



Investing in rural people

Montenegro

Rural Clustering and Transformation Project (RCTP)

Final project design report

Main report and appendices

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Currency equivalents

Currency Unit	=	EUR
US\$ 1.00	=	0.94 (21 December 2016)

Weights and measures

1 kilogram	=	1000 g
1 000 kg	=	2.204 lb
1 kilometre (km)	=	0.62 mile
1 metre	=	1.09 yards
1 square metre	=	10.76 square feet
1 acre	=	0.405 hectare
1 hectare	=	2.47 acres

Abbreviations and acronyms

ASAP	Adaptation for Smallholder Agriculture Programme
ATCG	Accreditation Body of Montenegro
ATS	Certificate of Accreditation
AWPB	Annual Work Plans and Budgets
BSF	Business Skill Facilitator(s)
CAP	Common Agricultural Policy
CPM	Country Programme Manager (IFAD)
DANIDA	Danish International Development Assistance
DG AGRI	Directorate General for Agriculture and Rural Development (EU)
DRM	Disaster Risk Management
EC	European Commission
EIA	Environmental Impact Assessment
EIRR	Economic Internal Rate of Return
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GAP	Code of good agricultural policy
GDI	Gender Development Index
GDP	Gross Domestic Products
GEF	Global Environmental Fund
GMO	Genetically modified organism
GoM	Government of Montenegro
Ha	Hectare
HACCP	Hazard Analyses and Critical Control Points
HDI	Human Development Index
HH	Household(s)
IBRD	International Bank for Reconstruction & Development (of WB)
IDF	Investment Development Fund (Montenegro)
IFAD	International Fund for Agricultural Development
IPA	Instrument for Pre-accession Assistance
IPARD	Instrument for Pre-accession Assistance for Rural Development
IPCC	Inter-governmental Panel on Climate Change
ISO	International Standards Organisation
KM	Knowledge Management
LEE	List of Eligible Expenditure
M&E	Monitoring and Evaluation
MARD	Ministry of Agriculture and Rural Development
MG	Matching grants
MHMR	Ministry for Human and Minority Rights
MIC	Middle Income Country
MIDAS	Montenegro Institutional Development and Agriculture Strengthening
MoE	Ministry of Economy
MoF	Ministry of Finance
MONSTAT	Statistics Office of Montenegro

MSDT	Ministry of Sustainable Development and Tourism
MSMEs	Micro, small & medium sized enterprises
NGOs	Non-Governmental Organizations
NPV	Net Present Value
OECD	The Organization for Economic Cooperation and Development
PCU	Project Coordination Unit
PEFA	Public Expenditure and Financial Accountability
PIM	Project Implementation Manual
PP	Procurement Plan
PSC	Programme Steering Committee
RCTP	Rural Clustering and Transformation Project
RD	Rural development
RIMS	Results and Impact Management System
RRS	Rural Road Support
RWS	Rural Water Support
SME	Small and Medium Enterprises
SWOT	Strengths, weaknesses, opportunities, threats analysis
UCM	Union of Cooperatives Montenegro
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
US\$	United States Dollar
VAT	Value-added Tax
VC	Value chain
VCF	Value chain fund
WB	World Bank
WFD	Water Framework Directive
WP	Working Paper

Map 1: RCTP area in Montenegro

Montenegro

Rural Clustering and Transformation Project (RCTP)

Design report



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 09-01-2017

Executive Summary

Montenegro recovered impressively from the disastrous and destructive events that engulfed most of Southeast Europe in the 1990s. The economy has grown to regain much of the losses and poverty has fallen substantially. It has managed a peaceful dissolution of the state union with Serbia in 2006 and its governance standards have improved steadily, while ethnic minorities are protected well by regional standards. It is against this background that Montenegro has made substantial progress towards its overriding policy ambition: That of EU accession, which will further cement macro-political and economic stability while also ensuring unhindered and permanent access to the world largest market. Montenegro is consequently expected to be the next country that will join EU, at the earliest in 2021.

However, if one disaggregates the remarkable macroeconomic figures and significant socio-economic achievements, a different and more disturbing picture emerges. Most of the economic growth has benefitted the coastal areas and the adjacent plains where robust and consistent rise in tourism numbers have catalysed investments in the service and construction sectors associated with the hospitality industry. More than 1.6 million tourists visited Montenegro in 2016 (almost 3 times the population's size) generating more than euro 750 million in income. Unsurprisingly, the effect has been to make the coastal municipalities and those around the capital Podgorica in the plains the richest in the country with low poverty, high employment and robust competitiveness.

The flip side is found in the northern mountainous region of Montenegro, where less than 2% of the tourist venture. Here, the context is characterised by de-population and associated demographic aging, higher poverty and few employment opportunities. Agriculture is the key economic activity, but with low productivity, limited by small-scale production, inconsistent volumes and quality, as well as poor production and processing techniques. Consequently, Montenegro imports 10 times more food-stuff than it exports. The northern mountainous areas are also disadvantaged in terms of connectivity with poor infrastructure that is hard-to-impossible to negotiate during winter and periods of heavy rainfalls. Most infrastructural investments have been concentrated in the coastal areas and, more recently, in the construction of the highway connecting Montenegro's largest port, Bar, with Serbia, its main trading partner.

Climate change is further aggravating the situation in northern Montenegro, not least due to its reliance on the most climate vulnerable sector; agriculture. Increased severity and irregularity of rainfalls is being observed and is expected to increase as temperature rises. This will put pressure on both livestock (heat stress) and crop production (water scarcity and flooding), with the numerous small-holders being particularly exposed. Moreover, the extreme weather events also have a detrimental effect on the region's infrastructure, with many gravel roads being eroded by flooding and heavy rainfalls. In sum, Montenegro is developing into an increasingly unequal dual economy, with climate change deepening the division, leaving the poor rural mountainous regions further behind.

The government's recent membership of IFAD in 2015 and its subsequent request for assistance to design the Rural Clustering and Transformation Project (RCTP) should be seen in this context¹. Clearly, mitigation measures will need to be taken to stop and eventually reverse the decline of the northern region and IFAD is a partner that is uniquely positioned to facilitate a deliberate policy driven rural transformation. The government is thus primarily interested in IFAD's expertise and knowledge brokering competencies, as also evidenced by the substantial own contribution that it has committed to the RCTP, allowing substantial leveraging of IFAD resources.

The window of opportunity for IFAD's engagement in Montenegro may be time limited with EU accession in the offing. This has informed the design of the RCTP which aims to rapidly achieve impact, be scalable, and policy relevant allowing for easy adoption by domestic stakeholders, not least the rural private sector, municipalities and the central government. While the learning process will be gradual,

¹ The mission comprised: Annabelle Lhommeau, Country Programme Manager and Mission Leader, IFAD/NEN; Peter Frøsløv Christensen, Lead Consultant; Tom Anyonge, Lead Advisor, IFAD/PTA; Marco Camagni, Senior Technical Specialist, IFAD/PTA; Edward Heinemann, Lead Technical Specialist, IFAD/PTA; Malek Sahli, Senior Finance Officer, IFAD/FMD; Nigel Smith, Value Chain expert; Erkan Ozcelik, Economist and Financial Analyst; Anta Sow, Financial and Procurement Specialist; Maria Donnat, M&E Specialist; and Velibor Spalevic, National Agricultural and Environmental Expert. The mission was accompanied and assisted by Milan Lekovic and Enis Gjakaj, from MARD.

all opportunities for scaling up successful results will constantly be pursued during implementation with the aim of expanding the outreach to more smallholders in northern Montenegro.

Therefore, the RCTP development objective is to contribute to the transformation of smallholders' livelihoods in northern Montenegro, enabling them to become commercially competitive and more resilient to climate change. This will be accomplished by improving economic opportunities for the rural poor based on competitive farms and agribusinesses that are connected to and integrated into more profitable value chains (VC), making sustainable use of Montenegro's natural resources. The concept is premised not only on mainstreaming climate adaptation and environmental concerns into project design for sustainability reasons, but also leverage these mountainous ecological value aspects to make the products more unique, through e.g. branding, certification and storytelling.

The strategy is geared at three transformative and complementary outcomes. The first will aim at critical agribusiness development support through inclusive multi-stakeholder platforming in high-potential VC, aggregation to achieve economies-of-scale for business transactions, VC inclusion to ensure smallholders participation, and clustering to enhance business relationships. The second will aim at improving smallholders' connectivity and water supply, leveraging climate smart infrastructural solutions, both described below. The third will leverage the learnings from M&E and knowledge management to allow for scaling up, policy engagements and generation of evidence that can inform both the government and IFAD on the challenges and opportunities for transformative rural development in an upper middle income country.

Main outcomes and components

To deliver on these ambitions the RCTP outcomes are chosen to achieve optimal impact in terms of addressing the core binding constraints facing poor smallholders in northern Montenegro. Combined, the two outcomes will thus deliver more than the sum of their parts, by ensuring that a multiplicity of challenges are simultaneously addressed where and when needed. Moreover, the outcomes also reflect the areas where IFAD has a comparative advantage vis-à-vis other development partners, most notably in catalysing inclusive rural transformations for poor smallholders.

The first outcome is focused on supporting **inclusive VC clustering** for smallholders and processors. This outcome will aim to increase poor farmers and processors' incomes by overcoming current constraints to production, processing and sales of products. Access to markets will be increased by building on the products currently produced and sold, by linking farmers with the other actors in the VC, most notably input providers, advisory services, and buyers.

Clustering efforts will be key in promoting rural transformations. The clusters are geographic concentration of interconnected producers, businesses, suppliers, and associated institutions, which creates direct and indirect synergies among them, resulting in market linkages. Three clusters with the most promising VC have been identified; livestock (primarily sheep/goat meat but also high-value dairy), cultivated berries and seed potatoes, with possible later expansion of the product range and geographical coverage. The actors will together discuss challenges and opportunities in multi-stakeholder meetings and develop an action plan together to tackle the issues. These meetings can be seen as a space for engagement and dialogue to create trust, address common issues and strengthen the VC. The clusters help the actors overcome various challenges including better coordination, creating trust by deepening partnerships and improving the consistency of both quantity and quality of the produce. The key platform will be the multi-stakeholder cluster meetings where all actors will jointly identify both business opportunities and obstacles for further cluster strengthening. The outcome of these meetings will include prioritized investments in specific areas of critical importance to strengthening the VCs. The RCTP will support such investments that can demonstrate a clear benefit for smallholders and support will be granted both to private investments (e.g. production expansion) and quasi-public ones (e.g. trials, action research, testing labs and piloting new business models). All assistance will be complementary to that of other support schemes, most notably EU's Instrument for Pre-accession to Rural Development.

To complement the above clustering and VC strengthening ambitions, a second outcome will consist of **cluster supportive rural infrastructure** to remove the bottlenecks hampering the consolidation and clustering of smallholders and village based agri-business and to promote the adoption of climate smart technologies. Public-private-partnerships will be leveraged for business-enabling rural infrastructure development as a way of driving private sector investment and scaling up of RCTP interventions. The upscaling pathways are thus one of leveraging both public (from both municipalities and central government, most notably for roads) resources as well as harnessing private capital (e.g. from

beneficiaries contributing both in cash and in-kind). While contributing to increasing the profitability of the supported small farmers as agri-businesses, this outcome will also contribute to increasing the net income of the rural poor who will get access to the jobs created by the expansion of these agribusinesses, particularly as wage labour (both seasonal and full time) for the production of high value livestock/crop products. Clearly, these investments catalysed by IFAD support will assist in the structural transformation of the rural sector, towards increased competitiveness and resilience, in the process creating opportunities for many of the poor, including youth in particular, and women.

Each of the two above outcomes has an operational component with a clear implementation focus. The third outcome on **evidencing, learning and policy engagement** will build on the first two outcomes and will deliver less tangible outputs in the form of knowledge products, enriching the policy conversation around transformative rural pathways for poor smallholders and in ensuring that RCTP maximise all learning opportunities available.

Project cost and financing

The total cost of RCTP, over 6 years, is estimated to amount to EUR 13.6 million, with investment costs making up fully 86% whereas recurrent costs amount to 11%. Works account for the largest expenditure category with 48% of the total (reflecting e.g. infrastructure); grants 23%, consultancies 8% (to e.g. associations and transformation drivers).

Project components by year ('000 euro)

	Totals Including Contingencies						Total
	2017	2018	2019	2020	2021	2022	
1. Value Chain Clustering for Resilient Rural Transformation	3,504	369	451	384	231	197	5,135
2. Cluster Supportive Rural Infrastructure	44	1,700	2,769	2,730	19	-	7,262
3. Project Management Unit	349	149	166	165	156	229	1,213
Total PROJECT COSTS	3,897	2,218	3,386	3,278	407	425	13,611

The IFAD loan of EUR 3.9 million (or US\$ 4.1 million equivalent) will fund 28.5% of total project costs, of which funding for component 1, 2 and 3 will comprise of loan contributions of 44%, 13% and 60%, respectively (including contingencies). The grant from IFAD's Adaptation for Smallholder Agriculture Programme (ASAP) of EUR 1.88 million will be used to finance: (i) climate smart assistance to farmers and farmers' associations in Component 1 and (ii) climate smart infrastructure in Component 2, which in total equates to 13.8% of project funding. The government will finance taxes and duties of EUR 1.2 million of the total budget. In addition the government will make budget contributions towards Component 2, for the amount of EUR 2.5 million (or 34%) of the Component's total RCTP budget (excluding local municipal government contributions), towards Component 1, for the amount of EUR 0.176 million (or 3.4% of the component's total project budget), and towards Component 3 (in cash and in kind) for the amount of EUR 0.423 (or 35% of the component's total project budget). Approximately EUR 1.6 million (or 12% of the total) will be provided by the primary beneficiaries within the project area, mainly as contributions in small-scale agriculture investments. Local municipalities will also contribute to local investments in rural infrastructure to the tune of EUR 1.3 million (or 10%) of the total budget. Local SMEs are also likely to co-finance grant funding activities to the tune of approximately 25% of grant investment funding, or EUR 0.6 million (or 4.6% of the total).

Expected impact

The RCTP will refine and evidence the underlying theory of rural transformation that underpins the project thus providing scalable pathways that smallholders, private sector and government will drive forward rural transformation initiatives beyond the project period. Thus, the quantitative figures outlined below can be viewed as only the initiation of a wider transformative agenda which IFAD and the government have catalysed. Under the RCTP, the main impact will manifest itself through a more equitable, balanced and inclusive development process that reduce the divide between the coastal and mountainous regions. Consequently, poor smallholders in the northern mountainous region will see increased incomes from farming, processing and employment opportunities that the clustering and strengthening of VCs will bring about. Another impact will be the increased resilience against both the two closely correlated climatic and economic shocks. Thus, the RCTP will promote sustainable resource management, as well as climate resilient connectivity that upgrades rural infrastructure to withstand more volatile weather events, not least in terms of rural roads and productive water supply. Quantitatively 4,600 mountainous households (or 16,100 individuals) are expected to become more climate resilient and prosperous through a package of adaptive infrastructure and clustering of VC

activities that will improve incomes. Overall, the project analysis suggests an economic internal rate of return of 33% over twenty years. Net present value is just under EUR 64 million.

RCTP Results' Management Framework (Log frame)

Results	Indicators and targets				Means of Verification			Assumptions
	Indicators	Baseline data	MT	End (Y6)	Source	Freq.	Resp.	
Overall goal: To contribute to the transformation of smallholders' livelihoods in northern Montenegro, enabling them to become commercially competitive and more resilient to climate change.	1. Percentage decrease in rural poverty in supported municipalities compared to national rural poverty rate	Baseline data*	n/a	10%	Project impact survey Municipality statistics	At completion	M&E Officer	Initial and continued political commitment and support to project implementation. Macro-economic conditions remain stable or improve.
Development Objective: 2400 participating households register an increase in income of at least 30% by the end of the project implementation (Y6).	2. Number of participating households registering an increase in income of at least 30%	Baseline data*	500	2400	Project impact survey BSF records Farmers' diaries	At completion	M&E Officer	
Outcome 1: Improved commercial relations between smallholders, suppliers and buyers – supported by relevant public actors; and increased level of investments in the selected value chain.	3. Number of VC smallholders involved in the production of selected commodities	Baseline data*	1500	3000	Farmers' diaries BSF records Project outcome surveys Farmers' diaries	Annually, starting Y2	- VC Specialists - M&E Officer	Macro-economic conditions continue to be supportive for doing business. Smallholders' and VC actors' willingness to participate in selected value chains. VC suppliers' ability to respond to technical support requests by smallholders. Marketing potential for berries remains high.
	4. Percentage increase in the value of marketed commodities, by VC	Baseline data*	20%	50%		Annually, starting Y 3	- VC Specialists - M&E Officer	
	5. Value of incremental investments in selected VCs (excluding project financing)	n/a	€0.5m	€2m	BSF records Project sector study	At mid-term and completion	- VC Specialists - M&E Officer	
Outcome 2: Enhanced resilience of smallholders' livelihoods to climate change through improved access to water supply systems and all-weather farm gate roads.	6. Number of households with improved access to climate resilient roads and water supply systems ^{(RIMS) (ASAP)} 2	Baseline data*	800	2000	Contractors' records Municipal staff records	Annually	- PCU Engineer - M&E Officer	Climate change patterns are according to current predictions. Continued fiscal space for GoM and municipalities to pay their contributions. No political interference in the choice of investments.
Outcome 3 – Lessons from project approaches and implementation are incorporated into national or municipal-level policies, strategies or investments.	7. Number of policies, strategies and investments influenced by project experience	n/a	At least 1	At least 3	Amended policy or project documents	Annually, after mid-term	M&E Officer	Continuing MARD's interest to support poor smallholders. Policy makers' willingness to learn from project experience
Outputs:								
Multi-stakeholder clusters established and	8. Number of functional clusters ^(A)	6	7	11	VC Specialists	Annually	VC Spe-	

² In the context of the RCTP, the main vulnerabilities of smallholders to climate change are all-weather access to market and to sustainable water resources. Thus this indicator will reflect the number of households for which climate resilience has increased.

* Data to be filled once baseline survey is available

Results	Indicators and targets				Means of Verification			Assumptions
	Indicators	Baseline data	MT	End (Y6)	Source	Freq.	Resp.	
facilitated for four commodities*; and business or trading plans agreed between smallholders and suppliers/buyers.					records Cluster meeting minutes		cialists	
	9. Percentage of participating VC smallholders with an agreed business or trading plan*	n/a	80%	100%	BSF records	Six-monthly	BSF	
Strategic investment grants provided to value chain actors and for “quasi-public” goods.	10. Number of VCF grant recipients**	0	At least 300	At least 500	VCF manager records Minutes of VCF board meetings	Monthly	VCF Manager	
	11. Percentage of grant recipients meeting their first key performance criteria as defined in grant contracts*	0	80%	80%	VCF Manager records	Six-monthly	VCF Manager	
Project implementers, key Government stakeholders and smallholders provided with capacity development support.	12. Number of project implementers and Government staff trained in value chain and cluster development*	0	20	40	PCU training records	Annually	M&E Officer	
	13. Number of smallholders trained in business development* <i>(RIMS)</i>	0	1500	2500	BSF training records	Annually	BSF	
Rain-harvesting water structures and other water supply systems constructed or rehabilitated.	14. Number of water supply schemes newly constructed or rehabilitated	0	11	27	Contractors' activity reports Municipal Engineers' records	Monthly, starting from contract award date	PCU Engineer	
“Last km” farm roads rehabilitated or upgraded according to best standards.	15. Number of km of roads rehabilitated or upgraded <i>(RIMS)</i>	0	26	70				
Relevant knowledge products prepared and disseminated to key stakeholders.	16. Number of knowledge products produced and disseminated <i>(RIMS)</i>	0	At least 2	At least 5	– PCU records – PSC and KM working group minutes	Annually	M&E Officer	

** For these indicators, the number of male and female beneficiaries, and the number of “youth” (defined as a person below the age of 40), will be reported separately.

(A) A cluster will be assessed as functional if cluster meetings are organized at least 2 times per year and are well attended by a diversity of stakeholders. Detailed criteria will be defined in the M&E Manual

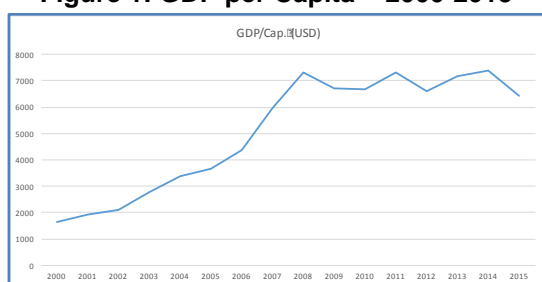
I. Strategic context and rationale

A. Country and rural development context

1. Montenegro is one of the smallest countries in Europe with an area of 13,800 km² and a population of only 622,000. It is divided into three regions: The coastal region which is also the hub of the booming tourism industry, the central region which has both plains and mountains, as well as hosting the capital Podgorica and, the northern region which is mostly mountainous and dominated by agriculture. 70% of Montenegro's territory is located between 500 m and 1500 m altitude, mostly in the northern region. One third of the population live in rural areas (approx. 36.2%) with the northern region being the least urbanized with 60% living in rural areas here.

2. Montenegro was amongst the poorest regions of the Socialist Republic of Yugoslavia and despite its ability to escape most of the armed violence that engulfed ex-Yugoslavia in the 1990s, the economy collapsed during that time, partly due to the sanctions imposed by UN in 1992 and the disintegration and devastation of the war-torn Yugoslav market. Hyperinflation ensued and poverty skyrocketed to engulf over 65% of the population. Only with the secession of hostilities in Kosovo and the lifting of sanctions in 2000 did the economy begin to grow again (see figure 1), but at that point the country had been virtually deindustrialized, with a decimated economy and damaged infrastructure.

Figure 1: GDP per Capita – 2000-2015



Source: World Development Indicators, 2016

140,000 of all citizen of Montenegro live out the country, close to 20% of the population⁴. Remittances play an important part of the economic, not least for the poorest, with close to 10% of GDP being remittances, but with a declining trend due to more restrictive practices in key destination countries. While large scale infrastructure project such as the highway between Montenegro's main port, Bar, and Belgrade will temporarily boost GDP and employment, Montenegro will have to complement the service and consumption based growth model (fuelled by FDI in the tourist industry and remittances) towards one also based on a productive and competitive economy. GoM has singled out agricultural and agribusinesses as key catalysers in this transition. However, delivering on this ambition is challenged by many factors, further described below.

5. **Climatically, Montenegro is experiencing increasing temperatures and volatility most notably in the northern mountainous region.** The 2001–2010 decade was the warmest since records began, with the most prominent changes in the northern mountainous region of +1.40C° and a decreasing of the number of frost days and very cold days and nights. Changing rainfall pattern is also forecasted in the near future (more precipitations in winter, less in summer) also increasing erosion, flood risks (winter) and water stress (summer). There has been a damaging and significant increase in the number of extreme weather events. This pertains specially to heat waves that are increasingly frequent. Secondly, and equally important, storms have become more frequent and more intensive since 1998, bringing with them huge amounts of precipitation and flooding in significant areas. Climate change is thus augmenting many hazards, including landslides and forest fires, and predictions from European Centre for Climate Change Adaptation suggest that especially the northern parts will see temperatures increasing by 1.3 °C in the next decade, whereas precipitation will drop in winter and spring. Extreme whether events (e.g. droughts, flooding and heat weaves) are increasingly impacting on natural resources (soils, water bodies, pastures, others), on rural infrastructures such as

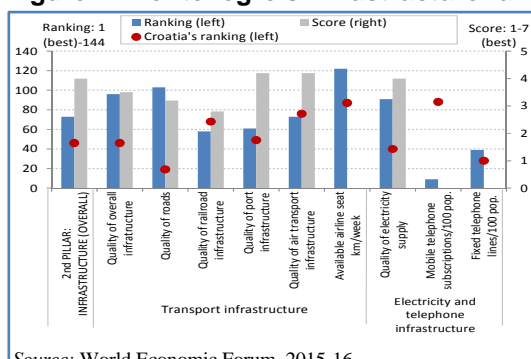
³ See News: ['Foreign tourist arrivals to Montenegro rise 2.6% y/y in July'](#) 31 August 2016

⁴ IOM: Global Migration Flows' 2016

roads and water points, and therefore on livelihoods of smallholders and rural people who still depends largely on their availability and quality. Animal feed is expected to become adversely affected due to heat stress on pasture (loss in nitrogenous content), which could undermine productivity and increase sensitivity to zoonosis. Extreme events are also likely to decrease livestock productivity and crop damages due to drought, flooding, hail and wind storms. It should be noted nevertheless that milder temperatures mean longer vegetation periods in altitude: this is an agricultural opportunity brought by climate change though increased attention will have to be paid to pests, water and fodder management to extract maximum return from these positive aspects (see more details in Appendix 1).

6. **The already insufficient infrastructure is also becoming affected by climate change.** With especially flash floods or heavy rains occurring more frequently, rural roads have deteriorated significantly and many are now not negotiable during winter, causing social, economic and health problems for increasingly isolated rural settlements. Combined with new innovations in tarmacking roads, climate change has also changed the cost-benefit of when it becomes economically feasible to tarmac gravel roads and the government (both at central and municipality level) has accelerated a programme for rural connectivity, but still lacks funding. Similarly, the heat and drought increases have also made reliable water supply more urgent, not least in rural areas, which have historically relied on rain. Moreover, increasing temperature means increasing water needs for crops and animals: if rainfall is less reliable and water needs increasing, there is an urgent rationale in improving water supply (ponds, etc.) and water demand (more efficient use of water). As can be seen from Figure 2 below, the quality of especially roads is suboptimal compared to e.g. neighbouring Croatia

Figure 2: Montenegro's infrastructure ranked

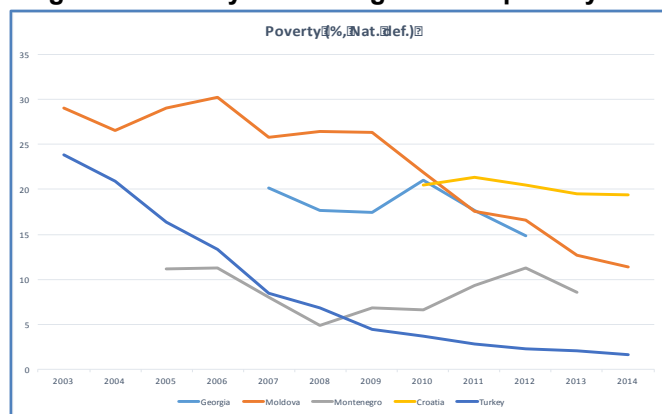


Source: World Economic Forum, 2015-16.

investments and depopulation of especially the youth, is likely to accelerate. Especially these challenges shaped the RCTP design and have also been informing the government of Montenegro (GoM) in its decision to leverage the knowledge and resources of IFAD.

Poverty: Impressive past reductions have stalled and there is still a high rural urban divide

Figure 3: Poverty ratio using national poverty lines



Source: World Bank Development Indicators, 2016

7. However, Figure 2 severely underestimates regional disparities. With support from EU, more than EUR 300 million have been invested in upgrading major roads, not least in the coastal and central regions, but the northern region, where the traffic density is lower, has seen far fewer investment especially in tertiary and 'last-kilometre' roads. This has contributed to worsening disparities between the northern region and the rest of the country. Thus, in the rural north the distance to food shops and elementary schools on average is 3-4 km, and secondary schools and banks 10 km. If continued unabated, a vicious cycle of closure of social and shopping facilities, lower

8. **Poverty levels have been significantly reduced but remains of concern.** The most recent figure puts poverty at 9% of the population, which suggest that Montenegro has been largely successful in rebuilding the country after the disastrous 1990s. The high economic growth from 2000 to 2008 was correlated with reductions in poverty reaching a record low of 5% in 2008, but the subsequent financial crises reversed some of those gains. Moreover, inequality has increased with the Gini coefficient rising from 24.3 in 2010 to 26.2 in 2013.

9. **The increasingly weaker correlation between GDP growth**

and poverty reduction suggests that more targeted efforts are needed as the low hanging fruits of emphasizing foreign and domestic investment in the coastal areas are no longer promoting inclusive growth. While the 60% richest households have increased their level of consumption during the last 7 years, the poorest 40% have seen negative growth⁵. Also, while poverty levels have declined slightly in the last 2 years, vulnerability levels remained significantly higher in the post-crises era.

10. **The poor are overrepresented in rural areas.** 37% of the population live in rural area and while the poverty rate has fallen, it is still 19% higher than the urban ratio. The northern and central regions have significant higher poverty incidence (10.3%) compared to the coastal (3.8%). The rural northern municipalities are also less competitive and dominate the bottom half of the competitiveness table with 10 out of the 11 least competitive municipalities being in the north (table 17, Appendix 2).

11. **The causes of rural poverty are complex.** In addition to the migration, small land area holdings, climate and political vulnerability, it is also evident that the low incomes derived from agriculture stem primarily from weak links to markets and low competitiveness of the outputs produced. This situation is determined by constraints on both supply and demand sides that together form a vicious circle which is hard to break. On the supply side, farm size and farming patterns, problems related to innovation, lack of connectivity, lack of post-harvest storing facilities, handling and packaging, are the main causes for limited marketing opportunities available to rural producers. This in turn is linked to demand side failures, i.e. the under-development of vertically coordinated supply chains that could play a key role in driving demand for agricultural produce in line with market requirements.

12. **Gender inequalities are comparatively minor, but youth issues are becoming a priority.** The Gender Development Index (GDI) and the Gender inequality index from 2016 shows that female HDI value for Montenegro is 0.728 in contrast with 0.819 for males, resulting in a GDI value of 0.954 with Montenegrin women living longer than men, but with lower income than men. Youth face particular challenges in rural areas with ever decreasing number of attractive social facilities, including schools and cultural facilities. Thus, the age structure is skewed towards the elder accelerating a vicious cycle of out-migration of those that should hold the future for the rural areas⁶. While GoM has a youth policy, its limited budget reduces the effectiveness, not least in terms of retaining young rural talent. More details are provided in Appendix 1, from paragraph 185, and in Appendix 2, paragraphs 252 and 253.

Rural context and agriculture

13. **The rural sector has obviously also been affected by the climate, infrastructural and economic vulnerabilities** that has characterized much of Montenegro's society, agricultural land accounting for 38% (517 000 hectares) of the total territory. The largest share of agricultural land resources consists of pasture and grassland (88%), used extensively. Montenegro's agriculture is quite diversified - from growing olives and citrus fruits in the coastal region, through to early seasonal vegetables and tobacco in the central parts and extensive sheep breeding in the north. Although only 5.7% of the economic active population is employed in agriculture, it is still the dominant activity of the rural population - more than 65 000 households obtain their income partly or entirely from agriculture.

14. As can be seen from Figure 4 (next page), most labour in agriculture are part-time and informally employed. Food production and agriculture play an important role in economy, representing around 7% of GDP (EU, Bilateral relation in agriculture, November 2014). However, farm sizes are small, the average being 4.6 ha with more than half under 1 ha and 31% under 0.5 ha, while about 3 000 households have less than 4 cows. Not only are farm sizes small, very few specialise with 80% of all agricultural holdings being mixed, often with crop, poultry, pig and cow production. This is partly related to the fact that virtually all agricultural holdings are family holdings and also part of the legacy of the sanctions period in which self-sufficiency was more important than commercial efficiency. Consequently, only around 4000 households are registered farms with GoM and less than 1% of farm holdings are registered as business entities. This also creates structural barriers to expansion, commercialisation and increased competitiveness. Consequently, Montenegro's agricultural added value per hectare is less than half of Albania's.

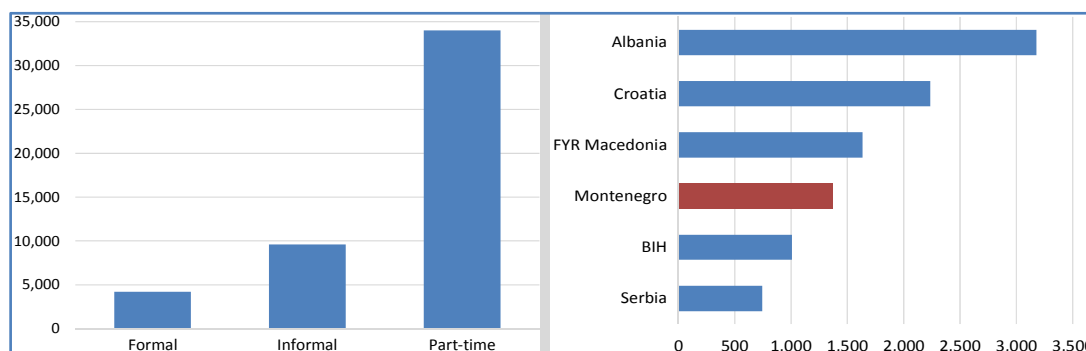
⁵ World Bank: Montenegro - Country Diagnostic Study, 2016

⁶ See e.g. Dragica Mijanovic: 'Depopulation in Northern Montenegro – Causes and Consequences' University of Niksic, 2015 and Aleksandra Despotović, Miljan Joksimović, Ljiljana Kaščelan and Miomir Jovanović: 'Causes for Depopulation of Rural Areas In the Municipality of Pljevlja', in *Agriculture and Forestry* vol. 61, 4, 2015

15. **Especially in the northern region the small size of farms is prevalent and problematic.** With scattered producers, poor connectivity and unreliable inputs such as water and fertilizer, the low output volumes and inconsistent quality hampers integration into more profitable VCs that could improve incomes and livelihoods. Especially older farmers are reluctant to enter into more cooperative engagements that could improve their bargaining power, quantities, qualities, as well as facilitate storage, packing and marketing. This is partly a consequence of the dreaded legacy of the socialist system of *agro-kombinats* (or *zadruga*). However, a younger (but unfortunately much smaller) generation of farmers is emerging, that has a more pragmatic approach to collective action and cooperation with other farmers. Recently such farmers have reeved a boost due to passing of a law on cooperatives that improves governance structures as well as provides fiscal incentives (see below).

16. The forthcoming EU accession⁷ offers both opportunities and challenges for the agricultural economy. With accession, Montenegro will have unhindered access to export to the world's largest market, where demand for especially high-value agricultural products is soaring. On the other hand, accession will increase competitive pressures and require structural transformation of many agricultural holding, also within high-value production sectors. Currently, Montenegro's agricultural trade with the EU is heavily skewed, with imports from EU (EUR 159 million) being more than 25 times higher than exports to the EU (EUR 6 million), indicating that there is a largely unfinished transitional agenda facing Montenegrin agriculture. The EU accession will also mean that rules and regulations will need to be aligned to the *acquis communautaire* including those pertaining food safety and hygiene.

Figure 4: Agricultural employment (left) and Agri. Added Value/ha (right, US\$)



Source: World Bank: Montenegro Country Diagnostic Study, 2016

Market opportunities and constraints

17. **Livestock production is a significant contributor to Montenegro's agricultural economy,** accounting for more than 50% of the total output. Ruminant breeding allows for utilization of less productive areas that prevail in the structure of total agricultural land. During 2007-2011, a drastic decline in the number of heads was generally recorded compared to 1999. However, some positive structural changes can be noted with the size of farm and flock increasing. Among cattle, dual-purpose breeds prevail with a tendency for an increase in the presence of dairy breeds. Goats are primarily used for milk and cheese production while sheep are primarily for meat. Pig and poultry production is only on a small scale and tends to be largely for home consumption. While Montenegro has a comparative advantage in ruminant production due to its pastures, it has little advantage in pig and poultry production as it does not produce significant volume of grains and other feed stocks.

18. **Among ruminants, market opportunities for inclusive growth vary substantially.** The global *dairy* sector has seen a prolonged period of general oversupply and volatile but declining prices, exacerbated in the last few years in Europe due to the trade embargo with Russia. World dairy prices halved from 2013 to mid-2016 but have since recovered somewhat on expectations of tightening supply. Sustained price pressures have put dairy farmers under significant pressure, favouring the most efficient dairy sectors. This is reflected in the market prices in the Montenegrin market - where import prices of milk (EUR 0.54/litre) are now close to, and sometimes below, the reported costs of production for Montenegro's dairy industry, especially in the upland northern regions. Smallholder dairy production in the RCTP areas is characterized by very small herds sizes (less than 4 milking

⁷ EU opened two new chapters in the accession negotiations with Montenegro in December 2015 (transport policy and energy). At the current trend, accession might be in 2021.

cows), mixed breeds, extensive grazing and scattered production - all contributing to low productivity, significant inefficiencies at both farm level and collection systems and hence low return on labour. Raising the competitiveness of the local dairy sector is feasible but likely to require substantial investments aimed at increasing efficiency, for example in increasing the individual herd sizes as well as in much more efficient collection networks. So, while 20% of milk demand is currently imported (approximately 37,000 litres of milk and yoghurt in 2015⁸ against domestic production of approx. 150,000 litres⁸), the scope for profitable import substitution appears limited. Furthermore, the scale of investments required to become competitive and uncertain returns in the current market conditions make such investments challenging for the types of smallholder farmers being targeted by the project.

19. **For meat**⁸, while the aggregate domestic production is far below consumption, with a self-sufficient rate of about 36%, a large part of this gap is accounted for by pigs and poultry which together account for 63% of imports of meat and live animal (by value). Beef imports accounts for 32% of consumption by value while sheep and goats only around 3%. The relatively low carrying capacity for cattle in the upland pastures and extensive grazing systems means that the potential for competitiveness and decent returns to labour from upland beef production is rather limited without the use of significant supplementary feeding and significant investments to increase herd sizes. However, as with pig and poultry production, Montenegro's limited feed production and reliance on imports for animal feed stocks puts it at a comparative disadvantage in such production systems.

20. **For sheep**, in contrast, while imports for meat are much smaller in value, they are still relatively large in absolute terms - equivalent to approximate 53,000 animals in 2015 compared to a national herd of approximately 170,000 breeding ewes likely to be producing a comparable number of lambs for meat each year⁹. This suggests that around 25% of demand of lamb and goat meat is currently met by imports. Import and domestic prices are comparable (around EUR 2.20 per kg live weight) with each breeding ewe reported to generate net income of around EUR 60-70 per year. Competitively priced local sheep and goat meat production offers reasonable income opportunities to farmers with access to suitable grazing lands able to support flocks of 100 breeding ewes or more. Sheep and goat can also be grazed in a wider range of hilly terrain than many of the favoured cattle breeds, making them well suited to more isolated farms and villages often with more rugged terrain. The main challenges faced by smallholders concern labour productivity, mainly driven by small herd sizes. Thus, on-farm investments that raise labour productivity are likely to be the priority - for example in expanding herd size to a minimum of around 100 breeding animals as well as other labour saving production systems allowing more efficient management of larger herds.

21. **Higher value crop opportunities exist that build on the particular comparative advantage of the conditions in northern Montenegro.** Farmland at 800m above sea level can be ideal for producing high *quality seed potato* given the clean, low disease conditions. This has enabled about one third of domestic potato seed demand to be met from local production and the first potato seed was sold to export in 2016. Seed potato production is substantially more profitable than ware potato production, but they are linked as a share of a potato crop grown for seed will always end up as ware potatoes when it does not meet the quality standard required to be classified as seed. The income opportunities are substantial for smallholders with suitable land, for example in the upland fields of Zabljak (see map, page viii) and similar areas in other project municipalities, if they can apply the stricter field management systems required for seed production and develop more reliable linkages to the market. For better market linkages, trust in the quality of seed is the foundation of any seed sector. There is already a high-quality system of seed certification at the farm level, led by the team of the well-equipped seed-testing laboratory of the Biotechnical Faculty but more needs to be done to strengthen the confidence and trust of ware potato farmers in the marketing and distribution system for domestically produced potato seed. Improving mechanization and irrigation for smallholders will also help improve productivity as well as reducing variability of yields between years.

22. Similarly, an emerging new sector is the cultivation of *high value berries* especially raspberries but with potential for cultivated blueberries and strawberries. There are already an estimated 200ha of berry productions and recent investments in commercial nurseries that have secured the rights to produce and sell quality seedlings of improved international berry varieties under Plant Breeder Right schemes. There is also significant interest in expanding local production for export from some of Montenegro's largest and most successful agribusiness. Export markets for berries are large and offer

⁸ Import/export data from comtrade.un.org . Domestic production data from MONSTAT.org

⁹ I.e. approx. 1 lamb/ewe, assuming following rates: fertility 130%, mortality 7%, herd replacement 10%, culling 50%

prices that would be attractive to the local industry. For example, the easily reachable Italian market imports 7600t of fresh raspberries every year at an average price of US\$ 3.90/kg CIF while Germany imports 27,000t at an average of US\$ 5.90/kg CIF. Similarly, for frozen raspberries, Italy imports 11,000t at US\$ 2.80/kg CIF and Germany 108,000t at US\$ 2.18/kg¹⁰. Berry production is dominated by smallholders and their main opportunities are in increasing their production of improved cultivars, providing higher yields and better quality fruit. This will require on farm investments and access to better quality seedlings. With increasing production, smallholders will increasingly need to collaborate to aggregate supply and organize their production schedules so they can build durable relationships with larger buyers who can absorb the increased supply volumes most likely destined for export markets. Exporters will need to invest in export pack houses and cold chain facilities, and will need confidence in the supply before they make these substantial investments. Thus, for smallholder to benefit, there is a need for a relatively coordinated set of complementary investments along the VC and the development new trading relationships between networks of exporters and producers.

23. Local geography causes constraints. In addition to constraints caused by lack of markets, competition of low priced (and low quality) imports and lack of mechanisation, farm production is also severely restricted by (i) inadequate knowledge on orchards/berry fields management and limited scope for processing; (ii) farms - frequently with only gravelled roads on steep slopes, that can be unusable in winter; and (iii) soils on mountains which are relatively thin, typically 15-30cm deep though much deeper in the alluvial terraces and slopes in some of the river valleys in project areas.

24. Agriculture is intertwined with other economic sectors, especially with tourism, where the consumption trends indicate a high potential of growth for Montenegro-specific food products and the rural hospitality industry. Linking the agriculture and tourism sectors, and utilising renewable energy sources, can create conditions for new job creation and improved standard of living in rural areas.

25. For livestock and agriculture production to develop commercially, an adequate and climate resilient infrastructure network will be required. However, rural infrastructure, especially in northern Montenegro, is not adequate to provide the necessary public services to enable the required enterprise development needed for sustainable rural economic growth. The current state of infrastructure, especially water for irrigation and livestock, contributes to a decrease in agricultural and livestock productivity and production quality, hence making the rural business environment in northern Montenegro riskier. Furthermore, the increase of extreme events requires a new approach to infrastructures to ensure their use and potential in view of the recorded and foreseen climatic changes. This will imply more erosion proof connectivity infrastructure and more reliable productive water supply from irrigation. Analyses of status of rural infrastructure highlight obvious need for continued investment for development of infrastructure in northern rural area¹¹. These analyses show that poor rural smallholders as well as the commercially active rural households/smallholders living in northern Montenegro are particularly affected by the lack of adequate water supply, which is a significant barrier to productivity, especially as livestock watering ponds are disappearing. Many of these smallholders harvest rainwater but also need to transport water or buy it, which is laborious, time-consuming and expensive, especially for the poorest. These analyses also reveal that poor road conditions, especially for the commercially active rural households/smallholders, is another key barrier to accessing markets, as well as working together with other smallholders.

26. Rural infrastructure investments will not be supported by the EU funds before several years (details below), but the needs are pressing, especially in terms of significant investments in multiple-use water supply systems (including for domestic use, livestock watering, and small scale irrigation) and in local rural roads (last miles) to complement the municipalities' investments and connect more rural households to market towns, weighing stations and processing plants.

Government and EU policies on agriculture, rural development and food safety

27. Montenegro is benefiting, for the period 2014-2020, from the second phase of the Instrument for Pre-Accession Assistance (IPA¹², EUR 270.5 million). The specific instrument for rural development (abbreviated IPARD, with an indicative amount of EUR 52.4 million) aims to devel-

¹⁰ CIF is the price at the destination port. All figures Comtrade.org.un.

¹¹ Poverty and social inclusion assessments conducted prior to the detail design to assess the relative importance of the key assets for each of the different RCTP target groups, with particular reference to vulnerability on EU accession. See related working papers produced by IFAD.

¹² IPA supports reforms in EU candidate countries with financial and TA that aims at easing their accession process.

op competitive and sustainable production that is better prepared for the implementation of the common agricultural policy and the EU standards. IPARD intends to implement 9 measures under three priority axes. The first axis aims at improving market efficiency and to implement EU standards. It has three measures: (i) Investments in agricultural holdings to restructure and upgrade to the EU standards; (ii) Investments in processing and marketing of agriculture and fishery products; and (iii) Supporting the setting up of producer groups. The second axis refers to preparatory actions for the implementation of agri-environmental measures, and has two actions: (i) Preparation for implementation of actions relating to environment and the countryside; and (ii) Preparation and implementation of local rural development strategies. Finally, the third axis aims at developing rural economy, through four measures: (i) Improvement and development of rural infrastructure; (ii) Development and diversification of rural economic activities; (iii) Training; and (iv) Technical assistance (TA).

28. Until now most focus has been the first axis and less on the third, reflecting the priorities of Ministry of Agriculture and Rural Development (MARD) as well as the absorption and management capacities. So far, governance and policy predictability in the agricultural sector has been comparatively robust, with consistent progress made toward complying with the IPARD requirements in terms of institutions and control measures. Most of the focus has been on the first axis, reflecting on one hand the priorities of MARD and its absorption and management capacities, and on the other external financing. In November 2014, MARD, the EU and the WB launched the “IPARD-like” programme (EUR 4.5 million, of which EUR 4.1 million available to agricultural producers in form of grant support). IPARD-like support has been addressing especially the first two measures under Axis 1. The programme provides grant support for investments in physical assets to modernize agricultural holdings (minimum total investment is EUR 10,000), as well as agro-processing (minimum EUR 40,000).

29. However, the scheme is geared at agricultural holdings and enterprises that have more than 25 employees and annual income of at least EUR 200 000; and it requires (a) a contribution of 50% of the overall investment by the beneficiaries; (b) a full pre-financing of the overall investment cost by the beneficiaries, 50% of which is then refunded by the IPARD-like (75% from the EU and 25% from the MARD), and (c) an elaborated business plan. This is managed by a Directorate for IPARD Payment that has been established within the MARD. This programme excludes most smallholders, who struggle to comply with both mobilising their contribution as well as drafting acceptable business plans; and it could actually lead to further intra-rural inequality and accelerated marginalisation of the rural poor. Support to producer organizations (Axis 1) has not started yet; while support to farm diversification, business development, and rural development strategies (Axis 3) will start in 2018/19 at the earliest.

30. **There are virtually no other external development partners actively engaged in agriculture.** The World Bank’s work in the rural space is largely funded by and aligned to EU’s support and the IPARD scheme. The World Food Program (WFP) left Montenegro in 2004, mainly due to the high nutrition standards and food security in the country. While FAO in 2013 provided technical assistance (TA) for the country’s Agriculture and Rural Development Strategy and Action Plan, it has no permanent representation and its budget for its 2015-2019 country programming framework is largely unfunded. However, it has small funded budget for policy related TA and the RCTP will coordinate with FAO on studies/surveys, with the Directorate for Rural Development/MARD being the driver of this.

31. **The National Strategy for the Development of the Agriculture and Rural Areas 2015-2020, based on IPARD and EU alignment**, has four main outcomes: (1) The long-term management of agricultural resources in a sustainable way, along with the environment preservation; (2) Ensuring a stable supply of safe food that is affordable in terms of quality and price; (3) Improving the standard of living of the rural population; and (4) Strengthening competitiveness of food producers. The strategy emphasises the need to overcome fragmentation, poor connectivity and climate vulnerability. The RCTP is very much in line with this strategy.

32. **Of MARD’s total annual budget**, approximately 61% is used for subsidies for production and supply of services; 20% for social transfers (old age allowance to the rural population); 7% for animal health protection measures; and only 5% for general services (principally research and extension). The subsidies include both the EU/IPARD grants described above, as well as MARD’s own programme of direct payments (mainly for livestock production, milk production and marketing, and – to a limited extent – crop production). While the EU primarily support target large rural agricultural holdings, MARD’s direct payments system also targets medium sized agricultural holdings, according to the following eligibility criteria : (i) support to crop production for agricultural holdings of minimum 0.5 ha (and minimum 1 ha for cereals); (ii) support to livestock production for farmers having more than 4 cows, more than 40 sheep, or more than 30 goats, and whose animals are registered with veterinary

administration and marked with ear tags; and (iii) support to milk producers, who supply registered dairy/cheese factories, with a minimum of 400 litres of milk/month. However, in order to access the scheme, the farms must be registered, and in practice, few are. Currently only about 10% of Montenegro's 49,000 agricultural holdings are registered; and to a large extent, the other 90% are largely by-passed in terms of productive support from MARD.

33. Support to smallholders under the agro-budget can be accessed through two types of support measures: (i) direct payments which are automatic and per-unit (e.g. x amount EUR per ha/goat/kg) and (ii) development support which is aimed at supporting investments that improve competitiveness, sustainability and diversification. In addition, it also supports research, extension and social transfers to the rural population. Table 1 provides an overview of the support areas of interest to the RCTP:

Table 1: Selected budget lines of MARD's agro-support, 2016

1 Direct payments (total EUR 5.4m)		2b Development support for competitiveness, (EUR 3m excl. IPARD/MIDAS)	
Support measure	EUR	Support measure	EUR
Direct payments in livestock production	2.240.000	Support to viticulture and vine growing	300.000
Support to the development of commercial production of milk	1.600.000	<i>Support for establishment and modernization/equipping of fruit crops</i>	350.000
Support to strengthening the milk collection network	260.000	Support to development of olive growing	200.000
Direct payments in crop production	700.000	Support to vegetable production	320.000
Direct payments for tobacco production	50.000	Support to establishment of perennial medicinal and aromatic plants	100.000
Direct payments for cultivation of agriculture crops	500.000	<i>Support to investments in processing on family holdings</i>	350.000
Risk management in agriculture	200.000	<i>Improvement of product quality</i>	80.000
Program for beekeeping improvement	150.000	<i>Promotion of agriculture and agric. products</i>	190.000
2a Development support for Sustainability and Diversification (EUR 1m)		<i>Support to raw milk quality improvement</i>	100.000
<i>Sustainable use of mountain pastures</i>	220.000	<i>Support to activities of cooperatives and national associations</i>	50.000
Support to management of manure	80.000	<i>Support to improvement of livestock breeds</i>	700.000
<i>Diversification of rural economic activities</i>	110.000	Support to organic production	250.000
Renewal and development of villages	540.000		

34. The above table shows that direct payments constitute a large share of agro-budget, whereas the support to the key commodities in the RCTP is quite limited (RCTP relevant budget lines italicised in the table). The RCTP will complement the agro-budget and augment its financial reach in certain areas, with the MARD being the implementing agency for both programmes. Moreover, the RCTP transformative mechanism, the multi-stakeholder platforms are complementary to the other initiatives.

35. **Legally and regulatory changes encourage organisation of producers.** A new law on cooperatives has recently been passed providing much-improved corporate governance safeguards. The law and the provision of an adequate legal framework will allow for the creation of new for-profit cooperatives in the rural development sector as well as the transformation of the old cooperatives and associations currently operating under the MoF and the law for non-governmental organizations, further promoting the commercialisation of the sector. However, uptake has so far been limited. The majority of existing and functioning producer organizations are registered as associations, which characterises the organizations as non-profit making and allows members to mostly share information, advocate for their interest and buy in bulk.

36. There are around 60 associations of cattle goat/sheep farmers, beekeepers, vegetables, fruit (including berries), organic production, crafts, and processors in northern municipalities, including Niksic. These organizations currently represent over 3,096 farmers. There are other NGOs in the North such as Rural Development Network of Montenegro (nation-wide), Centre for Development of Agrar (North-East), NGO "Healthy seed", The Foundation for the Development of Northern Montenegro (FORS) and the Association of agricultural producers of plants in protected areas. The number of old style 'zadruga' cooperatives dropped after the end of Yugoslavia, from about 150 to less than 20 today. Despite the negative perception of collective action due to the socialist cooperative legacy,

Box 1: Clustering for rural transformation: Clusters are a geographic concentration of interconnected producers, businesses, suppliers, and associated institutions that creates direct and indirect synergies among them, resulting in market linkages. This means that a cluster approach will geographically group the key actors along the value chain (VC) in the same areas. For the purposes of the RCTP, this will typically be defined geographically by zones of production which form discrete buying zones of several competing buyers/traders. The key actors in a cluster include input suppliers, farmers, buyers, service providers and government agencies that will discuss arising issues in multi-stakeholder meetings and develop an action plan together to tackle the issues. It is a 'stakeholder association' which is a tool to create trust, address common issues and strengthen the VC. To effectively address VC constraints, clusters need to be used as a means to achieve an end not as an end in themselves. A cluster is useful when the VC is highly fragmented or unstructured throughout its segments (transportation, distribution, enabling environment), thus requiring interventions by numerous stakeholders who could not resolve any single issue alone. A cluster also builds trust among stakeholders and strengthens coordination of the multiple stakeholders and VC segments. For each priority product (berries, potato, sheep/goat meat, cheese), the potential for the local cluster development will be re-confirmed by initial rapid scans including confirming buyer demand and mapping and analysis of the different players (buyers, suppliers, banker, and service providers) and attractive to smallholders and especially younger farmers.

especially by the oldest farmers, there is willingness among the smallholders, especially the youth, to work together in a business-like fashion to benefit from economies of scale to access services and markets.

37. **Regulatory aspects of food production have been driven by the EU requirements** concerning food safety, hygiene rules, labelling, additives, food enzymes, flavourings, contact materials, supplements, and contaminants. Moreover, Montenegro is reviewing regulations governing quality control to ensure compliance with the WTO Agreement on Technical Barriers to Trade. On general food safety, GoM recently adopted the strategy for transposing and implementing the *EU acquis*. A Code on Good Agricultural Practices (GAP) has been prepared by the WB during the MIDAS project, also emphasising compliance with future EU requirements. Legislation in the food field is largely harmonized with the EU but the application of ISO standards in food production is still inadequate. In the same way, only a small number of hotels and other companies set up a HACCP¹³ concept. The reasons are multiple: lack of information on the HACCP concept, initial high financial

investment, and resistance to the introduction of changing established procedures. For production and export of high quality and safe food to succeed, it is essential that the entire food industry as soon as move on to the application of the HACCP. This is also an entry point for RCTP in terms of *de facto* improving compliance as well as engaging in policy dialogue informed by evidence from implementation. The MARD Veterinary and Phytosanitary Directorate is responsible for the policy and legislation relating to food safety of animal origin, food of plant origin at the primary production level and feed and the Montenegrin agricultural advisory service. The National Council for Food Safety Assessment provides advice and assistance towards risk assessment activities on food and feed safety.

38. **The policy framework for organic agriculture is relatively developed and favourable.** An organic law was adopted in 2004, which includes the granting of compensatory payments under a special scheme. Additional support is provided for advisory services and participation in international projects. There is also a national logo for organic products. A National Association of Organic Producers of Montenegro was established in 2011, while a National Action Plan for the Development of

¹³ The Hazard Analysis and Critical Control Points is a certification for food production, storage, and distribution monitoring system for identification and control of associated health hazards carried out by the producer. In the EU is legally binding for all food producers and distributors.

Organic Agriculture was adopted in 2015. *Monteorganica* is the accredited certification body for control and certification in organic agriculture.

39. **The second National Communication on Climate Change** submitted to UNFCCC (Feb. 2015), is highlighting the specific vulnerability of agriculture sector to climate change. Four priority topics have been identified to adapt agriculture to a changing climate: promotion of climate smart techniques, improvement of agricultural water efficiency (supply and demand), sustainable forest management and share technologies and knowledge.

40. **MARD's Directorate for Rural Development is the key unit for strategy development.** The unit's focus is on measures to improve rural competitiveness and living standards. It is also the key coordinator and implementer of both national and internationally funded engagements that often have a more transformative and disruptive character and will hence be the natural anchor for the RCTP.

41. **MARD's strategy is to encourage complementary public and private extension services.** On the public side MARD is in the process of merging its plant and livestock extension services into one, institutionally anchored inside MARD, but maintain the 7 regional offices (including in Niksic and Bijelo Polje) that cover all rural municipalities. Currently extension officer devote a substantial part of the work load to managing the IPARD and agro-budget schemes. There are private service providers, consultancy firms and individual consultants providing agricultural and business support services to farmers including farmer mobilization, individual and group agri-business development, and market linkage brokerage. The government is also hiring specialised international or local private technical assistance to provide specialised inputs where expertise is not available in the country. There are several entrepreneurs in the dairy and fruit sub-sectors, available on the national service provider market and over 120 individual consultants with expertise in agronomy and veterinary services.

42. **Rural finance.** Key institutions include banks, the Investment and Development Fund (IDF, government owned), a couple of micro-finance institutions (MFIs), and informal lenders/family. More information is provided in Appendix 1. However, MFI rates are often prohibitively high for investment capital and banks have limited risk willingness in the agricultural space, due to high collateral requirements and a general risk averseness in the wake of the financial crises. Especially foreign owned banks have restrictive rural credit policies, whereas locals have been more willing to enter this space. Furthermore, the financial sector also lacks important structural elements that would facilitate greater smallholders and MSME lending, such as the absence of a national credit bureau to provide credit history checks on potential borrowers. Major buyers and processors, such as Franca and Goranovic, have also been able to provide inputs such as fodder, livestock and advisory services to farmers on modalities that have some resembles to contract farming, thus reducing the capital requirements on behalf of the participating smallholders. Against this background, RCTP must have realistic and modest expectations of the level of progress that might be achievable in increasing availability of finance for smallholders and MSMEs in agriculture. Notwithstanding this, the RCTP will be piloting approaches that may increase accessibility of loans for suitable investments, using alternative collateral or guarantee mechanisms in the context of coordinated investments along the VC in each cluster.

B. Rationale, underlying theory of change and design considerations

43. Montenegro became a member of IFAD in February 2015 and subsequently requested financing for a project. This comes at critical juncture in Montenegro's short history at a time with slowing growth, raising inequality, emigration from especially rural areas, but also with the prospects of joining the EU and the benefits that comes with that in the form of internal market access, financial support and stability. Moreover, while the growth is slowing, tourist numbers are still increasing bringing with them the incomes, jobs and FDI. However, these benefits are not equally shared and Montenegro is increasingly becoming a dual economy. On the one hand, there is a thriving economy in the coastal and central plains, benefiting from the growth in tourism, other services sectors, construction and light manufacturing. On the other hand, the northern mountainous region is increasingly disconnected from the growth drivers, instead suffering from depopulation, reduced investments, high climate change vulnerability and limited competitiveness. In particular, agricultural businesses in the northern regions are disadvantaged as they lack economies of scale that are key to competing against imports.

44. Experience from other countries suggests that with the right strategy, tourism can be one of the levers for promoting inclusive rural growth for both traditional and innovative products. Many tourists are becoming increasingly sophisticated in the hospitality choices, demanding inter alia high quality food that is differentiated and offer a unique 'story', such as being produced locally, organically or in a

clean mountainous environment. At the same time, with a population that treasures local food products and traditions, but with food imports being at multiples of domestic production, there is clearly a potential to promote agricultural import substitution. However, such a change will require a fundamental structural transformation of smallholders' production, processing, marketing and branding methods.

45. IFAD's value added in Montenegro. As an upper middle-income country (upper MIC), Montenegro has perhaps only a limited need to draw on IFAD loan resources as a source of complementary funding to its public expenditure. Its requirement from IFAD is rather one of 'finance-plus', where the additional dimension is the experience, skills and knowledge management that IFAD can bring. The process of EU accession is a complex one, and MARD's capacity is stretched thin in addressing the many policy, legislative – and indeed administrative – requirements associated with it. In this context, the Ministry has only a limited capacity to take on the additional task of articulating – and operationalising – a strategy for promoting an inclusive approach to agricultural and rural development that incorporates and responds to the challenges faced by poor smallholder families. GoM is looking to IFAD to assist it in filling this gap, and use the project as a vehicle to test and promote approaches for inclusive and sustainable agricultural development which can provide the basis for future public policy, strategy and investments. For IFAD, this represents a valuable opportunity to pursue its poverty-focused mandate, and to leverage this to contribute to the process of agricultural and rural policy formulation in an upper MIC and future EU member.

46. Reflecting this agenda, the project is structured to offer a strong focus on knowledge management (KM) and learning, focused by and large on capitalising the emerging policy lessons. More broadly however, its design responds to the specific context of rural poverty and the economic opportunities available. First, the project will be carefully targeted at poor smallholder farming households in the mountainous areas of northern Montenegro, who constitute the poorest section of Montenegrin society. These households are currently largely excluded from agricultural markets and they risk being further left behind by the process of EU accession. Many are too small even to benefit from MARD's direct payments support. Second, the project will support those smallholder farmers and small producers as businesses, targeting resources to those who have the potential to be economically productive, but who cannot yet comply with the EU requirements. In doing so, it will complement the EU measures, and assist smallholders to progressively graduate and meet the EU standards. Third, it will focus on empowering rural women and men, both individually and collectively. It will pilot approaches for bringing together poor rural producers and processors and assisting them to create their own market-based organizations, where they see the benefits of doing so, and so laying the ground for future EU support under the third measure of its first axis (i.e. support to farmer organizations). And fourth, the project will bring expertise in promoting climate change adaptation, natural resource management and sustainable smallholder agriculture.

47. The emphasis on smallholders is particularly relevant in this transitional context. The rationale for RCTP is ultimately about improving the livelihoods of the rural poor and the resilience to climate change. Off-farm employment opportunities have narrowed with the collapse of the rural industrial base and viable smallholder agriculture and agro-based enterprises are thus critical for maintaining and sustaining many parts of the rural north. However, agricultural productivity is frustrated by low use of technology, physical isolation, a lack of experience and mistrust of the benefits of working together. Weak market integration is partly a result of poor connectivity but also the narrow agri-business sector, the small production volumes and lack of certification. Stricter enforcement of EU requirements, could see many economically active farmers run a significant risk of slipping into poverty as semi-commercial outlets will be closed for them. On-farm and local processing provides an opportunity to develop niche products based on artisanal, organic or locality-specific certification.

48. The RCTP rationale is further bolstered by a robust policy framework and commitment to drive rural inclusiveness forward. At macro level, GoM's Economy Reform Programme is a solid manifestation of the consistency with IFAD's country strategy¹⁴ of generating growth in the productive sectors that drives a regionally and socio-economic balanced development process, benefitting more than the coastal and plain areas. At sector level, the strategy for development of agricultural and rural areas further refine the approaches and interventions need to ensure sustainable and inclusive leveraging of Montenegro's unique natural resources. The rationale is also shaped by the fact that farm production alone is unlikely to provide a rapid pathway out of poverty for the majority of the mountainous poor, and some will continue to depend heavily on own-account farming for food security and as an important source of cash income for the future, until economic opportunity outside agriculture

¹⁴ IFAD country strategy note (CSN), May 2016.

increases. To facilitate this, the RCPT will adopt a dynamic approach to semi-commercial agriculture, which builds the resilience of smallholders and raises returns to existing farm assets, but at the same time integrates such interventions with other engagements to promote growth, jobs and increased incomes in the rural non-farm economy. Facilitating greater mobility and connectivity between sectors and rural and urban areas, to optimise access to better opportunities for poor people, will be essential.

49. **The underlying theory of change** is that the RCTP will address the key challenges in transforming Montenegro's northern rural economy, towards one that is competitive, climate resilient and a driver of rural economic change and growth. This will be achieved by directing investments at groups where the impact on rural poor smallholder's income is maximised. The theory of change also assumes that protecting the natural environment will be a precondition for a sustainable transformation and hence significant emphasis will be placed on promoting products and processes respecting the delicate eco-balance that characterises mountainous areas. More specifically the RCPT is aiming at addressing areas that have been identified by GoM and IFAD as being critical to achieve the rural transformation (shared vision of where IFAD can add value and provide knowledge products that accelerate the processes of change needed). In particular, 3 areas have been identified as critical for achieving success: (i) VC development and clustering; (ii) connectivity and rural infrastructure; and (iii) climate adaptation.

50. **VC and clustering.** The northern municipalities are rich in natural resources but subject to fragile soils and vulnerability to climate change. Their unspoilt nature offers both challenges – to ensure that intensification/over use of the land and natural resources does not occur – and opportunities, e.g. to develop geographic branding based on low input, low environmental impact, traditional areas of production. Here, smallholders produce food products, such as meat, berries, cheeses, yoghurts, creams, and potatoes using traditional production systems, valued throughout Montenegro.

51. Currently, in the mountainous northern regions, production of dairy products is mainly carried out by smallholders living in scattered, isolated regions, and producing tiny quantities, i.e. too small to be worth the farmer applying for state registration to trade officially, and to guarantee linkages with formalised marketing chains. Similarly, berry production is a new industry, with varietal choices resulting in a lack of continuity of supply, and a major peak in production – which threatens selling prices, limited infrastructure for post-harvest handling, and a fragmented marketing chain (individuals work alone). Many farmers also lack access to water for livestock, and irrigation processing and hygiene conditions during production are often inadequate. Producers, including those with some financial means, are also struggling to find access to up to date production information and equipment.

52. The approach will be covering all stakeholders in a VC, across all municipal boundaries, but based around the poorest of farmers in pre-selected poor mountainous northern municipalities. Taking into account the history of compulsory socialist production, RCTP will not force the creation of new associations/groups, but will prioritize already existing and functional ones and also let stakeholders choose which organizational models make business sense and worth pursuing.

53. **Connectivity and water infrastructure.** For livestock and agriculture to be commercially competitive, a robust and climate resilient infrastructure network is a prerequisite. In northern Montenegro, poor connectivity has contributed greatly to a drastic decrease in livestock and agricultural productivity as well as production quality, hence making the rural business environment riskier. There is a need for accelerated and significant investments in multiple-use water supply systems including domestic use, livestock watering, water-efficient small-scale irrigation (important to cope with recorded climate changes) and local rural roads. Much of the investment required is strategic in nature; that is, its improvement would facilitate and induce a greater subsequent level of farming and other business investment, and thereby contribute to raising levels of economic activity in the proposed project area.

54. **Climate adaptation as a cross cutting issues.** As it is clear from the above, the key climatic patterns such as temperature and rain distribution have changed, while forecasts confirm they will worsen. The consequences of climate change have been visible in the recent past and have led to heavy and destructive events that have affected several municipalities, in particular northern municipalities. Moreover, heavy snowfalls and flash floods are becoming more common. While Montenegrin institutions are engaged in adapting the agriculture sector to climate change - mainly adopting the European policy framework for Environment and Climate Change adaptation as well as investing in a new model of green and organic agriculture - rural smallholders and their livelihoods still need to be supported and guided into a resilience building process.

55. The aim of RCTP and of the adaptation for smallholder agricultural programme (ASAP) grant is to demonstrate that climate change adaptation is possible through improved natural resource management, climate resilient infrastructure and an enhanced VC approach. This can reverse the trend described above and using the selected municipalities as pilots, the project will target key eco-regions and their natural resources and will have a dual approach. Firstly, it will aim at improving the adaptive capacity of both rural people and institutions through the introduction of new practices and technologies that will ensure climate resilience of key infrastructure. Secondly, it will aim at promoting climate smart agricultural and sustainable natural resource management practices.

56. **A final, and critical, rationale for the IFAD engagement is the scaling up potential.** With probably a limited timeframe for IFAD's engagements (assuming accession to EU proceeds as expected), it has been of paramount importance that the interventions are quickly scalable and without needing long-term support from IFAD. Knowledge capture and the use of the knowledge to leverage additional financial resources and inform policy shifts in favour of smallholders will be the main scaling up pathway, as explained earlier. Proven successful results will be used by GoM to leverage partnerships with EU and private sector to expand the outreach to more smallholder farmers.

57. There are two dimensions to the project approach. The first will be to promote the scaling up of new production and infrastructure technologies and operational approaches/models that the project proves to be relevant, effective and efficient. A strong focus on innovation, knowledge capture/dissemination, and policy engagement will offer GoM the opportunity to draw on the implementation experience in developing its own policies, strategies and investments for smallholder agricultural development, including by simply replicating the concepts more widely. In this process, strong budgetary commitment from GoM to the project augurs well for future scaling up. Second, RCTP will strengthen the capacity of the different VC players, and assist them to build sustainable business relations that can be subsequently scaled up. The project will work with selected groups of producers and processors with common interests, in the pre-identified VCs. It will help these to graduate into business-oriented groups/companies to deliver services to their members/shareholders and/or establish sustainable linkages with input suppliers, output buyers, specialized agro-technology service providers, micro-financers and banks; and enable them to make their voice heard in policymaking processes. Scaling up will also be achieved by promoting financial partnerships with the private sector, including public, private, producer partnerships (4Ps). Moreover, by engaging local partners from the onset, IFAD will also expand core institutional-organizational spaces that will allow for domestically led and financed scaling up.

II. RCTP description

A. RCTP's targeting strategy and groups

58. **Target groups.** A strong focus on effective targeting is especially important given that there are no previous IFAD projects in Montenegro and few development partners from whom to learn. In MICs: (i) targeting to reach the rural poor is essential to underpin the rationale for IFAD's engagement; (ii) however, it is also important to notice that the context poses some challenges in reaching the poorest, as this group primarily consists of older men and women with limited productive potential, often surviving on a combination of social transfers (incl. disability benefits) and backyard farming, with the latter being for own consumption and informal sales. With limited investable surplus and no access to investment credits, this group cannot drive the rural transformation that the RCTP aims to catalyse.

59. Accordingly, RCTP's focus will be on those remaining in rural areas that have a potential to invest time, effort and capital and thus catalyse this transformation. This is also in line with the experience for/from other MICs in the region (e.g. Georgia and Moldova), which have seen similar depopulation of the rural areas, with resulting similar characteristics of the poorest. This approach has also been validated in IFAD's evaluation of its engagement with MICs¹⁵. However, it is obviously also important to guard against elite capture and hence both selection criteria and subsequent monitoring and evaluation (M&E) arrangements will ensure that benefits are accruing to the core target groups.

60. In line with IFAD's mandate, the population profile in northern Montenegro and project objectives, the RCTP target groups will be: (i) semi-subsistence farmers; (ii) commercial and economically

¹⁵ See IFAD-IOE: IFAD's Evaluation of Engagement in Middle-income Countries' 2013

active smallholders and small-scale processors; as well as (iii) key private sector actors along the selected VCs. Their characteristics are as follows (more details are given in Appendix 2):

- (i) *Semi subsistence farmers* are poorer households below the threshold for GoM and EU subventions. They have access to small areas of farm/arable land (up to 2 ha), grow some fruits/vegetables and keep some livestock. They process cheese and products for household use and informal sales. Annual income ranges from EUR 2000 to 4000, of which up to one third comes from agriculture. Many have higher commercial ambitions, and the RCTP objective is to help them graduate to become more commercial and economically active.
- (ii) *Commercial and economically active smallholders/small-scale dairy processors with potential* are smallholders and/or small-scale processors who typically own 2-15 ha of arable land, 10-15 cows, 50-100 sheep and goats, or orchards. They have sufficient labour and skills but lack affordable inputs, finance, connectivity to networks and markets, technical capacity and scale. They process a range of milk-based and meat products which are sold through formal outlets (dairies, local supermarkets, and informal networks). Annual income ranges from EUR 4000 to 8000, of which 40 to 80% is earned in agriculture, including government agricultural direct payment subsidies. They have the potential to provide consistent increased outputs' volumes and quality to meet safety compliance standards and market requirements.
- (iii) *Other strategic VC actors* include larger, lead farmers and agro-enterprises who can serve as models to demonstrate the viability of new approaches to increase rural resilience and provide potential development pathways for the poor, including generating employment opportunities. They also include traders, input suppliers, private service providers, cooperatives or associations. In the cluster-based development approach, the private sector plays a crucial role in ensuring market-led enterprise growth and provide contract farming opportunities for smallholders and general market outlets.

61. **Outreach and type of beneficiaries.** The total RCTP outreach is estimated at around 4.600 households¹⁶ (or some 16,100 persons). Not all beneficiaries, however, will derive the same types of benefits, and depth of outreach will vary. Thus, beneficiaries may be categorized as follows, according to the type and combination of services they will receive from the project:

- (i) *Primary beneficiaries.* Group of households expected to benefit the most from the project. They are the key actors in the VC (producers, buyers, suppliers, etc.), who will receive a matching grant from the value chain fund (VCF, see Component 1) to invest in a profitable activity and who will be supported to establish business and trade agreements. Within this group, the active smallholders and poorer farmers will benefit the most, as they will also receive capacity building support to develop their business skills. Among them, a smaller group will also benefit from improved access to roads and water infrastructure under Component 2. As result of RCTP interventions, the group of primary project beneficiaries are expected to increase their incomes significantly.
- (ii) *Secondary beneficiaries.* These are all the producers, suppliers, traders or agri-businesses who will not receive a VCF grant or Business Skill Facilitation (BSF) training, but who will participate in cluster meetings and, gradually, in cluster activities. The improved production and market conditions created by the project will stimulate their motivation to join the VC activities with their own investments, ultimately resulting in improved incomes.
- (iii) *Tertiary beneficiaries.* These are the households who will benefit from the improved roads and the new water supply schemes, but who will not receive any other support from the project and will not engage in IFAD supported VC activities. They will essentially benefit from improved resilience to climate change and from a more modest increase in incomes, compared with the previous two categories, due to the reduction of transportation costs and the reduction in water shortages resulting in better agricultural productivity.

62. **Targeting strategy.** Targeting will take place in a three-stage process: (i) cluster selection; (ii) geographical targeting; and (iii) beneficiaries' selection, with specific targeting measures to ensure outreach to poorer smallholders, women and youth.

¹⁶ Estimated 3075 producers who will participate in the clusters, and the 2000 households benefiting from component 2 investments, minus the number of Component 2 households also benefiting from Component 1 activities (roughly estimated at 400 households). These are estimates and close monitoring will be done at implementation in order to avoid double-counting of households reached.

63. Cluster selection. The project design has identified an initial portfolio of four products that have both confirmed market demand and income potential for smallholders. They offer opportunities for smallholders in different settings and with different available resources. As well as the fundamentals of confirmed market demand and profit opportunities for smallholders, a key selection criterion has been the existence of feasible investment pathways for poorer smallholders to benefit from the supported product clusters. In particular, cluster selection has considered the minimum practical scale of a starter investment by a smallholder to upgrade their production to a level at which a share of their increased income earned can be reinvested to continue to grow the farm, ultimately delivering sufficient returns on labour to farmers. The initial products (detailed information in Section II.C. Component 1 below) and their expected targeting are:

- (1) Cultivated berries, which are among the most profitable, and have one of the lowest costs of entry for smallholders if they are collaborating to aggregate and sell their produce. If working within a cluster, profitable initial smallholder production can start on as little as a few hundred square metres and a good living can be earned from production on less than 0.5 ha.
- (2) Seed potato production is well suited to upland arable smallholders with a few ha of cultivable land (as is typical in the more upland parts of the northern region) but with more severe winter conditions and short production seasons that prevent the competitive production of other high value crops. The modest domestic market size means that opportunities are likely to be limited to less than 100 smallholders initially, committed and diligent in applying the required in-field production systems and willing to collaborate together for efficient investment in mechanization and aggregation of production to enable better market linkages.
- (3) Cheese production - especially craft cheeses from cow, goat and sheep's milk are conservatively estimated to create 55% incremental added value compared to raw milk sales. With clear demand, this presents opportunities for milk producing smallholders, who are willing to work together and can find entrepreneurial managers among their network to run small professional cheese dairies which meet required food safety standards. This makes it best suited to existing livestock farmers living in villages with good relationships with their neighbours, and often the younger generation of farmers as well.
- (4) Meat, especially of sheep and goats, has strong domestic demand and is well suited to farmers with access to grazing land but who are too remote to collaborate easily with others to aggregate production. While raising small ruminants for meat is still profitable, the slower returns and larger starter investments to upgrade herd sizes to levels at which farmers can then use profits to reinvest means that the cost to RCTP in supporting these more remote farmers may be somewhat higher than for the more accessible farmers who can engage in berries. Such higher costs are justified to ensure a broader, more inclusive distribution of impacts.

64. Geographical targeting. The project will focus on rural areas in the northern mountainous region, where farm land is mostly above 600 m. Selection criteria are based on socio-economic, poverty, and climate vulnerability profiles, coupled with potential for enterprise development in the products pre-identified and the target groups' willingness to participate in and support the project. The initial selection includes Niksic, Savnik, Zabljak, Berane, Mojkovac, Petnjica, and Bijelo Polje. At a later stage Pluzine, and Andrijevica, may be included, pending funding, market opportunities and potential impact on smallholders.

65. Beneficiaries' selection. The targeting strategy will include a mix of methods and approaches. Self-targeting will be one of them, as many activities will be of immediate relevance to the economically active farmers (poor and better off) and other VC actors, who will have a genuine interest and motivation, at least initially, to participate in clusters' meetings and/or activities. Their participation in clusters' meetings will be primarily ensured through communication efforts and networking by the Project Coordination Unit (PCU) and local partners. To ensure that economically active smallholders and poorer producers are effectively participating and benefiting, the method of *eligibility criteria* will ensure that they are efficient to avoid elite capture, and adequate to promote the effective participation of the poor, women and the youth. In addition, an important practical aspect of the project targeting approach will be to ensure a multi-round engagement in villages that are part of the project supported clusters. By having multiple rounds of farmer mobilization and VCF grants, typically over 3-4 years, more risk averse and poorer farmers will have the opportunity to enter the clusters later, once the clusters are more established and when they can learn from their "early adopter" neighbours' successes and piggy-back on the more established market linkages.

66. **Youth and gender considerations.** The project will ensure that young men and women (below the age of 40) are fully engaged in cluster development opportunities in terms of participating in business skills training, VCF grants or small-scale infrastructure. Among others, the PCU VC experts will have specific responsibility for maximising opportunities for youth empowerment. Staff from PCU, MARD, municipalities and service providers will be sensitized on the importance of youth and gender mainstreaming and the PCU VC Specialists will work in close collaboration with the municipal gender focal points. The M&E officer will consolidate and analyse the sex- and age-disaggregated and poverty data to track project engagement with households who may otherwise be excluded, and work with PCU colleagues and service providers to strengthen youth inclusion. During project start-up and throughout implementation, it will be essential to ensure all stakeholders, including staff from MARD, municipalities, the PCU and service providers, fully appreciate IFAD's commitment to working with poorer smallholders as well as the more economically active enterprises.

B. Overall goal and development objective

67. The **RCTP overall goal** is to *contribute to the transformation of smallholders' livelihoods in northern Montenegro, enabling them to become more competitive and resilient to climate change.* This will be accomplished by strengthening their resilience and improving economic opportunities for the rural poor based on competitive farms and agribusinesses that are connected to and integrated into more profitable VCs.

68. The **development objective** thus aims at *increasing the participation of poor smallholders in inclusive, profitable and environmentally sustainable VCs, and enhance the benefits they derive from them.* The strategy for achieving this is to build on and accentuate the treasured characteristics of rural production, thus ensuring that sustainable land and water use practices are promoted while also increasing the smallholders' climate adaptive capacity. Climate adaptation and environmental concerns will be leveraged to make products more unique, through branding, certification and storytelling.

C. Outcomes, components and synergies

69. To achieve the development objective, the RCTP three (3) outcomes are: (i) Firstly to improve commercial relations between smallholders, suppliers, buyers, supported by relevant public actors, which will catalyse increased level of investments in the selected VCs; (ii) Secondly, the project will improve access by smallholders to resilient water schemes and farm access roads that support the selected VCs; and (iii) Finally, lessons from successful project approaches will be gradually incorporated into national practices and policies. The latter outcome is thus fully reliant on lessons produced by outcomes 1 and 2.

70. The first two outcomes are chosen to achieve optimal impact in terms of addressing the core binding constraints facing poor smallholders. Combined, they will thus deliver more than the sum of their parts by ensuring that a multiplicity of challenges are simultaneously addressed where and when needed. Moreover, they also reflect the areas where IFAD has a comparative advantage vis-à-vis other development partners, most notably in catalysing inclusive rural transformations for smallholders and helping translate project experience into lasting institutional capacities and public investment strategies. The first two outcomes will be primarily addressed through Components 1 and 2, respectively, while the third outcome will draw on experience and evidence from across the project. The synergies will materialise based on demand within selected VC clusters. Thus, some smallholder communities may need infrastructural improvements to cope with increased production volumes and the need for more reliable connectivity as a consequence of increased VC integration. Rural roads and water supply investments will be identified with stakeholders within the selected VC clusters. Also within the components, there will be strong mutually reinforcing synergies between activities based needs (e.g. upgrading product quality may be accompanied with better branding/marketing).

71. Synergies will also be sought with other development engagement that can assist in the rural transformation, including EU (which will be able to cater for smallholders graduating out poverty), municipalities, and obviously MARD. Progressively the VC integration will allow for significant synergies with the private sector, that is expected to be the main driver in the long term. All engagements will be demand-driven, which implies that when farmers and MSEs supported under Component 1 (see below) are in need of infrastructural support, RCTP will link them up with the Component 2, where so desired by the actors. Vice-versa, where farmers/enterprises benefitting from infrastructural support (see below) are within a supported cluster area and also request support to become more

tightly integrated in relevant VCs, Component 1 should positively consider including these. The outreach campaign will strengthen awareness of the menu of support engagements that the RCTP offers, enhancing synergies and coherence where relevant to the beneficiaries, but not forcing them to accept bundling of various activities, of which only one may be demanded.

Outcome 1: VC clustering for resilient rural transformation (Component 1)

72. The project will focus on promoting the expansion of competitive clusters for a portfolio of products with confirmed market potential and comparative advantages for smallholder production in the project locations. Specifically, product clusters have been prioritized which have: (i) Clear, current market demand for the specific products - sufficient to absorb the expected increase in production; (ii) Interest from traders and agribusinesses to grow their sourcing from the cluster locations; (iii) Interest from farmers, including smallholders, to expand and improve their production; (iv) Opportunities for competitive, profitable and sustainable (including climate resilience) smallholder production; and (v) Practical intervention opportunities for the project to facilitate the accelerated development of the particular market and local cluster.

73. A critical consideration has been the potential for strong upside for individual smallholders and younger farmers to invest, expand and improve their production. Careful consideration has been given to viable "investment pathways" for smallholders in each of the prioritized products (details in Appendix 4). Clustering of production to help aggregate supply and reduce transaction costs between buyers and farmers, is also vital if smallholders and especially those making minimum initial investment are going to be able to succeed in becoming reliable suppliers. Clustering can thus help improve market access for small farmers and hence make the above investment pathways viable. In contrast, small farmers operating in isolation face problems in accessing competitive markets and so the investment pathways are challenging, often requiring much larger minimum investments to reach a viable minimum scale as a standalone producer. Accordingly, the RCTP design recognizes the likely value of some degree of coordination between smallholders in a locality – e.g. in jointly negotiating with buyers or bulk purchasing of inputs and services.

74. The Component will therefore develop competitive inclusive clusters by focusing on brokering, facilitation, innovations development and capacity development support to inclusive growth. The four initial prioritized products (cultivated berries, cheese, meat and seed potatoes), based on a rapid assessment against the above criteria, and their projected outreach and primary market opportunity being targeted are summarized in table 2 (next page). While they offer immediate opportunities, it is expected that during implementation additional opportunities will emerge, often for products which are only produced on a minimal scale at the moment but which have both favourable market conditions and comparative advantage for smallholder production. Examples may include honey, cultivated medicinal & aromatic plants, as well as strawberry production in upland areas (e.g. Dormitor region).

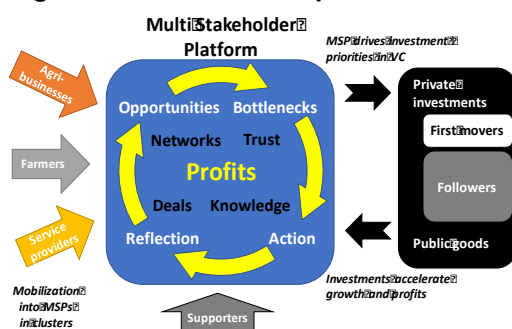
75. The project will therefore be open to increasing the number and range of clusters supported in response to credible opportunities subject to the capacity of the project teams and implementing partners to extend their support further.

Table 2: Priority commodities, outreach and target markets

Commodity	Outreach (smallholders)	Target market opportunity
Cultivated berries (initially raspberries and expected to expand to other berries)	2200	Export driven growth. Some initial growth in domestic market (for residents and tourists) but likely to be quickly saturated. Price expectation would be competitive fresh (US\$ 4/kg CIF) and frozen (US\$ 2.5/kg) berry export prices in Europe but also other high potential markets (UAE, China)
Cheese (goat, cow, sheep)	600	Import substitution of approximately 30% of the 4700t p.a. of cheese and curd imported. Focus on premium quality segments with locally branded cheeses. Second stage growth would be export markets once local supply chains and branding are more mature.
Meat (especially sheep/goat)	200	Import substitution for sheep and goat meat. Current approximately 20% of consumption met from imports - equivalent to approx. 50,000 animals p.a. imports - 80% as live animal imports (mostly Serbia) and 20% as meat (mostly Macedonia). Price expectations would be on par with import prices and at comparable quality or higher.
Seed potatoes (supported by ware potatoes).	75	Import substitutions for domestic seed potato demand of approx. 3500t p.a., currently approx. 30% is met from domestic supply. Target would be to increase to 60% from domestic supply. Price expectations would be below import prices but at comparable quality to gain market share.
Total (initial 4 products)	3075 households	

76. The key actors in a cluster are farmers, buyers, processors, input suppliers, financial service providers, other private and public service providers and staff of government agencies, municipalities and other supporters of the cluster.

Figure 5: Cluster Development Process



77. **Cluster development processes will be driven by the primary actors themselves**, primarily farmers and agribusinesses, and not directed by external experts. The process is anchored on an ongoing series of facilitated multi-stakeholder cluster meetings among key actors, to discuss emerging issues and opportunities and develop immediate action plans together to tackle the issues. These meetings (sometimes referred to as multi-stakeholder platforms, MSPs) create a space for engagement and dialogue, help to create trust and deepen networks among farmers and agri-businesses, share knowledge, address common issues, identify pro-

spects for business opportunities between participants and so strengthen the VC. These dialogues and action plans then generate spin-off activities and investments driven by the priorities jointly identified by the actors. Some actions and investments can happen without external support, while other may require some form of enabling public support.

78. The expertise of the RCTP team therefore needs to be in mobilizing the primary actors, facilitating and brokering these processes and subsequently deploying the project's investment instruments (i.e. VCF, Sector Development Facility - see below) to respond to the joint priorities. The role of the project team is not to dictate specific actions or directions for the clusters' development. Clusters need to be used as a means to achieve an end, not as an end in themselves, i.e. a cluster is useful when: (i) the VC is highly unstructured throughout its segments (production, transportation, enabling environment), thus requiring interventions by numerous stakeholders who could not resolve any single issue alone; (ii) trust among stakeholders is weak and hence a special effort to create trust and 'social capital' is necessary; and (iii) obstacles to objectives need to be addressed by multiple stakeholders.

79. For each initially supported commodity, the potential for local cluster development will be re-confirmed by initial rapid scans at project start, including confirming buyers' demand, mapping, climate risks, analysis of players, and attractiveness of opportunities to smallholders, especially the next generation of younger farmers. The main activities under the Component will therefore include:

80. **Multi-stakeholder cluster meetings.** The core of the approach will be to facilitate results-driven brokering and dialogue among primary actors in each cluster. The multi-stakeholder cluster meetings will enable these actors to jointly identify priority opportunities and bottlenecks for developing their cluster and corresponding priorities. These meetings will have a rolling cycle of dialogues organized 1-2 times per year in each cluster, to provide a space to reflect on and address emerging opportunities and bottlenecks as the local clusters develop. The meetings will generate follow-up activities, summarized below. In addition, priority needs for additional infrastructure support in climate-smart irrigation and farm access roads for smallholders in the clusters will also be identified through the multi-stakeholder meetings and inform the prioritisation of works under Component 2.

81. **Bilateral business-to-business (B2B) meetings.** B2B meetings will be held, typically between one of the businesses (a buyer or service/input provider) and a set of farmers who met during the multi-stakeholder meetings and identified opportunities to do business together. In the early stages of cluster development, these meetings will be facilitated by the project team to help build trust among partners. The B2B follow-up meetings will typically focus on developing and negotiating practical trading plans between farmers and businesses to do business together. In turn, the trading plans will often lead to the need for specific actions or investments to be made by the farmers, business or both. The investments and actions may be taken individually or jointly, depending on what has been agreed. If requested, technical support will be arranged by the project to assist the farmers and businesses to prepare well-informed investment plans, which will include climate smart best options.

82. **Value Chain Fund (VCF).** Matching grants for private investments promotion will be offered on a competitive basis to smallholders and SMEs engaged in the clusters, specifically targeted to stimulate investments in the priorities identified via the multi-stakeholder cluster meetings. E.g., this may be on investments in small commercial nurseries to increase supply of certified berry seedlings, expansion of smallholder production to increase the supply of products in a target locality, and/or investment in collection/storage/processing facilities to absorb production. Any required technical advice or training to farmers will be included in the investment plans, comprising of the climate resilience dimension, and will be provided by specialised service providers. The rationale for the use of grants is to stimulate investment to address identified bottlenecks, introduce innovations and/or achieve minimum critical mass in local clusters. Once the investments are successful and the clusters become more dynamic, other smallholders will be able to copy them at lower risk, and without the same level of grant subsidies. To ensure reasonable transaction costs, a minimum grant size and small grant bundling procedures will be determined during finalisation of the project implementation manual (PIM).

83. Matching grants will have specific eligibility, selection and screening criteria (see preliminary details in Appendices 4 and 11). The VCF will operate two windows for its grants with the first being aimed at *smallholder investments with a maximum grant of EUR 1,000*. The second window *will be for SME investments with a cap of EUR 13,000*. Grant applications will be prioritized based on credible projected impact on target smallholders if the proposed investment is fully implemented. For larger agri-business investment, where total investment is larger than EUR 40,000, the enterprise, co-operatives and groups will be supported to make application to IPARD for grant support. It will be critical that activities financed by matching grants have minimal impact on environment and are complying with national regulations on environment and social impact to mitigate risks whenever relevant.

84. **Sector Development Facility (SDF)** will be managed directly by the PCU for investment in quasi-public goods that address specific bottlenecks to the cluster development identified by the primary actors themselves. The SDF will focus on "public good" investments only that cannot reasonably be delivered through private investment in the current context of the specific clusters. The types of investments possible under the SDF will include, for example: action research on production/post-harvest issues, variety/production trials, upgrading public testing labs or sanitary and phytosanitary (SPS) inspection capacity at local level, piloting novel or untested business models, etc. Climate proofing of these facilities will be sought for sustainability of the service delivery.

85. **Business skills for farmers** are vital if they are to succeed in the supported clusters and critically important for households to properly assess opportunities and risks (in particular regarding climate stresses), enabling them to better negotiate their interests in VC transactions and become reliable partners to agri-businesses. Business skills trainings, focused on farming as a climate smart

business, will be provided to all interested farmers in a cluster through a peer-to-peer process. Business Skills Facilitators (BSFs) will be recruited by the PCU, with assistance from the regional extension teams, and trained to provide business skills to interested participating farmers in their local community. They will initially be paid by the project for training sessions¹⁷ and are expected to gain a high level of skill and confidence, contributing increasingly to supporting the preparation of investment plans and helping with collective negotiations among their neighbours with traders and buyers. As residents in their community, these skills will remain available after the project to support neighbours in the future in preparing investment plans, loan applications or joint negotiations with new prospective buyers, allowing for easy up-scaling.

86. **Increasing access to finance for smallholders and agri-SMEs** from mainstream financial institutions, as well as via VC financing where feasible, is vital if widespread investment in higher value agriculture is to be achieved and the country's agricultural potential fully developed. To increase the appetite of financial institutions to lend to profitable agricultural sectors, the RCTP will initially pilot partnerships with one or more financial institutions, which have a commercial interest in testing new approaches (e.g. alternative collateral or guarantee mechanisms in the context of coordinated investments along the VC in a given cluster). This will be supported with TA on a cost sharing basis and the project will also support the financial institution to identify suitable banking professional with the necessary skills and experience in agricultural finance.

Outcome 2: Cluster supportive rural infrastructure (Component 2)

87. This outcome will support investments in productive rural infrastructure to remove the bottlenecks hampering the consolidation and clustering of smallholders and village based agri-business, and to foster the adoption of climate smart technologies. To this effect, the component will utilise public-private-partnerships for business-enabling rural infrastructure development as a way of driving private sector investment and scaling up of the RCTP interventions. As key drivers of local economy, municipalities should also play a role within the process of cluster development.

88. The upscaling pathways are based on two interlinked trajectories: One of leveraging public resources from both municipalities and central government, most notably for roads. Secondly, the RCTP will harness private capital (e.g. from beneficiaries contributing both cash and in-kind). While contributing to increasing the profitability of the supported small farmers and agri-businesses, this outcome will also contribute to increasing the net income of the rural poor who will get access to the jobs created by the expansion of these agribusinesses, particularly as wage labour (both seasonal and full time) for the production of high value crops. These investments catalysed by IFAD support will assist in the structural transformation of the rural sector, towards increased competitiveness and greater resilience, in the process creating opportunities for many poor people, including women.

89. With an input of about US\$ 7.726 million¹⁸ (or EUR 7.26 million), identified list of eligible infrastructure and the proposed implementation approach (details are provided further below), the main outputs expected as a result of the infrastructure component activities are: (i) some 30 rural roads with improved 'last mile' sections and total lengths of about 65-70 km, improving connectivity and market inclusiveness; (ii) 15 water ponds for animals; and (iii) 12 water supply systems for multiple use.

90. The following main outcomes are expected to be the key results from the activities under the Cluster supportive rural infrastructure Component:

- Quality of life and/or livestock/agricultural production improved in an estimated 20 rural communities¹⁹ or some 57 villages in the project area municipalities.
- Some 1,400 HH (4,900 people) would directly benefit from improved road in the targeted municipalities.
- About 600 HH (2,100 people) would be provided with ponds for livestock watering and adequate water supply for multiple use purposes.
- The total number of households benefitting from the infrastructure component is projected to be 2,000 HH, or some 7,000 people (12 % of the total rural population from project area).

¹⁷ Budgeted in detailed tables 1. 2.(d) (training of the BSFs) and 1.2.(e) (financial incentive for them).

¹⁸ Consultancy services for feasibility studies would be funded from the ASAP grant fund and works supervision from IFAD loan fund. The benefitting municipalities at their own cost would provide detailed engineering designs.

¹⁹ Mjesna Zajednica in the context of northern Montenegro consisting usually of 3-15 villages.

91. The Component has been designed to enhance access to markets through a range of infrastructure investments which will be undertaken in close partnership with municipalities. The main selection criteria will be infrastructure schemes that enhance the opportunities for agribusiness and rural enterprises, while serving the largest numbers of beneficiaries, and in particular the semi-subsistence households/smallholders and the commercial and economically active rural households/smallholders. All selected schemes will have to demonstrate the potential of the scheme to enhance economic opportunities and improved livelihoods, allowing for future easier scaling-up by beneficiaries (incl. private sector), municipalities or central government. The identification of schemes will be based on the selected clusters (in support of Component 1), and will be undertaken in a participatory and demand-driven manner to ensure that they meet target group needs. Selection criteria that assess technical feasibility of the scheme, ensure economic viability, local contribution and capacity of the municipality to maintain the scheme will be used to identify selected schemes²⁰. The draft PIM (Appendix 11) specifies the selection criteria in detail.

92. There is a substantial requirement for major investment in rural infrastructure in general and in multiple-use water supply, rural roads, and flood protection in particular. However, the Component explicitly will not support infrastructure investment simply because there is scope for its improvement. It will support the RCTP in removing infrastructure bottlenecks aiming to increase incomes in rural areas through the stimulation of private enterprise as the vehicle for poverty reduction. In this context, any involvement in aspects of infrastructure investment will be explicitly linked to their ability to catalyse inclusive economic growth, including the clusters/VCs supported under Component 1. The deficiencies in infrastructure noted above that affect the financial feasibility of further investment in economic activities at a local level, by farmers or the proprietors of small and medium-scale enterprises illustrate the types of investments that the infrastructure component could potentially support.

93. The main types of infrastructure that will be eligible will include infrastructure of common use such as economic/productive water infrastructure including livestock water ponds, multiple-use household water supply systems, and last mileage of local or feeder roads including required ancillary structures. Investments will have to comply with national regulations on environment and social impact to mitigate risks, whenever relevant. The Component will comprise of two sub-components:

94. **Output 2.1: Investment in rural water supplies (RWS) (sub-component 2.1).** The investment will support communities on a pragmatic basis based on demand and support the objectives of Component 1. A total amount of US\$ 1.87 million has been allocated to this sub-component including US\$ 1.06 million (about 56%) from IFAD's ASAP grant, municipality cash contribution of about US\$ 0.41 million (some 20%), beneficiary contribution of about US\$ 0.10 million (5%), and central GoM contribution of about US\$ 0.30 million (19%) in the form of VAT exemption. The investments will focus on multiple use facilities, providing households with domestic water supply, as well as water to cater for livestock or processing facilities, and possibly small scale irrigation systems. These investments will include ponds and facilities for rain water harvesting for livestock watering, spring capping, gravity conveyance and distribution network with polyethylene pipes and other facilities as will be required by site specific conditions. All these will ensure better climate and economic resilience as reliability of water supply and management will increase.

95. **Output 2.2: Investment in rural roads improvements (RRI) (sub-component 2.2).** The investment will be directed in rural roads and ancillary structures that complement and strengthen RCTP objectives under Component 1, for example by assuring adequate access to RCTP-supported VC/commodity production areas and facilitating marketing of their produce. A total amount of US\$ 5.72 million has been allocated to this sub-component including US\$ 0.93 million (about 16%) from IFAD's loan and ASAP grant funds, central government cash contribution of US\$ 2.63 million (some 46%), municipality cash contribution of US\$ 0.99 million (about 17%), beneficiary contribution of about US\$ 0.25 million (5%), and central government contribution of about US\$ 0.91 million in the form of VAT exemption (16%). The roads to be improved will comprise mainly of last mileage of local or unclassified roads in rural areas. Eligible investments will include also road ancillaries such as small bridges, drainage facilities and erosion protection works to ensure climate resilience of the rehabilitated roads.

²⁰ Full viability assessment of the proposed infrastructure investments on targeted beneficiaries will be made.

Outcome 3: Learnings and Policy Engagements

96. The RCTP is designed to reflect and conform to national policies. In addition however, it is expected to: (i) pilot new approaches to smallholder-focused rural development and draw out the lessons learned that can potentially inform new national policies and strategies; (ii) create space for engagement and dialogue involving key players in the selected VCs, which can (amongst their other functions) identify specific policy bottlenecks that constrain the development of those VCs; and (iii) on the basis of the issues emerging under (i) and (ii) above, conduct more specific policy reviews/analyses as necessary. Implementation is expected to generate useful lessons in a number of key thematic areas, and that may be of value to MARD policy makers and other stakeholders. To track and assess the performance/relevance of the clusters model (i.e. collect and assess data), annual cluster surveys are planned from year 1 (budgeted under Component 1). On that basis, a case study approach would be prepared in year 3. It is also considered that a national/broad based workshop be held in year 4 of implementation (which will include policy decision makers and the EU funded programmes), to demonstrate project results, and to communicate on progress made and potential for scalability (using information generated from the outcomes of the annual cluster surveys). For certain more complex policy issues, project lessons and experience may need to be complemented with more in-depth policy studies/analysis. During implementation, the initial “learning and policy dialogue agenda” shall be enriched with new policy issues emerging from the established clusters. The documentation of key, evidenced-based lessons will include a range of methods (printed case studies, policy briefs or videos), while their dissemination will depend on the targeted audience (local, national, regional workshops; KM working group meetings; project website; media broadcast).

D. Lessons learned and adherence to IFAD policies

97. As IFAD has no country experience yet, this section focuses on lessons learned: (i) from others development partners (GoM, EU, the WB, UNIDO, etc.); and (ii) from IFAD’s engagements in other MICs in East and Southeast Europe, in particular Albania, Bosnia and Herzegovina, Moldova, and Georgia. The lessons focus have shaped the design of the RCTP in terms of institutional setup, infrastructural financing, clustering modalities, targeting in MICs and on mainstreaming climate adaptation, all detailed below. More information is provided in Appendices 3 and 12.

Main lessons learnt

98. **Institutionally, although MARD has significantly strengthened its institutional capacities, the set-up of a dedicated project coordination unit (PCU) is recommended.** The key lessons come from the review of the experience of the IPA assistance, the pre-IPARD projects and the EU/WB Montenegro Institutional Development and Agricultural Strengthening project (MIDAS, closed in September 2016). Significant institutional progress has been recorded in working with the MARD. This is especially recognized when it comes to the establishment of the IPARD-Paying Agency, now staffed with MARD’s employees and managing IPARD funding without TA. Despite progress achieved, areas for further improvement include: (i) a more adequate targeting of beneficiaries (i.e. compliance with project criteria); (ii) an improved delivery planning, allowing for better monitoring of both disbursement and physical progress; (iii) a more adequate staffing to avoid overloading MARD’s staff; (iv) a greater awareness on sustainability and impact monitoring; and (v) a more adequate donor coordination. Against this background, and with the concurrence of MARD, it is proposed to have a fully dedicated PCU set-up for the RCTP implementation (with staff competitively recruited and with staff seconded by MARD, as described in Section III.B below).

99. **Concerning the institutional capacity to deliver front line services, the main lesson is that provision of extension services by government has been extremely limited in its coverage, and largely been supply driven with a focus on production aspects of crops and livestock.** Consequently, there is need to facilitate the gradual move towards market-oriented pluralistic demand driven extension services to smallholders to enable them to become competitive in the EU market in the medium term. MARD has a Directorate of Phytosanitary and Veterinary, which supports delivery of extension services at municipality level. The Bio-Faculty of the University of Montenegro complements provision of extension services. There are private service providers in the training market who can be mobilised to provide services to the project. There are several entrepreneurs in the meat and fruit sub-sectors who are willing to mentor young entrepreneurs. Capacity development is planned for MARD extension services particularly in the areas of agribusiness and in managing contracts with hired

service providers. Training of trainers (TOT) will be required to ensure that extension officers are able to build capacity for strengthening social capital and business skills of producer association members in efforts to make them business oriented. Contracting of local services providers for implementation of project activities will allow strengthening local NGOs and private sector.

100. **While past socialist "Zadruga" legacy still lingers, younger generations of farmers remain open to collaboration where there are clear practical benefits.** The UNIDO supported Cluster Development Project and the FAO Project "Development Assistance (2006-2010) to Farmers in Remote Areas of Kosovo and Montenegro" present useful lessons RCTP will draw from. The UNIDO approach has begun to demonstrate the potential of letting the private sector play a central role in promoting growth along business lines in olive, fish, wine, and metal-works micro-clusters with a small number of similar businesses coming together to create larger networks. This facilitates learning and brokering of business relationships. The limitations of especially the UNIDO approach, in the context of the RCTP objectives, have been the rather limited size of the clusters, its limited engagement with smallholder producers as the foundation of the VCs and its relatively limited employment creation which have reduced inclusiveness and cost effectiveness of the impacts so far.

101. **On infrastructure, a key learning is that investments can leverage substantial private and public co-financing, building robust PPPs.** This is a key lesson learnt from the region. In rural northern Montenegro, there is huge unsatisfied demand for rural infrastructure, which will be tackled by the EU resources only from 2019/2020. The RCTP activities will therefore be the one of first intervention in rural small-scale infrastructure by a foreign donor institution.

102. **In terms of poverty targeting, experience from e.g. Albania suggests that the most resourceful rural entrepreneurs are likely to capture most of the benefits,** as they are often best placed to articulate demand and frame it in the formats that are required. This can have the unintended consequence of excluding the economically active poor that could potentially graduate out of poverty and become transformation catalyser in their area; which means that there is need to balance a demand driven approach with appropriate procedures and targeting criteria. Second, the key characteristic of IFAD financed investments in rural infrastructure in the region is the targeting of primarily small agro-enterprises, and the mobilization of resources from these entities for co-financing – an approach which has been generally successful in ensuring proper use and sustainability of the completed infrastructure. To maximize the impact of small-scale rural infrastructure, it is essential that they are closely synchronised with other project interventions to achieve the desired complementarity wherever relevant, that maintenance arrangements of infrastructure are defined, and that emphasis is put on cost-benefit analyses and environmental assessment. IFAD experience in comparable environments suggests that: (i) funding support should differ according to the poverty level of the direct beneficiaries, to mitigate potential elite-capture; (ii) such a differentiated approach is possible, based on a robust understanding of how the poor will benefit from the project; and (iii) consideration should be given to poverty and gender impact in selecting infrastructure. PCUs should be sensitized and trained from the start on IFAD targeting strategies and inclusion of the poorest rural households.

103. **Especially water system infrastructure can leverage additional investments in agriculture, catalysing climate resilient rural growth and employment.** In IFAD financed projects in the East and Southeast Europe, most of the investments in rural water supplies have been *de facto* used as multiple use facilities, catering for domestic, livestock watering and irrigation use. These water supplies have generally proven cost effective and provided equitable benefits for the youth, women, and men and were effective in reaching out to the poor. Verifiable impact has been recorded especially for milking cows' productivity and for watering the backyards next to the household.

104. **On clustering, a key learning is that exclusive reliance on geographical targeting (for supported investments) is not sufficient,** and may contradict an effective VC approach since project may feel obliged to distribute resources equitably amongst municipalities, regardless of needs and poverty levels. It is therefore important to couple geographic targeting with socio-economic targeting, ensuring that it is demand driven. The rollout of the RCTP clustering will be phased.

105. **Support to smallholders must take into consideration that the limited degree of commercialisation can undermine their competitiveness especially if they are competing primarily on price.** Opportunities therefore lie in clearly understanding the comparative advantages of the different types of smallholders in the project areas and targeting products and markets accordingly. Similar lessons have been learnt from EU pre-IPARD projects and the EU/WB MIDAS.

Adherence to IFAD Policies and Strategies

106. The RCTP is fully aligned with the IFAD's strategic framework 2016-2025. The project will aim at transforming northern smallholders to become commercially competitive and climatically more resilient. This will be accomplished by strengthening the resilience and improving economic opportunities for the rural poor based on competitive farms and agribusinesses that are connected to and integrated into more profitable VCs, making sustainable use of Montenegro's unique natural resources. Thus, RCTP will contribute to all objectives of the 2016-2025 framework, namely: (i) increase poor rural people's productive capacities; (ii) increase poor rural people's benefits from market participation; and (iii) strengthen environmental sustainability and climate resilience of poor rural people's economic activities. Through the catalytic support of ASAP grant, climate resilience is built in the project contributing then to the 100% climate resilience target²¹ for IFAD10 (see Appendix 12).

107. The RCTP will also translate *IFAD's private-sector strategy* into actions. The strategy states that companies that IFAD will be working with cannot be selected in advance and will depend on the context, implementation opportunities, and the interest of farmers and the companies themselves. It also underlines that the support or partnership should be driven first and foremost by the interests and needs of the smallholders. In that perspective, several small and medium-sized private sector actors were consulted during RCTP design, as well as several farmers already engaged in a commercial partnership with these private actors. Whenever possible and requested by smallholders, and if a clear win-win situation can be achieved, the RCTP will facilitate linkages and contract farming opportunities the private sector. Lead farmers and agro-enterprises will also be involved in project's implementation, as they can serve as champions/ models to demonstrate the viability of new approaches to increase rural resilience and provide potential development pathways for the poor. In doing so, RCTP will assist in improving smallholders access to inputs, services and know-how, as fully in line with the IFAD strategy²². This engagement is expected to leverage significantly more investments from other resources, as farmers and processors become more integrated into the commercial markets (including EU) and as young entrepreneurs gain tracking and expand production.

108. The RCTP design is also fully in accordance with IFAD's *targeting policy* as detailed in 'Reaching the Rural Poor' (2008). The target groups have been profiled and beneficiary groups for proposed project activities identified. The completed targeting checklist is included as an annex to Appendix 2. Special emphasis has been placed on creating attractive livelihood opportunities for young men and women engaged in agriculture and agribusiness, consistent with *IFAD's Gender Mainstreaming in IFAD10 (2016)*. The completed gender checklist is included as an annex to Appendix 2.

III. RCTP implementation

A. Approach

109. A key ambition is to promote institutional development among the core partners. RCTP will contribute to this outcome in several ways, including: (i) development and establishment of institutionalised systems (through clusters, business oriented cooperatives and VC integration) for promotion of commercial, profitable and climate adaptive agricultural practices, with particular focus on rural poor (either as labour or smallholders); and (ii) support to and expansion of public private partnership in rural resilient infrastructure. The outreach campaign will both ensure (i) appropriate targeting by reaching a broad audience of potential beneficiaries, and (ii) better synergies between the Components, as it will inform about all the offers that the RCTP has available.

110. The project approach recognises that while the two primary Components are highly complementary, focusing on inclusive agricultural cluster development and rural productive infrastructure upgrading respectively, they each serve a wider purpose in support of the desired rural transformation. For example, not all developments in the clusters are primarily constrained by physical infrastructure limitations and, conversely, the planned improved water and road infrastructure does not only serve the purposes of the development of the particular product cluster but the wider socio-economic development of the communities benefiting. Consequently, while the project will actively seek to develop synergies between Components where demanded and relevant, it will not dogmati-

²¹ IFAD officially committed to have 100% of its new investments "climate resilient" under its tenth replenishment (IFAD10) and beyond.

²² IFAD: Deepening IFAD's engagement with the private sector, 2012, p 17.

cally insist on rigid linkages and forcing farmers to accept bundled packages of engagements. Synergies will also be sought with other development partners, most notably the EU. Below are the core governance approaches (more details are provided in Appendix 5).

VC clustering for resilient rural transformation (Component 1)

111. The Component will adopt an inclusive VC clustering approach driven by the primary actors in the clusters themselves. The core of the approach is therefore results driven brokering and facilitation among primary cluster actors supported by the use of targeted investments to accelerate the removal of bottlenecks in the clusters' development - either through investment incentives to trigger private investment or through more direct public-led investment in critical "public goods" and infrastructure essential to unlocking the clusters' potential. The critical skills of the project team are therefore as trusted brokers able to build trust and successful trading relationships between smallholders and agri-business. To be successful, this approach must be built on the following principles:

- (i) *Only commercially viable clusters and investments should be supported.* This is essential for supported clusters to be able to sustain long-term competitiveness and genuine self-sufficiency after the project without direct or indirect public subsidies e.g. subsidized interest loans, subsidized fertilizer schemes or free extension services for market-oriented farmers.
- (ii) *Successful clusters are living things that have to be sustained by those involved and cannot be built according to a grand design.* Investment priorities should be driven by the private sector actors who are the ones who have to make the investments a success and carry the risk.
- (iii) *From the start, the project should promote the development of the critical supporting service and input markets* that are a vital part of sustaining a competitive industry alongside the primary VC (farmers, MSMEs, agricultural cooperatives, agri-businesses).
- (iv) *Investment incentives (e.g. matching grants) should be kept to a minimum to address the additional risk of "first movers" investing in innovation in the local clusters* (new technologies, varieties, climate-smart opportunities, business models or services) that are expected to be replicable by others (using mainstream financing) once seen to be a commercial success
- (v) *To attract IFAD-financing support from the project, clusters must have credible potential for inclusive growth*, meaning that significant numbers of active but initially poorer farmers can also earn their fair share of profits alongside other farmers and agribusinesses.
- (vi) *Notwithstanding (d) above, the project should adopt a pragmatic approach to provide targeted additional financial support to poorer smallholders* for productive investments where mainstream financing is functionally not available at the time of the investment.
- (vii) *Be flexible and responsive to the varying character, size, state of development and emerging opportunities and issues in each of the different clusters.*

112. The project will also develop capacity (in individuals, institutions, networks, systems) so that the approaches can be continued after the project. In addition it will learn from best practice elsewhere, but not be limited by this, and refine/adapt approaches to work well in the real setting in Montenegro.

Cluster supportive rural infrastructure (Component 2)

113. Given the dispersed nature of the infrastructure interventions to be carried out and the relatively small-scale characteristics of the works involved, a demand-driven approach will be adopted where the specific works will not be pre-identified at the start of the project, but selected on a periodic (annual) basis on specified criteria and demand by participating municipalities and beneficiaries. The investment selection criteria and scoring procedure for ranking of proposals will be provided in the PIM.

114. The decision-making procedure to be followed for the award of project funding for infrastructure investments is guided by the principles of transparency, demand-driven allocation, cost efficiency, market linkage and cost sharing. The various steps to be followed in selection and award of funding for infrastructure investments are described in detail in Appendices 4, 5 and 11 and involve: (i) information and awareness campaign about the project; (ii) preparation and submission of requests for funding; (iii) prequalification of proposals; (iv) screening and field verification; (v) feasibility study and ranking of proposals; and (vi) final selection and inclusion in the Annual Work Plan and Budget (AWPB) to be approved by IFAD.

B. Organizational framework and implementation arrangements

115. Figure 6 (next page) presents an overview of governance arrangements.

Institutional anchoring and organizational framework

116. The MoF will represent the Borrower (GoM), while the RCTP will be anchored to the Directorate for Rural Development Department of MARD (implementing agency). This Directorate has the responsibility for strategies and programmes in the area of rural development. In collaboration with other MARD departments and with the assistance of other ministries and institutions, it also develops and prepares IPARD-like and IPARD program. Anchoring RCTP to this directorate will allow a better coordination of development assistance, especially when it comes to complementing IPARD.

117. The overall responsibility for RCTP's oversight, political guidance and implementation will rest with a specific project steering committee (PSC), established by government decree and chaired by MARD. The PSC will also include representatives from all RCTP's partners and stakeholders (i.e. MoF, Ministry of Sustainable Development and Tourism, Ministry of Economy, representatives of partner municipalities, and the private sector, including farmers' organisations). The PSC membership may be amended depending on project requirements, subject to prior approval of IFAD. Logistical support and secretarial services for the PSC will be provided by the PCU.

118. Day-to-day management and implementation of the project will rest with the PCU. The PCU will be fully embedded and located in MARD (in Podgorica), except the two VC experts who will be located in the regions (see below). The PCU will be vested with financial and technical autonomy. Its proposed staffing will encompass: (i) a Project Director, with particular expertise in brokering partnerships in VCs; (ii) a Finance Officer (seconded); (iii) a Procurement Officer (seconded); (iv) an Administrative Assistant (seconded); (v) an Engineer for infrastructure; (iv) two VC Experts (based in Bijelo Polje and Niksic.); and (vii) a M&E and KM Specialist (seconded). Contracts for the PCU members will be renewable annually, upon satisfactory performance. Appointment of seconded staff will be contingent to IFAD no-objection on proposed profiles, and seconded staff will have to assure full-time availability for RCTP. For the seconded staff, additional salary compensation (above MARD level) will be financed from the IFAD loan budget. The PCU's draft terms of reference are presented in Appendix 5.

119. The principal functions of the PCU will be to carry out the overall programming and budgeting of RCPT activities, take the lead in implementation - in cooperation with municipalities, business development partners and other services providers, infrastructure contractors, beneficiary institutions, associations and cooperatives, etc. - and to monitor and document project progress. The PCU will be supported by additional technical assistance and short term contracted staff as required, including a VC development expert (international) with an estimated 12 months input over the first 4 years, as well as an IT/database specialist - fulltime in the first year to set-up the MIS and M&E systems then part time thereafter for ongoing IT support²³. Specifically, the PCU will assume the responsibility for producing the AWPBs to be submitted to the PSC for review and approval, and subsequently to IFAD for no objection. Likewise, the PCU will take the lead in the procurement of civil works, goods and services. With the PCU being deliberately lean, it will be important to ensure proper management of the outsourcing of non-core tasks to capable services providers.

Implementation arrangements

120. For both Components, implementation arrangements are summarized in Appendix 5 (see Section B, tables 22 and 23) and also in Appendix 11 (PIM).

121. **Component 1.** The Project Director and VC Experts will work closely with the MARD regional extension services to coordinate and deliver all activities under cluster development and facilitation and collectively form the VC team of the project. The PCU will acts as the fund administrator for the VCF but with an Independent Investment Committee established to make grant award decisions. As fund administrator, the PCU will ensure compliance with grant application, eligibility, award and implementation procedures set-out in the PIM. The PCU will also prepare, sign and administer the grant contracts with each grantee and administer disbursement of grants, ensuring these are released against confirmed performance against contracted milestones. The PCU's Finance Officer and Pro-

²³ Budgeted in detailed tables C.a. and C.d. of investment costs.

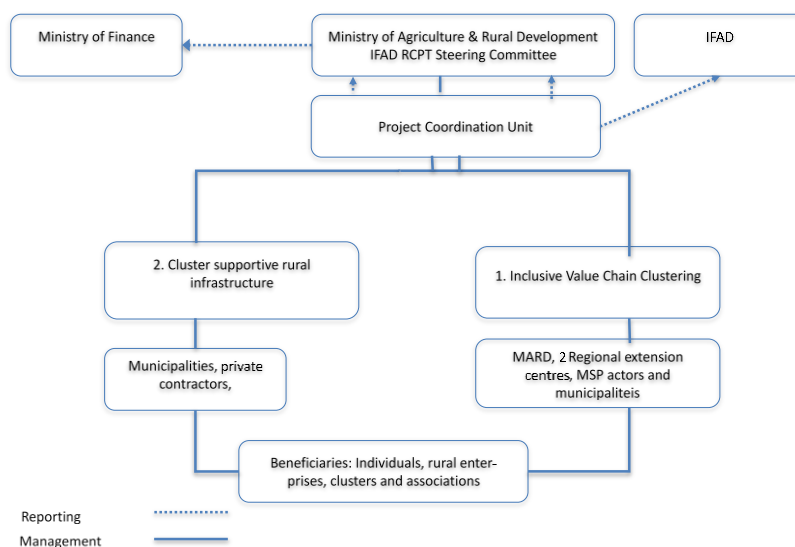
curement Officer will play a key role in the VCF administration. The PCU will also directly manage the SDF in-line with the procedures set-out in the PIM.

122. **Component 2.** The main tasks of the PCU, under the coordination of the Rural Infrastructure Engineer, will be conducting information campaign in the project area municipalities, technical and financial analysis of preliminary screened infrastructure proposals, review and approval of engineering designs provided by municipalities, procurement and supervision of civil works. Provisions will also be made for feasibility study and financial and economic analysis of proposed investments to be outsourced to private sector consultant on a short term basis during the selection phases of proposals. Thus the permanent RCTP engineer will be supported at crucial points in the project when the workload is peaking, while still being cost-effective compared to having a permanent second engineer.

123. **Implementing Partners for Component 1.** They will be engaged in delivery of specific core activities in the project, and especially include the MARD regional extension service teams for crops and livestock. To ensure close coordination, the VC experts should be based in the same offices as the regional Extension Service teams. The principal roles of the Extension Services in the project include: (i) supporting the identification of suitable villages with the necessary agronomic conditions and farmers interest for production of each product in the cluster area; (ii) leading the mobilization of interested farmers into the project and multi-stakeholder processes; (iii) facilitating the selection by farmers themselves of their own BSFs; (iv) participating in the multi-stakeholder cluster meetings as technical experts and service providers; and (v) providing technical advice to farmers in preparation and implementation of their detailed investment plans.

124. **Implementing Partners for Component 2.** *Municipalities* will be the primary partners, in the selection phase and also in supervision of the works and subsequent operation and maintenance. Most often the municipalities will be recipient and responsible for maintenance of infrastructure, hence their engagement is particularly important. In addition, the component will need to engage with Ministry of Transport and Maritime Affairs and contractors; local designing companies licensed in designing irrigation systems and roads.

Figure 6: RCTP organisational chart



C. Planning, M&E, learning and knowledge management

125. This section summarises information on how the RCTP will undertake planning, M&E, learning and knowledge management (KM). Details can be found in Appendices 6 and 11.

126. The project’s log-frame (also presented in Appendix 6, together with the theory of change) is at the heart of the M&E system design. It defines the implicit results’ chain underlying design options, and linking outputs to outcomes according to a cause-effect relationship. Moreover, it defines the criteria that will be used to assess, monitor and evaluate project performance and results.

Planning

127. A rigorous planning process – that clearly identifies the concrete outputs (or physical targets) to be produced in the next 12 months in pursuit of overall project objectives, the activities to be implemented to deliver these outputs and the financial resources (or financial targets) required – will be the starting point for the sound management and monitoring of the RCTP execution. To this end, the PCU will use a pre-defined AWPB template (see Appendix 6). Although the log-frame and the cost-tables shall not constitute a rigid blueprint, they will be key reference for the preparation of the AWPBs. If required, the original project log-frame and cost tables may be revised, upon the recommendations from supervision missions and/or from the mid-term review, and upon IFAD's approval.

128. While the first AWPB will be prepared during the start-up workshop, the preparation of subsequent AWPBs shall follow an iterative process, starting around the month of September with the organization of municipality-level annual planning workshops. On this basis, a draft consolidated AWPB will be prepared by the PCU, identifying under each Component: (i) outputs and related physical targets to be achieved in all municipalities; (ii) key activities, sub-activities and inputs required; (iii) timetable for implementation of key activities; (iv) staff/persons responsible for each activity and sub-activity; and (v) financial resources required. The AWPB shall also include a Procurement Plan (see chapter D and Appendix 8). Both documents shall be submitted to IFAD for no-objection no later than 60 days before the end of the fiscal year. Once the no-objection is granted, the PCU will submit the AWPB to the PSC for approval. It will constitute a binding document that will govern, through the year, IFAD's decisions on funds' release or procurement matters. The AWPB and PP may be amended during the year at the PCU request, along with proper justification and upon IFAD's no-objection.

Monitoring and evaluation (M&E)

129. The M&E system shall provide the PCU, GoM and IFAD with reliable and timely information on project execution and results, so that informed management decisions can be timely taken and to ensure that project implementation is efficient (results obtained at reasonable costs) and effective (expected goods and services delivered and intended outcomes achieved). The system established and managed by the PCU M&E Officer will aim at: (i) monitoring RCTP execution; (ii) monitoring outreach; and (iii) Measuring and evaluating results, and monitoring design assumptions.

130. **Monitoring of project implementation.** It will essentially consist in (i) the tracking of activities and outputs against planned, physical and financial targets and agreed calendars, and (ii) in the monitoring of the quality products and services being delivered. Responsibility for the recording and/or collection of primary data will be vested with the various grassroots-level implementers. Under Component 1, BSFs will play a key role in the collection of key information, while VCF beneficiaries will be trained in the recording of production and sales data. As such, the M&E system will have some participatory features. Once collected and consolidated, activity and output data will be analysed, and findings will be shared with PCU staff during bi-monthly or monthly PCU meetings. To randomly verify data submitted by project implementers and monitor the quality of delivered outputs, the M&E Officer will participate in monthly field visits, alone or jointly with PCU staff/project implementers.

131. **Outreach monitoring.** For each key output, as and when they will be delivered, the M&E system shall track the number of primary, secondary and tertiary beneficiaries. In so doing, the system will help monitor the extent to which intended beneficiaries are actually being reached and targeting mechanisms are effective. Table 3 below summarizes the key outreach data (details in Appendix 6).

Table 3: Data required for outreach monitoring

Beneficiaries	Type of direct beneficiaries	Required data
Primary beneficiaries	VCF matching grant beneficiaries + BSF training beneficiaries + VC participants also benefiting from roads and water supply infrastructure + Beneficiaries of capacity strengthening support	Age and sex Farm's geographic coordinates Household size
		Age and sex
Secondary beneficiaries	Clusters' active participants (i.e. buyers, producers not supported with a VCF grant or project infrastructure but with an established business agreement)	Age and sex Occupation/business Place of provenance
Tertiary beneficiaries	Road beneficiaries not involved in supported VC	Household size Farm's geographic coordinates

132. **Results' monitoring.** The assessment of project results will consist in the measurement of the outcomes of RCTP interventions on primary beneficiaries. The objective will be to verify, at regular intervals, that the outputs delivered under both Components are leading to the expected results.

133. Cases of both highly successful farmers and least successful farmers will also be identified, to be subjective to additional surveys. These farmers will thus become, among others, part of the sample for two qualitative surveys that will be conducted around Year 3²⁴ and in Year 5. The purpose will be to complement the quantitative data collected through the BSFs with a more qualitative assessment of key factors explaining success or failure, so as to identify best practices or remedial actions. Moreover, these two surveys will help collect information on beneficiaries' satisfaction with the relevance and quality of project services, as well as their views on issues and solutions. On the basis of both these longitudinal data and qualitative information, key findings and recommendations will be documented in a survey report and discussed during a dedicated PCU meetings in Year 3 and 5. Specific case studies may also be documented, in link with knowledge management activities.

134. **Evaluation of results.** It will be done using the following tools and processes:

- *A Mid-Term Review (MTR) will be organized by the GoM and IFAD jointly towards the end of Year 3 of implementation. It will assess management performance, implementation status, outreach, targeting, and progress towards achievement of RCTP development objective. It will also focus on necessary corrective actions to address performance gaps and other issues.*
- *The Project Completion Review (PCR), also jointly organized by the GoM and IFAD, will be held towards the end of the RCTP completion period, ideally 3 months before the completion date. The PCR will focus on assessing the relevance of project interventions, implementation effectiveness and efficiency, outreach and targeting, the likelihood of sustainability of project benefits and the potential for upscaling and replication.*

135. To ensure that both the MTR and PCR processes can be informed by reliable quantitative data on outcomes and early impact, the PCU will be responsible to organize the following surveys:

- *Baseline survey: To be carried out at the earliest during the first year of implementation, to document the livelihoods and socio-economic conditions of potential project beneficiaries prior to the start of the RCTP interventions. This information will, at mid-term and completion, become a useful basis against which to measure changes. The purpose will be to obtain more reliable and comprehensive baseline data on production and farming incomes for primary project beneficiaries²⁵. Draft terms of reference for the survey are presented in Appendix 6.*
- *Mid-term and completion surveys: They will be conducted, respectively, prior to the start of the mid-term review mission and completion review missions, to inform these important review processes. They shall use the same questionnaire as the one used for the baseline survey. Comparison with baseline data will allow the measurement of changes in key indicators and questions, and thus to infer on likely project outcomes and early impact*

136. The three surveys will be carried out by a competent consultancy firm or service provider that will be selected by the PCU (see Appendix 6 for draft TOR and guidance on the suggested sampling strategy). They shall use a sampling framework of 750 to 900 households that should be representative of the targeted beneficiary households in the targeted municipality.

137. **Data collection and management.** An M&E Manual will be prepared by the PCU within 3 months of project start. This document shall define all the necessary operational details the M&E processes, tools and responsibilities, and shall provide, in annex, all the necessary data collection forms, templates for performance tables, progress reports outline, survey TOR and questionnaire, etc. (see Appendix 11 for M&E Manual outlines). Upon finalization, the M&E Officer will train key M&E actors in the use of data collection forms and of the RCTP central database. A part-time short-term IT Specialist will assist the M&E Officer in the development of a web-based, electronic central database that will allow the electronic recording of all primary data collected. Once collected using electronic tablets (in the case of the BSFs) or paper forms, the primary data will be entered in the web-based database by all M&E actors remotely, from their various geographic locations. In the case of the data

²⁴ This is the first year that berries' producers – who are expected to account for the bulk of Component 1 beneficiaries - can expect some income from their new production, as it takes 2 to 3 years for berries to come to production.

²⁵ Given that the baseline survey will be conducted in year 1, that is before all VCF beneficiaries are selected, the survey sample may, or may not, include a large number of future VCF project beneficiaries.

contained in farmers' diaries, it will be collected by BSFs using electronic tablets. To monitor the coverage and spatial distribution of project interventions, all infrastructure, VCF beneficiaries and key activities will be geo-referenced and mapped. To this end, the PCU will acquire a web-based Geographic Information System, which will be fine-tuned with support from the IT Specialist. At the municipality level, the SIG should help prepare electronic maps showing details on infrastructure realized and expected number of users. At cluster level, the electronic maps will provide details on cluster meetings frequency and attendance, location of grants' recipients, and production and sales data.

138. **Reporting requirements.** The M&E Officer will be responsible for the preparation of monthly, 6-monthly and annual progress reports. The 6-monthly and annual progress reports will be sent to IFAD for information and shall be important documents to inform the supervision missions. The annual progress report shall be prepared towards the end of the year and submitted, if possible, together with the draft AWPB of the subsequent year. Each year, the M&E Officer will also be responsible for the preparation of RIMS tables (see Appendix 6 for RIMS reporting template) to be submitted to IFAD (as part of IFAD central results' management system, annual achievements against planned targets are to be reported for a small set of standard indicators). These indicators are included in the project log-frame. Timely RIMS reporting at the agreed date will be important and mandatory.

Learning, knowledge management and policy engagement

139. Project implementation is expected to generate useful learnings, which may be of value to MARD policy makers and other stakeholders. This will also be the platform for delivering on the ambitions of outcome 3 on learnings and policy engagements. To ensure that these learnings are properly captured, documented and disseminated, the M&E Officer, with initial support from IFAD, will define a clearly spelled-out "learning and policy dialogue agenda" and a Knowledge Management (KM) and Communication Plan within 12 months of project start, and upon the establishment of a KM working group consisting of relevant MARD and other key stakeholders at the central or municipal level. It will be developed in tandem with the RCTP M&E system to ensure that M&E and KM are fully linked. It will also build on the learning-oriented KM framework, which has been used successfully in IFAD-supported country programmes (e.g. in Moldova and Turkey), to collect, document and disseminate lessons and best practices emerging from IFAD-supported projects, and including a range of partners.

140. Lessons of interest to MARD stakeholders will be identified by the KM working group and endorsed by the PSC and IFAD. They might include those emerging from: (i) multi-stakeholder meetings (do these work well as a vehicle for business brokerage, what institutional relations emerge, etc.); (ii) collective action by smallholder farmers to respond to project-induced market opportunities (what sort of models seem to work, what is their impact); (iii) matching grants (do they catalyse additional financing from commercial sources); (iv) involvement of banks (does this encourage them to lend to agricultural producers/processors, etc.); (v) linking (IPARD-eligible) agro-processors and small-scale (non-IPARD-eligible) producers (is it possible to create a complementarity of policy instruments); and (vi) supporting smallholder farmers in marginalized areas (can one identify a strategy for doing so).

Scaling Up

141. The implementation process will move quickly to identify scalable actions. Knowledge capture and the use of the knowledge to leverage additional financial resources and inform policy shifts in favour of smallholders will be the main scaling up pathway. Successful elements will be tracked over the first three years with respect to: (i) the process of operationalizing the VC clusters; and (ii) benefits which will come out of the institutional relations that emerge from the cluster meetings. The agro-technologies and the organizational models adopted by farmers will be assessed on the overall impact they will have on the lives of the target groups. Once the approach is proven and evaluated at mid-term review, the well packaged specific policy and operational knowledge products will be used to illustrate to GoM and private sector actors, what works well for smallholders. Successful results will be used by GoM to exploit the partnership space to encourage additional investments from key stakeholders with the aim to replicate the new approach for other commodities.

142. Expansion of institutional space will also be supported where significant work will be done in increasing the capacities of service providers (extension, NGOs and individual local level mentors) to deliver business-focused services which will be available for scaling up activities in additional clusters after mid-term and beyond. The foremost scaling up driver is the commitment of GoM to support small producers in becoming commercially competitive in readying them for EU accession. GoM is encouraging import substitution and wants smallholders in northern mountainous Montenegro to take ad-

vantage of the opportunities provided by the expanding tourist sector. This said, the RCTP being the first IFAD intervention in Montenegro, the learning process will be gradual and it is pre-mature to predict the implementation pace at this point in time. The PCU, MARD together with implementation partners will pursue all opportunities for scaling up successful results during implementation.

D. Financial management, procurement and governance

143. **Overall risk assessment.** The country risk is rated as *Medium*. In line with the overall governance indicators that serve as a foundation for anti-corruption performance, Montenegro has been consistently improving its standing on a range of corruption indicators. However, the country needs further improvements to catch up with the EU standards. The 2013 PEFA report highlighted progress compared to the 2009 report, especially in relation to aggregate revenue outturn, expenditure payment arrears, budget classification, cash management, debt and guarantees, procurement controls, competition and value for money and use of national procedures for international aid. The report noted some major weakness for the following indicators: inter-governmental fiscal transparency, unreported operations, tax collection, annual financial statements and internal controls (non-salary).

144. **Financial management.** The RCTP financial management team will be part of the PCU, which will be vested with financial and administrative autonomy. The financial team will be composed of the Finance officer, the Procurement Officer and the Administrative Assistant, seconded from MARD staff. The Borrower will open two (2) EUR denominated Designated Accounts (DAs) for the IFAD loan and for the ASAP grant in a commercial bank acceptable to IFAD in order to receive IFAD loan and grant resources. The authorized allocation will be equal to approximately 12 months of project expenditure, from both IFAD loan and grant (ASAP) resources.

145. The State Treasury under the MoF maintains the accounts of general budget public institutions and executes their payments. For that purpose, MoF has developed a web-based Public Expenditures and Accounting Information System (the SAP system). PCU payments from IFAD loan, ASAP grant and GoM counterpart contribution will be processed through the MoF system and in EUR. The SAP system includes budget, procurement and contract management, M&E modules, etc. However, the system will not enable the PCU to directly generate financial reports, withdrawal applications and statements of expenditure (SOE) as per IFAD reporting requirements, which would lead to the use of an Excel based financial reporting mechanism. Consequently, as conditions for the first disbursement, the project will (i) acquire and configure a financial, accounting and operational software to support all the transactions, budget and cash forecasts analysis, operational and financial dashboards; and (ii) prepare a draft PIM (outlines in Appendix 11), acceptable to IFAD, including financial, accounting, procurement and administrative arrangements. AWPBs showing all activities planned during the given year, disaggregated by quarter and by financier, should reach IFAD 60 days before the beginning of each fiscal year. A chart of the flow of funds arrangements is shown in Appendix 7 (Attachment 1).

146. **Counterpart funding.** The GoM contribution to project costs will be in the form of tax exemption, cash contributions to cover certain project activities, and in kind contributions (essentially office space and utilities, and compensation part of salaries for seconded staff). Payment of expenditure on counterpart funds will be managed directly by State Treasury. Both the beneficiary municipalities and the project end-beneficiaries will participate in the project costs in the form of cash contributions for the construction of water supply schemes and rural roads. The modalities related to these cash contributions for Component 2 activities will be detailed in the PIM.

147. **Audit.** The RCTP annual external audit will be carried out by an independent audit firm acceptable to IFAD, in accordance with the International Standards on Auditing and the IFAD Guidelines for Project Audits and based on terms of reference subject to IFAD no objection. The final audit report and management letter are required to be submitted to IFAD by the Borrower at the latest six months after the end of each fiscal year. In addition: (i) the State Audit Institution will be encouraged to include RCTP in their annual audit programme, and (ii) the internal audit unit of MARD will include the audit of the project's internal controls system in its annual work plan for the period 2019-2022.

148. **Procurement.** Considering the challenges still faced in the Montenegrin procurement system²⁶, the procurement of goods, works and services will be conducted in accordance with the IFAD Project

²⁶ These challenges include: (i) difficulties in practical implementation of the law, (ii) insufficient capacity in the public procurement institutions, (iii) shortcomings in the complaints mechanism, and (iv) risks associated with corruption and conflicts of interest.

Procurement Guidelines and Procurement Handbook, the provisions of the financing agreement and Letter to the Borrower, and the RCTP financial, accounting and administrative procedures manual. Prior to the start of each fiscal year, the PCU will prepare a detailed procurement plan (PP) derived from the AWPB. The PP will be submitted (together with the AWPB) to the PSC for approval and to IFAD for no objection. It will be presented by component and type of procurement, and will indicate the AWPB reference, estimated cost, procurement method, need for IFAD prior review (based on applicable thresholds) and timeline for execution of the procurement process until contract signature. An assessment of the procurement systems and MARD procurement capacity, as well as a draft procurement plan for the first 18 months of project implementation are included in Appendix 8.

149. **Governance.** The primary responsibility for detecting fraud and corruption lies with the Borrower. However, the project should note that IFAD applies a zero tolerance policy towards fraudulent, corrupt, collusive or coercive actions in projects financed through its loans and grants. The dissemination of IFAD's anti-corruption policy²⁷ amongst project staff and stakeholders, as well as the adoption of IFAD procurement guidelines for RCTP procurement should reinforce the use of good practices. In addition, RCTP will promote good governance through the involvement of municipalities and beneficiaries in (i) the preparation of the AWPBs; (ii) the procurement process at community level; and (iii) the monitoring and evaluation of project activities.

E. Supervision

150. IFAD will be responsible for the direct supervision of the RCTP through supervision missions supported by follow-up and/or specific thematic missions, as may be required, not least in the start-up phase. The supervision exercise will provide continuous feedback regarding the RCTP coordination and management, particularly with respect to the progress made towards the achievement of the targets, and the likelihood of reaching the intended objective and the overall goal. The supervision exercise will engage different catalytic mechanisms to influence and, if necessary, reorient the direction of RCTP implementation. Supervision will allow for the following activities: (i) policy dialogue; (ii) fine-tuning of implementation procedures; (iii) revising agreements; and (iv) revising design to respond to unforeseen problems and issues. It will also involve three processes: loan administration, RCTP actual supervision, and implementation support. The loan administration support will ensure RCTP compliance with fiduciary requirements. Implementation support will address broader issues related to the entire strategic and policy aspects of the IFAD engagement in Montenegro, focusing on the development of appropriate systems and institutional frameworks for poverty alleviation, building inclusive partnerships and mobilizing financial resources for the rural poor.

F. Risk identification and mitigation

151. At the macro level, political risks are deemed low, as there has been robust continuity for more than a decade and even in case of a change of government, the overall direction of most relevant policies (e.g. EU approximation, improving rural inclusion and adapting to climate change) is unlikely to change substantially. IFAD and GoM will continue the close dialogue on the political situation especially after the elections in late 2016. The table below show the more component specific risk and mitigation measures. All risks identified below are deemed to be within acceptable levels provided the RCTP exhibits vigilant monitoring of these and apply the mitigation strategies consistently.

²⁷ IFAD's anticorruption policy is available on the IFAD website at www.ifad.org/governance/anticorruption/index.htm. The IFAD website also provides instructions on how to report any alleged wrongdoing to the Office of Audit and Oversight (<http://www.ifad.org/governance/anticorruption/how.htm>).

Table 4: Risks and mitigation measures

VC / Cluster potential risks	Risk mitigation measures
Lack of credible market opportunities in which smallholder can profitably compete limits the scale of impact	<p>Only products with confirmed interest from buyers and verified market demand will be supported. All clusters will hold a verification workshop before the start of activities to confirm specific interest of current/potential buyers. The portfolio of four initial products all have confirmed upside potential for smallholder producers and credible market demand, but suited to farmers with varying production resources (e.g. land, labour, location). Finally, there is to increase number of clusters/products during project implementation where these have been screened for confirmed market demand and smallholder profitability achieved via a staged approach to investing in clusters, enabling smaller initial pilot investments in potentially promising clusters.</p>
Ineffective targeting of poorer smallholders	<p>RCTP will ensure rigorous and objective initial cluster, VC assessment and selection process including verification of credible and affordable investment pathways for smallholders to participate in the selected cluster. (i.e. maximum initial cash investment by smallholder of EUR 500 for smallest feasible investment step resulting in EUR 500 per month net income within 4 years).</p> <p>Moreover, there will be a process to ensure farmers' perspectives are considered during the cluster prioritization (via the multi-stakeholder cluster meetings). Multiple rounds of grants and other engagement in villages will provide opportunities for poorer risk averse farmers to join in the clusters after they have seen their neighbours have some initial success. Initial mobilization in the villages needs to emphasise this two-step process and highlight to all farmers the likely benefits of larger local production to achieve economies of scale and attract increasing number of buyers, and hence the benefit to progressive "first mover" farmers to support their neighbours to copy successes later on.</p> <p>The RCTP will have close involvement of Regional Extension Service staff in farmer outreach and mobilization as they are well respected by stakeholders with excellent local knowledge of villages in project areas. "Progressive" grant mechanisms, with clear criteria based awards and high degree of transparency will provide proportionally larger support to smaller investments by farmers. Finally the PCU will emphasise transparency in information outreach campaign and publishing outcomes of grants and tenders on the web, local news outlets and via multi-stakeholder meetings etc.</p>
Reluctance to collaborate between smallholders	<p>Engagement of farmers in multi-stakeholder meetings is expected to highlight the need and opportunities for smallholders from collaboration on specific issues e.g. joint negotiation and/or production planning to secure orders.</p> <p>Support to more organized producer group development, whether formal or informal groups, will be offered in response to specific demand in-line with cluster priorities and on a cost sharing basis (to ensure commitment).</p>
Lack of bank/MFI finance for smallholders and SME investment for replication	<p>The RCTP will select the clusters for products that have affordable minimum first investment for smallholder, reducing the need for external credit by them. It will proactively encourage local credit officers of banks/MFIs to attend multi-stakeholder cluster meetings and identify bankable clients among local smallholders and SMEs. Finally there will be pilot partnerships with progressive financial institutions to increase their understanding and capacity for profitable lending opportunities.</p>
Unfamiliar approach to market oriented agriculture development will slow project delivery and reduce impacts	<p>The RCTP will provide intensive and sustained TA, especially during first 3 years and IFAD implementation support. It will also work to demystify approach through practical on-the-job coaching and support with an early focus on action in the field with VC actors - not just theory and desk studies.</p> <p>The project will ensure simple and clear procedures and guidelines to allow for quick roll-out, e.g. for VCF and SDF, and framework to adjust procedures to make them work better based on experience during implementation. It will work with selected implementing partners/services providers with some existing capacity on specific issues e.g. Business skills training (e.g. Technical/vocation training centres), farmer mobilization (e.g. Regional Extension Services, Rural Network).</p>

Infrastructure potential risks	Risk mitigation measures
Political priorities may not always be consistent with the procedures established for the selection of investment proposals.	Measures included in the infrastructure component design to mitigate these risks are built around the empowerment of the targeted communities in decision-making. Also the approval process of AWPBs, in conjunction with the programmatic approach in which project works would be selected on an annual basis provides opportunities to fine tune decision making during implementation and to minimize risk that such adverse effects could occur.
Negative social and environmental impact of project investments.	For infrastructure and matching grant schemes the concerned municipality would be responsible for ensuring that all Montenegro's Social and Environmental Assessment requirements have been met including the preparation of clear mitigation plans and monitoring procedures. This compliance requirement will be monitored with the ESMP (e.g. in Appendix 12)
Sub-optimal quality of infrastructure designs procured by the beneficiaries, and climate change undermining infrastructure	Additional level of design quality assurance to reduce the risk of unforeseen expenditures and address the possible impacts of climate change. Compliance with technical norms and state regulations (licencing of designers and submission to state expertise) will be ensured. The project will allocate specific funds to ensure climate proofed designs and will invest into capacity development of municipal technical offices to ensure that climate change negative impacts are properly factored in.
Climate Risks	Risk mitigation measures
Adverse effects on animal productivity due to heat stress and pests	Any livestock housing investment will be provided with TA support. Also, enhancing water availability in pasture areas will allow for better resistance of livestock and its productivity to increasing temperature and heat waves.
Reduced availability of irrigation water due to climate change	Preliminary study on water balances of micro-catchments to pre-identify the wider areas for piloting rainwater harvesting. The project will also increase the supply (ponds, etc.). Foster irrigation water use efficiency through pilot systems and in farm training for farmers as well as for institutions responsible of the irrigation systems.
Policy-related Risks	Risk mitigation measures
The project remains an isolated initiative, with limited policy pick-up from GOM	The project will have a strong KM / policy engagement agenda, aimed at bringing proven successful models and approaches to government, with a view to informing its policies, strategies and investments for inclusive and sustainable smallholder agricultural development.

IV. RCTP costs, financing, benefits and sustainability

A. RCTP costs

152. Project costs have been derived from the data obtained during the design missions in August and November 2016, from consultations with staff of MARD and other practitioners working with food, agriculture and livestock; and from interviews with village communities and from other donor agencies. The main assumptions underlying the cost derivation are as follows:

153. **Project period, inflation and exchange rate.** The project is financed over a 6 year period. An inflation rate of 0.2% was used for its duration - the same rate as the current one in the Eurozone. Given that EUR is the currency denomination of Montenegro and the loan is issued in Euro, no exchange rate is foreseen. The IFAD/ASAP grant and the IFAD loan were used as a benchmark for defining the euro equivalent, using an exchange rate of US\$/EUR of 0.94.

154. **Taxes and Duties.** Most items procured under the project will be purchased locally. VAT (19%) will be financed by GoM and all other identifiable taxes and duties, in line with the practice of externally financed projects in Montenegro.

155. **Expenditure Accounts.** The physical contingencies are estimated at 3% of base costs to cover the cost of any items that cannot be reasonably estimated.

156. **Basis for Cost Estimates.** Project costs are estimated as of August 2016 prices. Estimates for costs of works, equipment, salaries, local TA, operation and maintenance (O&M) were based on recent data provided by the MARD. All prices are VAT included, using 15.96% in the calculations. Various import and excise duties apply for imported goods and services. International TA is assumed to be free of tax. For directly recruited local staff the Government would cover employer's tax.

157. **Total investment and incremental recurrent project costs.** These total costs, including physical and price contingencies, is estimated at EUR 13.6 million. The project has three components as follows: (i) VC Clustering for Resilient Rural Transformation; (ii) Cluster Supportive Rural Infrastructure; and (iii) Project Management Unit (including M&E and KM activities). Table 5 below presents the Components project costs summary; Table 6 shows Component costs by year - including contingencies; Table 7 presents expenditure accounts by Component; and Table 8 shows expenditure accounts project cost summary.

Table 5: Project costs by Component (EUR AND US\$)

	(Euro '000)			(US\$ '000)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
1. Value Chain Clustering for Resilient Rural Transformation	4,945	178	5,124	5,261	190	5,451	3	39
2. Cluster Supportive Rural Infrastructure	4,910	1,979	6,888	5,223	2,105	7,328	29	52
3. Project Management Unit	1,130	80	1,210	1,203	85	1,287	7	9
Total BASELINE COSTS	10,985	2,237	13,222	11,686	2,380	14,066	17	100
Physical Contingencies	241	99	340	256	105	361	29	3
Price Contingencies	26	23	49	27	25	52	48	-
Total PROJECT COSTS	11,252	2,359	13,611	11,970	2,510	14,480	17	103

Table 6: Project Components by Year – Totals including contingencies (EUR'000)

	Totals Including Contingencies						Total
	2017	2018	2019	2020	2021	2022	
1. Value Chain Clustering for Resilient Rural Transformation	3,504	369	451	384	231	197	5,135
2. Cluster Supportive Rural Infrastructure	44	1,700	2,769	2,730	19	-	7,262
3. Project Management Unit	349	149	166	165	156	229	1,213
Total PROJECT COSTS	3,897	2,218	3,386	3,278	407	425	13,611

Table 7: Expenditure accounts by Components – Total including contingencies (EUR'000)

	Value Chain Clustering for Resilient Rural Transformation	Cluster Supportive Rural Infrastructure	Project Management Unit	Total
I. Investment Costs				
A. Consultancies	677	242	146	1,064
B. Equipment and Materials	55	-	53	108
C. Goods, Services and Inputs	211	-	-	211
D. Grants	3,246	-	-	3,246
E. Training	437	-	48	485
F. Vehicles	40	-	-	40
G. Workshops	-	-	63	63
H. Works	-	6,925	-	6,925
Total Investment Costs	4,666	7,166	309	12,141
II. Recurrent Costs				
A. Operating Costs	90	-	276	366
B. Salaries and Allowances	380	96	628	1,104
Total Recurrent Costs	469	96	904	1,469
Total PROJECT COSTS	5,135	7,262	1,213	13,611
Taxes	7	1,143	68	1,219
Foreign Exchange	180	2,099	80	2,359

Table 8: Expenditure accounts project cost summary (EUR)

	(Euro '000)			%	% Total
	Local	Foreign	Total	Foreign Exchange	Base Costs
I. Investment Costs					
A. Consultancies	852	197	1,049	19	8
B. Equipment and Materials	81	26	108	24	1
C. Goods, Services and Inputs	210	-	210	-	2
D. Grants	3,239	-	3,239	-	24
E. Training	484	-	484	-	4
F. Vehicles	40	-	40	-	-
G. Workshops	49	13	62	21	-
H. Works	4,584	1,979	6,563	30	50
Total Investment Costs	9,541	2,215	11,756	19	89
II. Recurrent Costs					
A. Operating Costs	343	22	365	6	3
B. Salaries and Allowances	1,101	-	1,101	-	8
Total Recurrent Costs	1,444	22	1,466	1	11
Total BASELINE COSTS	10,985	2,237	13,222	17	100
Physical Contingencies	241	99	340	29	3
Price Contingencies	26	23	49	48	-
Total PROJECT COSTS	11,252	2,359	13,611	17	103

158. Investment costs make up fully 86% of the total projected baseline costs whereas recurrent costs amount to 11%. Works account for the largest expenditure category with 48% of the total; grants 23%, and consultancies 8%. The complete set of cost tables can be found in Appendix 9.

B. RCTP financing

159. The project base cost (excluding contingencies) is forecast to total EUR 13.2 million of which EUR 5.1 million (or 39% of total base costs) will go to finance Component 1, EUR 6.9 million (or 52% of total base costs) to finance Component 2, and EUR 1.20 million (or 9%) for Component 3.

160. The IFAD loan of EUR 3.9 million (or US\$ 4.124 million equivalent) will fund 28.5% of total project costs, of which funding for Components 1, 2 and 3 will comprise of loan contributions of 44%, 13% and 60%, respectively (including contingencies). The ASAP grant of EUR 1.88 million (US\$ 2 million equivalent) will be used to finance: (i) climate smart assistance to farmers and associations in Component 1, and (ii) climate smart works in Component 2, which equates to 13.8% of funding.

161. GoM will: (i) finance taxes and duties of EUR 1.2 million (or 9% of the total budget); (ii) make a budget contribution (in cash) towards Component 2 for the amount of EUR 2.5 million (or 34% of the component's total project budget, excluding local municipal government contributions); and (iii) make budget contributions towards Component 1 (in cash), for the amount of EUR 0.176 million (or 3.4% of the component's total project budget), and Component 3 (in cash and in kind) for the amount of EUR 0.423 (or 35% of the component's total project budget). Approximately EUR 1.6 million (or 12% of the total) will be provided by the primary beneficiaries within the project area, mainly as contributions in small-scale agriculture investments. Local municipalities will also contribute to local investments in rural infrastructure to the tune of EUR 1.3 million (or 10%) of the total budget. Local SMEs are also likely to co-finance grant funding activities to the tune of approximately 25% of grant investment funding, or EUR 0.6 million (or 4.6% of the total).

162. To avoid artificially inflating the magnitude of project financing needs, the Costab excluded any operating capital needs and restricted estimated figures to investment costs only. This is considered a more prudent approach to the financing requirements of the project and in line with common practice at IFAD. Rather, some consideration of operating capital needs was made in the EFA instead.

Table 9: Component by Financier (EUR'000)

	Government Budget		IFAD Loan		ASAP Grant		Beneficiary		SME Contr.		Government (taxes)		Municipal Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1. Value Chain Clustering for Resilient Rural Transformation	176.1	3.4	2 242.6	43.7	806.3	15.7	1 282.7	25.0	620.6	12.1	7.0	0.1	-	-	5 135.3	37.7
2. Cluster Supportive Rural Infrastructure	2 475.1	34.1	912.6	12.6	1 073.7	14.8	331.4	4.6	-	-	1 143.2	15.7	1 326.3	18.3	7 262.3	53.4
3. Project Management Unit	423.1	34.9	721.7	59.5	-	-	-	-	-	-	68.4	5.6	-	-	1 213.3	8.9
Total PROJECT COSTS	3 074.4	22.6	3 876.9	28.5	1 880.0	13.8	1 614.1	11.9	620.6	4.6	1 218.6	9.0	1 326.3	9.7	13 610.9	100.0

C. Summary benefits and economic analysis

163. **Benefits Stream.** The analysis identifies all the possible quantifiable incremental benefits generated by the RCTP's implementation. The benefits stream corresponds to: (i) the farmers' benefits analysed in the financial analysis – i.e. increased agricultural production, and (ii) the economic and societal benefits analysed in the economic analysis – the i.e. the economic internal rate of return (EIRR). The illustrative financial models described previously have been used as a basis for the calculation of the overall (economic) benefit stream, after conversion of the financial prices into economic values. For the purpose of this analysis, the benefits derived from 2 475 primary beneficiaries across three VCs, have been aggregated and treated as a whole. The numbers of physical activities (properly phased in time) were multiplied by their respective net economic returns per unit as calculated in the crop budgets. An adoption rate of 90% at full development was used in the calculations to acknowledge that copycat activities may see a doubling of participation figures, with some decline in rural population.

164. **Cost Stream.** In order to estimate the Project's economic viability, in terms of EIRR, the cash flow calculated includes the project base costs (as extracted from the COSTAB tables) with their physical contingencies but without taxes and price contingencies (therefore in constant EUR). These costs include all investment and recurrent costs for Components 1 and 2, mainly for O&M.

165. **Project Level Analysis.** For the purpose of the analysis, a social discount rate of 6% is taken for the calculation of NPV and EIRR, based on: (i) the 5-year Montenegro Government bond yield of 5.37% (May, 2014)²⁸; (ii) Interest rate spread (lending rate minus deposit rate) in Montenegro of 7.5%²⁹; and (iii) the EC's 5% social discount rate for major projects in cohesion countries. Overall project analysis suggests an EIRR of 33% over 20 years and a NPV of EUR 64 million. Benefits of the project increase to EUR 168 million, while incremental costs to a little under EUR 28 million, including labour. Benefits exceed costs by a factor of four with NPVb just under EUR 84 million and NPVc close to EUR 21 million.

166. **Sensitivity Analysis.** The sensitivity analysis assessed the effect of the main risks for the project and the adverse situations that would arise and have a negative impact on the project in terms of benefits and costs and various lags in time. It shows that with a decrease in benefits by 20%, an increase in costs by 20%, a two-year time lag, a 20% decrease in price and loss of export markets for potato seed and raspberry as the most adverse scenario, the EIRR remains robust (EIRR 16% and a benefit/cost ratio of 2.06). Switching value analysis suggests a further decline in benefits of 51% and a cost increase of 106% would result in an overall negative project return. Despite the drop in EIRR the chances of such a scenario happening is low a 4% probability of such a case occurring within the lifetime of the project.

D. Sustainability

167. Environmental sustainability is the key guiding principle of the RCTP, as the project will seek to leverage the mountainous characteristic (purity, absence of viruses, traditional, limited/no use of pesticides and based on respect for the natural resources) for commercial differentiation and success. Thus most of the farmers and processors activities envisaged will harness commercialisation and profitability for sustainability. All project activities are designed to enhance the capacity and incentives of private sector agents in agriculture to sustainably increase market activity – during and after project

²⁸ Source: <http://cbonds.com/emissions/issue/136943>

²⁹ Source: <http://data.worldbank.org/indicator/FR.INR.LNDP?locations=ME>

implementation. Small-scale farmers will be equipped with knowledge, skills and opportunities for organizational infrastructure to engage in value chains, and have access to grants for production or post-harvest equipment and/or marketing/branding to improve sales potential.

168. Training course materials will be captured and published on the RCTP Cluster based websites. Where feasible, training courses should be video recorded, and also included on websites. Information prepared for farmer and small producer training – including blue prints for animal husbandry and crop production - will be published on the project websites, and in booklet form. The RCTP website(s) will also be used to communicate to the public on (i) the availability of matching grants, (ii) the selection and eligibility criteria for the matching grants, (iii) the number of grant applications received and the number of grants approved (grant awardees). Appendix 11 (draft PIM) – which will be finalized within the first months of implementation – contains preliminary guidance and transparency measures proposed for the grant allocation. The PCU will initially administer the VCF, and grants for investments will be approved by an Independent Investment Committee (which should include representatives from IPARD Paying Agency, MARD, and representatives from banks, participating municipalities, and civil society (NGOs, associations, etc.). The PCU not being a permanent structure, it will be important, after the first 3/4 years of implementation, to identify the best structure which could continue supporting matching grants to smallholders in the mountain areas using the RCTP criteria and mechanism after the RCTP closing. To ensure that web based information is not lost at the end of the project, the websites should be hosted on an appropriate government office website. The site(s) is (are) to be managed by the PCU/IT contractors only until the end of the project, when it will become the responsibility of the host government office.

169. The strong focus on profitability for both the individual economic agents as well as for the groups will drive commercial sustainability and build strong incentives for maintaining the structures post-project. The associations chosen to catalyse growth of the selected value chains will have a demonstrated commitment to broad-based value chain development. Their investments will be demand driven and supported by strong technical advice, and the project's requirements for a minimum contribution to grants will increase their ownership and commitment to successful commercial outcomes. Project support to other agents in the VC will also be based on these principles. Capacity development of extension officers and other relevant advisory bodies, MOS, MARD Officials and university staff, will broaden and deepen overall understanding of the principles of good agricultural practices and good animal husbandry practices to EU standards, and will be passed on either directly or indirectly to farmers and future generations of agricultural students. The proposed training also offers an opportunity to update former graduates to use the same modern EU agricultural practices and commercial management systems.

170. Sustainability is being built into the design of the cluster supportive infrastructure component in several critical ways. By application of demand-driven and cost sharing approach, and by enhancing the target group capacity for enhancing the productivity of existing resources it is hoped that they will use the existing natural resources (land, pastures, water) more efficiently and profitably. This in turn will enable the target group to respond more resiliently to the challenges of climate change as well as having a financial incentive and means to finance the recurrent cost of the investments. The project will ensure environmental sustainability by ensuring that all project activities and inputs are screened from an environmental perspective by the relevant authorities. And finally, the selection criterion on feasible and sustainable procedure for operation and maintenance of the proposed facility, endorsed by the responsible institution, i.e. municipality. The endorsement will be subsequently formalized in a letter from relevant municipalities stating the commitment to transfer the assets to the institution's balance sheet and to make yearly provisions for maintenance.

171. After MTR, by the end of year 4 of implementation, an exit strategy will be prepared based on experience gained, results obtained, and the vision of the MARD and IFAD for a continued support to smallholders in the mountainous areas after the RCTP completion.

Appendix 1: Country and rural context background

172. Montenegro is one of the smallest countries in Europe with an area of 13,800 km² and a registered resident population of only 622,000 (2016, MONTSTAT), giving a population density of 45 persons per km². Montenegro is divided into three regions: The coastal region which is also the hub of the booming tourism industry, the central region which has both plains and mountains, as well as hosting the capital Podgorica (population: 187,000) and, the northern region which is mostly mountainous and dominated by agriculture. 70% of Montenegro's territory is located between 500 m and 1500 m altitude, mostly in the northern region. Nationally, 1/3 of the population live in rural areas with the northern region being the least urbanized with 60% living in rural areas here.

173. Montenegro was amongst the poorest regions of the Socialist Republic of Yugoslavia and despite its ability to escape most of the armed violence that engulfed ex-Yugoslavia in the 1990s, the economy collapsed during that time, partly due to the sanctions imposed by UN in 1992, partly due to the disintegration and devastation of the war-torn ex-Yugoslav market. Hyperinflation ensued (which is part of the reason why Montenegro adopted the Deutsche Mark and later the euro as its currency) and poverty skyrocketed to over 65% of the population. Only with the secession of hostilities in Kosovo and the consequent lifting of sanctions in 2000 did the economy begin to grow again (as shown in figure 1, main text, page 1), but at by that time Montenegro had been virtually deindustrialized, with a decimated economy and severely damaged infrastructure.

174. Economic growth accelerated after the independence from Serbia in 2006, fuelled in a large part by often foreign investments in the coastal-based tourist industry and hence concentrated in real estate and the service sector. By 2008, Montenegro was receiving more foreign investment per capita than any other nation in Europe. The Montenegrin economy grew at a very fast pace until the onset of the global crisis. Since then growth has been lacklustre, mirroring that of EU, its largest trading partner. Only the tourism industry has continued to grow robustly but even here signs point to a slowdown with year on year arrivals rising only by 2.6% in July 2016.³⁰

175. With stagnant growth, emigration has picked up again and it is now estimated that 140,000 of all citizens of Montenegro live out the country, or close to 20% of the population.³¹ Remittances play an important part of the economy, not least for the poorest, with close to 10% of GDP being remittances, but with a declining trend due to more restrictive practices in key destination countries. While large scale infrastructure projects - such as the highway between Montenegro's main port, Bar, and Belgrade - will temporarily boost GDP and employment (but at the risk of undermining budget discipline), Montenegro will have to complement the service and consumption based growth model (fuelled by FDI in the tourist industry and remittances) towards one also based on a productive and competitive economy. GoM has singled out agricultural and agribusinesses as a key catalyser in this transition, both due to its comparative advantage (not least in high value agriculture) but also due to its relatively high labour intensity. However, delivering on this ambition is challenged by many factors.

176. **Climatically, Montenegro is by experiencing increasing temperatures and volatility most notably in the northern mountainous region.** The 2001–2010 decade was the warmest since records began, with the most prominent changes in the northern mountainous region of +1.40C° and a decreasing in the number of frost days and very cold days and nights. Changing rainfall pattern is also forecasted in the near future (more precipitations in winter, less in summer) also increasing erosion, flood risks (winter) and water stress (summer). The analysis of the climatic patterns undertaken by IFAD in 2016³², in support of the design mission, confirmed that the climate in Montenegro has already changed and that the main impacts foreseen by the IPCC³³ for temperatures and extreme events are confirmed. In particular, the study highlights an increase in temperatures (+1,5 C) in both coastal and mountainous areas with expected negative impacts on agriculture and livestock.

177. Regarding precipitation there has been no significant reduction in the total annual average precipitation: precipitation has increased during the autumn while has decreased during the spring,

³⁰ SeeNews: 'Foreign tourist arrivals to Montenegro rise 2.6% y/y in July' 31 August 2016

³¹ IOM: Global Migration Flows' 2016

³² Montenegro Georeferenced Climate Trends Assessment 1989-2016. IFAD 2016

³³ A detailed analysis of the main environmental and climate change challenges is presented in the SECAP note.

summer and winter. However there has been a damaging and significant increase in the number of extreme weather events. This pertains specially to heat waves that are increasingly frequent *and* their length shows a high year-to-year variability. Secondly, and equally important, storms have become more frequent and more intensive since 1998, bringing with them huge amounts of precipitation, storm to hurricane gusts of wind, high waves and flooding in significant areas along the coast. Climate change is thus augmenting many hazards, including landslides and forest fires, and predictions from European Centre for Climate Change Adaptation suggest that especially the northern parts will see temperatures increasing by 1.3 °C in the next decade, whereas precipitation will drop in winter and spring. Extreme weather events (e.g. droughts, flooding and heat waves) are increasingly impacting on natural resources (soils, water bodies, pastures, others), on rural infrastructures such as roads and water points, and therefore on livelihoods of smallholders and rural people who still depends largely on their availability and quality. Animal feed is expected to become adversely affected due to heat stress on pasture (loss in nitrogenous content), which could undermine productivity and increase sensitivity to zoonosis. Extreme events are also likely to decrease livestock productivity and crop damages due to drought, flooding, hail and wind storms. It should be noted nevertheless that milder temperatures mean longer vegetation periods in altitude: this is an agricultural opportunity brought by climate change though increased attention will have to be paid to pests, water and fodder management to extract maximum return from these positive aspects.

178. The consequences of climate change have been visible in the recent past in Montenegro and have led to heavy and destructive floods that have affected the territory of 12 municipalities (Podgorica - town municipalities Golubovci and Tuzi, Ulcinj, Bar, Cetinje, Nikšić, Danilovgrad, Bijelo Polje, Berane, Plav, Andrijevica, Kolašin and Mojkovac) in 2010. Heavy snowfalls were recorded in February 2012, leading to the declaration of state of emergency in Montenegro. The following sectors are predicted to become even more vulnerable: water resources, agriculture, forestry and human health. For agriculture, commercial crops are likely to see rapid growth of weeds and increased competition from weeds for available resources due to increasing CO₂ concentrations, whereas rising temperatures will reduce irrigation water supply but increase demand. Animal health is expected to become adversely affected due to heat stress. Extreme events are also likely to increase livestock productivity and crop damages due to drought, flooding, hail and wind storms.

179. As agriculture is the main employer in rural areas, addressing the adaptation deficit of rural communities and of smallholders is critical. According to the 2010 agriculture census³⁴, primary agriculture contributes to around 20% of employment (including part-time and unofficial employment³⁵). *More than 50% of the poorest households live in rural areas (especially in the northern and mountain region, where the employment opportunities are limited), and 70% of rural incomes depend on agriculture.* In fact, agriculture represents an important social buffer and 'shock absorber' and through its role in contributing to the poverty reduction. Rural people are largely dependent on natural resources and the related ecosystem-derived products. In almost all regions of Montenegro the majority of the farming areas are used extensively, and can be regarded as high nature value farming systems. Ecosystems are therefore the main source of economic activities and include products such as non-timber high value crops (berries, mushrooms and herbs – 143 400 ha), transhumance to high meadows (128,621 ha) and beekeeping (50,024 bee colonies registered). Rural agriculture in mountainous areas is at risk as smallholders and poor rural communities largely depend on such resources to maintain their livelihood strategies (i.e. over 2000 households still practice transhumance, 2533 households work on beekeeping). The described scenario (increased temperatures, flash floods and other extreme events) is and will impact natural resources (forests, water bodies, pastures, others) as well as rural infrastructures such as roads and water points and therefore livelihoods of smallholders and rural people who still depends largely on their availability and quality.³⁶ Neglecting smallholders' adaptation in Montenegro will contribute to socio-economic challenges, including accelerated rural-urban migration and unemployment, and could undermine country's stability and food security.

180. At the policy level, new climate related strategic documents to be adopted are: the national climate change *strategy* until 2030; the plan to protect waters from pollution; river basin management plans; Energy Development Strategy of Montenegro until 2030 and Action Plan for 2014–2018; national action plan for the use of renewable energy for 2014–2020; action plan for energy efficiency

³⁴ MONSTAT 2016

³⁵ World Bank Group – Montenegro Partnership Country Program Snapshot , April 2015.

³⁶ Kindly refer to the SECAP Note for additional information and data.

2016–2018; national biodiversity strategy and action plan 2015–2020; national strategy for chemicals management and action plan 2015–2018; and national strategy for waste management, among others. The new laws to be adopted include: the law on environment; law on national parks; law on energy; law on the efficient use of energy; law on climate change; and several others. More information on environment and climate change adaptation measures can be found in the Appendix 12.

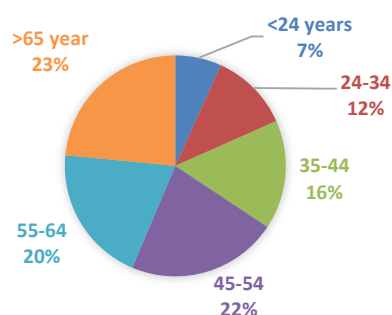
181. **The already insufficient infrastructure is also becoming affected by climate change.** With especially flash floods or heavy rains occurring more frequently, rural roads have deteriorated significantly and many are now not negotiable during winter causing social, economic and health problems for increasingly isolated rural settlements. Combined with new innovations in tarmacking roads, climate change has also changed the cost-benefit of when it becomes economically feasible to tarmac gravel roads and the government (including municipalities) have accelerated a programme for rural connectivity, but still lacks funding. Similarly, the heat and drought increases have also made reliable water supply more urgent, not least in rural areas, which have historically relied on rain. As can be seen Figure 2 (PDR main text, page 2), the quality of especially roads is suboptimal compared to e.g. neighbouring Croatia. There are also severe regional disparities in Montenegro. With previous support from EU, more than EUR 300 million have been invested in upgrading the major roads, not least in the coastal and central regions, but the northern region, where the traffic density is lower, has seen far fewer investment especially in tertiary and 'last-kilometre' roads. This has contributed to worsening disparities between this region and the rest of the country. Thus in the rural north the distance to food shops and elementary schools on average is 3-4 km, and secondary schools and banks 10 km. The distance to a bus station is 2.5 km, and a post office, on average, about 7.5 km. If continued unabated, a vicious cycle of closure of social and shopping facilities, lower investments and depopulation of especially the youth, is likely to accelerate.

182. However, the government and its external development partners still deem the current actions as being insufficient and underfunded, to be an effective response to climate change and infrastructural challenges, not least in the context of the accelerating floods and the resulting erosion of rural gravel roads. This has shaped the design of the RCPT.

183. **Human development, gender, youth and governance.** See Appendix 2.

184. **The youth in Montenegro face particular challenges**, with limited and often unattractive employment opportunities, not least in areas outside the coast region and the capital. The youth unemployment rate is 46% or 24 percentage points above the EU28 average³⁷. Moreover, Montenegro is the only country in Europe not featuring in the high or very high category of the global youth development index (YDI 2016, developed by Commonwealth Secretariat). Montenegro scores low on civic and political participation as well as on employment and opportunities for youth. The poor connectively and social infrastructure in the rural areas have contributed to an especially stronger emigration of youth out of northern rural areas towards the capital, the coastal areas and abroad.³⁸ Finally, the incomes of rural areas are typically unattractive to young people. They also face unique challenges in accessing financial services as they typically have no or only short credit histories. As a result, the share of the population residing in rural areas has halved from around 2/3 of the population in 1991 to 1/3 in 2013³⁹. It is especially the youth that has migrated and that is reflected in the age structure of the agricultural labor force where only 1/3 is under 45 years old and a

Figure 7: Age structure of agricultural labour force



connectively and social infrastructure in the rural areas have contributed to an especially stronger emigration of youth out of northern rural areas towards the capital, the coastal areas and abroad.³⁸ Finally, the incomes of rural areas are typically unattractive to young people. They also face unique challenges in accessing financial services as they typically have no or only short credit histories. As a result, the share of the population residing in rural areas has halved from around 2/3 of the population in 1991 to 1/3 in 2013³⁹. It is especially the youth that has migrated and that is reflected in the age structure of the agricultural labor force where only 1/3 is under 45 years old and a

³⁷ Government of Montenegro: 'Economic Recovery Programme, 2016-2020', January 2016

³⁸ See e.g. Dragica Mijanović: 'Depopulation in Northern Montenegro, Causes and Consequences' in *Socio Economic Geography*, 2015 and Aleksandra Despotović, Miljan Joksimović, Ljiljana Kaščelan and Miomir Jovanović: 'Causes for depopulation of rural areas in the municipality of Pljevlja' in *Agriculture & Forestry*, Vol. 61, December 2015

³⁹ See Making Migration Work for Development: *Migration Profile of Montenegro*, 2014

staggering 23% over 65 (Figure 7). Thus, in the next few years rural areas in Montenegro risk further depopulation as the old workers retire and perish.

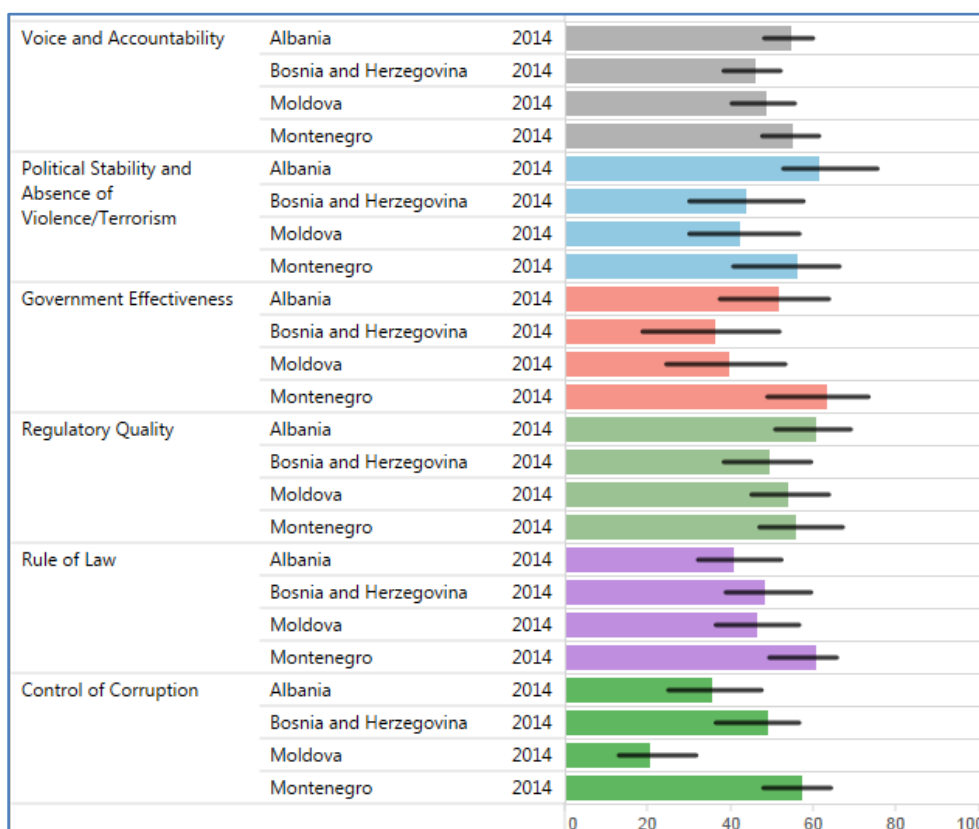
185. **Governance issues.** In addition to EU accession, Montenegro's key foreign policy priority is to join NATO. Both priorities are linked by the focus on the rule of law: progress in this area is a key condition for both processes. Coordination among institutions involved in the accession process has improved. As regards transparency, the Open Government Partnership operational team was dissolved due to irregularities in its appointment, and re-established. The e-petitions platform continues to exist, but is underused. However, according to the EU, the capacity and independence of regulatory authorities should be strengthened, while stakeholder inclusion and consultation should be further enhanced⁴⁰. Despite some improvements related to the Ombudsman's resourcing, the capacity to effectively handle complaints is limited. In 2014, parliament adopted amendments to the law on the financing of local self-government, giving the recently-established municipalities access to additional funds. A considerable number of units of local self-government have been struggling with high municipal debts and are not financially self-sufficient. In 2015, the government approved the restructuring of tax arrears for 14 municipalities. Also in 2015, the government adopted the 2015-2018 strategy for the professional development of local civil servants and state employees and its 2015-2016 action plan.

186. As can be seen from Figure 8 (next page), these effort have contributed to Montenegro's being one of the best performers in governance rankings compared to its regional peers, scoring highest categories such as voice and accountability (indicating reasonable press freedoms and democratic elections), GoM effectiveness (indicating the quality of public services, the quality of the civil service and the degree of its independence from political pressures), rule of law (the degree to which people have confidence in and abide by the rules of society) and, control of corruption (the degree to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests). In the categories where Montenegro is not best, it comes second. A similar pattern can be observed from TI's Corruption Perception Index 2015, which ranks Montenegro as better than its regional peers (including Croatia) and equal to Italy, both ranking as the 61st least corrupt country in the world.

187. The comparatively robust governance systems and their solid integrity is also a key reason why the EU (Montenegro's by far largest donor) is increasingly using budget support as its preferred modality to channel assistance to Montenegro. IFAD has will however been insisting on strict fiduciary safeguards, not least concerning procurement, and the RCPT will further develop capacity to strengthen fiduciary and risk management safeguards (see section under 'Procurement').

⁴⁰ EU Commission: Progress Report of Montenegro, November 2015.

Figure 8: Montenegro's governance in a comparative perspective (WB, 2016)



A. Rural context

188. The rural sector has obviously also been affected by the climate, infrastructural and economic vulnerabilities that has characterized much of Montenegro's society. Agricultural land accounting for 38% (517 000 hectares) of the total territory. The largest share of agricultural land resources consists of pasture and grassland (88%), which is used extensively. Montenegro's agriculture is quite diversified - from growing olives and citrus fruits in the coastal region, through to early seasonal vegetables and tobacco in the central parts and extensive sheep breeding in the north. Although only 5.7% of the economic active population is employed in agriculture, it is still the dominant activity of the rural population - more than 65 000 households obtain their income partly or entirely from agriculture.

189. As can be seen from Figure 4 (main text, page 4), most labour in agriculture are part-time and informally employed. Food production and agriculture play an important role in Montenegro's economy, representing around 7% of GDP⁴¹. However, farm sizes are small, the average being 4.6 ha, but (i) with more than half under 1 ha, (ii) with 31% under 0.5 ha, (iii) while about 3 000 households have less than 4 cows. Not only are farm sizes small, very few specialise with 80% of all agricultural holding being mixed, often with crop, poultry, sheep, pig and cow production. This is partly related to the fact to virtually all agricultural holdings are family holdings, with less than 1‰ being registered as business entities. This also creates structural barriers to expansion, commercialisation and increased competitiveness. Consequently, Montenegro's agricultural added value per ha is less than half of Albania's.

190. **Especially in the northern region is small farm size prevalent and problematic.** With scattered producers, poor connectivity and unreliable inputs such as water and fertilizer, the low output volumes and inconsistent quality hampers integration into more profitable value chains, that could improve incomes and livelihoods. Especially older farmers are reluctant to enter into more cooperative engagements that could improve their bargaining power, improve quantities and qualities, as well as facilitate storage, packing and marketing. This is partly a consequence of the legacy of the

⁴¹ EU: Bilateral relation in agriculture, November 2014

socialist system of agro-kombinats (or *zadruga*). However, a younger (but small) generation of farmers are emerging that have a more pragmatic approach to joining forces with other farmers.

191. The forthcoming EU accession⁴² offers both opportunities and challenges for the agricultural economy. With accession, Montenegro will have unhindered access to export to the world's largest market, where demand for especially high-value agricultural products is soaring. On the other hand, accession will increase competitive pressures and require structural transformation of many agricultural holding, also within high-value production sectors. Currently, Montenegro's agricultural trade with the EU is heavily skewed, with imports from EU (EUR 159 million) being more than 25 times higher than exports to the EU (EUR 6 million), indicating that there is a largely unfinished transitional agenda facing Montenegrin agriculture. The EU accession will also mean that rules and regulations will need to be aligned to the *acquis communautaire* including those pertaining food safety and hygiene.

192. **Production in the south of the country is better organised.** Agriculture production is divided approximately into two parts – the fertile and marginally better developed areas around Podgorica and the coastal strip, where large vineyards for table grape and wine production are found, plus olive groves, stone fruit (peach) production, fig production and increasingly greenhouse production etc. With ready markets in Podgorica and top quality tourist hotels on the coastal strip, commercial production is increasing and improving in these areas. Food produced in the North is of a high quality, but food safety compliance needs to be improved. By contrast, the cooler northern forested mountainous areas are dominated by isolated family-run farms, which are managed extensively⁴³. Despite the many constraints and problems experienced by producers in the region, it is important to highlight the high quality of the northern traditionally produced foodstuffs. However, conditions of production are poor in terms of hygiene, and market opportunities limited.

193. Most cultivations are still carried out manually, even when farms are quite large. Farmers in these areas have small herds of livestock – cows and/or sheep for dairy or meat production. Although some of these farms are of a reasonable size physically, from c.6 – 10ha with some larger inherited/shared farms of 75ha, even the largest are clearly under-funded and under mechanised – with growers limited to the production they can perform by hand – including land preparation for fodder production, and hand scything of fodder crops for winter feed. Relatively few farmers have (small) 'walk and push' mechanised grass cutters or hay cutting.

194. **There is a shortage of markets for agri-products.** There are insufficient dairies to collect and process relatively tiny quantities of milk from large numbers of producers. One of the two large dairies in Niksic recently closed because the owner was unable to maintain a profitable business based on collection of small quantities of milk of variable quality, supplied by from numerous different producers in widely spread locations. That particular dairy owner moved his operations and now benefits from economies of scale and business streamlining – buying milk only from three, large Serbian dairy farms. New markets remain elusive. Whilst there is speculation that a new owner has been persuaded to re-open the Niksic dairy, until that time, farmers are left to market their milk where they can, to small dairies that are in many cases over supplied, or by adding value to the milk themselves by processing it to produce cheese, yoghurts and cream, which is marketed informally.

195. **There are few markets for sheep products.** Most producers have some dairy cows for milk production, and some growers have small flocks of 10- 40 sheep, with rarely, flocks of 150- 200 sheep, maintained for lamb's meat and for milk. There are no markets for sheep milk, which producers process into cheese and sell informally. The sheep are not shorn – there are no markets for wool.

196. **There is relatively little vegetable production,** those produced need improved winter storage. With the exception of potato production, there is relatively little commercial production of vegetables for sale, although most growers produce vegetables and fruits for the household, including: cabbages, sweetcorn, tomatoes, onions, garlic, pumpkins/squash, potatoes, plus fruit for the house – plums, apples, pears, strawberries, etc. Whilst some fruit is consumed fresh, little is sold commercially, and the majority of plums and apples are fermented and used to produce Rakia.

197. **Constraints to agricultural production on the small farms are numerous.** One of the most important constraints is the lack of water – animals cannot be grazed too far from sources of water.

⁴² The EU opened two new chapters in the accession negotiations with Montenegro in December 2015 (transport policy and energy). At the current trend, accession might be in 2021.

⁴³ i.e. production is not intensive.

One example is a producer with 200 sheep who daily uses his vehicle and various plastic containers to carry all water necessary for the flock up to mountain pasture land. The same farmer made unskilled attempts to harvest snow melt and rain water, but failed badly. He is unable to expand his flock and use additional, underused pasture because of the limitation on water. Even where there is water, producers cannot access it. Lack of water for livestock and crop production is a very commonly mentioned constraint; in one area visited, with 17 lakes immediately surrounding the area, there was no method of moving water even one kilometre from its source to livestock grazing areas. Extraction of water is expensive, beyond the means of poor farmers. Underground water sources can be found even in the most mountainous areas – but they are generally quite deeply below ground at, for example 23-30m below ground level. A borehole would cost EUR 10,000 to install, and one borehole would not be sufficient for grazing needs. Growers are creative, at accessing water where possible. There are springs in some areas, and enterprising producers tap springs above their farms, and install pipelines to move water by gravity down hillsides to their homes and to livestock grazing areas on their farms. The water and pipes are untreated.

198. **Authorities can give support, but resources are limited.** Some fortunate farmers with springs below their homes have been provided with pumps and piping (from donors/municipal authorities), to carry water from springs below the level of their homes, to shared reservoirs on land above the homes. Water from the reservoirs is then piped by gravity to typically 10 households. In extreme dry periods (usually July/August), reservoirs can be filled by the authorities using water bowsers⁴⁴. Farmers with on-farm water are lucky; generally, farmers do not have access to piped water.

199. **Lack of rural connectivity is a serious constraint.** Other issues faced by farmers included the remoteness of their farms, frequently with only gravelled roads on steep slopes; in some cases, farms were 12km from an asphalt road, and in winter or after heavy summer rainfall the unpaved roads become impassable. Increasingly too, gravelled roads, and even some asphalted roads are being either eroded or completely destroyed by uncontrolled flood water after heavy rain, which frequency is accelerating with climate change (see SECAP note).

200. **Mountain soils and ecologies are fragile.** Soils on mountains are relatively thin – 15-30cm deep. Sheep are grazed widely, but extensively. There is a trend of reduction in the quality/biodiversity of grazing land, and the need to reseed pastures. By comparison, many farmers lack of grazing animals/smaller ranges for animals (caused by inadequate water supplies) which has led to a natural but undesirable reforestation of traditional grazing land, and loss of meadows.

201. **Livestock quality can be significantly improved.** Issues exist with the 'quality' of livestock in Montenegro. Adapted local breeds are often very low yielding dairy animals (it is also possible that milk yields are also reduced as a result of inadequate levels of drinking water). Imported breeds do not always adapt well to the climate and traditional methods of husbandry. The findings of Marković (2004 and 2013) show very wide variation in milk traits – lactation duration, milk yield, daily milk yield and fat and protein contents – resulting primarily from differences in rearing conditions and the variety of domestic Balkan goat. The research found that milk yields varied from 136 to 153 kg/lactation, compared to the Saanen breed which is reared as individual animals or in very small herds. There are no data or estimates on its performance, but farmers report that milk production can be as high as 4 litres/doe/day, implying a milk yield of 500 kg/lactation.⁴⁵ Volumes of production can be small, making markets even more difficult to find. Small producers with for example, 80kg – 200kg of cheese production per year are too small to be worth the farmer applying for state registration to trade officially. The volumes are also too tiny to guarantee linkages with 'normal' marketing chains – supermarkets, hotels, distributors etc. These poor producers, along with the majority of the farmers sell informally to neighbours, friends, and family, and rarely at farmers' markets.

Market opportunities for inclusive growth

202. **Livestock production is a significant contributor to Montenegro's agricultural economy,** accounting for more than 50% of the total output. Ruminant breeding allows for utilization of less productive areas that prevail in the structure of total agricultural land in Montenegro. During 2007-2011, a drastic decline in the number of heads was generally recorded compared to 1999. However,

⁴⁴ Specially manufactured vehicles designed specifically for transporting water.

⁴⁵ FAO Sustainable Goat Breeding and Goat Farming in Central and Eastern European Countries 7-13 April 2014

some positive structural changes can be noted with the size of farm and flock increasing. Among cattle, dual-purpose breeds prevail with a tendency for an increase in the presence of dairy breeds. Goats are primarily used for milk and cheese production while sheep are primarily for meat. Pig and poultry production is only on a small scale and tends to be for home consumption. While Montenegro has a comparative advantage in ruminant production due to its pastures, it has little advantage in pig and poultry production as it does not produce significant volume of grains and other feed stocks.

203. Even among ruminants, the market opportunities for inclusive growth vary substantially. The global dairy sector has seen a prolonged period of general oversupply and volatile but declining prices, exacerbated in the last few years in Europe due to the trade embargo with Russia. World dairy prices halved from 2013 to mid-2016 but have since recovered somewhat on expectations of tightening supply. Sustained price pressures have put dairy farmers under significant pressure, favouring the most efficient dairy sectors. This is reflected in the market prices in the Montenegrin market - where import prices of milk (EUR 0.54/litre) are now close to the reported costs of production for Montenegro's dairy industry, especially in the upland northern regions. Smallholder dairy production in the project areas is characterized by small herds sizes (less than 4 milking cows), mixed breeds, extensive grazing and scattered production - all contributing to low productivity, significant inefficiencies at both farm level and collection systems and hence low return on labour for most small dairy farmers. The recent closure and relocation of one of the major dairies in Niksic due to a lack of competitive raw milk supply is symptomatic of the underlying efficiency problems constraining the dairy sector.

204. A potentially more promising segment is the cheese market, for both cow and goat cheeses. Some small dairies are now producing small volumes of premium cheese (e.g. 20 tons per year from one typical small goat cheese dairy), including some certified organic cheese, and sell to the premium domestic and tourism markets (prices around EUR5-10/g depending on the cheese). The producers estimate, based on their own market contacts and sales, that there is sufficient immediate demand to absorb 200-400 tons per year without difficulty in finding buyers. This appears highly plausible as it is equivalent to less than 10% of the total of 4700 tonnes of cheese imports in 2015, of which almost 75% comes from Germany and Serbia. In addition to the domestic market, some of the better local craft cheeses are already of an export standard, though only from the best small dairies at present. Hence it would appear feasible that over a 5-7 year period a small cluster of premium craft cheese dairies could emerge and then begin to establish an export market base.

205. Such small professional dairies producing a mixture of cheese are estimated to increase the effective value of the milk by around 55%, net of all processing, marketing and dairy operation costs. The opportunity for smallholder therefore exists in increased collaboration among small groups of a few committed goat or cow's milk farmers to facilitate investments in new professionally run small craft cheese dairies, with a focus on quality and food safety standards in production, packaging and handling. This would require both financial investments but also investment in raising their own professional skills in running the business to the required standards - technically and commercially. Thankfully there are a few good role models already who recognize their own interest in growing the craft cheese sector and appear willing and able to mentor others to follow their experience.

206. For meat, while the aggregate domestic production of meat is far below consumption with a self-sufficient rate of about 36%, a large part of this gap is accounted for by pigs and poultry which together account for 63% of imports of meat and live animal (by value). Beef accounts for 32% of meat imports by value while sheep and goats only around 3%. The relatively low carrying capacity for cattle in the upland pastures and extensive grazing systems means that the potential for competitiveness and decent returns to labour from upland beef production is rather limited in current market conditions without the use of significant supplementary feeding and investments to increase herd sizes. However, as with pig and poultry production, Montenegro's limited feed production and reliance on imports for animal feed stocks puts it at a comparative disadvantage in such production systems.

207. In contrast, while sheep imports for meat are much smaller in value, they are still relatively large in absolute terms - equivalent to approximately 53,000 animals in 2015 compared to a national herd of approximately 170,000 breeding ewes (from a total herd of around 210,000 head) likely to be producing a comparable number of lambs for meat each year⁴⁶. This suggests that around 25% of demand of lamb and goat meat is currently met by imports. Import and domestic prices are comparable

⁴⁶ Equivalent to approximately 1 lamb per ewe, assuming rates as follows: fertility 130%, mortality 7%, herd replacement 10%, culling 50%

(around EUR2.20 per kg live weight) with each breeding ewe reported to generate net income of around EUR60-70 per year. Competitively priced local sheep and goat meat production offers reasonable income opportunities to farmers with access to suitable grazing lands able to support flocks of 100 breeding ewes or more. Sheep and goat can also be grazed in a wider range of hilly terrain than many of the favoured cattle breeds, making them well suited to more isolated farms and villages often with more rugged terrain. The main challenges faced by smallholders concern labour productivity, to a large extent driven by small herd/flock sizes. Therefore on-farm investments that raise labour productivity are likely to be the priority - for example in expanding herd/flock size to a minimum of around 100 breeding animal as well as other labour saving production systems allowing more efficient management of larger herds, such as the use of working dog packs including guardian dogs. Livestock water ponds are also vital to supporting increased herd sizes in the abundant grazing land available to many villages, including the "kantuns".

208. **Higher value crop** opportunities exist that build on the particular comparative advantage of the conditions in northern Montenegro. This includes *Seed potato* grown on farmlands at +800m above sea level can be ideal for producing high quality seed potato given the clean, low disease conditions. This has enabled about one third of domestic potato seed demand to be met from local production and the first potato seed was sold to export this year. Seed potato production is substantially more profitable than ware potato production, but they are linked as a share of a potato crop grown for seed will always end up as ware potatoes when it does not meet the quality standard required to be classified as seed. The income opportunities are substantial for smallholders with suitable land, for example in the upland fields of Zabljak (see map, page vii) and similar areas in other project municipalities, if they can apply the stricter field management systems required for seed production and develop more reliable linkages to the market. For better market linkages, trust in the quality of seed is the foundation of any seed sector. There is already a high-quality system of seed certification at the farm level, led by the team of the well-equipped seed testing laboratory of the Biotechnical Faculty but more needs to be done to strengthen the confidence and trust of ware potato farmers in the marketing and distribution system for domestically produced potato seed. Improving mechanization and irrigation for smallholders during the hottest summer month will also help improve productivity as well as reducing variability of yields between years, which will intern facilitate easier commercial linkages as smallholders become more reliable suppliers of consistent volumes of quality seed.

209. **High value berries** are another an emerging new sector, especially cultivation of raspberries but with potential for cultivated blueberries and strawberries. There are already an estimated 200ha of berry productions and recent investments in commercial nurseries that have secured the rights to produce and sell quality seedlings of improved international berry varieties under Plant Breeder Right schemes. There is also significant interest in expanding local production for export from some of Montenegro's largest and most successful agribusiness. Export markets for berries are large and offer prices that would be attractive to the local industry. For example, the easily reachable Italian market imports 7600t of fresh raspberries a year at an average price of US\$ 3.90/kg CIF⁴⁷ while Germany imports 27,000t at an average of US\$ 5.90/kg CIF. Similarly for frozen raspberries, Italy imports 11,000t at US\$ 2.80/kg CIF and Germany 108,000t at US\$ 2.18/kg (Comtrade.org.un). Montenegrin raspberry growers currently sell their picked product for around EUR2/kg at farm gate. With additional variable export costs of around EUR1.50 per kg if packing and cooling into retail packing (e.g. 400gr clamshells) the local industry is likely to be competitive in export markets especially if growing internationally recognised varieties such as the "Glen Amble" variety that is now licensed for sale by one of the recently established nursery businesses.

210. The main opportunities for smallholders are in increasing their production of improved cultivars, providing higher yields and better quality fruit. This will require on farm investments and access to better quality seedlings. With increasing production across the cluster, smallholders will increasingly need to collaborate to aggregate supply and organize their production schedules so they can build durable relationships with larger buyers who can absorb the increased supply volumes most likely destined for export markets. Exporters will need to invest in export pack houses and cold chain facilities, and will need confidence in the supply before they make these substantial investments. Thus, in order for smallholder to benefit, there is a need for a relatively coordinated set of complementary

⁴⁷ CIF: "Cargo Insurance Freight" is one of the standard international commercial terms rules and reflects the price of the goods delivered to the port in the importing country. Search for "Incoterms" for further explanation.

investments to be made along the value chain and the development new trading relationships between networks of exporters and producers.

211. Some of the business already investing estimate that there is potential for an industry of around 2000 ha to develop in the coming years. This relies on developing significant export markets and associated export facilities in the country. While such estimates may be optimistic, such scales of transformation have happened rapidly in many other countries where highly profitable fruit and vegetable production has displaced cereals or livestock pasture. The strong fundamentals seen in the local agro-climatic conditions, proximity to large export markets and apparent profitability for smallholder production make such a transformation feasible if sufficient investment can be mobilized.

212. **Beekeeping** has a rich tradition in Montenegro, with about 2,533 holdings, which have about 50,024 hives (20 per household). More than 99% of beehives are owned by family smallholders. Honey yields per beehive depend on climatic and other natural factors, with a total annual production of 550 tonnes in 2012. With imports of around 204 tonnes in the same year, the total domestic market is estimated at about 750 tonnes of which it is estimated⁴⁸ that roughly 60% is for resident urban demand, 30% for resident rural demand and 10% from tourist demand. Almost all domestically produced honey sells at premium prices of EUR8-10/kg with an estimated 95% sold either directly "house to house" or via local markets. In contrast, the 200 tonnes of imported honey cost EUR4.60/kg - more in line with regular honey prices. In terms of growth opportunities, Montenegrins' honey consumption is already high, at more than 1.1 kg per capita each year - on par with Europe's major honey market in Germany (1.04kg) and almost 3 times the level of Serbia (0.44kg) (FAOSTAT).

213. The growth potential in both the domestic and tourist market is much smaller than the headlines figure of 1.6 million foreign tourists every year might suggest. Foreign overnight stays of 10.3 million in 2015 (MONSTAT) are equivalent to a resident town of just 28,000 people (albeit a wealthy, high spending one). So while there is clearly significant potential to increase production, the bigger challenge is to find premium markets that can sustain the current premium prices widely enjoyed by honey producers without saturating local markets and driving down current premium prices. This is likely to require developing niche branded premium export markets backed by effective and trusted traceability and authentication systems given current problems with adulteration and substitution of honey in world markets. The major premium honey segments internationally are for monofloral honeys and organic honeys, neither of which are typical of Montenegrin production systems making the task of establishing Montenegrin honey as a premium export product challenging.

214. **The organic market** has grown in recent years but remains small and most organic products are still imported. The main sales channels are specialised shops, supermarkets and direct marketing. Data on exports and imports are not publicly available. The main institution carrying out research into organic agriculture is the Biotechnical Faculty of the University of Montenegro. Advice is provided into the cantonal advisory services and by Switzerland's research Institute of Organic Agriculture. The latter provides specialised advice for farmers, as well as training courses and technical information for practitioners. In 2014 there were 172 officially registered organic producers, of which 26 have received a certificate. Montenegro had a total agriculture area of 3,034 ha devoted to organic farming in 2014. Of these, 93.5% consists of grassland/grazing areas, while 6.5% are arable and permanent cropland. The key crops are field crops and cultivated herbs (119.81 hectares), and permanent crops of fruits (75.52 hectares), and grapes (2.67 hectares). Furthermore, approx.143,400 ha of forestland are certified for the collection of wild herbs and forest fruits: Montenegro is one of the seven countries in Europe where the highest amounts of organic wild berries, mushrooms, and medicinal and aromatic plants are collected. Some of these products may be candidates for further investigation as potential additional cluster and value chains later in the project.

215. In some cases, premium Montenegrin producers, such as for goats cheese, have invested in organic production and certification primarily as a market access tool - enabling them to produce a high quality product that is widely recognized and accepted in the market. This is especially important for small producers trying to establish a brand and reputation. It is notable that the premiums earned for organic products (around 10-15%) do not offset the productivity loss (around 30%) from an organic vs conventional goat cheese operation.

⁴⁸ Team analysis based on urban/rural population data, number of tourist overnights and typical per capita consumption in different European countries

Government policies on rural development

216. At the macro-level, GoM's Montenegro Economy Reform Programme 2016 - 2018 aims to increase the living standard of the Montenegrin population and the quality of life of every individual in Montenegro. In particular relevant to IFAD are the programme's ambitions to reduce rural – urban migration and to reduce migration from underdeveloped municipalities of the North to the Central and Coastal area of Montenegro, through increased competitiveness and by linking rural areas to better commercial opportunities. This ambition to reduce emigration from the north is not explicitly carried through into policies or strategies for agriculture and rural development however.

217. **In the agricultural sector, governance and policy predictability has been comparatively robust**, with consistent progress toward complying with the EU's Instrument for Pre-accession Assistance for Rural Development (IPARD) requirements in terms of the legal and regulatory framework (particularly for issues around standards and food safety), institutions and control measures. This imperative has been the main focus of MARD's work in recent years. The National Strategy for the Development of the Agriculture and Rural Areas 2015-2020 has four main pillars for the rural sector:

- The long-term management of agricultural resources in a sustainable way, along with the preservation of the environment,
- Ensuring a stable supply of safe food that is affordable both in terms of quality and price;
- Improving the standard of living of the rural population;
- Strengthening the competitiveness of food producers.

218. The strategy emphasizes the need to overcome widespread fragmentation, poor connectivity and increased climate vulnerability. In the sector, the EU support in the coming years will focus on the provision of direct financial support to primary production, agro-processing and transformation for the medium to large-sized agricultural holdings. The enabling external environment, particularly the improvement of the rural infrastructure network, will only be tackled from 2018/2019.

219. **A new law on cooperatives has recently been passed providing much improved corporate governance safeguards.** The law and the provision of an adequate legal framework will allow for the creation of new cooperative enterprises in the rural development sector as well as the transformation of the old cooperatives currently operating under the law for non-governmental organizations, further promoting the commercialization of the sector.

220. **The policy framework for organic agriculture is relatively developed and favourable.** An organic law was adopted in 2004, which includes the granting of compensatory payments under a special scheme. Additional support is provided for advisory services and participation in international projects. There is also a national logo for organic products. A National Association of Organic Producers of Montenegro was established in 2011, while a National Action Plan for the Development of Organic Agriculture was adopted in 2015. Two projects of international support (Denmark and Switzerland) have been in place between 2008 and 2015 respectively.

221. **IFAD will align and support the government in its ambition to modernize the rural sector with a view to increase competitiveness and improve resilience.** The benefits of increasing the tax base, export revenue and employment generation has been proven. However, IFAD will also complement this strategy with more direct targeting of climate vulnerable and poor rural households, with special emphasis on youth and gender issues, as described in the next Appendix.

Rural finance and subsidies

222. Currently, financing the investments of farmers is available through the Investment Development Fund, commercial banks, and microfinance institutions (MFIs).

223. **Commercial banks.** The financial system is dominated by the banking sector, followed by a small, but growing segment of non-bank financial institutions. The banking sector accounts for about 90% of financial system assets and comprises 14 commercial banks, predominantly foreign-owned. Banks' assets are concentrated in lending products, most of which is provided for corporates and households (mostly mortgages), each representing about 38% of total credit. The insurance sector and capital markets remain small despite recent growth. Leasing and factoring companies exist, but their size and contribution to corporate finance is unclear due to the lack of reliable data and weak-

nesses in the regulatory and supervisory framework. Montenegro currently lack a national Credit Bureau for providing consumer or business credit references. For farmers, financing through banks is characterized by high interest rates and unfavorable conditions. The level of collateral depends on the type of investment: mortgage without charges and restrictions under the terms of the bank (mortgage value must be at least 1.5 times greater than the loan amount). Additional collateral is possible (guarantee of other legal entities and natural persons, etc.) depending on the amount requested.

224. **EBRD.** In terms of investments, since the beginning of its operations in Montenegro, the EBRD has committed more than EUR 530 million in 50 projects. Its investments cover the whole range of Montenegro's economy, and agribusiness remains an important part of the Bank's engagement in the country. The EBRD has invested around EUR 30 million through 8 projects in Montenegro's agribusiness sector to date. Main EBRD clients in the sector include meat production companies Goranovic and Mesopromet as well as the food retailer Voli. EBRD has one ongoing project launched in April 2015 (Increasing Market Access for Montenegro's Meat Producers) and one upcoming project (Supporting sustainable VC integration in Montenegro's horticultural sector). On the ongoing project, EBRD is working with FAO to support the upgrade of the meat sector to EU food safety and quality standards. This technical cooperation works with producers to develop Geographical Indications (private origin-based quality labels) for 2 of Montenegro's traditional beef and sheep meat specialties, recognized as having distinctive qualities. The project will boost competitiveness and export market opportunities for meat producers, while also benefiting domestic consumers. The objective of the second project, in the pipeline, will improve links between horticultural producers and the retail sector.

225. **Investment and Development Fund (IDF)** is government own and supports (i) micro, small and medium-sized enterprises (SMEs), delivering credit and guarantee support; (ii) infrastructure and environmental projects; and (iii) stimulation of exports and employment. Support is provided through direct IDF credit lines, and by providing credits to borrowers through cooperating commercial banks, within IPARD Like. The credit beneficiaries are micro, small and medium-sized enterprises and entrepreneurs, all of which complying with the Law on Companies.

Table 9 : IFD Direct credit

Activity	Credit amount in EUR	Grace period	Repayment period (grace period excluded)	Interest rate
Agriculture and Food Production	Min 10 000 and max 1 000 000 Max 50 000 for entrepreneurs and agricultural producers	Up to 4 years	Up to 8 years	3.5% annually

Table 10: Credit through Bank (IPARD Like credit line)

Activity	Credit amount in €	Grace period	Repayment period (grace period excluded)	Interest rate
Development of agriculture IPARD Like	Up to 100 000 for micro and SMEs Up to 80 000 for registered agricultural producers	Up to 4 years	Up to 8 years	3.5% annually

226. IDF can directly finance up to 50% of the total investment. The amount of the loan intended for investment in working capital can be up to 20% of the total loan amount. As a collateral loan IDF will accept bills of exchange, mortgage, bank guarantees, guarantees of local self-government units, the government guarantee and other usual collaterals in the banking business in accordance with the policies of the collateral and the decisions of the competent authorities of the IDF.

227. **Micro finance institutions (MFIs).** There are 5 MFIs in Montenegro, Alter Modus, Klikloan, Montenegro Investments Credit, Erste Bank and Monte Credit, whose 4 report to the Mix Market. MFIs have emerged as an important source of financing for microenterprises, but their size remains limited, with total assets slightly over 1% that of banks. The total size of the five MFIs is 2% of GDP. The leasing market is small and has been declining since the crisis. The biggest problems of the microfinance sector are under-development and networking, the sources of financing, high interest rates, and little opportunities to lower those interest rates.

228. *Alter Modus* is the largest MFI in Montenegro (operating for more than 17 years, and a market share is of 70%), specialized in loans to entrepreneurs for investments in growing their businesses as

well as to households for home acquisition and/or improvement. The head office is located in Podgorica, while the MFIs has 15 branches/sub-branches across the country, serving over 19,000 clients. In RCTP intervention areas/Municipalities, Alter Modus Ltd has branches in Bijelo Polje, Berane and Niksic. The MFI offers two main types of credits: (i) microloans for business, and (ii) microloans for improvement of living conditions.

Table 11 : Alter Modus microloans to business

Activity	Credit amount in €	Grace period	Repayment period (grace period excl.)	Interest rate
Agriculture, husbandry, trade, services, handicraft, hospitality services, fishery, production	From 500 to 5000 (first cycle) Up to 10 000 (next cycles) Max 50 000 for entrepreneurs and agricultural producers	Up to 6 months	Between 5 months and 3 years	From 1.49% to 1.89% per month, i.e. from 17.88% to 22.68%/year

229. Supported businesses may and may not be registered. These loans can be delivered to persons or legal entities, with the same loan application and processing system (no info on how long it takes). Legal entities must submit the Articles of Association and documentation referring to the company. In 2016, the Green for Growth Fund (GGF) announced a EUR 2 million loan to Alter Modus, in a transaction that further expands and diversifies the fund's geographic and operational scope with financing for emerging energy efficiency (EE) market.

230. *Monte Credit* is a leading MFI established as a subsidiary of Vision Fund International, a global MFI operating in Africa, Asia, Latin America and the Middle East/Eastern Europe, and wholly owned subsidiary of World Vision International. It operates in Serbia and Montenegro. Monte Credit's office is based in Podgorica and manages the work of 8 branch offices – 4 of them branches (Podgorica, Berane, Niksic and Budva) with the other 6 being sub-offices (Pljevlja, Bijelo Polje, Mojkovac, Herceg Novi, Bar and Ulcinj). I.e. Monte Credit is also present in RCTP intervention areas/Municipalities. IT provides financial services to people who would otherwise have little or no access to credit. Targeting criteria include: (i) location and address - rural households; (ii) income and assets – low-income and poor households; and (iii) source of the income - households with micro business activities. Thus, most clients are poor households, households with small business activities, micro businesses such as trade, agricultural production/processing/sales, small and medium productions and facilities for tourist season of a moderate type. Monte Credit provides (i) agro-loans, through commercial partner banks; (ii) business loans; (iii) start-up loans; and (iv) consumer loans. The terms and conditions for microcredit which could interest RCTP beneficiaries, i.e. agro loans and business loans, are described below (careful, info only available for loans in Serbia):

Table 12: Monte Credit Agro loans

Activity	Credit amount	Grace period	Repayment period (grace period excl.)	Interest rate
Agriculture, farming	From RSD 50 000 (€ 405) to RSD 200 000 (€ 1 620) for the first cycle Up to RSD 500 000 (€ 4 052) for next cycles	From 0 to 3 months	Between 6 months and 2 years, equal installments	No information found

231. For the Agro loans, Agro-Invest gives a recommendation and a guarantee for loans and the loan is distributed by a partner bank. No matter if their farm is registered or not. Farmers are to be living in rural area for already minimum one year. The loan can be used as primary or secondary source of income, but solely to be invested in agriculture – machinery, fruit and/or vegetable crops, greenhouses, irrigation systems etc. Borrowers should not be older than 70 for the first loan cycle (up to 75 for additional loan cycles). Collaterals are: administrative ban, guarantor, bill of exchange and collateral (guarantees and collaterals are more flexible for long term clients)

Table 13: Monte Credit Business loans

Activity	Credit amount	Grace period	Repayment period (grace period excl)	Interest rate
Agriculture, farming	From RSD 50 000 (€ 405) to RSD 200000 (€ 1 620) for the first cycle Up to RSD 400 000 (€ 4 052) for next cycles	0	Between 3 months and 2 years, equal installments	No information found

232. For the business loans, Agro-Invest gives a recommendation and a guarantee for loans and the loan is distributed by a partner bank. Business loans are for small entrepreneurs living in rural areas and operating a small business (trade, production, processing, services), which they want to expand. Borrowers should not be older than 70 for the first loan cycle (up to 75 for additional loan cycles). Collaterals are: administrative ban, guarantor, bill of exchange and collateral (guarantees and collaterals are more flexible for long term clients).

233. **Subsidies.** The subsidies available to farmers/processors are summarized below:

Table 14: Subsidies

1. Agro-budget (selected items)	€
Direct Payments to farmers	
> 4 cows (approx. market price €2000)	70 per head
> 40 sheep (approx. market price €130)	8
> 30 goats (approx. market price €130)	8
Bulls if sold to approved slaughterhouse	120
Pigs	From 2016
> 4000L milk commercial production	0.06
> 5000L milk commercial production	0.01
Milk quality	
Forage p.ha	160
Potato p.ha	Upto 700 'elite'/160 other
Cereal p.ha	Up to 300
Fruit perennials p.ha	160
Medicinal herbs	<i>Checking with Ana</i>
Rural Development	
Insurance for crops/ livestock	50%
Orchards incl. irrigation, vegetables etc	<i>Checking with Ana</i>
Young beginner beekeepers 18-40 years	80% cost of beehives
2. MIDAS	
7 calls from 2009 (incl. 2 financed by GEF, 1 EC) Themes include livestock acquisition, improving ag. holdings. Need business plan, reimbursement of farmers' own investment Extra points in selection for women and youth	Up to 50%
3. IPARD-like (2015, 2016)	
2 calls: (i) 2015 (upgrading ag. holdings of primary producers) and (i) 2016 (agro-processors) Need full business plan over €50,000 and simple one under €50,000 Reimbursement of investment	Up to 50%
4. IPARD I (2007 – 2013) and IPARD II (2014 – 2020)	Up to 50% loan
Themes: primary production & rural Infrastructure Need full business plan over €50,000 and simple one under €50,000 Reimbursement of investment	€10,000 to €100,000

234. The *Agrobudget* is the annual budget managed by MARD and structured in line with the EU CAP. The budget lines are flexible and new ones can be added to respond to changing demands as well as policy initiatives. 61% of the total budget is allocated to subsidies (IPARD investments and MARD direct payments). Extremely poor households either do not, or barely access subsidies, while the economically active poor and successful farmers are able to do so. However, overall, less than

10% of farm enterprises are able to access the direct payments. Reports on progress are not available in English. In 2015 selected data on actual support provided is as follows⁴⁹:

Direct Payments	Rural development
4,472 beneficiaries	feeder roads were provided in municipalities including (Nikšić, Petnica, Plužine, Šavnic)
25 million litres of milk	the number of agro-processing requests supported from 24 in 2014 to 47 in 2015
1 House of Honey opened in Danilovgrad and 78 young beekeepers supported	diversification projects numbered 13 (11 from northern regions) and up from 4 last year – it is a relatively new measure
Support for medicinal herbs increased	11 learning visits were organized for producers, including overseas
67% more support for crops than in 2014	schools were also promoted.
422 vegetable producers supported	
166 fruit trees & 84 ha of orchards supported	
222 producers supported to start organic production, of which 72 were certified	
Over 1,500 HHs were provided with water (cisterns 'bistierno')	

235. **MIDAS, IPARD-like grants, Instrument for Pre-Accession Assistance in Rural Development (IPARD).** All three are aligned in that MIDAS is a WB-financed programme that also supports EU accession, and the WB also implements IPARD-like grants in preparation for IPARD, which in turn supports EU accession. All three have offered smallholders the option to obtain 50% of investments to boost primary production and agro-processing. MIDAS is expected to be phased out gradually, and IPARD II calls are to be launched in 2017.

Table 15: MIDAS grants in calls 1-5 by selected northern municipalities/sex

1st Call	Nikšić	Plužine	Šavnic	Petnica	Zabljak
Women	4	0	1	0	0
Men	43	10	12	0	7
Total Montenegro	268				
2nd Call	Nikšić	Plužine	Šavnic	Petnica	Zabljak
Women	1	0	0	0	1
Men	7	7	6	0	5
Total Montenegro	97				
3rd Call	Nikšić	Plužine	Šavnic	Petnica	Zabljak
Women	1	0	0	0	0
Men	8	2	0	0	1
Total Montenegro	32				
4th Call	Nikšić	Plužine	Šavnic	Petnica	Zabljak
Women	11	0	0	0	0
Men	19	6	7	0	5
Total Montenegro	222				
5th Call	Nikšić	Plužine	Šavnic	Petnica	Zabljak
Women	1	0	0	0	0
Men	2	1	0	1	1
Total Montenegro	39				

Source: Analysis of published data on MIDAS website.

⁴⁹ Data may be available on the sex disaggregation as well as the youth/ northern municipality breakdown from the relevant division in MARD but due to summer holidays many key people were absent.

236. With regard to IPARD II, the data for 2015 is below.⁵⁰

Table 16: IPARD II 2015 gender/ age disaggregation

IPARD like (primary production)	Applications in 2015	Contracts awarded
Total	521	291
Women	n/a	n/a
Young people under 40 years of age	221	n/a
Northern municipalities	292	n/a

⁵⁰ Data from informal translation of Agrobudget report for 2015 (5/8/2016). Data may be available on the sex disaggregation as well as the youth/ northern municipality breakdown from the relevant division in MARD but due to summer holidays many key people were absent.

Appendix 2: Poverty, targeting and gender

A. Administrative Structure and Political Context

237. **Administrative structure and population.** Montenegro is composed of 23 municipalities (opštinas), the Old Royal Capital Cetinje and the Podgorica Capital City (largest entity, with 186,000 inhabitants, almost 3 times the second largest, Niksic (72,000)). The regions are defined, as of 2011, by the Montenegrin Regional Development Law, and roughly correspond to the informal and colloquial division, often used by the Montenegrin media and citizens. Regions are not administrative divisions per se; they are used for statistical and analytical purposes, to help create the outline for more uniform economic development. This official definition of the regions of Montenegro is one of many definitions that are in everyday use in the country. However, this division into three regions is most widespread:

- The *coastal region* : southernmost, consisting of municipalities with access to the Adriatic Sea, mainly oriented towards tourism, and with a population of 150,000. It has been the center for the rapid booming hospitality sector with construction (hotels, restaurants, shops and summerhouses) booming, as well as attracting seasonal workers in the summer time.
- The *central region* : four municipalities, the most populous of the regions (295,000), containing the capital of Podgorica, the historical capital of Cetinje, and the industrial centre of Nikšić. Most of Montenegrin economic, cultural, educational and administration base is located within the region and it is also home to the large vineyards, which grows well on the plains.
- The *northern region* : eleven municipalities, the largest region by area, encompassing the increasingly depopulated mountainous part of Montenegro. With the decline of the heavy industries in the 1990s, the region has seen severe economic hardship and migration of the population to the two southern regions. The population is estimated at 175,000 (all figures MONSTAT, 2015). The RCTP will focus primarily on this region.

238. There has been political stability, even preceding independence in 2006. Montenegro has managed to maintain political stability through turbulent times in a volatile region, which has also contributed to a (relative to its neighbors) peaceful transition from being part of the socialist republic of Yugoslavia to become a market-oriented independent state. The Democratic Party of Socialists (DPS), has been in power since independence and has dominated political life being the backbone of every government coalition for more than 20 years. The DPS is aligned to the international social-democratic movement and is committed to increasing inclusiveness and accelerating growth through redistribution, EU accession and through the Economy Reform Programme 2016/2018. The latter aims to increase the living standard of the Montenegrin population and the quality of life of every individual. Particularly relevant to IFAD is the programme's ambitions to reduce rural/urban migration, and to reduce migration from underdeveloped municipalities of the North to the Central and Coastal ones, through increased competitiveness and by linking rural areas to better commercial opportunities

B. Poverty Status in Montenegro

239. **Poverty levels have reduced significantly but still remain of concern.** The most recent figure puts poverty at 9% of the population, which suggests that Montenegro has been largely successful in rebuilding the country after the disastrous 1990s, which saw poverty rates soar to over 50%. The high economic growth from 2000 to 2008 was correlated with reductions in poverty reaching a record low of 5 per cent in 2008, but the subsequent financial crises reversed many of those gains. Moreover inequality has increased with the Gini coefficient rising from 24.3 in 2010 to 26.2 in 2013. Nevertheless, Montenegro is in a comfortable situation vis-à-vis most of its peers in the region (as shown in Figure 3, main text, page 3).

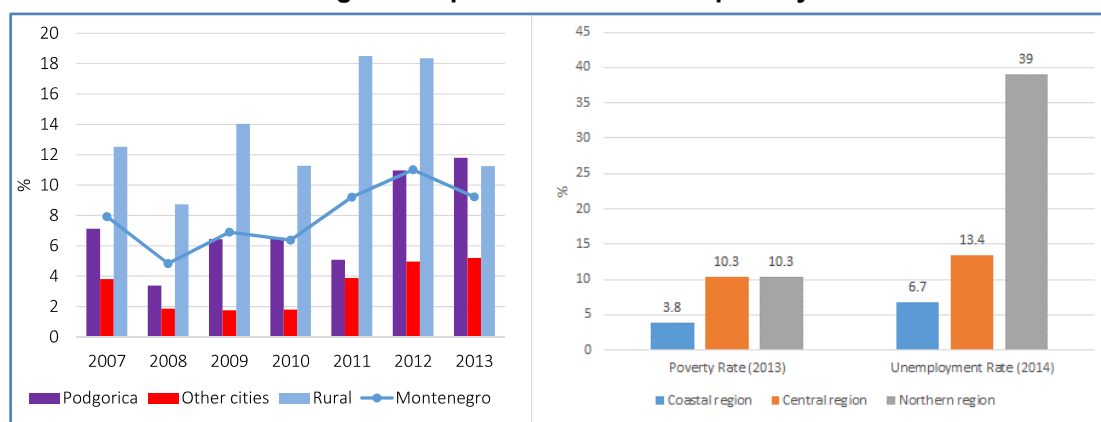
240. **The increasingly weaker correlation between GDP growth and poverty reduction suggest that more targeted efforts are needed** to be deployed as the low hanging fruits of emphasizing further foreign and domestic investment in the coastal areas (e.g. construction and service sector related to hospitality industry) are no longer promoting inclusive growth. Thus, while the 60% richest

households have increased their level of consumption during the last 7 years the poorest 40% have seen negative growth.⁵¹ Also while poverty levels have declined slightly in the last two years, vulnerability levels (defined as having 1.5 or less times the consumption level at the poverty line) have remained significantly higher in the post-crises era.

241. Figures from MONSTAT suggest rising un- and underemployment being a key driver. The poor and vulnerable are more likely to be unemployed than the non-vulnerable, and this percentage has significantly increased between 2008 and 2013, especially for the vulnerable. The poverty rate in 2013 was the highest (around 19%) in households with an unemployed head followed by those with an inactive household head. The poverty rate for households with a retired head was 6.5%, while the one for employed heads was 6.1%. The percentage of the poor living in households with an unemployed head increased threefold, from 11.3% in 2008 to 33% in 2013. Another 30% of poor households had a retired head. On average about one-third of adults in poor households were employed in 2013, whereas two-thirds of adults of non-vulnerable households were employed. Also, 45% of the vulnerable and 39% of the non-vulnerable population lived in households with a retired household head, compared to only 30% among the poor.

242. The poor are overrepresented in rural areas and in the north. Of Montenegro's population, 37% live in rural areas and while the poverty rate has fallen, it is still 19% higher than the urban ratio. The northern and central regions have a significantly higher incidence of poverty (10.3%) compared to the coastal region (3.8%) (see figure 3, main text, page 3, all data MONSTAT).

Figure 9: Spatial dimensions of poverty



243. The causes of rural poverty are complex. In addition to small sized holdings, climate and economic vulnerability, it is evident that the low incomes derived from agriculture stem primarily from weak links to markets and low competitiveness of the output produced. This situation is determined by constraints on both supply and demand sides that together form a vicious circle which is hard to break. On the supply side, farm size and farming patterns, problems related to innovation, lack of connectivity, lack of post-harvest storing facilities, handling and packaging, are the main causes for limited marketing opportunities available to rural producers, not least in northern areas. This in turn is linked to demand side failures, i.e. the under-development of vertically coordinated supply chains that could play a key role in driving demand for agricultural produce in line with market requirements.

244. Northern municipalities are also less competitive (see table 17, next page). Due to their limited connectivity, lack of economies of scale, weak market integration and absence of major companies, the northern municipalities dominate the bottom half of the competitiveness table (MONSTAT, 2015).

Table 17: Competitiveness of municipalities, 2014

<i>Municipality (northern in bold)</i>	<i>Competitiveness (0= national average)</i>
Budva	0,802
Tivat	0,763
Herceg Novi	0,643
Podgorica	0,407
Kotor	0,287
Bar	0,094
Danilovgrad	0,042
Žabljak	0,041
Nikšić	-0,005
Ulcinj	-0,006
Rožaje	-0,024
Cetinje	-0,175
Bijelo Polje	-0,178
Plav	-0,211
Mojkovac	-0,217
Pljevlja	-0,271
Šavnik	-0,302
Berane	-0,332
Kolašin	-0,460
Plužine	-0,492
Andrijevica	-0,538

245. Dimensions of poverty in the north. A variety of socio-economic data highlights different dimensions of poverty experienced in the north:

- Economic (Annex 1, table 1): There is a correlation between the municipalities which have more than two-thirds of their population living in rural areas, levels of employment and indicators of municipal development or competitiveness. The most disadvantages municipalities include Savnik, Andrijevica and Berane.
- Socio-economic (Annex 1, table 2): At the time of the 2011 Census, connectivity of dwellings to electricity was almost universal but water supply coverage was less complete. Less than half of the dwellings were connected to public water supplies in Savnik, Pluzine, and Bijelo, Polje. Moreover, at that time, 10 per cent of the dwellings in Savnik were abandoned.

C. Human development, nutrition and gender

246. **Human development.** According to the United Nations Development Programme (UNDP) Human Development Report 2016, Montenegro's HDI value is 0.802 which for the first time ever puts the country in the very high human development category—positioning it at 49 out of 188 countries and territories. Between 2005 and 2014, Montenegro's HDI value increased from 0.750 to 0.802, an increase of 7% or an average annual increase of about 0.75%. However, when the HDI value for Montenegro is discounted for inequality, it falls to 0.728. Montenegro's HDI value is below the average of 0.896 of other countries in the very high human development group, but above the average of 0.748 for countries in Europe and Central Asia. From Europe and Central Asia, countries which are close to Montenegro in 2014 HDI rank and to some extent in population size are Latvia and Lithuania, which have HDIs ranked 46 and 37 respectively. Montenegro is ranks better even than some EU member countries, i.e. Romania (52nd) and Bulgaria (59th). When it comes to the region of Western Balkans, Montenegro is 3rd best ranked country, after Slovenia (25th) and Croatia (47th).

247. Life expectancy in Montenegro has continued to increase (reaching 76.2 years), but remains below the expectancy in countries from the category of high human development (80.5 years). Expected years of schooling are 15.2, while mean years of schooling (11.2) are close to the score of other countries that fall in the same category of high human development (11.8). Even though GNI per capita is constantly increasing in Montenegro (and has reached US\$ 14,558 PPP), it still remains significantly lower than in other countries from the same category (US\$ 41,584 PPP).

248. The parallel measure, the Gender Inequality Index (GII), examines inequalities in reproductive health, empowerment, and economic activity. Montenegro has a GII value of 0.171, ranking it 37 out of 155 countries in 2014. Only 17.3 percent of parliamentary seats are held by women, and 84.2% of adult women have reached at least a secondary level of education compared to 94.7% of their male counterparts. For every 100,000 live births, 7 women die from pregnancy related causes; and the adolescent birth rate is 15.2 births per 1,000 women of ages 15-19. Female participation in the labour market is 43.0 percent (57.3 for men).

249. **The country's food security and energy requirements are largely met.** Montenegro has limited under-nutrition and the rate of under 5 mortality is also low. But under-5 stunting has been rising from 8% in 2005 to 9% in 2013, with children in the poorest quintile being more than 10 times more likely to be stunted compared to their peers in the wealthiest quintile, suggesting severe inequalities in nutritional intake (IFPRI 2015). Roma rates of malnutrition are also significantly above the average. Overweight of under-5s is now a major problem with 22% being above two standard deviations of the median weight for height of WHO standard (UNICEF; MICS for Montenegro, 2014).

250. **Gender.** For the first time, the Human Development Report 2016 presents the data for Montenegro on gender, the Gender Development Index (GDI) and the Gender inequality index. This new sex-disaggregated value shows that female HDI value for Montenegro is 0.782 in contrast with 0.819 for males, resulting in a GDI value of 0.954. In practical terms, even though Montenegrin women live longer than men, they still have slightly lower score in mean years of schooling (10.5 as opposed to 11.8 among men) and lower income than men (US\$11,106 PPP as opposed to US\$18,094 PPP among men). The parallel measure, the Gender Inequality Index (GII), examines inequalities in three dimensions – reproductive health, empowerment, and economic activity. Montenegro has a GII value of 0.171, ranking it 37 out of 155 countries in 2014. In Montenegro, only 17% of parliamentary seats are held by women, and 84% of adult women have reached at least a secondary level of education compared to 95% of their male counterparts. For every 100,000 live births, 7 women die from pregnancy related causes; and the adolescent birth rate is 15.2 births per 1,000 women of ages 15-19. Female participation in the labour market is 43 per cent compared to 57 for men.

251. **Gender policy.** The main provisions regarding the promotion of gender equality are set out in the Constitution (Article 6) and the Law on Gender Equality (2007). The Ministry for Human and Minority Rights (MHMR) developed the Action Plan for Achieving Gender Equality (2013-2017) to implement the gender equality policy and tackle gender stereotypes. The plan focuses on: (i) improving human rights of women and gender equality; (ii) gender-sensitive upbringing and education; (iii) gender equality in economy; (iv) gender-sensitive health care; (v) gender-based violence; (vi) media and culture; (vii) equality in decision-making process in political and public life; (viii) international politics and cooperation; and (ix) institutional mechanisms for the implementation of gender equality policies. Points (iii) and (ix) will be of most relevance to the project.

252. **Gender institutional framework provisions.** At the national level, there are two main institutional mechanisms for promoting gender equality: the Gender Equality Committee of Parliament (founded in 2001) and the Gender Equality Department (established in 2003), which is located within the Ministry of Human and Minority Rights. At the municipal level, there are in principle two main mechanisms that effectively mirror the national ones: a Gender Coordinator (full time dedicated staff member in civil service part of local government and working closely with the Department), and a Gender Committee in the local elected administration. Municipality Gender Coordinators are tasked with putting together and overseeing a gender action plan aligned with the national one, and gender committees are expected to identify key issues and ensure that all policies and programmes at the municipal level take into account gender dimensions and contribute to gender equality.

253. **Youth.** Montenegro is a relatively youthful country, with almost 46% of the population aged between 10 and 29 at the time of 2011 Census, although outmigration means that rural areas are left with aging and old populations. One third of those aged 15-24 years are unemployed and a similar proportion are engaged in informal employment. Young people account for less than 7% of the labor force on farms. A survey on 'knowledge, attitudes and practices' (KAP) youth employment and participation show that their aspirations are to 'complete education, find job, form a family' and that over 60% claim to prefer self-employment than working for someone else. Despite this, it is considered risky and reasons for not starting their business include lack of finance (IPSOS, 2013).

254. **National youth policy.** At the end 2016, a new Youth Law and a new National Youth Action Plan are expected to be adopted, based on learning from the National Youth Action Plan (2006 – 2011) and consultations. The previous National Youth Action Plan defines young people as aged between 15-29 years. The NYAP provides for giving youth more voice in local youth plans and sensitization on gender issues, as well as promoting employment and entrepreneurship. Municipalities are expected to develop a Local Youth Action Plan in the following sectors: education, employment, participation, health, mobility, information, human rights, family, leisure time, security and culture. The Directorate for Youth and Sports sits in the Ministry of Culture, Sports and Media. The Montenegrin Youth Forum was established in 2012 and has been involved in the creation of the upcoming Law on Youth, and aims to promote the participation of youth in society and in decision-making processes and to influence policies affecting young people and youth organizations at local and national levels.

255. **Integration of youth issues in related sectoral policies.** The Strategy for the Development of Agriculture and Rural Areas (2015-2020) does not have a specific indicator for youth and it is not clear whether other indicators relating to participation will be disaggregated by age. The Montenegro Regional Development Strategy (2014-2020) recognizes the need to strengthen entrepreneurial skills in young people. Accession to the EU will entail a number of policy directions to support youth, including in agriculture/ business development/ rural development e.g. compulsory young farmers' payment that is delinked from specific requirements of minimum heads of cattle, holding size etc. (EC, 2015a).

256. **NGO network.** The Rural Development Network NGO was established 2014, originally among 11 associations and now has 22 associations. The network is mainly active in northern and central Montenegro, working with MARD and municipalities, with its main focus is to make rural areas and populations visible. It informs rural populations about EU support for agriculture and rural diversification. The NGO is active in the European network and receives external support (e.g. GIZ).

D. Rural livelihoods

257. **Farming systems in the north.** Livestock grazing is the dominant enterprise in more than half of all holdings in the north and, more typically, accounts for 60-70% of agricultural holdings at the time of 2010 Agriculture Census (Annex 1, table 3). A further 25-30% of holdings grow field crops; 4-8% rear pigs and poultry; and 3-4% are mixed crops and livestock. Permanent crops (including orchards and cultivated berries- check) are modest, accounting for only 1-2% of the holdings in Bijelo Polje, Berane, Pluzine and Niksic. Horticulture is almost negligible. The northern region has four distinct farming and livelihood systems (Table 18):

- The north west is dominated by extensive grazing systems for both sheep and cattle, scattered communities and widespread migration to the katuns in the summer months. Some communities (e.g around Zabljak) have access to large cultivable areas of rolling arable land suitable to commercial field crops such as potato and barley but with long winters. Niksic is the gateway, with a large abattoir and meat processing facilities (Goranovic, private actor), and a good network for milk collection. Crops include: fodder (alfalfa and more recently maize for silage); potatoes for home consumption, green markets and trade; open field vegetables on a small scale for home consumption and occasional sales. There are few greenhouses.
- The north central is a mix of field crops and grazing livestock, with farming around Kolasin dominated by field crops and Mojkovac by livestock.
- The north east is a mix of dairy production with dairies and orchards and soft fruit. Bijelo Polje is the main service centre with a large abattoir and meat processing facilities. Franca (private sector) operates an outgrower scheme for beef and chicken with "cooperants"; the company also buys 1-2 tonnes of homemade cheese from smallholders per week which, once tested for food safety, are labelled as Franca 'homemade cheese' and sold in their own supermarkets. The average number of cows per household is 7-8 cows, with larger herds of 20-30 cows. All groups migrate to the katun in the summer months but road network is poor.
- The development of the extreme east-north-east is based on the use of natural resources, including timber and other forest products, agriculture, livestock and tourism. The area is the most mountainous and most isolated. There is more subsistence living with traditional livestock systems, summer transhumance to the katuns, harvesting forest products and beekeeping. Whilst the traditional user right practices used to work well, the market value of

forest products is resulting in damaging practices, such as the over-harvesting of berries and the use of fire to stimulate mushroom growth.

Table 18: Clusters of municipalities into livelihood systems

North West	North Central	North East	East-North-East
Pljevlja	Kolasin	Andrijevica	Rozaje
Zabljak	Mojkovac	Berane	Plav
Savnik		Bijelo Polje	Gusinje
Pluzine			Petnjica
<i>Livestock (sheep)</i> <i>Agro-tourism (potential)</i>	<i>Potatoes</i> <i>Agro-tourism</i>	<i>Livestock (dairy cows)</i> <i>Orchards</i> <i>Cultivated berries</i> <i>Potatoes</i>	<i>Livestock (sheep)</i> <i>Wild berries</i> <i>Honey</i> <i>Agro-tourism (potential)</i>

258. **Smallholder farmers** in project areas can be broadly categorized into (a) semi-subsistence farmers, and (b) commercial and economically active smallholders and small-scale processors. Their characteristics are as follows:

- (i) *Semi subsistence farmers*: these poorer households are below the threshold for GoM and EU-related subventions. They are already vulnerable and are likely to become more so with EU accession and increased competition from imports. They have access to small areas of farm/arable land of up to 2 ha, grow some fruits/vegetables and keep some livestock (approximately 1- to 2 cows, 10 to 20 sheep/goats). They process cheese and other products for household use and occasional informal sales. Annual income ranges from EUR 2000 to 4000, of which up to one third comes from agriculture. Nevertheless, proceeds from agricultural activities make a vital contribution to the viability of their livelihood by supplementing non-farm income including GoM support. This group includes those who wish to have more profitable and resilient livelihoods and for these households the project objective should be to help them graduate to become more commercial and economically active smallholders (see below).
- (ii) *Commercial and economically active smallholders/small-scale dairy processors with potential*: are smallholders and/or small-scale processors who typically own 2-15 ha of arable land (and access additional land up to 40 ha)⁵², 10-15 cows, 50-100 sheep and goats, or orchards. They have sufficient labour and skills but lack affordable inputs, finance, connectivity to networks and markets, technical capacity and scale. They process a range of milk-based and meat products which are sold through formal outlets including dairies and local supermarkets and informal networks, such as neighbours, friends and tourists. Annual income ranges from €4000 to 8000, of which 40 to 80% is earned in agriculture, including government agricultural direct payment subsidies. They have the potential to provide consistent increased volumes and quality of their outputs to meet safety compliance standards and market requirements.
- (iii) *Other strategic VC actors* include larger, lead farmers and agro-enterprises who can serve as models to demonstrate the viability of new approaches to increase rural resilience and provide potential development pathways for the poor, including generating employment opportunities. They also include traders, input suppliers, private service providers, cooperatives or associations. In the cluster-based development approach, the private sector plays a crucial role in ensuring market-led enterprise growth and provide contract farming opportunities for smallholders and general market outlets.

259. The key characteristics of the target groups (resources, livelihood outcomes, challenges, opportunities, priorities, project response) are summarised in Annex 2 and described in more detail below. Cases studies are presented in Annex 3 and sources financial support are summarized in Annex 4.

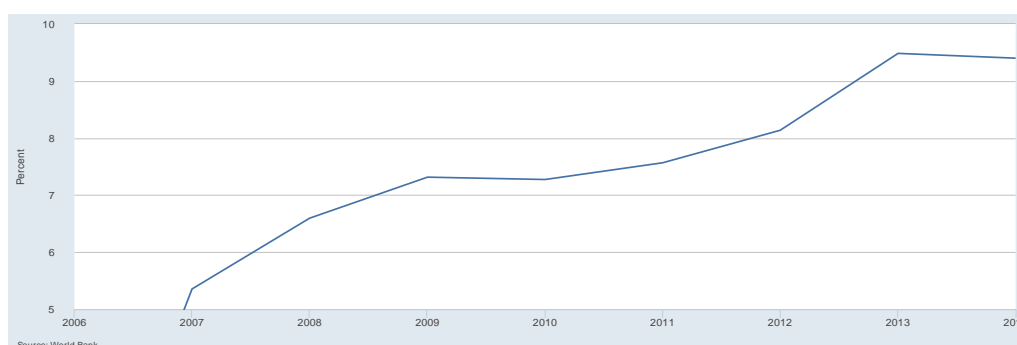
260. **Youth**. Given the demographics of the rural population, engaging with the youth is essential in order to ensure viability of the agricultural sector beyond the current generation. Yet there is a steady flow of young people from rural areas to Podgorica or the coast. Young women find it easier to get any

⁵² In Montenegro, land ownership and access is a poor stand-alone indicator of poverty. This is due to significant depopulation of the rural areas, which has in some places made land abundant and virtually free. Thus, this indicator will need to be contextualised and complemented with other measures.

type of work; they migrate for one or two seasons and once they get socially settled, they tend not to return to the mountains. Hence many rural areas are characterised by young single men, living with their parents and finding it very difficult to get young women to live with them in remote valleys. Younger people tend to be more receptive to the idea of working together around economic goals.

261. **International migration and remittances.** The patterns of international migration have varied over time. Out migration dates back to the 17th and 18th centuries when people left Montenegro to work in the South American coalmines. More recently, most migration took place in 1970s-1980s by people with lower levels of education (led by the husband who then would call his wife to join him once he found work). In the 1990s, educated people migrated with their family members. Even though the unemployment rate in the north is high (15%), seasonal migrants from Serbia, Bosnia and Macedonia come to do unskilled work in agriculture or tourism. A UNDP report of 2016 found that the mobility of the national workforce is limited; many people do not want to do farm work, where they are paid the minimum wage and do not receive full society security payments. Remittances play a key role in the Montenegrin economy, with official flow amounting to 9% of GDP (see table 19). It is estimated that nearly half of all households in Montenegro have members of their family who work in other countries and directly or indirectly support their family financially. The average monthly amount sent home to households in Montenegro is about EUR 20⁵³.

Remittances as a % share of Montenegro's GDP



E. Target group and target strategy

262. **Targeting.** A strong focus on effective targeting is especially important in Montenegro given that there is no IFAD project and few development partners from whom to learn. In upper MICs, effective targeting to reach the rural poor is essential to underpin the rationale for IFAD's presence. While enterprise selection and geographic targeting of poor rural communities is part of the approach, additional steps are required to ensure that the poorer members of those communities are reached. Targeting will take place in a three-stage process: cluster enterprise selection, geographical targeting and specific measures to ensure outreach to semi-subsistence smallholders, women and youth.

263. **Targeting strategy.** The main target groups are the two types of smallholders outlined above (the semi-subsistence smallholders and the economically active smallholders/small-scale processors with potential), plus other strategic VC actors. Targeting will take place in a three-stage process: (i) cluster selection; (ii) geographical targeting; and (iii) beneficiaries' selection, with specific targeting measures to ensure outreach to poorer smallholders, women and youth.

264. **Cluster selection.** The project design has identified an initial portfolio of four products (and associated clusters and value chains, with the dairy and meat production often considered as one livestock cluster as smallholders use them for both products) that have both confirmed market demand and income potential for smallholders. As a portfolio, they offer opportunities for smallholders in different settings and with different available resources. As well as the fundamentals of confirmed

⁵³ EU Commission: Social Impact of Emigration and Rural-Urban Migration in Central and Eastern Europe, Final Country Report Montenegro, Brussels 2012.

market demand and profit opportunities for smallholders, a key selection criterion has been the existence of feasible investment pathways for poorer smallholders to benefit from each of the supported product clusters. Cluster selection has considered the minimum practical scale of a starter investment by a smallholder to upgrade their production to a level at which a share of their increased income earned can be reinvested to continue to grow the farm, ultimately delivering sufficient returns on labour to farmers to make farming an attractive profession for those that are interested. The initial four products and their expected targeting are:

(1) Cultivated berries are among the most profitable and have one of the lowest costs of entry for smallholders if they are collaborating with their neighbours to aggregate and sell their produce. If working within a cluster, profitable initial smallholder production can start on as little as a few hundred square metres and a good living can be earned from production on less than 0.5ha. These dynamics make berries potentially very inclusive and widely relevant for smallholders along the valley bottoms and low slopes in the project areas. The limiting factor is likely to be the speed with which export markets can be developed.

(2) Seed potato production is especially well suited to upland arable smallholders with a few hectares of cultivable land (as is typical in the more upland parts of the northern region) but with more severe winter conditions and short production seasons that prevent the competitive production of other high value crops such as vegetables or fruits. The modest domestic market size means that the opportunities are likely to be limited to less than 100 smallholders initially who are committed and diligent in applying the required in-field production systems and willing to collaborate together for efficient investment in mechanization and aggregation of production to enable better market linkages. For committed smallholders in the upland areas, seed potato is likely to be among the most profitable farming opportunities they have.

(3) Cheese production - especially craft cheeses from cow, goat and sheep's milk are conservatively estimated to create 55% incremental added value compared to raw milk sales (see EFA). With clear demand, this presents opportunities for milk producing smallholders who are willing to work together and can find entrepreneurial managers among their network to run small professional cheese dairies meeting required food safety standards. This makes it best suited to existing livestock farmers living in villages with good relationships with their neighbours, and often the younger generation of farmers as well.

(4) Meat, via live animal production especially of sheep and goats, has strong domestic demand and is well suited to farmers with access to grazing land but who are too remote to collaborate easily with others to aggregate production of potentially more profitable but perishable produce such as berries or milk for cheese. While raising small ruminants for meat is still profitable, the slower returns and larger starter investments to upgrade herd sizes to levels at which farmers can then use profits to reinvest means that the cost to the project in supporting these more remote farmers may be somewhat higher than for the more accessible farmers who can engage in berries. Such higher costs are fully justified to ensure a broader and more inclusive distribution of project impacts.

265. *Geographical targeting.* The project will focus on rural areas in the northern mountainous region, where farm land is mostly above 600 m. Selection criteria are based on economic, poverty, socio-economic, climate vulnerability profiles coupled with potential for enterprise development in the products identified and the target groups' willingness to participate in and support the project. The initial selection includes Niksic, Savnik, Zabljak, Berane, Mojkovac, Petnjica, and Bijelo Polje. At a later stage Pluzine, and Andrijevica, may be included, pending funding, market opportunities and potential impact on smallholders.

266. *Beneficiaries' selection.* The targeting strategy will include a mix of methods and approaches. Self-targeting will be one of them, as many activities will be of immediate relevance to the economically active farmers (poor and better off) and other value chain actors, who will have a genuine interest and motivation, at least initially, to participate in clusters' meetings and/or activities. Their participation in clusters' meetings will be primarily ensured through communication efforts and networking by the PCU and local partners.

267. In order to ensure that economically active smallholders and poorer producers are effectively participating in project implementation and reached out, the method of *eligibility criteria* will also be applied. Thus, eligibility criteria will be defined for the selection of VCF grants' beneficiaries under

Component 1 and the selection of roads and water supply schemes beneficiaries under component 2 (see detailed eligibility criteria in Appendices 4, 5 and 11). These criteria will be reviewed periodically to ensure that they are efficient to avoid elite capture and are adequate to promote the effective participation of the poor, women and the youth. The participation of the economically active smallholders, poorer producers in selected clusters will also be supported through additional tailored criteria to ensure their adequate representation and participation at critical stages, such as during the development of cluster development plans. Attention will also be paid to ensure that beneficiary contributions (for example, for multiple water use facilities and feeder roads) or thresholds for matching grants are attainable for poorer households.

268. In addition, an important practical aspect of the project targeting approach will be to ensure a multi-round engagement in villages that are part of the project supported clusters. By having multiple rounds of farmer mobilization and VCF grants, typically over 3-4 years, more risk averse and poorer farmers will have the opportunity to enter the clusters later once the clusters are more established and when they can learn from their "early adopter" neighbours successes and piggy-back on the more established market linkages all of which substantially lower the risk.

269. **Youth and Gender strategy.** The project will ensure that young men and women (below the age of 40) are fully engaged in cluster development opportunities in terms of participating in business skills training, VCF grants or small-scale infrastructure. Among others, the PCU VC Experts will have specific responsibility for maximising opportunities for youth empowerment. Staff from PCU, MARD, municipalities and service providers will be sensitized on the importance of youth and gender mainstreaming and the PCU VC Experts will work in close collaboration with the municipal gender focal points. The M&E officer will consolidate and analyse the sex- and age-disaggregated and poverty data to track project engagement with households who may otherwise be excluded, and work with PCU colleagues and service providers to strengthen youth inclusion. During project start-up and throughout implementation, it will be essential to ensure all stakeholders, including staff from MARD, municipalities, the PCU and service providers, fully appreciate IFAD's commitment to working with poorer smallholders, women and youth, as well as the more economically active enterprises.

270. **Implementation arrangements for targeting and gender strategies.** Overall responsibility for project outreach among the target groups will lie with the PCU and especially the Project Director and Value Chain Experts. This team will be closely support by the rest of the PCU and the partners from the Regional Extension Services to maximise the opportunities for women's and youth empowerment, promoting gender equality and including semi-subsistence farmers in cluster development initiatives. Staff from PCU, MARD, municipalities (including gender committees) and service providers will be sensitized on importance of pro-poor outreach, gender mainstreaming and youth inclusion by cluster development advisers and municipal gender focal points; this is especially important during the inception phase of the project. The advisers will also liaise with service providers to ensure they fully appreciate and understand the importance of outreach and social inclusion for IFAD operations. The M&E officer will consolidate and analyse the sex- and age-disaggregated and poverty data to track project engagement with households who may otherwise be excluded, and work with PMU colleagues and service providers to strengthen inclusion.

271. **Estimates of the number of beneficiaries per activity.** Although it is difficult to estimate, at design stage, the exact number and profile of VCF grants' recipients, the following table present key outreach targets.

Table 19: Expected outreach, by activity and target group profile

	No. of expected beneficiaries	Of whom,	
		% of smallholders	% of semi-substance farmers
VCF grants	500 to 700 farmers, agribusiness, suppliers, etc.	At least 60% of recipients	At least 7% of recipients
BSF training	2500 farmers	80%	10%
VCF grants + infrastructure	To be monitored	To be monitored	To be monitored
Berries cluster	2200 farmers	At least 60%	n/a
Seeds potatoes cluster	75 farmers	At least 50%	n/a
Cheese cluster	600 farmers	100%	n/a
Meat (Live animal) cluster	200 farmers	n/a	100%

Roads	1400 households	<i>To be monitored</i>	<i>To be monitored</i>
Water supply schemes	600 households	<i>To be monitored</i>	<i>To be monitored</i>

272. The total outreach is estimated at around 4.600 households⁵⁴ (or some 16,100 persons). Not all beneficiaries, however, will derive the same types of benefits, and depth of outreach will vary. Thus, beneficiaries may be categorized as follows, according to the type and combination of services they will receive from the project:

- (i) **Primary beneficiaries:** This is the group of households who are expected to benefit the most from the project. These are the key actors in the value chain (producers, buyers, suppliers, etc.) who will receive a matching grant from the VCF to invest in a profitable activity and who will be supported to establish business and trade agreements. Within this group of primary beneficiaries, the active smallholders and poorer farmers will benefit the most as they will also receive capacity building support to develop their business skills. Among them, a smaller group will, in addition, also benefit from improved access to roads and water under Component 2. As result of project interventions, the group of primary project beneficiaries (in particular the berries' producers) are expected to increase incomes significantly.
- (ii) **Secondary beneficiaries:** These are all the producers, suppliers, traders or agri-businesses who will not receive a VCF grant or BSF training, but who will participate in cluster meetings and, gradually, in cluster activities. The improved production and market conditions created by the project will stimulate their motivation to join the value chain activities with their own investments, ultimately resulting in improved incomes.
- (iii) **Tertiary beneficiaries:** These are the households who will benefit from the improved roads and the new water supply schemes, but who will not receive any other support from the project and will not engage in IFAD-supported value chain activities. They will essentially benefit from improved resilience to climate change and from a more modest increase in incomes, compared with the previous two categories, due to the reduction of transportation costs and the reduction in water shortages resulting in better agricultural productivity.

Table 20: Depth of outreach by target group profile

	Goods and services received by the project	Semi-subsistence farmers	Active smallholders and small processors	Others (larger farmers, agri-businesses)
Primary beneficiaries	VCF matching grant beneficiaries (smallholders, agri-businesses etc.)	yes	yes	yes
	BSF training beneficiaries	yes	yes	no
	Facilitation services for business/trade agreements	yes	yes	yes
	VC participants also benefiting from roads and water supply infrastructure	<i>potentially</i>	<i>potentially</i>	<i>unlikely</i>
Secondary beneficiaries	Participation in well-functioning clusters (<i>no other services, such as access to VC, received from project</i>)	<i>potentially - if within villages in clusters</i>	yes	yes
Tertiary beneficiaries	Road beneficiaries not involved in supported VC	<i>potentially</i>	<i>potentially</i>	<i>unlikely</i>
	Water supply beneficiaries not involved in supported VC	<i>potentially</i>	<i>potentially</i>	<i>unlikely</i>

⁵⁴ Estimated 3075 producers who will participate in the clusters, and the 2000 households benefiting from component 2 investments, minus the number of Component 2 households also benefiting from Component 1 activities (roughly estimated at 400 households). These are estimates and close monitoring will be done at implementation in order to avoid double-counting of households reached.

Annex 1: Municipal data

Annex 1, Table 1: Population and economic data

Municipalities	Population	Number of households		Index of municipal development, 2010-12		Index of local government competitiveness, 2012-14		Competitiveness of municipalities, 2014		Persons in employment		Rural population	
	Mid-2013	Average HH size 2011	Number of HHs	Index (Montenegro = 100)	Ranking out of 21 municipalities	Index = 100	Ranking out of 21 municipalities	Competitiveness (0= national average)	Ranking out of 21 municipalities	%age of total popn 2013-14	Women as %age of employed	%age of total popn 2011	Number of HHs
North West													
Pijevlja	29900	2.9	10310	71	13	73	16	-0,271	16	19	39	37	3815
Zabljak	3446	2.9	1188	78	10	104	8	0,041	8	20	47	52	618
Savnik	1924	3	641	49	17	70	17	-0,302	17	14	40	77	494
Pluzine	3040	2.9	1048	131	7	51	20	-0,492	20	19	46	59	618
Niksic	71843	3.4	21130	95	9	100	9	-0,005	9	19	41	21	4437
North Central													
Kolasin	7954	2.9	2743	64	14	54	19	-0,460	19	16	43	68	1865
Mojkovac	8386	3.1	2705	63	15	78	15	-0,217	15	14	46	58	1569
North East													
Bijelo Polje	44958	3.5	12845	38	19	82	13	-0,178	13	16	45	67	8606
Berane	27907	3.5	7973	60	16	67	18	-0,332	18	16	44	67	5342
Andrijevic	4957	3	1652	38	21	46	21	-0,538	21	10	35	79	1305
East-North-East													
Rozaje	23083	3.3	6995	40	18	98	11	-0,024	11	11	36	59	4127
Plav	12874	3.6	3576	38	20	79	14	-0,211	14	10	37	59	2110
Gusinje													0
Petnjica *	5191												0

Ministry of Economy, Rural Development, 2013

MONSYAS census 2011

Petnjica * population data for 2014

Development index: 1) Unemployment rates, 2) Income per capita, 3) Budget revenues (own and legally transferred) of municipality per capita,

4) The growth rate of the municipality, and 5) Rates of education in the municipality.

Annex 1, Table 2: Socio-economic data

Municipalities	Abandoned dwellings	Public water	Electricity	Primary schools	Secondary schools	Health workers		Pension beneficiaries	Children allowances	
	%age of total dwellings 2011	%age dwellings linked 2011	%age dwellings linked 2011	Number 2013-14	Number 2013-14	Total 2013	People per health worker	Total Dec 2014	%age of total popn 2013-14	Number 2014
North West										
Pljevlja	7	62	98	41	2	272	110	6324	21	371
Zabljak	3	74	99	2	1	10	345	672	20	34
Savnik	10	29	95	9	1	10	192	319	17	28
Pluzine	7	44	98	11	1	13	234	569	19	17
Niksic	3	85	99	44	5	546	132	15530	22	1459
North Central										
Kolasin	3	53	99	15	1	39	204	1347	17	161
Mojkovac	3	59	99	10	1	55	152	1561	19	167
North East										
Bijelo Polje	4	50	99	59	3	302	149	6978	16	1165
Berane	3	72	99	29	4	347	80	5484	20	1152
Andrijevic	3	47	97	13	1	26	191	669	13	135
East-North-East										
Rozaje	2	54	98	22	2	99	233	2300	10	1293
Plav	3	54	98	15	1	67	192	1437	11	499
Gusinje										
Petnjica										

Annex 2: Profile of target smallholder groups

Typology	Resources	Livelihood outcomes	Challenges	Opportunities	Farmer priorities and project response
Economically active smallholders	Adequate family labour; informal exchange for meat or <i>moba</i> (lending a hand) Limited technical, business skills Not a member of a group Land: 2-15 ha (with access up to to additional 40 ha) Machinery: milking machines, 2-wheel meadow mowers, tractors, balers Livestock (beginning to specialise): 15-30 cows, 80-150 sheep/goats, 10-50 pigs, 30-50 chicken, 12 beehives Value addition: milk and meat products Crops: mainly for home consumption and livestock (eg vegetables, maize), alfalfa Orchard (in east): 2 ha plums, apples, pears Finance: some use MIDAS/IPARD grants; some have start-up capital from redundancies/ inheritance	Sell liquid milk (dairy when available), milk products (cheese, kaymak), meat and meat products to friends, green markets, supermarkets, abattoir Total income: E4000-8000 with 40-80% from farming including Agrobudget direct payments Other income sources: salary, pension	Lack business skills, entrepreneurial outlook, limited knowledge on costs of production Poor roads hinders market access (eg milk to dairy) and damages produce Lack access to better quality inputs (improved planting materials, breeds) Irregular supply (quantity and quality) Procedures hinder access to finance: MIDAS/IPARD grants require collateral, up front 100% payment; paperwork onerous; bank interest rate high	Good contact with extension staff Afford private vets Capacity to expand production and produce niche, quality products Homes have agri-tourism potential Open to cooperate to access inputs (rather than value addition, joint marketing)	Farmer priorities: Stronger technical and business skills and attitudes Access to markets Roads to access summer pastures, weighing stations Farmer organizations Machinery for meeting EU food safety standards and for women Project response: Business skills training Group formation and strengthening Market linkages and new opportunities
Semi-subsistence smallholders	Limited family labour Often older farmers Limited education and technical skills Not a member of a group Up to 2 ha land with additional land of variable quality for haymaking and summer pastures Machinery: none or old Livestock (diverse): 1-3 cows, 10-20 sheep/goats, 5-10 pigs, 10-15 chicken Crops: for home consumption	Mainly produce for home consumption and small quantities sold to friends Total income: E2000-4000 with 15-30% from agriculture No salary or Agrobudget payments but social security	Just surviving No access to credit Limited access to extension and vet services Homes not suitable for agri-tourism Life on summer pastures very basic		Farmer priorities: Pro-poor financing eg 90% loan financing, minimal rates, long grace period; ability to access grants and subsidies Stronger technical and business skills and attitudes Improved livestock and productive water Machinery for reducing work burden (especially as unable to access other incentives/credit) Gain a voice in local planning Project response: Targeting will lift members of this group to participate in mainstream project activities and become eligible for government support

Annex 3: Case studies of target groups

Economically active woman farmer, Kolasin: Graduated approach to enterprise development

273. The couple are in their 40s, with three children (two attending university and the third at high school). The husband used to work in a factory (receives a pension) but now work on the farm. He owns 1.5 ha and rents in additional an 2 ha (paying EUR 150/ha annually). They do not have any land in the katon but the family collects, harvests and sells berries from the mountains. They have two cows for milk and cheese, 3 pigs and some chicken, and a small orchard of apples with beehives. They have a large outdoor vegetable plot where the seedlings raised in the greenhouses (see below) are planted. The husband does the more physically demanding work and she does the more intricate work, such as transplanting. Key steps in developing the wife's business over the last six years:

- investing her own money in establishing a polytunnel greenhouse to grow tomatoes/peppers;
- participating in UNDP training on gender equality and women in business, and joining a study tour to Bosnia Herzegovina;
- adapting rooms in the home to make salads and preserve and bottle vegetables – a skill she already had but was only using for home consumption;
- purchasing processing equipment with a grant of EUR 1000 from xx;
- investing in a second greenhouse using a EUR 2000 grant from TIKA (this was through an open call process, 1 person was selected/municipality; she would have had extra points because as a woman)
- securing an IDF loan of EUR 5000 to purchase a mower plus cultivator (multipurpose). The procedure was not complicated; they had no previous debts and could find a guarantor.

274. The wife plans to establish another small greenhouse using her own resources (EUR 300). She would also like heating for the greenhouses to raise more seedlings but that is beyond the scope of her own resources. She is an organic producer but not certified. She is the most economically active woman in the municipality. she does not belong to any association (indeed, it not aware of any to join). She sells her produce around the country, initially through a contact person but now works independently. She is a registered farmer and receives government subventions, including 30 per cent grant towards insurance; EUR 0.60 per m2 for area in greenhouses, and approximately EUR 160 per ha for outside vegetables (depending on what is being grown).

Subsistence smallholder, Šavnic

275. The couple are in their 30s and have four children. They moved to Šavnic from Niksic when the husband lost his job. They have access to 15 ha of land (shared with the husband's brother). Soils are poor and the plots scattered. They have one cow, 10 goats and 8 goat kids, and 10 pigs. Animal feed is very expensive but their neighbour lets them use the grass from his meadow for animal feed.

276. Their biggest problem is lack of water – there is a spring nearby but it is not connected to the village. They harvest rainwater and use natural livestock watering points. If they had more livestock they would have to buy water. They own a car and a barn but no agricultural machinery. They have not received any technical training and have very occasional visits from the extension agent. They don't belong to any formal or informal organizations. The husband has a voice in local infrastructure via a local village representative on the režijsky odbor, a local works committee. They would like more cows – three would enable them to get a subsidy of EUR 70 per cow each year. They would also like a grass mower for their own fodder and to hire out. They were not able to qualify for IDF loans for smallholders because of the guarantee requirements. They rejected the idea of a bank loan because it would be too risky and the interest rate is too high (over 10%). Their annual income is around EUR 2700, of which EUR 2000 is state social protection for the family and the balance from livestock sales. They have difficulty meeting their minimal expenses (fruit, shoes, clothes, school materials, oil and cooking basics). Nevertheless, the wife is very happy with the move, loves farming and is pleased that the children live healthier lives.

Annex 4: Sources of financial support to agricultural sector

1. Agro-budget (selected items)	€ per unit
Direct payments/subsidies to farmers	
> 4 cows (approx. market price €2000)	70 per head
> 40 sheep (approx. market price €130)	8 per head
> 30 goats (approx. market price €130)	8 per head
Bulls if sold to approved slaughterhouse	120 per head
Pigs	From 2016
> 4000 liters milk commercial production	0.06 per liter
> 5000 liters milk commercial production	0.01 per liter
Milk quality premium	
Forage (min area?)	160 per ha
Potato (min area?)	Up to 700 'elite'/160 other per ha
Cereal (min area?)	Up to 300 per ha
Fruit perennials min area?	160 per ha
Rural Development	
Insurance for crops/ livestock	50% of cost
Orchards incl. irrigation, vegetables etc	Variable
Young beginner beekeepers 18-40 years	80% cost of beehives
2. MIDAS (now closed)	
7 calls from 2009 (incl. 2 financed by GEF, 1 EC) Themes include livestock acquisition, improving ag. holdings. Need business plan, reimbursement of farmers' own investment. Extra points in selection for women and youth	Up to 50%
3. IPARD-like (2015, 2016)	
2 calls: (i) 2015 (upgrading ag. holdings of primary producers) and (i) 2016 (agro-processors). Need full business plan over €50,000 and simple one under €50,000	Up to 50% reimbursement of investment
4. IPARD I (2007 – 2013) and IPARD II (2014 – 2020)	Up to 50% loan
Themes: primary production & rural Infrastructure Need full business plan over €50,000 and simple one under €50,000	€10,000 to €100,000 reimbursement of investment
5. Investment Development Fund) IDF	
State-supported agency providing bridging credit for MIDAS, IPARD, women/ youth etc.	
1. Youth Business Financing Programme, interest rate 2.5 % annually (2% for Northern municipalities), max. 12 years	Up to 70% loan/ €50,000
2. Women Business Support Programmes, interest rate 3.5 % annually (3% for Northern municipalities), max. 12 years	Up to 70% loan/ €10,000 to €200,000 Up to 70% loan/ €50,000
3. Support to unemployed University Graduates Programme under 35 years, interest rate 2.5 % annually, max. 12 years	Up to €10,000
4. Support to Women in Business Programme - UNDP, interest rate 2.5 % annually (3% for Northern municipalities, max. 6 years	
6. Private banks	9 – 12%

Annex 5: Targeting checklist

Targeting checklist	Comments
1. Does the main target group - those expected to benefit most- correspond to IFAD's target group as defined by the Targeting Policy (poorer households and food insecure)?	The target group includes three principal groups: the economically active, semi-subsistence, and the drivers of transformations. The subsistence smallholders are below the threshold for government and EU-related subventions; their livelihoods are already vulnerable and are likely to become more so with EU accession.
2. Have target sub-groups been identified and described according to their different socio-economic characteristics, assets and livelihoods - with attention to gender and youth differences?	The socio-economic characteristics of the three groups are described in terms of assets, livelihood activities and outcomes, and priority needs. A matrix on target group characteristics is included as an annex to Appendix 2.
3. Is evidence provided of interest in and likely uptake of the proposed activities by the identified target sub-groups? What is the evidence?	Relationship between the priority needs of the three target groups, the project activities and their outreach examined: some activities will benefit all in the geographical area of investment (participatory planning and infrastructure investments); many target the economically active farmers; some also engage the transformation drivers, while others will engage with the semi-subsistence farmers.
4. Does the design document describe a feasible and operational targeting strategy in line with the Targeting Policy, <i>involving some or all of the following measures and methods:</i>	
4.1 Geographic targeting – based on poverty data or proxy indicators to identify, for area-based projects or programmes, geographic areas (and within these, communities) with high concentrations of poor people	The project will focus on rural areas above 600 m in the northern mountainous region. Selection criteria are based on economic, poverty, socio-economic, climate vulnerability profiles coupled with potential for enterprise development in selected enterprises and target groups' willingness to participate in and support the project.
4.3 Self targeting – when goods and services respond to the priority needs, resource endowments and livelihood strategies of target groups	Criteria for selecting enterprises include: (i) enterprise chain includes a critical mass of smallholders; and (ii) entry/establishment costs and risks for the enterprise are low (important for poorer farmers). Selection criteria for rural infrastructure investments include outreach to the largest number of beneficiaries.
4.2 Direct targeting - when services or resources are to be channelled to specific individuals or households	Young men and women to account for at least 30 per cent of participants cluster mapping activities and preparation of the cluster development plans. Specific measures will be used to encourage poorer smallholders, women and youth to join associations/ cooperatives, attend agri-business skills training, attend trade fairs, benefit from the matching grants and on-farm climate smart investments.
4.4 Empowering measures - i in order to empower and encourage the more active participation and inclusion in planning and decision making of people who traditionally have less voice and power	Additional measures will be necessary to support poorer smallholders, men, women and youth to have the opportunity to participate and become more economically active. These may include basic business skills training to encourage market engagement prior to accessing agri-business skills training; training on association/ cooperative membership and leadership; and rural women's networking.
4.5 Enabling measures –to strengthen stakeholders' and partners' attitude and commitment to poverty targeting, gender equality and women's empowerment, including policy dialogue, awareness-raising and capacity-building	All stakeholders to be sensitised about IFAD's commitment to working with poorer smallholders, women and youth, as well as the more economically active enterprises; work with municipal gender focal points to prepare and implement gender actions plans with attention to rural women. Municipalities and local youth mechanisms will be supported to incorporate a focus on engaging young people in agriculture.
6 Attention to procedural measures - that could militate against participation by the intended target groups	Attention to ensure entry requirements not beyond the reach of poorer smallholders/processors and their associations; timing and location of training events ; create a phased approach or graduated pathway to ensure inclusive processes to ensure outreach among women, youth and semi-subsistence smallholders.
4.7 Operational measures - appropriate project/programme management arrangements, staffing, selection of implementation partners and service providers	Overall responsibility for project outreach will lie with the PMU Coordinator/NR specialist. The cluster development advisers will have specific responsibility to maximise the opportunities for women's and youth empowerment, promoting gender equality and including semi-subsistence farmers in cluster development initiatives.
5. Monitoring targeting performance.	The M+E officer will consolidate and analyse sex- and age-disaggregated and poverty data to track project engagement with households who may otherwise be excluded.

Annex 6: Gender checklist

Gender checklist	Comments
1. The project design report contains sex-disaggregated poverty data and an analysis of gender differences in the activities or sectors concerned, as well as an analysis of each project activity from a gender perspective to address any unintentional barriers to women's participation.	Appendix 2 describes gender perspective of rural livelihoods and selected agricultural activities.
2. The project design report articulates actions which aim to: <ul style="list-style-type: none"> • Expand women's economic empowerment through access to and control over productive and household assets; 	Women will be encouraged to engage in farming as a business through enhanced access to climate smart on-farm investments (including processing equipment), study tours and women-women exchanges. Their role as economic actors will be given more visibility through the NGO Rural Development Network.
<ul style="list-style-type: none"> • Strengthen women's decision-making role in the household and community, and their representation in membership and leadership of local institutions; 	Women will account for at least 30 per cent of (i) participants in participatory cluster mapping and planning activities; (ii) members of associations/ cooperatives (including leadership positions); (iii) trainees. Capacity of municipal gender focal points will be strengthened to identify needs and present opportunities for rural women.
<ul style="list-style-type: none"> • Achieve a reduced workload and an equitable workload balance between women and men. 	Investments in multiple use water supplies will reduce workload in beneficiary households (estimated to reach xx households).
3. The project design report includes one paragraph in the targeting section that explains what the project will deliver from a gender perspective.	Paragraph summarises gender perspective of project in terms of access to technical and business skills training, climate-smart financing, membership and leadership of associations, and strengthening of enabling environment.
4. The project design report describes the key elements for operationalizing the gender strategy, with respect to the relevant project components.	Key aspects of gender strategy are mainstreamed into the description of the relevant project activities; to be further developed during implementation.
5. The design document describes operational measures to ensure gender-equitable participation in, and benefit from, project activities. These will generally include:	
5.1 <i>Allocating adequate human and financial resources to implement the gender strategy</i>	Dedicated funds allocated to support women's network and study tours.
5.2 <i>Ensuring and supporting women's active participation in project-related activities, decision-making bodies and committees, including setting specific targets for participation</i>	30 per cent targets set for: participatory cluster mapping and planning; GAHP, GAP, certification and agri-business training; membership and leadership of associations/cooperatives. Specific targets will be set for access to on-farm climate smart investments and women's networking.
5.3 <i>Ensuring that project management arrangements (composition of the project management unit, terms of reference for project staff and implementing partners, etc.) reflect attention to gender equality and women's empowerment</i>	The cluster development advisers will have specific responsibility for maximising opportunities for women's (and youth) empowerment and promoting gender equality.
5.4 <i>Ensuring direct project outreach to women (for example through appropriate numbers and qualification of field staff), especially where women's mobility is limited</i>	Staff from PMU, MARD, municipalities and service providers will be sensitized on importance of gender mainstreaming by cluster development advisers and municipal gender focal points.
5.5 <i>Identifying opportunities to support strategic partnerships with government and other development organizations for networking and policy dialogue</i>	Links will be established with: (i) municipal gender focal points; and (ii) NGO Rural Development Network to give greater visibility and support to rural women. The enabling environment will be strengthened by working with municipal gender focal points to prepare and implement gender actions plans which identify and address the needs of rural women.
6. The project's logical framework, M&E, MIS and learning systems specify in design includes sex- and age-disaggregated performance and impact data, including specific indicators on gender equality and women's empowerment.	Indicators will be developed during final design mission.

Appendix 3: Country performance and lessons learned

276. As IFAD has no country experience yet, this section focuses on lessons learned: (i) from others development partners in Montenegro; and (ii) from IFAD's engagements in other MICs in East and Southeast Europe (in particular Albania, Bosnia and Herzegovina, Moldova, and Georgia).

A. Learning from supporting institutional capacities

277. **Though MARD has significantly strengthened its implementation capacities, the set-up of a dedicated project coordination unit (PCU) is recommended for the RCTP.** The key lessons come from the review of the experience of other development partners, and especially the IPA assistance, the pre-IPARD projects and the EU/WB MIDAS (closed in September 2016). Significant institutional progress has been recorded in working with the MARD. This is especially recognized when it comes to the establishment of the IPARD-Paying Agency, now staffed with MARD's employees and managing IPARD funding without technical assistance. The structure was approved by the WB/EU to be in charge for execution of grant payments to the farmers, while it received in October 2015 its first EU audit for the entrustment of budget implementation tasks. In May 2016, MIDAS experience was presented in Bosnia and Herzegovina, as a best practice example for the EU accession process and for the steps taken toward the IPARD accreditation and the establishment of the Directorate for Payments (Paying Agency). Despite progress achieved, areas for further improvement include: (i) a more adequate targeting of projects' beneficiaries (i.e. compliance with required project criteria); (ii) an improved delivery planning, allowing for better monitoring of both disbursement and physical progress; (iii) a more adequate staffing to avoid overloading MARD's staff; (iv) a greater awareness on sustainability and impact monitoring; and (v) a more adequate donor coordination.

278. Consequently, and in agreement with the MARD, a fully dedicated PCU will be set-up for RCTP coordination and implementation, with staff recruited on a full-time, one-year renewable consultancy contract. Staff will be partly competitively recruited and partly seconded by MARD (subject to IFAD no-objection on proposed profiles). Capacity building would be strengthened by the following measures: (1) civil servants who could be recruited in the PCU would then re-integrated the Ministry and; (2) capacity development activities will be planned for the PCU throughout project life.

279. **Regarding delivery of field services, the main lesson learnt is that provision of extension services has largely been supply driven by government with a focus on production aspects of crops and livestock.** There is need to facilitate the gradual move towards market-oriented pluralistic demand driven extension services to smallholders to enable them to become competitive in the EU market in the medium term. MARD has a Directorate of Phytosanitary and Veterinary which supports delivery of extension services at municipality level. The Bio-Faculty of the University of Montenegro complements provision of extension services. There are private service providers (over 120 individual consultants with expertise in agronomy and veterinary services) in the training market who can be mobilised to provide services to RCTP. There are several entrepreneurs in the meat and fruit sub-sectors who are willing to mentor young entrepreneurs. Capacity building is planned for MARD extension services particularly in the areas of agribusiness and in managing contracts with hired service providers. TOT will be required to build capacity for strengthening social capital and business skills of producer association members in efforts to make them business oriented. Contracting of services providers for implementation of activities will allow strengthening local NGOs and private sector.

280. **While the past socialist "Zadruga" (cooperative) legacy still lingers, the UNIDO cluster approach to engaging with producers has shown a strong willingness among smallholders to work together in a new business-like fashion.** This enables them to benefit from economies of scale to access services and profitable markets. A key element to this approach is building social capital of those willing to work together as a prerequisite to entrepreneurship skills enhancement. This UNIDO approach implemented by the just completed Cluster Development Project and the FAO Project: Development Assistance to Farmers in Remote Areas of Kosovo and Montenegro' present the best lessons RCTP will draw from. The UNIDO approach which focuses on letting the private sector play a central role in promoting growth has enabled different producers (groups and individuals) along business lines in the olive, fish, wine, and metal-works to come together in order to create larger networks. This facilitates learning and brokering of business relationships between producers, traders and processors. It promotes inclusiveness, strengthens human and social capital through

empowerment of marginalized individuals and groups and promotes improved access to employment opportunities within the business lines.

281. Also to institutionalise clusters it is important maintain the geographical proximity of firms and the production of similar or related products to ensure that sufficient room for collaboration amongst stakeholders is being created. This will also ensure that awareness is built at the level of entire institutions, going beyond specifically assigned focal points and/or meeting participants. This holds true especially when using public calls. Certain decisions and actions have to be initiated and pursued by local stakeholders themselves in agreement with the lead agency and cannot be implemented on their behalf by external agencies. It is therefore recommended to assign a technical intermediary body or organization (following international best practice examples) that would provide a standardized quality training programme and counselling approach for future cluster brokers as well as for policy maker to integrate cluster programmes into the broader context of economic policy, in particular with efforts to improve framework conditions (clusters programmes deliver their full value only if structural reforms are pursued in parallel). As key drivers of local economic development, municipalities should play a crucial role within the process of cluster development. They should hence include cluster initiatives in their local strategic plans. The FAO approach facilitated selected Zadruga's to transit from the socialist era to the market economy. In promoting marketing partnerships with upstream buyers, two cooperatives (Agrosjever cooperative – wool production and the ZZ Vrbica - potato producers' cooperative) have demonstrated business viability. RCTP will build on this experience and work with business groups to enable them become inclusive, upgrade their technical and organizational skills to facilitate their 'graduation', from just producer associations into business-oriented groups or SMEs. The FAO approach facilitated selected Zadruga's to transit from the socialist era to the market economy. In promoting marketing partnerships with upstream buyers, two cooperatives (Agrosjever cooperative – wool production and the ZZ Vrbica - potato producers' cooperative) have demonstrated business viability. RCTP will build on this experience and work with business groups to enable them become inclusive, upgrade their technical and organizational skills to facilitate their 'graduation', from just producer associations into business-oriented groups or SMEs.

B. Learning from supporting infrastructure

282. Infrastructure investments can leverage substantial private and public co-financing, building robust PPPs. This is a key lesson learnt from the region. In rural northern Montenegro there is huge unsatisfied demand for rural infrastructure, which will be tackled by the EU resources only from 2019/2020. The RCTP activities will therefore be the one of first intervention in rural small-scale infrastructure by a foreign donor institution. So far, the improvements of rural level public infrastructure, especially in the northern Montenegro, have been funded exclusively from the municipal and central budgets. Therefore, the design of the component will build upon IFAD experience and lessons learned from the similar activities in the region. Early indications on leveraging co-financing from both authorities and private sector in Montenegro are highly encouraging, and evidence the strong catalyzing characteristics of IFAD's infrastructural engagement.

283. Progressively stricter and more granular criteria have allowed for improving targeting. The key and specific characteristic of IFAD financed investments in rural infrastructure in the region is the strict requirement of targeting primarily small and medium sized agro-enterprises and mobilizing resources from these entities for co-financing. This approach was also generally successful in ensuring proper use and sustainability of the completed infrastructure. The main lesson from the similar activities in the region is that to maximize the impact of small-scale rural infrastructure, it is essential that they are closely synchronised with other project interventions to achieve the desired complementarity wherever relevant and demanded. It is also essential to fully define maintenance arrangements of build infrastructure and also put emphasis on cost-benefit analyses, environmental assessment and operation of infrastructure. Experience in the region has also demonstrated that a greater attention should be given to the quality of the feasibility studies covering engineering, social, value chain and marketing aspects of investments prior to final selection. The procedures for the selection and implementation of infrastructure investments should also be well understood and accepted by the beneficiaries, while support should be provided on how to fulfil the minimum formal requirements to apply. Finally, whenever possible, before selecting the infrastructure investments to be made, an assessment of the potential for job creation (whether permanent or seasonal) should be carried out.

284. Especially water system infrastructure can leverage additional investment in agriculture, catalysing climate resilient rural growth and employment. In IFAD financed projects in the East and Southeast Europe, most of the investments in rural water supplies have been de facto used as multiple use facilities, catering for domestic, livestock watering and irrigation use. These water supplies have generally proven cost effective and provided equitable benefits for the youth, women, and men and were effective in reaching out to the poor. Verifiable impact has been recorded especially for milking cows' productivity and for watering the backyards next to the household. Experience has demonstrated that especially water management infrastructure can leverage additional investment in agriculture catalysing climate resilient rural growth and employment. Investments in irrigation generally also give positive contribution to increasing agricultural productivity. However, following the construction or rehabilitation of irrigation facilities, the uptake of irrigation in farmlands where these systems are beyond the point of repair, requires complementary investments, and labor shortages in some rural communities have also emerged as causes of slow uptake. These aspects need to be evaluated thoroughly when computing the projected benefit streams of new investments in irrigation.

285. Proper supervision of construction works should be budgeted at design. Which allows reducing the risk of unforeseen additional expenditures and addressing the possible impact of climate change in the durability of the infrastructure.

286. Taking into account these lessons learned, the main design considerations for the infrastructure component activities are consequently: (i) Experiences inform us that replication and standardisation helps adoption and speedy roll out. Hence the need to develop and demonstrate replicable mechanisms for infrastructure and environmental related investment to support commercial, market-oriented businesses in the project areas; (ii) Transparency and accessibility of criteria also promotes uptake and fairness. Hence the project will ensure the specification of clearly defined and consistently applied investment selection criteria including technical feasibility, and economic and financial viability and support for agricultural commodity chains or other business supply/value chains is promoted; (iii) When beneficiaries articulate their needs, sustainability and relevance is improved. Hence support should be provided on the basis of demand-driven investment opportunities available to individual farmers, farmer/producer organizations and private sector services; and (iv) Ensure that co-finance requirements are clear from the onset to avoid expectations of 'free lunch' i.e. pure grant. Thus the project will seek to have acceptance of the principle of cost sharing in investment and the adoption of market terms for all investments under consideration.

C. Learning from supporting clusters and market linkages

287. Promoting/financing value chain projects in East and Southeast European MICs indicate that the success of an inclusive value chain approach mainly depends on the **complementarity and linkages** among components along specific project-supported VCs.

288. Exclusive reliance on geographical targeting (for supported investments) is not sufficient, and may partly contradict an effective VC approach since project may feel obliged to distribute resources equitably amongst municipalities, regardless of needs and poverty levels. It is important to couple geographic targeting with socio-economic targeting, ensuring that it is demand driven.

289. Any intervention aimed to support smallholders must take its point of departure in the fact that the limited degree of commercialisation is making it difficult for them to be competitive in the market. This is a key lesson learnt from the DANIDA's experience in Montenegro. Opportunities therefore lie in developing small niche markets. Similar lessons have been learnt from EU pre-IPARD projects and the EU/WB MIDAS. Also, many smallholders continue to struggle to benefit from the EU/WB projects⁵⁵ and from their limited capacity to formulate reliable business plans.

290. There is a need to balance a purely demand driven approach with appropriate procedures and targeting criteria. If sole based on demand, experience from e.g. Albania suggest that the most resource-full rural entrepreneurs are likely to capture most of the benefits, as they are often best place to articulate demand and frame it in formats that are required by IFAD and governments. This can have the unintended consequence of excluding the economically active poor that could potentially graduate out of poverty and become transformation catalyzer in their area. On the other hand, apply-

⁵⁵ EU's methodology favours larger farms.

ing a demand driven approach has proven to generate better outcomes in terms of sustainability and profitability than a purely supply driven top-down scheme can deliver, even if the latter allow for better inclusion. Hence the RCTP will aim to balance these competing demands.

291. Considering these experience and taking into account the specificities of the Montenegrin context, the main design considerations for the value chain component activities are consequently: (i) the RCTP has been designed as a cluster based project, covering all stakeholders in one or several VC(s), across all project municipal boundaries, but based around the poorest of farmers in pre-selected poor mountainous northern municipalities; (ii) The RCTP's two technical components have been designed to be mutually supportive and complementary; (iii) Access to markets will be increased by building on the products currently produced and sold, by helping farmers to meet the necessary requirements for food safety certification, and where feasible organic certification, to help ensure commercial buyer and consumer confidence. The RCTP will also assist producers with improved marketing, branding, packaging, presentation, plus opportunities for joint marketing by farmers and strengthening of market linkages; and (iv) Whenever possible and requested by the smallholders themselves, and if a clear win-win situation can be achieved, the RCTP will facilitate linkages and contract farming opportunities the private sector.

D. Learning from supporting more inclusive targeting including gender and youth dimensions

292. **In MICs, a differentiated approach is needed in terms of targeting to reach poor rural households.** IFAD's experience in similar or comparable environments demonstrate that: (i) greater attention is required to identify pockets of poverty within the rural landscape where the standard of living is not characterised by the indicators of poverty typically found in areas where IFAD works; (ii) funding support should differ according to the poverty level of the direct beneficiaries to mitigate potential elite-capture and should provide graduated pathways to improved livelihoods; (iii) such a differentiated approach is possible based on a robust understanding of the characteristics of the poor and the clarity, at the onset, on how these can and will benefit from a project being designed; (iii) in contexts where the enabling policy and institutional environment promoting gender equality has not yet translated into widespread impact on the ground, specific attention is required to ensuring the project presents opportunities for women's empowerment; (iv) engagement with the rural youth is crucial in areas experiencing high levels of outward migration; and (v) consideration should be given to poverty and gender impacts in selecting infrastructure to be funded and targeting criteria should be strictly applied. PCUs should be sensitized and trained from the outset, especially in MICs where often less attention is paid to pro-poor and gender-inclusive approaches, on IFAD targeting strategies and inclusion of the poorest rural households, women and youth.

293. Taking into account these lessons learned, the main design considerations are consequently: (i) the RCTP will work with three different target groups, tailoring its support to the needs and capacities of these different groups; (ii) a targeting and gender awareness sensitization module will be delivered at project start to the PCU and MARD, to ensure a common understanding of RCTP targeting approaches and agree on ways to reach out to and properly monitor backward linkages and gains for the poorest rural households, women and the youth; (iii) during the first months of implementation, the PCU will organize an important sensitization/awareness campaign all participating municipalities and service providers; and (iv) for the matching grants, the RCTP will favour existing farmer's organizations/cooperatives/associations, based on simple but robust business plans. It could also help financing public infrastructure/equipment for which municipalities would then assume ownership and O&M. But the project will favour matching grants that benefits more than one individual farmer/agribusiness. This approach intends to benefit more rural households, including the poorest ones, while complementing and not overlapping with the approaches followed by the government's Agro-budget, MIDAS, the IPARD and IPARD-like programmes, which target individuals based on their capacities to pre-finance the investments (i.e. wealthier households). Elite capture will be attenuated by the relatively low ceiling for the matching grants, and a differentiation in the contributions requested from the beneficiary associations.

E. Learning from M&E system's performance and implementation

294. **In several countries with similar context to the one in Montenegro, IFAD financed projects have been facing generally weak M&E system throughout implementation.** Quantitative data on actual adoption on technologies, actual changes in crop, livestock and enterprises' production, as well as actual changes in household and enterprise revenues and incomes were not regularly collected and analysed. An effective M&E system needs to feed continuously project management with operational, financial and other information on project performance in order to take timely appropriate management decisions. To establish an efficient M&E system, the main design considerations have been the following ones: (i) The M&E system will be given a proper attention from project start, especially because the RCTP will be the first collaboration between IFAD and GoM (i.e. no previous track records); (ii) The RCTP cost tables will include a budget for TA at start-up, to help the M&E officer preparing the M&E manual and an Excel database; (iii) The Appendix 6 of the project design report has also been prepared in a quite detailed manner to provide the PCU, and particularly the M&E officer, with as much guidance as possible.

F. Learning from supporting climate adaptation

295. **Montenegro is committed to learn from and align to EU's adaptation models.** Montenegro's climate change adaptation strategy is structured around the main environment and climate change policy framework of the EU.⁵⁶ Since its independence, Montenegro has started a series of policy processes to ensure compliance with EU standards and regulations and new strategies to ensure environment management and climate change mitigation adaptation have been developed⁵⁷ Nonetheless, the country is still facing a major deficit in terms of climate change adaptation.

296. **However, agricultural adaptation strategies remain incomplete.** As confirmed in the 2016 Intended Nationally Derived Contribution (INDC) for the 2016 Conference of Parties (COP22)⁵⁸, Montenegro has not presented any action in terms of climate change and agriculture. While UNDP, FAO, WB and other international actors have been supporting Montenegro in developing national strategies and studies related to climate change impacts, little was done in terms of adaptation strategies for the agriculture sector and in terms of adaptation of rural people.

297. **Regional experience indicate that rural adaptation is feasible and can support market integration.** IFAD experiences from neighbouring countries, where adaptation of rural communities in remote mountainous areas was part of an IFAD program, can be used in order to support and develop sustainable VCs that are climate adaptive, modern and market oriented. In these similar contexts, a natural resource and territorial management approach to VC was developed. Moreover, the projects had positive feedback from both partnering institutions and beneficiaries. In the specific case of BiH, the project contributed to improving living conditions of smallholders as well as enhancing climate resilience of rural agriculture through specific climate adaptation practices and technologies. The project supported rural smallholders in the mountainous areas with the following set of actions:

- (i) supporting sustainable VCs in the livestock and dairy sector in the production of existing, high-quality products such as typical brands of cheese;
- (ii) investing in the provision of equipment, technology and materials to farmer associations and SME to facilitate the shift to new farming systems and improve traditional VCs and new complementary VCs, e.g. berries and fruits;
- (iii) investing in nurseries for production of seedlings, greenhouses, irrigation systems, freezing and refrigeration facilities for berries and fruits serving producers' associations/cooperatives;
- (iv) investing in infrastructure including rural roads and improved water management, including small-scale irrigation schemes, farm ponds, etc.

⁵⁶ EU Screening Report 2013, Chapter 27 Environment and Climate Change

⁵⁷ MARD & MSDT (2012) Technology Needs Assessment for Climate Change Mitigation and Adaptation. National Strategy and Action Plan. MSPE – The Second National Communication on Climate Change of Montenegro to the UNFCCC (2015). MSPE (2010) National Biodiversity Strategy and Action Plan for the period 2010-2015. MSPE (2007) National Strategy of Sustainable Development of Montenegro

⁵⁸ www4.unfccc.int/.../INDC/.../Montenegro/1/INDCSubmission_%20Montenegro.docx

298. Among others results, it is worth mentioning that improved irrigation combined with organic fertilizers and appropriate farming practices allowed increases in yields by minimum 40% (e.g. 1000 m² of berries without irrigation gives 1,5 t of products; with irrigation it comes up to 2,9 tons).

299. **Key infrastructure can promote adaptation with commercialisation.** There are several projects (markets and cold storage facilities) that have also contributed to prolonging the freshness of the products and thus, reducing post-harvest losses. Also, access to open markets provided small-holder farmers a market outlet on a daily basis, contributing to the reduction of on-farm post-harvest losses. The overall impact on productivity has not yet been measured in detail, but another 10-15 % is estimated. Infrastructure investments had a focus on establishment and improvement of water supply systems, also contributing to protect flora and fauna. Especially in Herzegovina, where forest fires happen frequently the improved availability of water facilitates fire-fighting to protect the ecological heterogeneity of Bosnia and Herzegovina and particularly the rich wildlife that likewise Montenegro is among the principal source of income for rural communities and particularly for smallholders.

G. Learning from beneficiary participation

300. **Strong awareness and understanding of project concepts and approaches from start is a key factor for implementation success.** Consequently, awareness/sensitization should be strengthened at start, to maximize participation and ensure adhesion to the project, while avoiding to raise false expectations. This should go beyond the project launch (start-up workshop) and promotion workshops as generally done at project start. Stakeholders and representatives of the beneficiaries should be involved in planning from the first year of implementation.

301. **A formal role, in both project monitoring and implementation, shall be given to regional agriculture departments and municipalities.** And in particular the latter, given their proximity with population and financial contribution to construction and maintenance of infrastructure.

302. Based on the above considerations, the RCTP: (i) will budget resources for the organization of information and planning regional/local workshops, which will help to mobilize and involve potential beneficiaries from the start; and (ii) will promote cooperation with direct beneficiaries (whether farmer's organizations or municipalities) based on simple but solid business plans (in the case of matching grants or infrastructures) and memorandum of understanding/written agreements, specifying implementation modalities as well as obligations from the beneficiary.

H. Phasing approach

303. Since RCTP is the first IFAD intervention in Montenegro, a **phased implementation approach is advisable**. In this regard it is proposed that implementation will start in all the clusters at the same time but activities be phased based on the needs of the clusters. The *first stage* would emphasize the start-up activities including data collection and analysis; selection of the individual smallholder farmers, groups and associations taking account key needs of existing in the identified commodity VC; mobilising and capacity building of both target farmers and other stakeholders in the VC, awareness campaigns and mobilization, and the start of pilot operations and investment. This start-up stage will take 6-12 months in each cluster, although this could be reduced if municipalities in cluster areas have already started construction/rehabilitation activities on infrastructure which links to and complements the commodity VC activities.

304. The *second stage* will be the implementation of the planned capacity building and productive infrastructure investment and, more importantly, improving the service delivery systems (extension and certification processes) and organizational capabilities of farmers. The length of the stage will depend on the construction period, maturity pace and the commitment of the farmers to work together to achieve ongoing improvements. This stage could run from 12 months to 6 years for energetic groups/associations that identify and work together to reach much higher levels of market-oriented productivity or organizational maturity.

Appendix 4: Detailed RCTP description

305. The RCTP is the joint GoM and IFAD response to the significant challenges facing the mountainous rural poor as well as an attempt to size the transformative opportunities available at this critical juncture in Montenegro's history. The strategy is geared at three core complementary implementation outcomes. The first will aim at critical agribusiness development support through clustering and higher added value for rural transformation. The second will aim at improving smallholders' connectivity and water supply, leveraging climate smart infrastructural solutions. The third will aim at gradually incorporate from project approaches into national practices and policies (this outcome is thus fully reliant on lessons produced by outcomes 1 and 2, and in that sense not primarily implementation focussed). The outcomes, corresponding components and synergies are described below.

306. The first two core outcomes are chosen to achieve optimal impact in terms of addressing the core binding constraints facing poor smallholders in northern Montenegro. Combined they will thus deliver more than the sum of their parts, but ensuring that a multiplicity of challenges are simultaneously addressed where and when needed. Moreover, they also reflect the areas where IFAD has a comparative advantage vis-à-vis other development partners, most notably in catalysing inclusive rural transformations for smallholders. The synergies will materialise based on demand. Thus some smallholder communities may need infrastructural improvements to cope with increased production volumes and the need for more reliable connectivity as a consequence of increased VC integration. Also within the components there will be strong mutually reinforcing synergies between the activities based needs (e.g. upgrading product quality may be accompanied with better branding/marketing).

307. Moreover, synergies will also be sought with other development engagement that can assist in the rural transformation, including EU (which will be able to cater for smallholders graduating out poverty), the municipalities and obviously MARD. Progressively the VC integration will allow for significant synergies with the private sector, that is expected to be the main driver in the long term.

308. Most engagements are demand-driven, which implies that where farmers, micro and small enterprises supported under Component 1 are in need of infrastructural support, linking them up with the other Component can and should be facilitated where so desired by the actors. Vice-versa, where farmers/enterprises benefitting from infrastructural support are also requesting support to become more tightly integrated in relevant VCs, Component 1 should positively consider including these. The outreach campaign will strengthen awareness of the menu of support engagements that IFAD offers, thus enhancing synergies and coherence where relevant and appropriate to the beneficiaries, but not forcing them to accept bundling of various activities, of which only one may be demanded.

A. Component 1: VC clustering for resilient rural transformation

Cluster development approach and cluster selection

309. The project will focus on promoting the expansion of competitive clusters for a portfolio of products with confirmed market potential and comparative advantages for smallholder production in the project locations. Specifically, product clusters have been prioritized which have:

- (i) Clear, current market demand for the specific products - sufficient to absorb the expected increase in production resulting from project enabled investments;
- (ii) Interest from traders and agribusinesses to grow their sourcing from the cluster locations;
- (iii) Interest from farmers, including smallholders, to expand and improve their production;
- (iv) Opportunities for competitive, profitable and sustainable (including climate resilience) smallholder production already demonstrated in the country at a reasonable scale;
- (v) Practical intervention opportunities for the project to facilitate the accelerated development of the particular market and local cluster;

310. A critical consideration has been the potential for strong upside for smallholders and younger farmers to invest, expand and improve their production. In particular, careful consideration has been given to viable "investment pathways" for individual smallholders in each of the prioritized products. As a guide, in order to be considered accessible for poorer smallholders two elements of an inclusive investment pathway would be:

- (i) the initial minimum investment should not be more than EUR 2000 per smallholder and generate sufficient increased net income to allow further reinvestment and expansion without additional external financing; and
- (ii) a net income of +EUR 500 per month per person (full time equivalent worker) is achievable in under 4 years if starting with the initial minimum investment (above) and reinvesting part of the increased income.

311. Clustering of production to help aggregate supply, and thereby reduce transaction costs between buyers and farmers, is also vital if smallholders and especially those making minimum initial investment are going to be able to succeed in becoming reliable suppliers and benefit from the market opportunities that clearly exist. Clustering can therefore help dramatically improve market access for small farmers and hence make the above investment pathways viable. In contrast, small farmers operating in isolation face significant problems in accessing competitive markets and so the investment pathways are much more challenging, often requiring much larger minimum investments in order to reach a viable minimum scale as a standalone producer. Accordingly, the project design recognize the likely value of some degree of coordination between smallholders in a particular locality - for example in jointly negotiating with buyers or bulk purchasing of inputs and services.

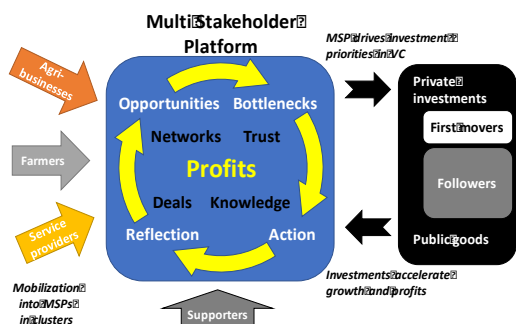
312. The component will therefore develop competitive inclusive clusters by focusing on brokering, facilitation, innovations development and capacity development support to inclusive growth. The four initial prioritized products, based on a rapid assessment against the above criteria, are: (i) cultivated berries (initially raspberries and expected to expand to other berries); (ii) Cheese (goat, cow, sheep); (iii) Meat (especially sheep/goat); and seed potatoes (supported by ware potatoes). Their projected outreach and primary market opportunity being targeted are summarized in the table 2, page 19 (main text). While these four products offer immediate opportunities, it is expected that during implementation additional opportunities will emerge, often for products which are only produced on a minimal scale at the moment but which have both favourable market conditions and comparative advantage for smallholder production in project areas. Examples may include cultivated medicinal & aromatic plants in various locations as well as strawberry production in upland areas (e.g. Dormitor region). The project will therefore be open to increasing the number and range of clusters supported in response to credible opportunities subject to the capacity of the project teams and implementing partners to extend their support further.

313. Clusters are defined as a geographic concentration of interconnected producers of a particular product, businesses, suppliers, and associated institutions, which creates direct and indirect synergies among them, resulting in market linkages. This means that a cluster approach will geographically group the key actors along the VC of a particular product in the same areas. For the purposes of the RCTP, this will typically be defined geographically by zones of production, which form discrete buying zones of a number of competing buyers/traders and so one cluster may cover several municipalities. The key actors in a cluster are farmers, buyers, processors, input suppliers, financial service providers, other private and public service providers and staff of government agencies, municipalities and other supporters of the cluster.

314. **Cluster development processes will be driven by the primary actors themselves**, primarily farmers and agribusinesses, and not directed by external experts. The process is anchored on an ongoing series of facilitated multi-stakeholder cluster meetings among key actors to discuss emerging issues and opportunities and develop immediate action plans together to tackle the issues. These meetings (sometimes referred to as multi-stakeholder platforms - MSPs) create a space for engagement and dialogue, help to create trust and deepen networks among farmers and agri-businesses, share knowledge, address common issues, identify opportunities for new deals and business opportunities between participants and so strengthen the VC. These dialogues and action plans then generate spin-off activities and investments driven by the priorities jointly identified by the key actors. Some actions and investments can happen without external support, while other may require some form of enabling public support - brokering, technical advice or financial support.

315. The expertise of the project teams therefore needs to be in mobilizing the primary actors, facilitating and brokering these processes and subsequently deploying the project's investment instruments (i.e. VCF, SDF - see below) to respond to the joint priorities of the primary actors. The role of the project teams is not to dictate specific actions or directions for the clusters' development.

Figure 10: Cluster Development Process



316. Clusters need to be used as a means to achieve an end not as an end in themselves, i.e. a cluster is useful when: (i) the VC is highly unstructured throughout its segments (production, transportation, distribution, enabling environment), thus requiring interventions by numerous stakeholders who could not resolve any single issue alone; (ii) trust among stakeholders is weak and hence a special effort to create trust and 'social capital' is necessary; and (iii) obstacles to objectives (e.g. increased sales) need to be addressed by multiple stakeholders.

317. When applying a cluster-based approach the RCTP will allow for the following points:

- (i) With multiple stakeholders involved in clusters, leadership can create a challenge. In that case, honest brokers are required who take up the role of bringing the stakeholders together and stimulate trust. It is important that the brokers gain the respect of all stakeholders.
- (ii) To create trust among numerous stakeholders, it is very helpful to have a common goal and indicator e.g. increased sales and incomes. The MSP process facilitates in bringing together and developing ownership and mutual understanding among stakeholders.
- (iii) Quick wins and early accomplishments are essential in fostering trust. This should be incorporated in early, doable action plans.
- (iv) Clusters are not an end in themselves; through clusters, the stakeholders need to achieve demonstrable, quantifiable and successful results based on market demands: VCs need to focus on what buyers want not on what is currently produced. Agribusiness-Producers Interactions meeting helps in driving this market led production. These wins will stimulate the stakeholders to continue in the same spirit of cooperation.
- (v) VC enhancement requires the involvement of supporting institutions e.g. GoM, research institutions. To support the clusters, the stakeholders need to be able building on existing institutions, amongst others this will contribute to sustainability.

318. For each supported commodity, the potential for the local cluster development will be re-confirmed by initial rapid scans at project start, including confirming buyers' demand, mapping, climate risks, analysis of the cluster players, and attractiveness of opportunities to smallholders, especially the next generation of younger farmers. The findings of this rapid scan will be validated at workshop with cluster actors. This validation workshop will be held with buyers, traders and businesses as well as representatives of producer groups and with service providers and also be the first informal step in the cluster development process. The aim of the workshop is to confirm:

- (i) The scale and scope of the immediate market opportunity based on the perspectives of the private sector;
- (ii) The credibility of buyers/traders being interested to buy increasing volumes of the scale likely to be produced from the identified production clusters at prices likely to be sufficiently attractive for producers to increase production and meet demand;
- (iii) The specific interest of sufficient numbers of traders, buyers and/or businesses to partner with the project and the producer groups in developing the local VC;
- (iv) That the project's instruments, modalities and resources are likely to be sufficient to make a meaningful contribution in addressing the likely bottlenecks and in stimulating accelerated growth of the local VCs.

Main activities

319. **Multi-stakeholder cluster meetings.** The core of the component approach will be to facilitate results-driven brokering and dialogue among primary actors in each cluster. This will be organised through multi-stakeholder cluster meetings facilitated by the project team which will enable these actors to jointly identify priority opportunities and bottlenecks for developing their cluster and corre-

sponding priorities for either individual or joint actions. These meetings will have a rolling cycle of dialogues organized 1-2 times per year in each cluster, to provide a space for businesses, farmers and other stakeholders to reflect on and address emerging opportunities and bottlenecks as the local clusters develop. The meetings will generate a number of follow-up activities to respond to the priorities jointly identified, summarized below. In addition, priority needs for additional infrastructure support in irrigation and farm access roads for smallholders in the clusters will also be identified through the multi-stakeholder meetings and inform the prioritisation of works under Component 2. This ongoing cycle of multi-stakeholder meetings and follow-up processes are intended to:

- (i) Strengthen the internal coherence of the climate resilient VC, promoting inclusive business, and improving the productivity or earnings in order to generate higher VC earnings, which in turn are aimed to particularly benefit small-scale producers;
- (ii) Facilitate meetings between groups of buyers/agribusinesses and farmers/producer for business to business (B2B) linkages including contract facilitation and actors with other service providers (banks, nurseries, input suppliers, service centres, technical production consultancy providers etc.) for business to service (B2S) linkages to deepen mutual understanding and identify win-win opportunities for greater collaboration;
- (iii) Identify specific bottlenecks in the cluster that can be tackled with the support of the project - e.g. through facilitating new/improved commercial relationship within the VC, through co-investment to stimulate private investment in critical elements of the local cluster and/or investment in public good infrastructure;
- (iv) Identify the main bottlenecks and development of cluster upgrading road-map and immediate priorities - including who will do what and who will pay for what.
- (v) Oversee delivery of a joint action plan developed with the main VC stakeholders in each cluster, the project and other development partners;
- (vi) Involved cluster and VC actors (via joint strategy and action plan) to set priority areas for project support - e.g. main "types" of post-harvest/marketing investments to be prioritized for co-investment or TA support, critical public and market infrastructure for project investment, types of technical support needed).
- (vii) Improve coordination and partnership among the stakeholders for sector level investment, policy dialogue for improved business environment as well as experience sharing and knowledge brokering in specific VC stimulating sector growth as a whole.

320. **Bilateral "business-to-business" (B2B) meetings.** B2B meetings will be held, typically between one of the businesses (either a buyer or service/input provider) and a set of farmers who met during the multi-stakeholder meetings and identified specific opportunities to do business together. In the early stages of cluster development, these meetings will be facilitated by the project team to help build trust among the partners. The B2B follow-up meetings will typically focus on developing and negotiating practical trading plans between farmers and businesses to do business together. In turn, the trading plans will often lead to the need for specific actions or investments to be made by the farmers, business or both. The investments and actions may be taken individually or jointly, depending on what has been agreed. If requested, technical support will be arranged by the project to assist the farmers and businesses to prepare well-informed investment plans, which will include climate smart best options.

321. **Value Chain Fund (VCF).** Matching grants for private investments promotion will be offered on a competitive basis to smallholders and SMEs engaged in the clusters, specifically targeted to stimulate investments in the priorities identified via the multi-stakeholder cluster meetings. For example, this may be on investments in small commercial nurseries to increase supply of certified berry seedlings, expansion of smallholder production to increase the supply of products in a target locality, and/or investment in collection/storage/processing facilities to absorb smallholder production. Any required technical advice or training to farmers will be included in the investment plans, comprising of the climate resilience dimension, and will be provided by specialised service providers. The rationale for the use of grants is to stimulate investment to address identified bottlenecks, introduce innovations and/or achieve minimum critical mass in the local clusters. Once these investments are successful and the clusters become more dynamic, other smallholders and business will be able to copy them at lower risk, and without the same level of grant subsidies. To ensure reasonable transaction costs, a minimum grant size and small grant bundling procedures will be determined during finalisation of the PIM. The VCF will operate two windows for its grants:

- Window 1: for smallholder investments in primary production and initial post-harvest activities in the targeted clusters. The maximum grant per household will initially be set as EUR 1,000. Grants will be awarded as a percentage of the total investment being made by the households according to the following progressive weighting system to provide proportionately most support to those only able to afford the smallest initial investments as these are more likely to be the poorer households (see

322. Table 21: for worked examples):

- First EUR 1000 of total eligible investment: 50% grant funding
- EUR 1001-2500 of total eligible investment: 33.3% grant funding
- EUR 2501+ of total eligible investment: 0% grant funding

Table 21: Window 1 grant calculation examples

Total eligible investment EUR	Grant amount by Investment tranche			Total grant amount Max. EUR1000
	EUR 0-1000 50% grant	EUR1001-2500 33.3% grant	EUR 2501+ 0% grant	
1000	500 (1000x50%)	-	-	500
2000	500	333 (1000 x 33.3%)	-	833
2500	500	500 (1500 x 33.3%)	-	1000
4000	500	500	0 (1500 x 0%)	1000

323. To ensure a broad and equitable coverage of grants from limited grant funds, only investments to expand primary production up to a pre-defined limit for each crop/livestock will be eligible. Any investment costs that increase production beyond these limits would not be eligible when calculating the total investment for grant support. This is to ensure grants support farmers to reach a viable initial scale but that they do not finance the expansion of established and successful farms. The initial proposed limits for production are: (i) berries = 3,000 m²; (ii) potato seed = 3 ha; (iii) sheep / goat herds for meat = 60 breeding ewes/goats; and (iv) cheese = either 6 cows or 60 milking goats - only if linked to a local cheese dairy.

324. From a practical perspective, minimizing the transaction costs of awarding and administering a large number of small grants needs to be a key consideration in the detailed design of the grant selection and management process. This may include setting a minimum grant amount, of say EUR 500, and/or requiring batches of 10 or more grant applications for similar purposes (e.g. expansion of berry production) to be submitted by smallholders in a given location which would both help clustering of production to attract buyers as well as increasing efficiency of service delivery.

325. Window 2: for SME investments in post-harvest handling, storage, processing, marketing etc. that buy from or supply inputs and services to smallholders in the target clusters. Window 2 will not support investments in primary production (except by SMEs acting as nurseries, breeding farms, etc. to produce critical inputs for smallholders). Recipients must be registered legal private entities (businesses, co-operatives, etc.). Grants to individual recipients will initially be capped at 30% of the total investment plan up to a maximum grant of EUR 13,000. Grant applications will be prioritized based on the credible projected impact on target smallholders if the proposed investment is fully implement. For larger agri-business investment where the total investment is larger than EUR 40,000, the enterprise, co-operatives and association will be supported to make application to IPARD for grant support.

326. The grants will be targeted to climate smart investments within the pre-identified high value clusters and typically be part of a series of coordinated investments and activities along the VC. The non-financial risks are likely to be substantially reduced compared to the stand-alone investments more typical under IPARD. The share of grant funding is therefore generally aimed to be somewhat lower than the 50% offered under IPARD with the exception of small grants to smallholders for minimum initial investments in primary production which will also attract up to 50% grant support as outlined above.

327. The percentage share of grant offered and other aspects such as eligibility, grant amounts and fund administration will be detailed in the PIM, and reviewed and adjusted if necessary during the course of the project. Grants will be released in tranches under result-based contracts with the recipients subject to verified completion of the agreed performance milestones agreed for each investment. For grants under Window 2, final tranches will be released subject to milestones clearly demonstrating backward linkages and benefits to the primary target groups e.g. actual volumes of products purchased from smallholders are in line with those projected in the approved investment plan.

328. The matching grants will complement and not duplicate the grants delivered under IPARD and will specifically target smaller investments or those not otherwise eligible for IPARD support. Specifically, for investments on-farm by smallholders and for processing/marketing grants, the maximum eligible total investment per recipient (of which the VCF grant is just part of the financing) will be EUR 10,000 (primary production) and EUR 40,000 (processing/marketing).

329. **Sector Development Facility (SDF)** will be managed directly by the PCU for investment in "public goods" that address specific bottlenecks to the cluster development identified by the primary actors themselves. The SDF will focus on "public good" investments only that cannot reasonably be delivered through private investment in the current context of the specific clusters.

330. Investments under the SDF will be managed as distinct sub-projects, implemented either directly by the project teams or a suitably qualified contracted organization from either the public or private sector. Selection of the implementing partner for each sub-project will be based on purposeful selection of the best qualified to deliver the sub-project objectives and activities but with an element of competition where multiple equally-well qualified and interested potential partners are available. While SDF will focus on "public goods" for the VC, the private actors in the VC will be expected to make a financial contribution of at least 5% to all SDF sub-projects in order to confirm that these are indeed an immediate priority for the value chain actors themselves. For SDF sub-projects of more than US\$ 20,000 value, the Investment Committee (see VCF) shall be responsible for making the final decision on the selection of the implementing partner and approval of the sub-project.

331. The types of investments possible under the SDF will include, for example: action research on production/post-harvest issues, variety/production trials, upgrading public testing labs or sanitary and phytosanitary (SPS) inspection capacity at local level, piloting novel or untested business models, initial demonstration and promotion of new technologies or production systems, actions research, market studies etc. Climate proofing of these facilities will be sought for sustainability of the service delivery. The SDF Guidelines shall govern the contracting of IFAD proceeds under a Private Public Partnership Framework/Model unless these resources are used to procure goods, civil works and consultancy services which would be governed by GoM and IFAD Procurement Guidelines.

332. **Business skills for farmers** are vital if they are to succeed in the supported clusters and critically important for households to properly assess opportunities and risks (in particular regarding climate stresses), enabling them to better negotiate their interests in value chain transactions and become reliable partners to agri-businesses in the clusters. Business skills training, focused on farming as a climate smart business, will be provided to all interested farmers in a cluster through a peer-to-peer process. Business Skills Facilitators (BSFs) will be recruited by the PCU, with assistance from the regional extension teams, and trained to provide business skills to all interested participating farmers in their local community. They will initially be paid by the RCTP for training sessions and are expected to gain a high level of skill and confidence, contributing increasingly to supporting the preparation of investment plans and helping with collective negotiations among their neighbours with traders and buyers. As residents in their community, these skills will remain after the project and continue to be available to support neighbours in the future in preparing investment plans, loan applications or joint negotiations with new prospective buyers, allowing for easy up-scaling of successful models. The PCU will procure the services of a suitably qualified adult learning institution to develop suitable business skills training modules and materials as well as deliver ToT training to the recruited BLFs.

333. **Increasing access to finance for smallholders and agri-SMEs** from mainstream financial institutions, as well as via value-chain financing where feasible, is vital if widespread investment in higher value agriculture is to be achieved and the country's agricultural potential fully developed. To increase the appetite of financial institutions to lend to profitable agricultural sectors, the project will initially pilot partnerships with one or more financial institutions, which have a commercial interest in testing new approaches (e.g. alternative collateral or guarantee mechanisms in the context of coordinated investments along the VC in a given cluster). The partnerships will focus on specific agricultural

products and clusters, and will be based on genuine common interest. RCTP will thus solicit the participation of local financial institutions' credit officers and staff in the multi-stakeholder meetings to better understand the financing opportunities and demands. If the initial pilot partnerships work well, the partner financial institutions may require some specialist TA related to agricultural finance during the second half of the project. This will be supported on a cost sharing basis for the TA with the partner financial institution, and the project will support the financial institution to identify suitable banking professional with the necessary skills and experience in agricultural finance.

334. In addition to the partnership with banks, the project will also explore and seek to jointly pilot with lead firms specific intra-chain financing arrangements, such as value chain financing within contract farming schemes into new clusters/commodities. Such examples exist already in the beef sector but are not yet common in the country. However, some lead agri-businesses have expressed an interest in exploring this in other sectors prioritised by the project.

335. Finally, **capacity strengthening in cluster development approaches for key stakeholders and partner institutions** will be achieved through a combination of: gradually decreasing TA over the first three years of the project, training courses for staff of key stakeholders as well as a study tour to an existing project successfully applying similar cluster development approaches.

B. Component 2: Cluster supportive rural infrastructure

336. The Component is designed to enhance access to markets through a range of infrastructure investments which will be undertaken in close partnership with project area municipalities. The main selection criteria will be infrastructure schemes of common use that enhance the opportunities for agribusiness and rural enterprise. It will not be a stand-alone Component from which any public infrastructure investment could be financed. All cases will have to demonstrate the commercial viability of the proposed venture, of which the infrastructure investment is a link, and its capacity to increase climate resilience and economic opportunities. The allocation of funds will be done through a participatory and demand-driven decision-making mechanism, supported by an analytical procedure.

337. The main types of infrastructure that will be eligible under the Component will include public infrastructure such as economic/productive water infrastructure including livestock water ponds, multiple-use household water supply systems; and last mileage of local or feeder roads including required ancillary structures. The component will consist of two sub-components:

338. **Sub-component 2.1: Investment in Rural Water Supplies (RWS)** in the project area will support communities on a pragmatic basis based on demand and supporting the objectives of Component 1. The investments will focus on multiple use facilities providing households with domestic water supply as well as water to cater for livestock or processing facilities, and possibly small scale irrigation systems to cope with recorded climate change. These investments will include ponds and facilities for rain water harvesting for livestock watering, spring capping, gravity conveyance and distribution network with polyethylene pipes and other facilities as required by site specific conditions.

339. **Sub-component 2.2: Investment in Rural Roads Improvements (RRI)** will be directed in rural roads and ancillary structures that complement and strengthen project investments under the component 1, for example by assuring adequate access to RCTP-supported value chains/commodity production areas and facilitating marketing of their produce. The roads to be improved will comprise mainly of last mileage of local or uncategorised roads in rural areas. Eligible investments will include also road ancillaries such as small bridges, drainage facilities and erosion protection works to ensure climate resilience of the rehabilitated roads.

340. The main criteria for investment decision will be:

- verified direct link to supporting inclusive rural economic growth including in the commodity/VC supported under the RCTP Component 1;
- public infrastructure of common use;
- technical feasibility;
- financial viability (rate of return higher than the opportunity cost of capital) ⁵⁹;

⁵⁹ Full viability assessment of the proposed infrastructure investments on targeted beneficiaries will be made.

- equity contribution by applicants;
- number of individuals assisted per US\$ 1,000 (or EUR 940) of investment;
- sound and plausible operation and maintenance procedure elaborated;
- consistency with nationally applicable regulations on environmental impact.

341. The infrastructure component total budget valued at US\$ 7.726 million (or EUR 7.262 million) including taxes and contingences. The total sum includes US\$ 1.9 million for RWS sub-component and US\$ 5.72 million for RRI sub-component. Besides investment in works this includes about US\$ 0.11 million for feasibility studies of the proposed investments (about 1.5% of investment costs) and about US\$ 0.15 million for supervision of works (about 2% of investment costs). The total allocated funds consist of about US\$ 0.87 million from IFAD loan, US\$ 1.14 million from ASAP grant fund, US\$ 2.63 million of central government cash contribution, of which US\$ 1.22 million is from central government VAT exemption and US\$ 1.41 million from municipality cash contribution and about US\$ 0.35 million from beneficiaries' cash contribution. ASAP grant funds will be used for works under the RWS sub-component and consultancy services for feasibility studies of proposed investments under both sub-components.

342. Based on the review of recently completed construction works implemented by municipalities, the indicative cost for the construction of 3 meter wide stabilized gravel or asphalt paved roadway with 0.5 m shoulders and required drainage structures may vary between US\$ 55,000 up to US\$ 110,000 per km, depending on the status of the road, old pavement and complexity of drainage structure. An average cost of US\$ 75,000 per km may be considered a conservative estimate, with an average length per road of about 2 to 2.5 km. Comparatively lower investments are required for water ponds and water supply systems. An average cost of US\$ 45,000 per water pond for rain water harvesting and US\$ 90,000 per piped water supply system is assumed for budgeting purposes.

343. The costs of the civil works listed above include VAT. In line with the market prices in Montenegro, the cost for engineering design and works daily supervision will be 5-7% and 2% of the total cost of construction respectively. The cost of engineering design will be the responsibility of the benefiting municipalities in addition to the required minimum cash contribution, as described above; while the cost of works supervision will be covered from the Component 2 IFAD loan allocations.

344. The cost of communications, information campaigns, staff salaries and allowances and equipment and vehicle operational costs will be incorporated into RCTP's operating budget.

345. The above figures are indicative only, based on the estimated costs of rural infrastructure construction. There will be no pre-defined allocation for different types of infrastructure within each group, nor will the number of communities/villages to be financed in each municipality be pre-determined. The infrastructure investment proposals ranking criteria will ensure that funds are allocated where the goal of improving livelihoods and economic growth in disadvantaged rural communities.

346. The anticipated outputs from the infrastructure component implementation are expected to be (i) some 30 roads with total lengths of about 65-70 km; (ii) 15 water ponds for animals to drink; and (iii) 12 water supply systems for multiple use. It is estimated that infrastructure investments would reach a total of about 2,000 rural households in municipalities of the project area providing opportunities for improved livelihoods and economic growth through the improvement of public utilities and road access. The benefits extended by the increased availability of water will be in terms of time saving, improved sanitation, reduced health hazards, reduced water losses, increased livestock productivity and opportunity for supplementary irrigation for a target population. Improvements of the rural road infrastructure will benefit households in increasing their production, cutting their transport cost, reduce their output losses and establish market linkages.

347. In addition, the construction works associated with infrastructure component will have a direct impact in terms of temporary employment generation, as it is a common practice among local contractors to hire labour from the communities. It was reported that about 15-20% of the cost contracted works are used for construction related employment as a rule.

C. Outcome 3: Learnings and Policy Engagements

348. The RCTP is designed to reflect and conform to national policies. In addition however, it is expected to: (i) pilot new approaches to smallholder-focused rural development and draw out the lessons learned that can potentially inform new national policies and strategies; (ii) create space for engagement and dialogue involving key players in the selected VCs, which can (amongst their other functions) identify specific policy bottlenecks that constrain the development of those VCs; and (iii) on the basis of the issues emerging under (i) and (ii) above, conduct more specific policy reviews/analyses as necessary. Implementation is expected to generate useful lessons in a number of key thematic areas, and that may be of value to MARD policy makers and other stakeholders. For certain more complex policy issues, project lessons and experience may need to be complemented with more in-depth policy studies/analysis. During implementation, the initial “learning and policy dialogue agenda” shall be enriched with new policy issues emerging from the established clusters. The documentation of key, evidenced-based lessons will include a range of methods (printed case studies, policy briefs or videos), while their dissemination will depend on the targeted audience (local, national, regional workshops; KM working group meetings; project website; media broadcast).

Appendix 5: Institutional details and implementation issues

349. This section describes the governance of the project as well as the role of the main implementing partners. A key ambition within implementation is to promote institutional development among the core partners. The RCTP will contribute to institutional development and outcomes in several ways, including: (i) close alignment with MARD by anchoring the PCU it institutionally and geographically within the ministry and hence contribute to internalisation of the lessons and practices obtained as well as ensure higher degree of sustainability and ownership). The PCU will have overall responsibility for implementing RCTP (see below); (ii) innovations and institutionalisation of approaches to integrating smallholders in more profitable and climatically resilient value chains using a cluster approach that leverage the northern region's unique advantages; and (iii) support to public private partnerships in climate resilient infrastructure leveraging a multiple of IFAD's investment by municipalities, central government and the private sector.

A. Governing the RCTP: Key partners and their responsibilities

350. **Steering committee and project governance.** RCTP will be overseen by a Project Steering Committee (PSC) established by government decree and chaired by MARD. The PSC will be responsible for providing overall governance, policy guidance, strategic direction, oversight and monitoring of project delivery. Other members of the PSC will include one representative each of the MoF, Ministry of Economy, Ministry of Sustainable Development and Tourism, partner municipalities and representatives from other programme stakeholders, including government agencies and public and private organisations as appropriate. The PSC membership may be amended depending on project requirements, subject to prior approval of IFAD. Logistical support and secretarial services for the PSC will be provided by the PCU.

351. **Overall project management.** MARD will be the Executing Agency of the project on behalf of GoM. MARD will establish a PCU to lead the day-to-day management and implementation of the project. The PCU will be hosted by MARD in Podgorica, with selected staff out-posted to regional centres. The PCU will comprise a team of fulltime staff fully dedicated to project activities, including: (i) a Project Director (senior project manager with value chain/brokering experience); (ii) 2 VC Experts - out-posted to regional centres (Niksic and Bijelo Polje); (iii) a Rural Infrastructure Engineer x1 (Yrs1-5 only); (iv) a M&E and KM Specialist; (v) a Procurement Officer; (vi) a Finance Officer; and (vii) an administrative assistant. The PCU will be supported by additional TA and short term contracted staff as required, including: (i) a VC Development Expert (international calibre) with an estimated 12 months input over the first 4 years; and (ii) an IT/database specialist - fulltime in the first year to set-up the MIS and M&E systems then part time thereafter for ongoing IT support. Appointment of seconded staff will be contingent to IFAD no-objection on the proposed profiles, and seconded staff will have to assure full-time availability for RCTP. For the seconded staff, additional salary compensation (above MARD level) will be financed from the IFAD loan budget.

352. The PCU will be responsible for producing the AWPBs to be submitted to the PSC for review and approval, and subsequently to IFAD for no objection. Likewise, the PCU will take the lead in the procurement of civil works, goods and services. With the PCU being deliberately lean, it will be important to ensure proper management of the outsourcing of non-core tasks to capable services providers and effective relationships with Implementing partners engaged on core activities.

353. **For component 1,** the Project Director and 2 VC Experts will work closely with the MARD regional Extension Services to coordinate and deliver all activities under cluster development and facilitation and collectively form the VC team of the project. The PCU will acts as the fund administrator for the Value Chain Fund but with an Independent Investment Committee established to make grant award decisions. As fund administrator, the PCU will ensure compliance with agreed grant application, eligibility, award and implementation procedures set-out in the PIM. The PCU will also prepare, sign and administer the grant contracts with each grantee and administer disbursement of grants, ensuring these are released against confirmed performance against contracted milestones. The PCU's Finance Officer and Procurement Officer will play a key role in the VCF administration. The PCU will directly manage the SDF in-line with the procedures set-out in the PIM.

354. **For Component 2.** The main tasks of the PCU, under the coordination of the Rural Infrastructure Engineer, will be conducting information campaign in the project area municipalities, technical and financial analysis of preliminary screened infrastructure proposals, review and approval of engineering designs provided by municipalities, procurement and supervision of civil works. An additional engineer will be contracted on a short term consultancy basis in times of peak workloads exceeding the capacity of the permanent engineer. Provisions will also be made for feasibility study and financial and economic analysis of proposed investments to be outsourced to private sector consultant on a short time basis during the selection phases of proposals.

B. Component governance

355. There will be quite distinct governance arrangements for the two main outcomes and associated components. The inclusive VC clustering will engage closely with farmers, processors, marketing body's, promotion bureaus, buyers, as well as with local and central authorities. Moreover, this component will also engage with both new and existing groups that can assist in getting sufficient volume and consistency. This will be rather labour intensive and require both staff and competencies. The cluster supportive infrastructure on the other hand will require different competencies and less in-house staff as much of the design, construction and supervision will be outsourced. Procurement will be retained in the PCU, but demand will be reduced in the last part of the project period. Below are the more detailed component governance modalities.

Component 1: VC clustering for resilient rural transformation

356. The Component will be implemented with a small, smart core team within the PCU in close collaboration with the Regional Extension Service staff in the regional centres. In the PCU, the VC team will be led by the Project Director and include the two VC Experts. During the first half of the project the VC technical assistant will also be an important senior member of the VC team. From the Regional Extension Services, staff from both the crops and livestock teams are expected to be closely involved in project activities alongside the PCU VC team.

Table 22: Implementation arrangements and responsibilities, Component 1

Activity	Responsibility
Mobilization of farmers and businesses into the cluster processes	<ul style="list-style-type: none"> • Smallholder - mobilization led by Regional Extension staff with support from VC teams • Businesses and other stakeholders - mobilization led by VC team
Multi-stakeholder cluster meetings	<ul style="list-style-type: none"> • VC team to lead facilitation initially. However, as clusters mature, they will increasingly encourage other stakeholders and partners to lead the facilitation to ensure the core approaches are well rooted after the project.
Bilateral "business-to-business" (B2B) meetings	<ul style="list-style-type: none"> • VC team to lead the facilitation of these, but with support from extension staff, especially on smallholder-related issues.
Business skills for farmers	<ul style="list-style-type: none"> • VC team to take overall lead. • Regional extension staff to lead recruitment of BSFs from among farmer villages themselves • Business skills training modules and ToT to be subcontracted by PCU to qualified external service provider. • Follow-up with Business Skills volunteers to be by VC team with the M&E staff (relating to seasonal data collection on tablets provided)
VCF	<ul style="list-style-type: none"> • Administered by the PCU. • VC team and Regional Extension team will be available to support smallholders and SMEs to prepare well-informed investment plans and applications for VCF grants. • Grant appraisal and awards to be completed by Independent Investment Committee, but with simplified process for smaller grants (Window 1) for administrative efficiency. Grant contracts and disbursement to be managed by PCU (Finance/Procurement staff) based on award decisions of Investment Committee. • Full detailed of the procedures, roles and responsibilities relating to the VCF

	will be set-out in a VCF Guidelines as part of the PIM and to be approved by the PSC and IFAD.
SDF	<ul style="list-style-type: none"> Administered by the PCU but organised as distinct sub-project, each with defined purpose, budget, deliverables etc.. Each sub-project will be implemented by an Implementer Partner, which will typically be a third party partner but may be the PCU itself if it has the necessary skills and available time. Implementing partners for sub-project will be recruited based on the technical competence and competitively recruited where more than one suitably qualified potential partner exists. Final sub-project design may be defined jointly with the selected implementing partner in order to incorporate their technical expertise. For SDF sub-projects of more than US\$ 20,000 value (or EUR 18,800), the Investment Committee (see VCF) shall be responsible for making the final decision on the selection of the implementing partner and approval of the sub-project. SDF sub-projects will be managed through performance based contracts with the selected implementing partner. The procurement of civil works, goods and equipment under the SDF will follow standard GoM/IFAD procurement procedures.
Pilot partnerships with financial institutions and intra-chain VC-financing pilots	<ul style="list-style-type: none"> The VC team will take the lead in developing and managing the relationship with interested partner financial institutions and business interested in VC financing. Pilot activities will be jointly designed between partner financial institution/business on a PPP basis and reflected in a concise agreement covering the scope, activities, financing and expected results of each pilot.
New cluster and/or location demonstration, testing and initiation activities	<ul style="list-style-type: none"> The PCU will coordinate these activities in close consultation with the Regional Extension teams and other technical experts, such as from the Biotechnical Faculty (e.g. related to the design of suitable demonstration). Implementation of specific tasks will be outsourced to suitably qualified service providers - e.g. in the set-up of new field demonstrations These activities will be programmed and managed through the regular AWPB process.

Component 2: Cluster supportive rural infrastructure

357. The implementation of the Component will be managed by the PCU, whose main tasks will be (i) conducting information campaign in the project area municipalities; (ii) technical and financial analysis of preliminary screened proposals; (iii) review and approval of engineering designs provided by municipalities; and (iv) procurement and supervision of civil works⁶⁰. Given the dispersed nature of the infrastructure interventions to be carried out and the relatively small-scale nature of the works involved, a programmatic approach will be adopted where project works will not be pre-identified before the start of the operation but will be selected on a periodic (annual) basis on specified set of criteria and demand by participating municipalities. The investment proposals selection criteria and scoring procedure for ranking of investment proposals are provided in the PIM (Appendix 11).

358. The budget requirements in the first year will be limited, as it will take at least eight months to execute the necessary preparation for infrastructure investments. The main indicative budget allocations will be in the second, third and fourth years. It is estimated that some 25% of total funds will be disbursed in the second year and 75% in the third and fourth years (about 37.5% in each). This progression of financing is reflected in the detailed cost tables.

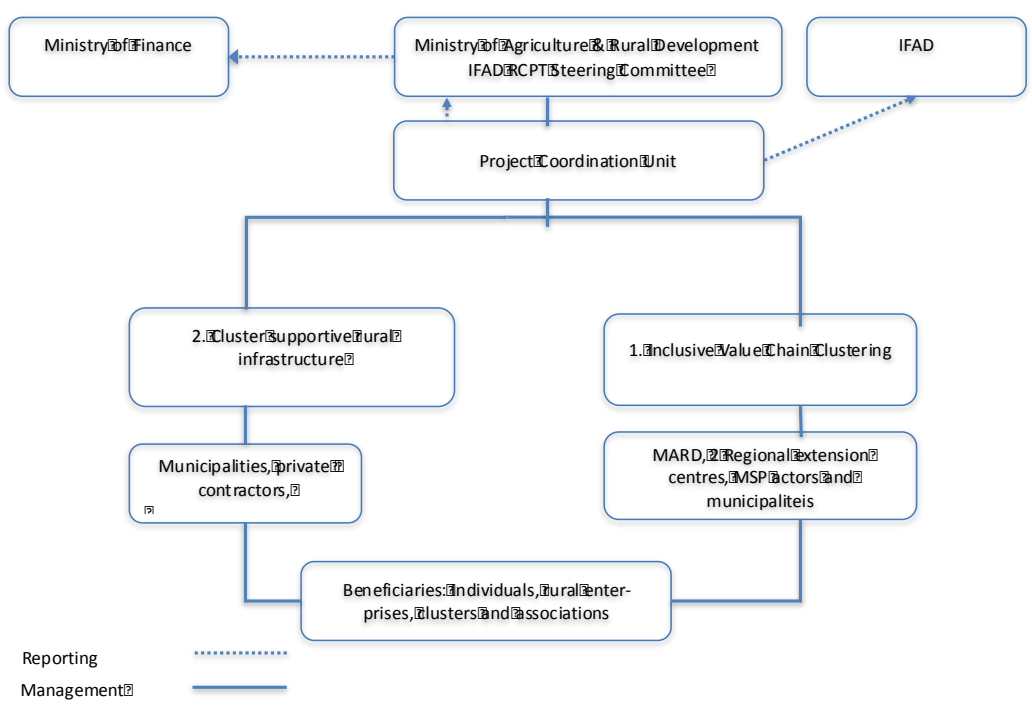
⁶⁰ Full viability assessment of the proposed infrastructure investments on targeted beneficiaries will be made.

Table 23: Implementation arrangements and responsibilities, Component 2

Steps	Activities and process	Responsibilities
Information and awareness campaigns.	<ul style="list-style-type: none"> Awareness and information workshops, within 3 months after loan effectiveness (including municipal authorities, rural entrepreneurs, agro-processors, producer & village associations, small & medium-size farmers). Advertisement of availability of competitive funding for infrastructure rehabilitation support with clear deadline and application forms and formats. 	PCU
Application	<ul style="list-style-type: none"> Collection of request for funding from the infrastructure component, based on thorough consultation with farmers groups, formal producer associations, other associations, community authorities (Mjesna Zajednica), and local entrepreneurs and businesses. Application/request done in writing, consisting of required information and data for PCU decision making. Sample application forms and required supporting documents will be provided in the PIM. 	Municipalities
Pre-qualification, screening, ranking and final approval of proposals	<ul style="list-style-type: none"> Pre-qualification of the investment proposals based on the set of initial criteria (detailed in the PIM). 	PCU
	<ul style="list-style-type: none"> Screening through feasibility studies and financial and economic analysis of proposed investments, outsourced to consulting companies (procured by PCU and paid from RCTP resources, IFAD Grant) 	Consulting companies
	<ul style="list-style-type: none"> Ranking of technically feasible, and financially and economically viable proposals based on the ORS 	PCU
	<ul style="list-style-type: none"> Presentation of selected infrastructure investment funding award to PSC for approval (for the next year funding award) based on the allocated budget for that year. 	PCU/PSC
	<ul style="list-style-type: none"> Request for IFAD no-objection on the AWPB which includes the selected proposals 	PCU/IFAD
Signing of investment agreements with selected municipalities	<ul style="list-style-type: none"> After final selection, agreement signed between PCU and relevant Municipality, with clear identification of responsibilities and implementation deadline (details in the PIM, while the agreement format and procedure for contribution payment will be developed during the start up when the PCU staff is on-board, and included in the PIM). 	PCU/ Municipalities
Development of engineering designs for proposed investments	<ul style="list-style-type: none"> Development of engineering designs, including Environmental impact assessment (EIA), mandatory as per Montenegrin law and considered as part of the engineering design. Paid by Municipalities from their own resources. 	Municipalities through licensed design companies
	<ul style="list-style-type: none"> Independent expertise technical review and validation of EIA with relevant environmental agencies as per the Montenegrin law. Paid by Municipalities from their own resources. 	Municipalities
	<ul style="list-style-type: none"> Submission of final approved engineering design package to PCU as per the deadline set in the implementation agreement. 	
Contribution Payment	<ul style="list-style-type: none"> Based on the engineers estimates, payment of contribution in cash only, including minimum 20% from Municipality resources and 5% from the beneficiaries as per the schedule set in the implementation agreement. Municipalities will be responsible for collection of 5% contribution from individual beneficiaries. Payment modality will be agreed during the start up when PCU staff is on board and included in the PIM. 	Municipalities/ PCU
Procurement of works	<ul style="list-style-type: none"> Based on the submitted engineering design preparation of bidding documents for works implementation 	PCU
	<ul style="list-style-type: none"> Bid advertisement and evaluation 	
	<ul style="list-style-type: none"> Evaluation report approval by IFAD and contract signing 	IFAD/PCU

Works implementation	<ul style="list-style-type: none"> • Payment to contractors as per current allocations include: • For water works: about 56% IFAD Grant, 20% Municipality, 5% beneficiaries, and 19% Gov. tax • Roads: about 9% IFAD loan, 47% Gov. cash, 5% beneficiaries, 20% municipalities and 19% Gov.tax. • Forms for completed works and payment certificates, etc. will be developed at start up when the PCU staff are on board. 	PCU
Supervision of civil works implementation	<ul style="list-style-type: none"> • Done through contracting of licensed companies (supervisor) as per the relevant legislation in Montenegro. Procurement of consulting services by PCU. Paid from IFAD Loan resources. 	PCU/Supervisor
Handover of completed works	<ul style="list-style-type: none"> • Upon satisfactory completion of works, the rehabilitated assets are handed over to Municipalities` balance sheets. Form of certificate for works completion, guarantee period and handover as well as signatories of these certificated will be developed at start up when the PCU Engineer and Accountant on board. 	PCU/ Municipalities
Operation and maintenance	<ul style="list-style-type: none"> • Operations and maintenance of the schemes through the Municipal level enterprises as per the current setup. <ul style="list-style-type: none"> - For roads: O&M paid from the Municipal budget; - For water structures: O&M paid through the service fees paid by beneficiaries. Fees are established by Municipal councils. 	Municipalities

Annex 1: RCTP Organigram



Annex 2: Draft PCU Staff Terms of Reference (TORs)

Project Director, VC broker

Reporting line:

- Secretary General of MARD, with communications to IFAD's country programme manager.

Main responsibilities:

Overall project management:

- Overall responsibility for: (i) day-to-day coordination and management of the project; (ii) implementation and respect, by the PCU staff, of measures contained in the PIM (financial and administrative procedures, M&E arrangements, as well as implementation of activities in the field); (iii) preparation of the AWPBs in relation to the project design and available financing, in close collaboration with MARD, IFAD and the northern project municipalities.
- Project representation vis-à-vis IFAD, MARD, MoF (Borrower Representative), partner donors, and implementing partners.
- Ultimate responsibility for arrangement and operation's management, and monitoring of PCU staff performance
- Oversight and guidance to the PCU on all matters pertaining to the smooth operation of the project, in accordance with procedures and obligations specified in the Financing Agreement signed with IFAD and implementation arrangements detailed in the PIM.
- Oversight of the implementation of the activities as per the approved AWPBs and following an inclusive targeting mechanism;
- Promotion and brokering of inclusive VC partnerships.
- Mainstreaming of sustainable natural resource practices into project activities, ensuring that climate smart adaptive measures are promoted wherever relevant and feasible, not least in relation to water supply schemes;
- Ensure – in coordination with other PCU staff – that project's investments comply with national regulations on environment and social impact.
- Oversight of the preparation, introduction and utilisation of a Results Oriented Management Information System for the project.

Component 1 technical aspects

Inclusions aspects

- Take overall responsibility of project performance on raising smallholder incomes, including for poor and near poor farmers.
- Develop a corporate project approach in which both the inclusion and market aspects of the project are equally important.
- Represent project approach and progress to social and economic inclusion in the national policy and development arena.
- Ensure that evidence-based analysis from project interventions inform IFAD policy and support and extend the agenda for inclusive market development in the country.

Required qualification, experience and skills:

- At least 15 years work experience in the development sectors and/or private sector, of which at least 10 years of experience in a senior project/programme management role.
- Extensive experience of setting-up and management of all aspect of project management systems, processes and implementation teams
- A track record in practical evidenced-based management practice to manage project activities for results
- Experiences that demonstrate creativeness, innovativeness and entrepreneurial skills;
- Possesses high quality attributes on leadership, facilitations and coaching.
- Excellent spoken and written Montenegrin and English.
- Proven skills in staff and budget management, networking and external communication.
- Good interpersonal skills and capacity to work effectively as part of a team.

- Master Degree in relevant subject (Business, agriculture, economics etc.).
- Experience in agriculture VC, public private partnership, service market development.
- Experience in natural resources management/climate change resilience will be added advantage.

Key competencies:

- Self-driven and proactive, capable of coaching, motivating and guiding staff, with proven management capacity within the relevant areas of natural resource management, rural transformation, rural infrastructure and clustering of agribusinesses.
- Strong interpersonal skill to lease with diverse stakeholders (small-scale farmers, agribusinesses, MARD, municipalities, IFAD, other development agencies, research and training institutions).
- Demonstrated ability to set priorities, plan, coordinate, monitor work performance;
- Very good integrity and high ethical standards;
- Self-starter and self-motivated; and
- Result-oriented.

Workplace:

- Podgorica, with frequent travels to the northern region of Montenegro and occasionally Rome.

Finance Officer

Reporting line:

- Project Director of the PCU

Main responsibilities:

- Establish a sound project accounting and financial management system, including adequate internal controls procedures; prepare and update the project's financial and administrative procedures manual; ensure project all records are maintained in a form appropriate for audits.
- Participate in the preparation and update of the Annual Work Plan and Budget (AWPB, in coordination with other PCU staff); monitor the financial execution of the AWPB, including analyses of budget-to-actual variances on a monthly basis;
- Review all expenditure requests to ensure inclusion in the AWPB and funds availability;
- Review/validate payment requests, obtain required approvals and monitor payment process with MARD and MoF;
- Prepare transaction vouchers and input all transactions into the project accounting system after approval by the Project Director;
- Perform monthly bank reconciliations of the accounts as well as monthly reconciliations of the initial deposits on the two special accounts;
- Prepare monthly financial reports for project management and MARD, quarterly interim financial reports (as required by IFAD) and annual financial statements;
- Process monthly payroll, social security and tax contributions;
- Prepare withdrawal applications for submission to IFAD after required approvals;
- Prepare and update cash flow forecasts on a regular basis;
- Monitor the financial execution of contracts;
- Monitor financial returns from implementing partners;
- Assist Project Coordination in project administrative matters and logistics (office administration, management of assets and management of personnel);
- Maintain a well-organized and up-to-date filing system for accounting/financial records;
- Perform physical inventory of fixed assets each year;
- Prepare required documents and reports, and provide assistance to the internal and external auditors as well as to IFAD missions as needed; ensure timely submission of audit reports;
- Undertake any other activities assigned by project management.

Required qualification, experience and skills:

- Bachelor's degree in accounting or finance from a recognized institution; a master degree in a relevant discipline will be an advantage.
- A minimum of 5 years progressive work experience in accounting and finance, preferably in donor funded-projects.

- Work experience in an audit firm will be added advantage.
- Proven capacity to perform financial analysis.
- Working knowledge of an accounting software.
- Computer literacy with proficiency in Microsoft Office applications.
- Fluent knowledge of Montenegrin and English languages (written and spoken)

Key competencies:

- Proven capacity to work under pressure and in coordination with high-level multi-sector technical staff;
- Demonstrated ability to set priorities, plan, coordinate, monitor work performance;
- Very good integrity and high ethical standards;
- Self-starter and self-motivated; and
- Result-oriented.

Workplace: Podgorica.

Procurement Officer

Reporting line:

- Project Coordinator of the PCU

Main responsibilities:

- Establish and update procurement procedures for the project based on the IFAD Procurement Guidelines.
- Prepare and update the annual procurement plan (in coordination with relevant staff of the PCU) based on the AWPB.
- Ensure the timely and transparent procurement of goods, works and services as identified in the procurement plan and in accordance with the applicable rules and procedures.
- Prepare bidding documents and coordinate the preparation of relevant inputs such as TORs, technical specifications and bills of quantities by technical staff or consultants.
- Supervise the bidding processes including advertisements, bid opening, bid evaluation, negotiation and selection of contractors; prepare bid opening minutes and bid evaluation reports.
- Draft contracts for signature by authorized project representatives and contractors.
- Manage the procurement monitoring database system; prepare periodic reports on the status of procurement for the project.
- Compile and confidentially keep up-to-date reports, documents and records of all procurement activities, ensuring proper documentation, transparency and ease of reference; maintain procurement files.
- Monitor the administrative implementation of contracts in coordination with the Finance Unit.
- Constantly review procurement arrangements in relation to the procurement plan to ensure consistency with the financing agreement and identify weaknesses, if any, and measures that should be undertaken to mitigate the risks posed by any weaknesses.
- Maintain close liaison with IFAD on all issues pertaining to procurement.
- Participate in project management meetings and IFAD supervision missions, including the preparation of all information required, in particular the procurement records for facilitating post-procurement reviews.
- Train project and implementing partners staff on procurement issues; and
- Carry out any other activities that are assigned by the project management.

Required qualification, experience and skills:

- Bachelor's degree in a relevant discipline such as law, engineering, business management, or related field from a recognized university; a master degree in a related discipline will be an advantage.
- Certification in Procurement or other qualifications specifically related to procurement.
- Minimum of 5 years progressive work experience in the procurement of goods, works and services, preferably in donor-funded projects.
- Fluent knowledge of Montenegrin and English languages (written and spoken)

- Computer literacy with proficiency in Microsoft Office applications.
- Knowledge of procurement or other database applications will be an asset.

Key competencies:

- Demonstrated ability to set priorities, plan, coordinate, monitor work performance;
- Proven capacity to work under pressure and in coordination with high-level multi-sector technical staff;
- Very good integrity and high ethical standards;
- Self-starter and self-motivated;
- Result-oriented.

Workplace: Podgorica.

Monitoring and evaluation (M&E) and knowledge management (KM) Officer

Reporting line:

- Project Director of the PCU

Main responsibilities:

- Prepare the project M&E manual (guidance will be provided in Appendix 6 of the design report), which describes the M&E arrangements (duties of all implementing partners, timeline for date reporting, etc.).
- Develop an Excel data base for the regular monitoring of RCTP's activities and beneficiaries, allowing to inform about activities' implementation progress against annual targets (outputs, outcomes and impact), disaggregated by gender and types of activities. Communicate data to the M&E unit of the Directorate for Rural Development, to ensure alignment and contribute to the MARD's M&E system.
- Organize and supervise a focused baseline survey at the beginning of the project to be undertaken by a contracted institution, supervise the recruitment process of an experienced institution, and follow-up/supervise the work done by this institution throughout the survey).
- Share the M&E manual with RCTP implementing partners (workshop), and train and supervise them M&E expectations and required reporting.
- Develop a KM & Communication (KMC) Strategy to ensure systematic and continuous learning, improvement and knowledge sharing, for policy engagement and communication purposes.
- Coordinate the preparation of the AWPB with the different PCU members, and consolidate inputs while ensuring that the KM strategy is internalized in AWPB and by key project implementers.
- Prepare semi-annual and annual progress reports, based on inputs from PCU staff, analyse differences between planned targets and achievements, and provide recommendations and/or corrective actions to improve implementation path.
- Prepare terms of reference for RCTP mid-term review and supervise mid-term review process;
- Facilitate RCTP's annual review workshops and various assessment studies.
- Monitor the implementation of RCTP targeting and gender strategy and its outcomes, to ensure that the project target group is benefiting from the project as intended (i.e. inclusiveness of targeting).
- Fine-tune the RCTP's dynamic Logical-Framework in keeping with IFAD-RIMS (Results and Impacts Management System – details in Appendix 6 of the project design report).
- Prepare the annual RIMS report (to be sent to IFAD on 31th March each year)
- Develop knowledge products that can be used to offer evidence to policy makers as to the proven successful approaches and models developed under the project.
- Undertake other tasks of relevance assigned by the Project Coordinator.
- Prepare the terms of reference for the RCTP impact survey and supervise the work of the service provider/institution recruited to perform this final important survey
- Organize final stakeholder workshops, which will serve for the completion review process and report (this completion report will be prepared jointly with IFAD).
- Ensure proper monitoring and reporting of climate smart adaptive measures and activities, and provide with specific reporting on ASAP financed activities and resources as may be required by Project Director.

Required qualification, experience and skills:

- Bachelor’s degree in a relevant discipline such as law, engineering, business management, or related field from a recognized university; a master degree in a related discipline will be an advantage.
- Minimum of 4 years of experience in the relevant field (M&E, KM, and/or qualitative and quantitative data collection methodologies).
- Solid understanding of rural development processes with a focus on participatory processes, joint management, as well as pro-poor targeting and gender issues.
- Data analysis and report writing skills, as well as experience in database management, computer skills, specifically knowledge and experience in the use of MS Office package.
- Fluent knowledge of Montenegrin and English languages (written and spoken)

Key competencies:

- Proven capacity to work under pressure, adaptability, team work and good organizational qualities
- Demonstrated ability to set priorities, plan and coordinate, and monitor.
- Very good integrity and high ethical standards;
- Self-starter and self-motivated; and result-oriented.

Workplace: Podgorica, with very frequent travels to the field.

Rural infrastructure engineer

Reporting line:

- Project Director of the PCU

Main responsibilities:

- Overall guidance and management of the infrastructure investment related activities under the infrastructure Component PIM, and regulations and procedures for supervision of design and civil works as per the applicable legislation of Montenegro.
- Responsibility for supervising and guiding activities of supervisors that due regard is given to the quality and quantity of works to be implemented throughout PCU operations in the framework of the infrastructure component. Within this overall role, the following tasks would be the specific responsibility of the PCU Rural Infrastructure Engineer:
- In cooperation with other PCU staff, participation in information workshops and sensitization of rural communities about the component’s objectives, eligibility criteria, application, selection procedure.
- Quality check of TOR for feasibility studies and ad hoc investigations to support assessment of proposals for infrastructure investment with regard to technical feasibility (including environmental and social assessment) and preliminary cost estimation.
- Assessment whether the proposed civil works are required or whether other, more appropriate structures may be more suitable, especially when it comes to climate change adaptive technologies (not least in relation to water supply schemes). Review of proposed works in relation to other possible alternatives. Review of detailed engineering designs in terms of sound technical solutions, quality and identified scope and volumes of works.
- Participation in Bid Opening & Evaluation Committee in evaluation of bids for civil works implementation.
- Contract Manager for all contracts for works procured by the PCU for the implementation of the infrastructure component, including approvals of contractors’ submittals (payment certificates, variation orders, completion certificates, etc.) and notifications to the contractors (defects, penalties, etc.) and any other issues as specified in the general and special conditions of contract.
- Participation and contribution in discussions with applicant, design companies and other interested parties in decision making during the construction stage.
- Supervision of the implementation of civil works and coordination of activities of site supervisors in accordance with agreed procedure and standard formats.
- Control of the compliance of design works and construction works with the technical requirements as well as the overall quality of works.
- Organization of the handover of completed infrastructure facilities to the municipalities according to stipulated procedures.

- Participation in the preparation of the AWPB for the infrastructure component (reports and information on infrastructure investment operations as necessary to the PCU Director, contribution to progress reports).

Required qualification, experience and skills:

- A higher degree or an equivalent qualification in Civil Engineering with sound knowledge of contemporary issues in the rural infrastructure of Montenegro in particular.
- Minimum of 5 years' experience with projects for infrastructure rehabilitation including design and construction supervision with proven ability to work in multi-disciplinary team & with rural population.
- Familiarity with engineering design requirements and construction supervision procedures of Montenegro, as well as with procurement procedures applicable under foreign donors' funded projects.
- Fluent knowledge of Montenegrin and English languages (written and spoken); Computer literate

Key competencies:

- Proven capacity to work under pressure, adaptability, team work and good organizational qualities
- Pragmatism, creativity and energetic approach to problem solving and decision-making.
- Capacity to operate effectively with contractors and rural population.
- Very good integrity and high ethical standards; Self-starter and self-motivated; and result-oriented.
- Good knowledge of national regulations on environment and social impact.
- Experience in climate smart construction would be an asset.

Workplace: Podgorica, with frequent travels to the field.

VC Expert (2)

Reporting line:

- Project Director of the PCU

Main responsibilities:

- In coordination with the PC, the VC Experts will be responsible for implementation of the cluster development interventions and to guide and coach other project staff and implementing partners to facilitate and support value chain actors in strengthening linkages, business planning, investment analysis and other areas that lead to improved performance of the clusters and associated VC systems.
- Establish and maintain close working relationship with Regional Extension Service staff in support of project activities.
- Mobilize relevant businesses, service providers and other stakeholders to participate in cluster meetings and associated processes, and ensure that targeting is as inclusive as possible (inclusion of primary farmers/smallholders in the cluster meetings and further);
- Support Regional Extensions Service teams to mobilize smallholder farmers into the cluster meetings and processes
- Lead the facilitation of the multi stakeholder cluster meetings and subsequent bilateral follow-up activities (e.g. business to business, business to service follow-up dialogue meetings)
- Facilitate and Support farmers, farmers' organisation, agribusiness, service provider in developing concept notes and investment/business plans for assessing matching grants/loans within specific VCs;
- Ensure that the business plans for MGs reflect demands for climate smart investments, and when necessary, recruit specific temporary TA on climate smart options for MGs;
- Responsible for identifying emerging critical interventions for investments, enhancement of relationships, development of enabling institutions and services and stimulating actual scaling as part of focussed and actor driven project facilitation for specific VCs in a continuous multi-stakeholder consultation process;
- Coach and mentor staff of key implementing partners and stakeholders on inclusive cluster development approaches and practical tools and techniques;
- Support the timely collection and pre-assessment of business proposals / plans from technical, business, management, financial and inclusion perspective in the specific VCs;
- Facilitate and support farmers organisation, cooperatives and agri-business to meet market requirements and strengthening technical, financial and business services providers/provision for specific VCs;

- Brokering “win-win” and trust based business or service relationships among VC actors including improvement in business enabling environment;
- Provide strategic support to Hub team for inclusion of poorer households in developing respective VCs investment proposals
- Ensure – in coordination with other VC/cluster actors/beneficiaries – that project’s investments (VCF, SDF) comply with national regulations on environment and social impact.
- Contribute to the knowledge development in the relevant clusters and VCs by undertaking case studies and document and promote learning in activities/investment following the knowledge agenda.
- Undertake any other duties as requested by the Project Director.

Inclusion aspects

- Regularly update results chain and implications for inclusion by different household and demographic profiles.
- Interact regularly with members of the Regional Extensions Service teams and ensure that VC plans and strategies adjust to field reality.
- Identify bottlenecks specific to poorer households and explore technical resolution options.
- Explore options for providing embedded services and extending linkages between service providers and households.
- Explore technical and financial options for graduated VC entry adapted for poorer households (investment pathways).
- Support multi-stakeholder cluster discussions with specialist and experience-based technical options on inclusive market development.

Required qualification, experience, skills and key competencies:

- Exceptional interpersonal skills and capacity to work effectively as part of a team and broker trusted relationships with a wide range of different individuals and organisations.
- A high level of personal integrity, to be able to be widely regarded as a trusted honest broker between farmers, businesses and other stakeholders.
- At least 5 years’ relevant experience of: VC development (or similar) in particular agriculture VCs, preferably working experience with private sector OR private sector experience in the agricultural sector, especially working with smallholder farmers (e.g. as a buyer), or banking sector in lending to SMEs
- Bachelor’s Degree in Business Administration, Agribusiness Development, or relevant degree
- Sound experience in business development, service provision and supply chain development;
- A high level of financial numeracy related to understanding SME/business investments, cash flow and financial consideration
- Experiences with management and market analysis, grant fund proposal/plan development, appraisal, monitoring and evaluation, and feasibility analysis.
- Knowledge and experience in building capacity of stakeholders and facilitation of multi-stakeholder consultation workshops and training.
- Experiences that demonstrate creativeness, innovativeness and entrepreneurial skills.
- Excellent spoken and written Montenegrin and English.
- Preferences given to experience in agriculture VCs, PPP and service market development

Workplace: Regional centers as designated by the project - Niksic and Bijelo Polje

Administrative Assistant

Reporting line:

- Project Director of the PCU

Main responsibilities:

- Handle the monitoring, maintenance and insurance of all project assets;

- Manage office supplies and consumables and maintain records of stock inventory;
- Act as petty cash custodian under the supervision of the Finance Officer;
- Provide assistance in the recruitment of staff and consultants ; create and maintain a personnel filing system to keep up-to-date records on all project staff; manage staff leave records; assist in personnel management of PCU staff;
- Create and maintain a roster of individual consultants and potential candidates for temporary positions;
- Provide assistance to the Procurement Officer in the preparation of bidding documents and bid opening ceremonies; sale of bid documents; act as custodian for receipt of bids;
- Prepare and update all staff schedules and the office annual travel plan;
- Organize all workshops, steering committee, mission and staff meetings; prepare meeting minutes;
- Organize travel arrangements for project staff, consultants and IFAD/GoM mission members (including procurement of tickets, airport transport and hotel reservations);
- File and archive all key project documents to ensure safety and facilitate easy access;
- Provide secretarial and administrative assistance to project staff and visiting missions;
- Maintain an electronic directory of project partners and suppliers;
- Welcome visitors, handle telephone calls and incoming/outgoing correspondence;
- Maintain up-to-date knowledge on project information/activities and answer general enquiries;
- Manage project vehicles and driver's schedules;
- Provide assistance to the Finance Officer as needed, and undertake any other activities assigned by PCU management.

Required qualification, experience and skills:

- Bachelor's degree in management, administration or related field from a recognized university.
- Minimum of 2 years working experience in an administrative position.
- Experience with a bilateral/multilateral organization, NGO or a donor-funded project will be an advantage.
- Computer literacy with proficiency in Microsoft Office applications.
- Fluency in English (written and spoken) and ability to translate documents and conversations from/to English.

Key competencies:

- Proven capacity to work under pressure and in coordination with high-level multi-sector technical staff;
- Excellent oral and written communication skills.
- Very good integrity and high ethical standards; Self-starter and self-motivated; and result-oriented.

Workplace: Podgorica.

Appendix 6: Planning, M&E and learning and KM

359. This Appendix describes the expectations and activities to be carried out by the PCU in terms of planning, monitoring and evaluation (M&E) and knowledge management (KM), which are all critical for the successful project implementation. The information from Appendix 6 will be used to prepare the M&E manual (volume 3 of the PIM, draft M&E manual outline, see Appendix 11).

A. Planning

360. A rigorous planning process that clearly identifies the concrete outputs (or physical targets) to be produced in the next 12 months in pursuit of overall project objectives, the activities to be implemented in order to deliver these outputs and the financial resources (or financial targets) required, will be the starting point for the sound management and monitoring of project execution. To this end, the PCU will use a pre-defined AWPB template (see Annex 1) that was designed as a tool for results-based management. The detailed Excel Table shall be accompanied by a short narrative (10 pages maximum) that will provide a quick overview of the key results achieved in previous 12 months and of cumulative progress to date, together with the rationale for the key activities and outputs targets planned for the next 12-month period.

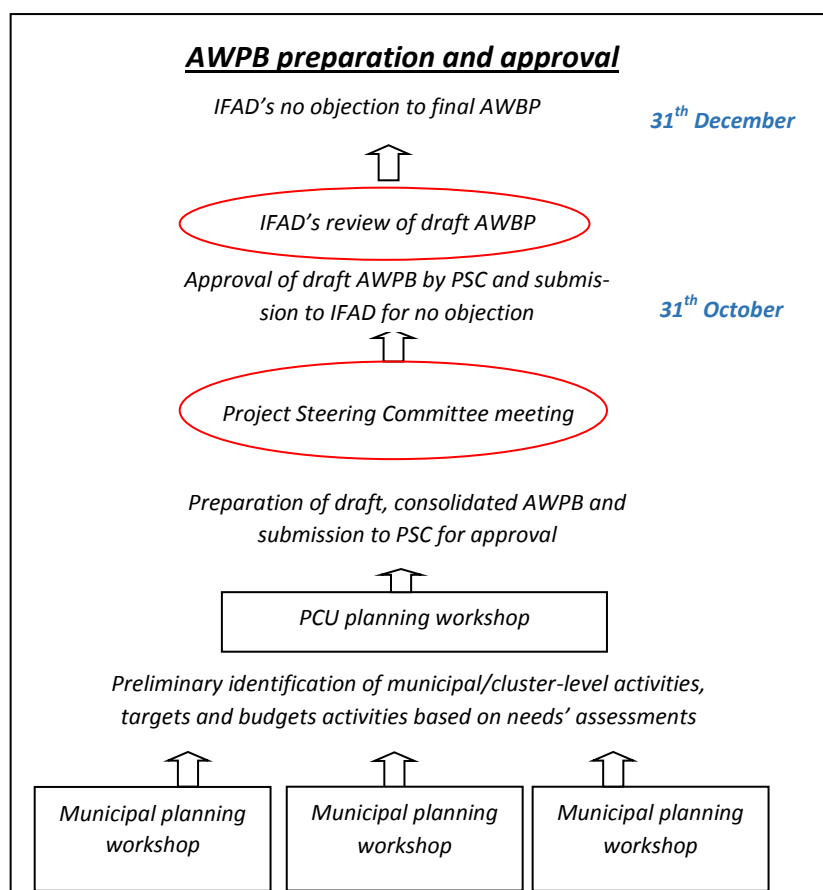
361. The key reference for the preparation of the AWPBs will be: (i) the project Logframe, which summarizes and quantifies the key results to be achieved by the project completion date; and (ii) the Cost Tables, which provide an indicative project budget broken down by years and activities. Both documents, however, do not constitute a rigid blueprint. Thus, Cost Tables should be considered as the best estimates by project designers, at the time of project design, of the various expenditures that will be required in order to deliver certain goods and services to project beneficiaries and achieve certain results. As implementation progresses, these expenditure estimates become increasingly obsolete, in particular unit costs, and some planned activities may need to be changed, or new ones added. Further, as the PCU gains more experience and understanding of the most promising value chains and/or of the field reality, some physical targets may need to be revised (some may prove overambitious, others may have been reached earlier than anticipated). The original project Logframe and Cost Tables may therefore need to be revised at mid-term, upon the recommendations of the Mid-Term Review⁶¹ and upon IFAD's approval.

362. While the first AWPB will be prepared during the start-up workshop⁶², the preparation of subsequent AWPBs shall follow an iterative process, starting around the month of September with the organization of municipality-level annual planning workshops. These will be facilitated by the PCU and will gather grassroots' implementers and project stakeholders (municipal civil works engineers, livestock/crop engineers, planning officers, project-recruited BSF, PCU Coordinator, M&E Officer, Financial etc.) in order to reflect on past performance, discuss implementation issues and identify preliminary annual targets for Component 1 and 2. On this basis, a draft consolidated AWPB will be prepared by the PCU, clearly identifying under each Component:

- the detailed outputs and related physical targets to be achieved in all municipalities,
- the key activities, sub-activities and inputs required in order to deliver planned outputs
- the timetable for implementation of key activities
- the staff/persons responsible for each activity and sub-activity
- the financial resources required for implementing activities and acquiring planned inputs.

⁶¹ In case of significant design problems, IFAD and GoM may decide to organize an anticipated Mid-Term Review.

⁶² The start-up workshop shall be an important event to officially launch project activities, but also to fine-tune all implementing arrangements. It shall be attended by all project partners and stakeholders at the municipality and national level, and by IFAD-ECD staff.



363. After approval by the PSC, the draft AWPB (accompanied by the PP) shall be submitted to IFAD for no-objection no later than 60 days before the end of the fiscal year (i.e. by 31st October each year). Once IFAD's no-objection is granted, the PCU shall submitted the AWPB to the PSC for approval⁶³. The final, approved AWPB will constitute a binding document that will govern, throughout the year, IFAD's decisions on funds' release or procurement matters. The approved AWPB and Procurement Plan may be amended in the course of the year at the request of the PCU if proper justification is provided for proposed changes, and upon IFAD's no-objection.

B. Monitoring and Evaluation

364. The result based management of RCTP will be supported by the establishment of a simple but effective M&E system, which will ensure the interconnection of the planning, M&E functions.

365. The Logframe is at the heart of the project M&E system design. It defines the implicit results' chain underlying project design options, and linking outputs to outcomes according to a cause-effect relationship. Moreover, it defines the criteria (indicators and targets) that will be used to assess, monitor and evaluate project performance and results. The project Log frame is presented in Appendix 2, together with the theory of change underlying project design. An M&E Manual will be developed by the M&E Officer as part of the Project Implementation Manual (PIM) within 3 months of project start, in order to describe the M&E system with the necessary operational details in terms of processes, tools and responsibilities (see Appendix 11, PIM, the M&E Manual outline).

366. **Purpose and scope.** With the project Log frame as key reference, the main purpose of the M&E system to be established by the M&E Officer, will be to provide project management, the gov-

⁶³ PSC approval may also be sought and granted as a final step, after IFAD's no objection is granted. This also means that, in the event when the PSC would recommend changes to the AWPB, IFAD's no objection on revised AWPB will have to be sought again,

ernment and IFAD with reliable and timely information on project execution and results, so that informed management decisions can be timely taken and to ensure that project implementation is efficient (i.e. results are obtained at reasonable costs) and effective (i.e. expected goods and services are delivered and intended outcomes are achieved).

367. More precisely, the M&E system established and managed by the PCU M&E Officer will aim at:

- i. Monitoring project execution, which will imply the tracking of activities and outputs.
- ii. Monitoring outreach, or the number of primary, secondary and tertiary beneficiary households received goods and services.
- iii. Measuring and evaluating project results, and monitoring critical design assumptions.

368. The monitoring of project implementation will essentially consist in the tracking of project activities and outputs against planned, physical targets, and in the monitoring of the quality products and services being delivered. More precisely, the monitoring of implementation progress will focus on:

- Assessing the rates of physical execution of yearly planned activities/sub-activities against planned annual targets,
- Verifying compliance by all actors (PCU, implementing partners, etc.), with agreed calendar and deadlines,
- Assessing the rate of financial execution against the provisional planned budget.

369. Responsibility for the collection of primary data will be vested with the various grassroots-level implementers (e.g. VC Experts; municipality and PCU Engineers, Regional Extension staff). Under Component 1, BSF will play a key role in the collection of key information, while VCF beneficiaries will be trained in the recording of production and sales data. As such, the M&E system will have some participatory features.

370. Once collected and consolidated, activity and output data will be analysed, and findings will be shared with PCU staff and the Coordinator during bi-monthly or monthly PCU coordination meetings. Among others, adherence with agreed calendar, implementation bottlenecks and implementers' performance will be discussed. Such information, which shall inform all Logframe output indicators, including RIMS indicators, will also be the basis for the preparation by the M&E Officer of periodic progress reports and the reporting of RIMS data to IFAD). In order to verify, randomly, the data submitted by primary project implementers and monitor the quality of delivered outputs, the M&E Officer will participate in monthly field visits, alone or jointly with other PCU staff or project implementers. Such field visits shall also provide an opportunity to interact with beneficiaries, assess their satisfaction with services received or field document stories (i.e. for preparation of knowledge material).

371. **Outreach monitoring.** For each key output, as and when they will be delivered, the M&E system shall track the number of primary, secondary and tertiary beneficiaries. In so doing, the M&E system will help monitor the extent to which intended beneficiaries, in particular poor and young smallholder farmers, are actually being reached and targeting mechanisms are effective. The table below summarizes the key outreach data that will need to be monitored by the PCU.

Table 24: Data required for outreach monitoring

Category of beneficiaries	Type of direct beneficiaries	Required data
Primary beneficiaries	VCF matching grant beneficiaries	- Age and sex
	BSF training beneficiaries	- Farm's geographic coordinates
	VC participants also benefiting from roads/water infra.	- Household size
	Beneficiaries of capacity strengthening support	- Age and sex
Secondary beneficiaries	Clusters' active participants (buyers, suppliers, producers not supported with a VCF grant or project infrastructure but with an established trade/business agreement)	- Age and sex - Occupation/business - Place of provenance
Tertiary beneficiaries	Road beneficiaries not involved in supported VC	- Household size
	Water supply beneficiaries not involved in supported VC	- Farm's geographic coordinates

372. Ultimately, outreach monitoring shall allow the PCU to complete the following table, that will be updated annually and included in the annual progress report.

373. **Results' monitoring.** The assessment of project results will consist in the measurement of the outcomes and early impact of project implementation on primary beneficiaries. The key reference shall be the Log-frame outcome indicators and related targets. The objective will be to verify, at regular intervals, that the outputs delivered under both Components are leading to the expected results in terms of increased production and marketing of selected commodities and increased farming incomes. In essence, M&E activities will help monitor the implicit results' chain underlying project design and document project results.

374. For all primary beneficiaries (i.e. smallholders' accessing matching grants and BSF training), the intention is to monitor farming income (from selected commodities) on an annual basis, once they have started the production of one of the supported commodities. It is thus proposed to build on the opportunity offered by the fact that, under Component 1, beneficiary farmers will be required to maintain a diary to record expenditures, production, sales or net profit, among others, in order to strengthen or develop their business skills. Primary data thus be recorded by smallholders themselves will be collected at the end of each agricultural season, and/or during cluster meetings, by the BSF using electronic tablets (with the information uploaded electronically into the M&E database), so as to minimize the data collection efforts and costs.

375. Every year, the longitudinal data thus collected will enable the PCU to track and quantify the changes in beneficiaries' farming incomes and in other key Log-frame outcome indicators. It will be analysed in order to identify trends by municipalities, clusters and communities. Cases of both highly successful farmers and least successful farmers will also be identified to become part of the sample for the 2 qualitative surveys that will be conducted around Year 364 and in Year 5. The purpose will be to complement the quantitative data collected through the BSF with a more qualitative assessment of key factors explaining success or failure, so as to identify best practices or remedial actions. Moreover, these two surveys will help collect information on beneficiaries' satisfaction with the relevance and quality of project services, or their views on issues and solutions. On the basis of both these longitudinal data and qualitative information, key findings and recommendations will be documented in a survey report and discussed during a dedicated PCU meeting.

C. Data requirements and data collection tools

376. **For the monitoring of execution.** The main data to be collected – and recorded as such in the M&E database - in order to ensure proper monitoring of physical achievements against planned activities is presented in table 25 below, with suggested data collection tools and responsibilities.

Table 25: Data required for the monitoring of project execution

Project activities	Data required	Data collection tool	Responsibility for data collection
Support to value chain clusters	– Number of meetings held annually, by cluster – Number and profile of cluster meeting participants (occupation, provenance, age, sex), by cluster	Cluster meeting minutes	VC Specialists
	– Types and number of agreements concluded, by cluster	B2B meetings minutes or MoU	BSF (<i>using tablets</i>)
Business skills training	– Number of trainees and trainees' profile (age, sex, occupation, provenance) – Training topic and duration	BSF training records	BSF (<i>using tablets</i>)
Provision of matching grants to smallholder producers	– Profile of grant recipient (occupation, age, sex, household size, farm's geographic coordinates)	VCF grants' application forms	VCF Manager

⁶⁴ This is the first year that berries' producers – who are expected to account for the bulk of Component 1 beneficiaries - can expect some income from their new production, as it takes 2 to 3 years for berries to come to production.

Table 25: Data required for the monitoring of project execution

Project activities	Data required	Data collection tool	Responsibility for data collection
	<ul style="list-style-type: none"> - Expected purpose of grant - Number of grants' proposals received, by types of recipient and purpose - Number and value of grants approved and disbursed, by types of recipient and purpose - Number of grants disbursed according to original schedule 	VCF Manager records	VCF Manager
Capacity building for PCU, government staff and other stakeholders	<ul style="list-style-type: none"> - Number of trainees and trainees' profile (age, sex, employing institution) - Training topic and duration 	Trainers' records	Trainers, Consultants
Construction/rehabilitation of roads and water supply infrastructure	<ul style="list-style-type: none"> - Quantities, material, labour, costs, works calendar (as per design and as deployed) - Infrastructure characteristics (e.g. length of roads; water reservoirs capacity, etc.) 	Contractors' reports	Contractors
	<p><i>For each infrastructure scheme:</i></p> <ul style="list-style-type: none"> - Date of scheme approval - Date of contract award - Feasibility study completion date (planned/realized) - Works' start and completion dates (plan./real.) - Works' execution rate at agreed intervals - Completion date of key construction steps (planned/realized) - Dates of pre-reception and final reception (planned/realized) - Number of minor and major reservations of works' quality raised and cleared. 	<ul style="list-style-type: none"> - Contractors' reports - Engineers' supervision and inspection reports 	Municipal Engineers
	<ul style="list-style-type: none"> - Dates of supervision visits by Municipal and PCU Engineers; - Date of post-reception and final inspection visits by PCU Engineer 	Engineers' supervision and inspection reports	
	<ul style="list-style-type: none"> - Number of expected infrastructure users, by infrastructure - Number of infrastructure users also supported under Component 1 	Infrastructure technical feasibility studies	PCU Engineer

377. The detailed data collection tools to be used by the various M&E actors will be developed by the M&E Officer and annexed to the M&E Manual.

378. For the measurement and monitoring of early results. The assessment of results will consist in the measurement of the outcomes of project interventions on primary beneficiaries. The key reference shall be the Log-frame outcome indicators and related targets. The objective will be to verify, at regular intervals, that the outputs delivered under both Components are leading to the expected results in terms of increased production and marketing of selected commodities and increased farming incomes. M&E activities will help monitor the implicit results' chain underlying project design and document project results.

379. For all primary beneficiaries (i.e. smallholders' accessing matching grants and BSF training), the intention is to monitor farming income (from selected commodities) on an annual basis, once they

have started the production of one of the supported commodities. Primary data thus be recorded by smallholders themselves will be collected at the end of each agricultural season by the BSF.

380. In order to measure and monitor early outcomes, all VCF beneficiary smallholders will receive a diary and will be trained to record in writing all the necessary information for sound business management, such as the one presented in the next table:

Table 26: Data required for the monitoring of beneficiaries' farming incomes

Commodity	Data to be recorded in farmers' diaries	Data to be recorded in central M&E database annually
Berries	(a) <i>Costs</i> : Initial land investment costs; Seedling costs; Fertilizers/chemical costs; Water charges; Labour costs; Other costs; (b) <i>Production</i> : Size of area planted (in ha); Quantity produced (in kg or tons) per season; (c) <i>Sales</i> : Quantity sold per season; Average price; Total income from sales; (d) Net profit from berries production.	For each farmer: <ul style="list-style-type: none"> - Total area of land utilized - Total production costs - Total production volume - Total production volume sold - Total value of production sold - Total gross and net income
Seed potatoes	(a) <i>Costs</i> : Initial land investment costs; Seeds' costs; Fertilizers/chemical costs; Water charges; Labour costs; Other costs; (b) <i>Production</i> : Size of planted area (in ha); Quantity of potatoes produced (in kg or tons); Quantity of seeds potatoes; (c) <i>Sales</i> : Quantity sold as seed potatoes and average price; Quantity of potatoes sold and average price; Total income from seeds potatoes and potatoes; (d) <i>Net profit</i> : Total net annual income from seed potatoes.	
Dairy	(a) <i>Costs</i> : Cost of new animal purchased; Feed costs; Veterinary fees; Vaccines and medicine; Dairy equipment purchase; Other costs; (b) <i>Production</i> : Number of productive cows; Average number of litres of milk produced annually; Number of kg of cheese produced annually; (c) <i>Sales</i> : Number of kg of cheese sold and average price; (d) <i>Net profit</i> : Total net income from sale of cheese.	For each farmer: <ul style="list-style-type: none"> - Total production costs - Total production volume - Total production volume sold - Total value of production sold - Total gross and net income
Meat	(a) <i>Costs</i> : Type, number and cost of new animal purchased; Investment costs (e.g. stable, water point); Feed costs; Veterinary fees; Vaccines and medicine; Dairy equipment purchase; Other costs; (b) <i>Production</i> : Number of new animals born, by type (c) <i>Sales</i> : Number of live animals sold, by type; Average price by type and age;	For each farmer: <ul style="list-style-type: none"> - Total production costs - Total number of new born animals - Total number of animals sold - Total value of production sold - Total gross and net income

381. At the end of each agricultural season (for berries and potatoes) and twice a year for livestock owners, the BSF will use this information to upload in the central database, for each VCF matching grant beneficiary, the following consolidated data; (a) the total annual production costs; (b) total production volume; (c) total volume sold; and (d) the total gross and net income.

382. Overtime, the longitudinal data thus collected will enable the PCU to track and quantify the changes in beneficiaries' farming incomes. It will be analysed in order to identify trends by municipalities, clusters and communities. During the analysis, cases of both highly successful farmers and least successful farmers will also be identified, to be subjective to additional surveys.

383. These farmers will thus become, among others, part of the sample for two qualitative surveys that will be conducted around Year 3⁶⁵ and in Year 5. The purpose will be to complement the quantitative data collected through the BSF with a more qualitative assessment of key factors explaining success or failure, so as to identify best practices or remedial actions. Moreover, these two surveys will help collect information on beneficiaries' satisfaction with the relevance and quality of project services, as well as their views on issues and solutions. On the basis of both these longitudinal data

⁶⁵ This is the first year that berries' producers – who are expected to account for the bulk of Component 1 beneficiaries - can expect some income from their new production, as it takes 2 to 3 years for berries to come to production.

and qualitative information, key findings and recommendations will be documented in a survey report and discussed during a dedicated PCU meetings in Year 3 and 5. Specific case studies may also be documented, in link with knowledge management activities.

384. Results' monitoring will also necessitate the monitoring of key Logframe assumptions. These are critical success factors in the external project environment that, if not realized, are compromising project success. They will need to be monitored as part of a risk management strategy that will be included in the project M&E Manual.

385. **For the evaluation of results.** In order to assess overall implementation performance and results, the following tools and processes will be used:

- *A Mid-Term Review (MTR)* will be organized by the government and IFAD jointly towards the end of the third year of implementation. It will assess project management performance, implementation status, outreach and targeting, and progress towards the achievement of the project development objective. The MTR will also focus on necessary corrective actions in order to address performance gaps and other issues.
- *The Project Completion Review (PCR)*, also jointly organized by the government and IFAD, will be held towards the end of the project completion period, ideally before the project completion date but no later than 3 months after project closing. The PCR will focus on assessing the relevance of project interventions, implementation effectiveness and efficiency, outreach and targeting, the likelihood of sustainability of project benefits and the potential for upscaling and replication. The PCR also aims at generating and documenting useful lessons from implementation that will help improve future programming or policies.

386. So that both the MTR and PCR processes can be informed by reliable quantitative data on outcomes and early impact, the PCU will be responsible to organize the following surveys:

- *Baseline survey:* The conduct of a baseline survey is a critical and mandatory exercise, whose objective is to describe and document the socio-economic and livelihoods conditions of the potential RCTP beneficiaries prior to project interventions. This information will, at mid-term and completion, become the reference against which to measure changes, and therefore appreciate project outcomes and impact, or lack thereof.

387. Additional baseline data will also be collected on a continuous basis by the BSF, as and when a new VCF grant's beneficiary will be officially selected. The purpose will be to obtain more comprehensive baseline data on production and farming incomes for primary project beneficiaries⁶⁶. This will be done by collecting essential data on farming income and current level of production and sales of selected commodity from new matching grants' beneficiaries prior to receipt of the first tranche.

- *Mid-term and completion surveys:* The mid-term and completion surveys will be conducted, respectively, prior to the start of the mid-term review mission and completion review missions, so that both surveys can inform these important review processes. They shall use the same questionnaire as the one used for the baseline survey. Comparison with baseline data will allow the measurement of changes in key indicators and questions, and thus to infer on likely project outcomes and early impact.
- *Other studies:* In addition to the two qualitative surveys described earlier and in order to inform the MTR or PCR process, the PCU may also conduct specific impact studies. For example, it may be useful for the PCU to conduct a sector study in order to estimate the value of the incremental investments that should be triggered by project activities (excluding the funds invested in the VC by the project itself), which is a Logframe indicator.

388. The three surveys will be carried out by a competent consultancy firm or service provider that will be selected by the PCU (see Appendix 6 for draft TOR). They shall use a sampling framework of 750 to 900 households that should be representative of the targeted beneficiary households in the targeted municipality. While the recruited consulting firm or service provided shall define the exact sampling framework, Appendix 6 provides some guidance on the suggested sampling strategy. In order to ensure reliability and comparability of impact survey results against baseline information, it is

⁶⁶ Given that the baseline survey will be conducted in year 1, that is before all VCF beneficiaries are selected, the survey sample may, or may not, include a large number of future VCF project beneficiaries.

important that the three surveys shall be carried out at the same period of the year (to avoid any seasonality effect) and using the same questionnaire and methodology.

389. **Data management.** An M&E Manual shall be prepared by the PCU within 3 months of project start. This document shall define with all the necessary operational details the M&E processes, tools and responsibilities; and it shall provide, in annex, all the necessary data collection forms, templates for performance tables, progress reports outline, survey TOR and questionnaire, etc. Upon finalization of the M&E Manual, the M&E Officer will train key M&E actors (BSF, PCU staff and municipality staff) in the use of data collection forms and of the project central database.

390. The key data collection tools and processes for data collection and entry in central database are described in the following table, together with related responsibilities:

Table 27: Processes and responsibilities for data collection and entry in central database

Project activities	Data required	Data source / collection tool	Responsibility for data recording	Data entry in central database	
				Responsibility	Frequency and process
Support to value chain clusters	Data on farming income	Farmers' diaries	Farmers	BSF	During each visit to farmers , using tablets.
	Cluster meetings data	Cluster meeting minutes	VC Specialists	VC Specialists	After each VC cluster meeting . The minutes are also sent to the M&E Officer by the VCS.
	B2B meetings data	B2B meetings minutes or MoU	BSF (<i>using tablets</i>)	BSF	After each meeting facilitated by BSF, using tablets. Quarterly for meetings not facilitated by BSF using tablets.
	Business skills training	BSF training records	BSF	BSF (<i>using tablets</i>)	After each training session . Signed attendance lists with names of all participants are archived by the BSF.
Capacity building other stakeholders		Trainers' reports	Trainers, Consultants	M&E Officer	After each training session , a report is sent to the M&E Officer, with signed, attendance lists annexed.
Provision of matching grants to smallholder producers	Grants' recipient profile	VCF grants' application forms	VCF Manager	VCF Manager	Quarterly . All original application forms, including the ones not approved, are archived by the VCF.
	Grants' portfolio characteristics	VCF Manager records	VCF Manager	VCF Manager	Quarterly
Construction/rehabilitation of roads and water supply infrastructure	Data required for the monitoring of work progress and compliance with contract	Contractors' reports	Municipal Engineers	PCU Engineer	Monthly . Contractors' reports are received and archived by Municipal Engineers, and e-copies are sent to PCU Engineers. If not overworked, Municipal Engineers can perform data entry.
		Engineers' supervision and inspection reports	Municipal Engineers	PCU Engineer	After each supervision . A copy of the inspection or supervision report is sent to the M&E.
	Data on infrastructure users	Feasibility studies Final inspection reports	PCU Engineer		Upon finalization of feasibility study (for provisional data) and upon works completion (for actual number)

391. A short-term IT Specialist will assist the M&E Officer in the development of a web-based, electronic central database that will allow the electronic recording of all primary data collected. Once collected using electronic tablets (in the case of the BSF) or paper forms, the primary data will be entered in the web-based database by all M&E actors remotely, from their various geographic locations. In the case of the data contained in farmers' diaries, it will be collected by BSF using electronic tablets. The central database will be designed in order to allow, not only the consolidation of all the data coming from various sources, but also the automatic generation of tables and charts for the monitoring of implementation performance and results.

392. In order to monitor the coverage and spatial distribution of project interventions, all project infrastructure, VCF beneficiaries and key project activities (BSF training, cluster meetings) will be geo-referenced and mapped. To this end, the PCU will acquire a web-based Geographic Information System, which will be fine-tuned with support from a short-term IT Specialist. At the municipality level, the SIG should help prepare electronic maps showing details on infrastructure realized and expected number of users. At cluster level, the electronic maps will provide details on cluster meetings frequency and attendance, location of production grants' recipients, as well as production and sales data.

D. Reporting requirements

393. The M&E Officer will be responsible for the preparation of monthly, 6-monthly and annual progress reports. The 6-monthly and annual progress reports will be sent to IFAD for information and shall be important documents to inform the IFAD supervision missions. The annual progress report shall be prepared towards the end of the year and submitted, if possible, together with the draft AWPB of the subsequent year. Each year, the M&E Officer will also be responsible for the preparation of RIMS tables (see Annex 5 for template) to be submitted to IFAD: as part of IFAD's central results' management system, annual achievements against planned targets, and cumulative achievements against global targets, are to be reported for a small set of standard indicators by all its projects on an annual basis. These indicators (identified as RIMS 1 for output-level indicators or RIMS² for outcome-level indicators in IFAD's terminology) are partly included in the project Logframe). Timely RIMS reporting at the agreed date will be important and mandatory (see Annex 5).

E. Learning and Knowledge Management

394. **Learning and KM, principles.** The project is designed to reflect and conform to national policies; in addition however it is expected to: (i) pilot new approaches to smallholder-focused rural development and draw out the lessons learned that can potentially inform new national policies and strategies; (ii) create space for engagement and dialogue involving all key players in the selected value chains, which can (amongst their other functions) identify specific policy bottlenecks that constrain the development of those value chains; and (iii) on the basis of the issues emerging under (i) and (ii) above, conduct more specific policy reviews/analysis as necessary. Project implementation is thus expected to generate useful lessons in a number of key thematic areas, which may be of value to MARD policy makers and other stakeholders. This will represent a key thrust of the KM approach under the project.

395. So that the lessons are properly captured, documented and disseminated, the M&E and KM Officer will define a clearly spelled-out "learning and policy dialogue agenda" and a Knowledge Management (KM) and Communication Plan. This will be developed within 12 months of project start. It will be based on stakeholder consultation – particularly with a KM Working Group that will be established, as well as analysis, a needs assessment and other studies; and it will be developed in tandem with the RCTP M&E system to ensure that M&E and KM are fully linked. It will also build on the learning-oriented KM framework that has been used successfully in IFAD-supported country programmes (for instance in Moldova and Turkey), to collect, document and disseminate lessons and best practices emerging from IFAD-supported projects, and including a range of partners (e.g. policy makers, technical specialists, government officials, farming communities, NGOs, research institutions and the donor community). Furthermore guidance and support will be offered throughout the process, by the KM Officer of the Near East, North Africa and Europe Division at IFAD .

396. The main purpose of the KM working group, which will consist of relevant MARD and other key stakeholders at the central or municipal level, is to ensure a broad understanding of and support for

the KM system. The intention is that this will help pave the way for institutionalization of KM in government work processes at different levels. To facilitate this process, project staff will be trained in building effective learning processes into the project M&E system, and developing a light KM framework for the duration of the project, including a communication and visibility plan on an annual basis. A KM indicator will be introduced in the M&E system to assess the number of knowledge products and their dissemination.

397. A number of preparatory activities will be carried out, particularly in Project Years 1 and 2. These are expected to cover the following:

- a) stakeholder analysis and consultation to ascertain existing levels of knowledge of the different stakeholders (rapid review of knowledge and information flows, current good practices) and to identify their information and knowledge needs and gaps at (and between) all levels (to be undertaken through agreements with universities and other learning institutions);
- b) identification of existing resources and opportunities for collaboration on knowledge management activities in Montenegro and in the wider region (via a review of relevant initiatives in neighboring countries, e.g. BiH and Albania, to identify and better understand success factors);
- c) communication support related to public advocacy and sensitization of project participants, including building understanding of the project's objectives and potential benefits, especially with regard to the project's key principles of engagement and eligibility criteria;
- d) development and implementation of processes to ensure that case studies (lessons learned and good practices) are captured systematically, analyzed, documented and used to improve programme implementation and demonstrate the impacts of project activities on the target population, and shared widely;
- e) KM awareness raising and capacity building of key staff members at national and municipal levels;
- f) support for advocacy efforts through providing evidence of impact gathered through the M&E system, closely linked to KM activities; and
- g) the establishment of an annual review of experience and performance, in consultation with service providers and stakeholders to decide how to respond to new constraints and opportunities identified during implementation, as well as for coordination and information sharing purposes among implementation partners.

398. Key lessons of interest to MARD stakeholders will be identified by the KM Working Group and endorsed by the PSC and IFAD. They might include those emerging from: (i) the multi-stakeholder meetings (do these work well as a vehicle for business brokerage? what are the institutional relations that emerge from them? etc.); (ii) collective action by smallholder farmers in order to respond to project-induced market opportunities (what sort of organizational models seem to work? what is their impact); (iii) the matching grants (do they catalyse additional financing from commercial sources); (iv) the involvement of banks (does this encourage them to lend to agricultural producers/processors, with what sorts of products, etc.); (v) linking (IPARD-eligible) agro-processors and small-scale (non-IPARD-eligible) producers (is it possible to create a complementarity of policy instruments); and (vi) supporting smallholder farmers in marginalized areas (can one identify elements of a strategy for doing so).

399. Close linkages between M&E activities and KM activities will ensure that the lessons generated are credible and based on evidence. For certain more complex policy issues, initial project lessons and experience may need to be complemented with more in-depth policy studies or analysis. During project implementation, the initial "learning and policy dialogue agenda" will be enriched with new policy issues emerging from the clusters that are established.

400. Approaches to documenting and communicating experiences and lessons learned will include a range of methods and products, such as website(s), print (with case studies, policy briefs, etc.), photography, audio and video; and a range of dissemination methods/knowledge sharing methods and platforms, for example capacity building, learning and knowledge sharing events and workshops, regional networks, depending on target audiences. Results will be communicated in the above-mentioned settings, and will also be shared via different outlets (e.g. website, print publications, newspapers, media broadcasts and social media).

401. The documentation and knowledge sharing activities will directly contribute to building government's, and IFAD's, knowledge base by generating evidence-based knowledge that improves the effectiveness and efficiency of their operations for greater outreach and impact. The envisaged learning outcomes, building on sound documentation practices, will drive the future project scaling up as well as serve as a basis for policy dialogue and project pipeline development.

402. The documentation and knowledge sharing activities will directly contribute to building IFAD's knowledge base by generating evidence-based knowledge that improves the effectiveness and efficiency of NEN's operations for greater outreach and impact. The envisaged learning outcomes, building on sound documentation practices, will drive the future project scaling up as well as serve as a basis for policy dialogue and project pipeline development.

403. **Scaling-up.** IFAD will pursue opportunities for scaling up results as a key priority. The development of the market-driven multi-stakeholder platform approach will be piloted by business groups and individuals. The approach, which will promote inclusiveness, will be underpinned by support to capacity development. This capacity development will be technical, managerial and organizational, and be complemented by investments in storage/cooling facilities (through matching grants) and productive infrastructure (productive water supply/last-mile roads). Given the limited funding envelope for this project, the approach will be tested in a limited number of thematic clusters in the northern mountainous region, but with build-in capability to replicate and eventually mainstream in national policy and practices. Scaling up will also be achieved by promoting financial partnerships with the private sector, including public, private, producer partnerships (4Ps) that will anchor the approach on a profitable platform ensuring sustainability and inclusiveness simultaneously. Moreover, by engaging local partners from the onset, IFAD will also expand core institutional-organizational spaces that will allow for domestically-led and -financed scaling up.

404. **Example of KM activities and plan.**

KM Activity	Type/Description	Responsible Unit	Time frame
Knowledge needs and gaps stakeholder analysis	Stakeholder consultation and analysis to be carried out to determine existing levels of knowledge of the different stakeholders (rapid review of knowledge and information flows, current good practices) and to identify their information and knowledge needs and gaps at (and between) all levels	PCU + service providers specifically selected through agreements with universities and other learning institutions (guidance by IFAD/ KMO)	No later than first three months of implementation
Creation of the RCTP KM working group	Set up the KM working group around key learning questions emerging from the needs assessment/ stakeholder consultation and analysis; IFAD/NEN KMO will provide basic KM on-the-job as well as distance training in developing a light KM framework for the duration of the project, including a communication and visibility plan on an annual basis.	RCTP M&E/KMC Specialist and relevant authorities, both at the Ministry and municipality level(and guidance provided by IFAD/NEN KMO)	Within first six months of implementation
RCTP KM and Communication framework and plan	Based on Stakeholder analysis and consultation outcomes, develop a full KM and communication framework for RCTP as well as the Annual KM and communication plan, building on the specific KM and communication activities proposed under project components 1 and 2	RCTP M&E/KMC Specialist (and guidance provided by IFAD/ KMO)	Within first six months of implementation
Link KM & M&E	Build effective learning processes into the project M&E system, and introduce a KM indicator in the M&E system to assess the number of knowledge products and their dissemination.	RCTP M&E/KMC Specialist	At the same time that the Monitoring system is set-up
Documentation	Use simple documentation tools and methods, such as: print, photography, audio and video; Document case	RCTP M&E/KMC Specialist and	Within Year I of implementation

	studies (success and failures); Support collection and initial analysis of data on the KM indicator to feed into a standardized database, and documentation of cases	relevant authorities, both at the Ministry and municipality level	
Communication and sharing	Use the documented best practices to communicate results in different settings, such as workshops, project website, print publications, learning exchanges, newspapers, media, etc., and adapt them to the targeted end users; Support in the production of knowledge and experience sharing; and Facilitate the dissemination of project results in different fora. Communication toolkits, relevant ICT mentoring and backstopping to be provided to the relevant project staff/partners.	Programme staff/partners with support of M&E/KMC Specialist	Within Year I and Year II of implementation
Knowledge based programme support, decision-making, scaling up and policy dialogue	Facilitate the reporting and presentation of lessons learned and good practices for incorporation in planning and policy formulation fora and support the internalization of lessons for scaling up and pipeline development; Decisions and policy informed by knowledge from implementation.	Programme staff/partners with support of M&E/KMC Specialist	Within Year I and Year II of implementation

Annex 1 – Annual Work Plan and Budget template

By Output: Activities, Sub-activities and Inputs	Physical targets				Calendar of activities												Responsible staff or partner	Provisional budget			Amount by Financiers					
	Output indicator	Annual Output target	Unit costs	Quantities	T1			T2			T3			T4				Cost in COSTAB	Cost estimate for the year	Expenditure category	IFAD	ASAP	GOM	Municipalities	Beneficiaries	
					J	F	M	A	M	J	J	A	S	O	N	D										

Annex 2 – Project Log-frame

Results	Indicators and targets				Means of Verification			Assumptions
	Indicators	Baseline data	MT	End (Y6)	Source	Freq.	Resp.	
Overall goal: To contribute to the transformation of smallholders' livelihoods in northern Montenegro, enabling them to become commercially competitive and more resilient to climate change.	1. Percentage decrease in rural poverty in supported municipalities compared to national rural poverty rate	Baseline data*	n/a	10%	Project impact survey Municipality statistics	At completion	M&E Officer	Initial and continued political commitment and support to project implementation. Macro-economic conditions remain stable or improve.
Development Objective: 2400 participating households register an increase in income of at least 30% by the end of the project implementation (Y6).	2. Number of participating households registering an increase in income of at least 30%	Baseline data*	500	2400	Project impact survey BSF records Farmers' diaries	At completion	M&E Officer	
Outcome 1: Improved commercial relations between smallholders, suppliers and buyers – supported by relevant public actors; and increased level of investments in the selected value chain.	3. Number of VC smallholders involved in the production of selected commodities	Baseline data*	1500	3000	Farmers' diaries BSF records Project outcome surveys	Annually, starting Y2	- VC Specialists - M&E Officer	Macro-economic conditions continue to be supportive for doing business. Smallholders' and VC actors' willingness to participate in selected value chains. VC suppliers' ability to respond to technical support requests by smallholders. Marketing potential for berries remains high.
	4. Percentage increase in the value of marketed commodities, by VC	Baseline data*	20%	50%	Farmers' diaries	Annually, starting Y 3	- VC Specialists - M&E Officer	
	5. Value of incremental investments in selected VCs (excluding project financing)	n/a	€0.5m	€2m	BSF records Project sector study	At mid-term and completion	- VC Specialists - M&E Officer	
Outcome 2: Enhanced resilience of smallholders' livelihoods to climate change through improved access to water supply systems and all-weather farm gate roads.	6. Number of households with improved access to climate resilient roads and water supply systems ^{(RIMS) (ASAP) 67}	Baseline data*	800	2000	Contractors' records Municipal staff records	Annually	- PCU Engineer - M&E Officer	Climate change patterns are according to current predictions. Continued fiscal space for GoM and municipalities to pay their contributions. No political interference in the choice of investments.
Outcome 3 – Lessons from project approaches and implementation are incorporated into national or municipal-level policies, strategies or investments.	7. Number of policies, strategies and investments influenced by project experience	n/a	At least 1	At least 3	Amended policy or project documents	Annually, after mid-term	M&E Officer	Continuing MARD's interest to support poor smallholders. Policy makers' willingness to learn from project experience
Outputs:								
Multi-stakeholder clusters established and	8. Number of functional clusters ^(A)	6	7	11	VC Specialists	Annually	VC Spe-	

⁶⁷ In the context of the RCTP, the main vulnerabilities of smallholders to climate change are all-weather access to market and to sustainable water resources. Thus this indicator will reflect the number of households for which climate resilience has increased.

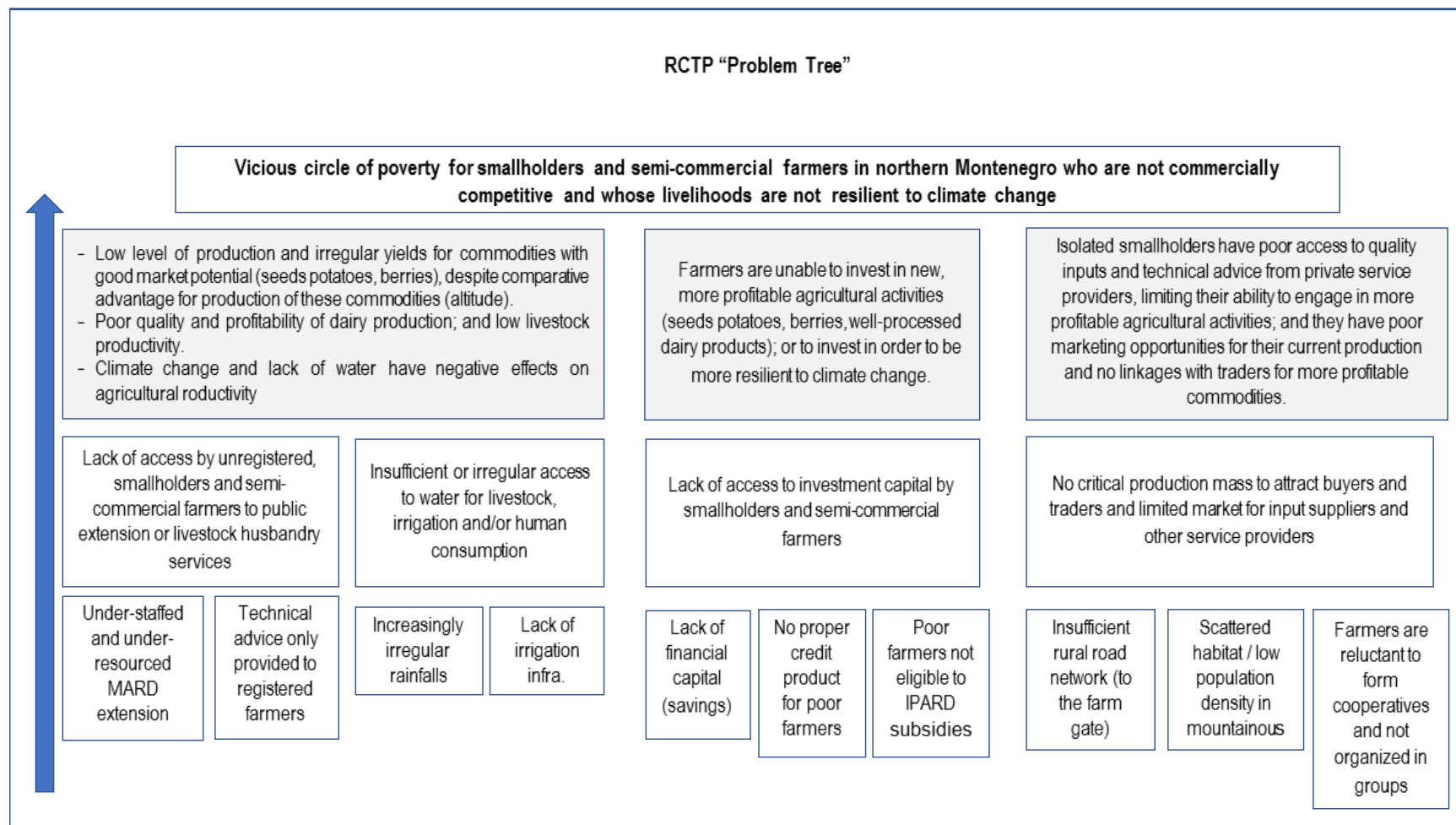
* Data to be filled once baseline survey is available

Results	Indicators and targets				Means of Verification			Assumptions
	Indicators	Baseline data	MT	End (Y6)	Source	Freq.	Resp.	
facilitated for four commodities*; and business or trading plans agreed between smallholders and suppliers/buyers.					records Cluster meeting minutes		cialists	
	9. Percentage of participating VC smallholders with an agreed business or trading plan*	n/a	80%	100%	BSF records	Six-monthly	BSF	
Strategic investment grants provided to value chain actors and for “quasi-public” goods.	10. Number of VCF grant recipients**	0	At least 300	At least 500	VCF manager records Minutes of VCF board meetings	Monthly	VCF Manager	
	11. Percentage of grant recipients meeting their first key performance criteria as defined in grant contracts*	0	80%	80%	VCF Manager records	Six-monthly	VCF Manager	
Project implementers, key Government stakeholders and smallholders provided with capacity development support.	12. Number of project implementers and Government staff trained in value chain and cluster development*	0	20	40	PCU training records	Annually	M&E Officer	
	13. Number of smallholders trained in business development* ^(RIMS)	0	1500	2500	BSF training records	Annually	BSF	
Rain-harvesting water structures and other water supply systems constructed or rehabilitated.	14. Number of water supply schemes newly constructed or rehabilitated	0	11	27	Contractors’ activity reports Municipal Engineers’ records	Monthly, starting from contract award date	PCU Engineer	
“Last km” farm roads rehabilitated or upgraded according to best standards.	15. Number of km of roads rehabilitated or upgraded ^(RIMS)	0	26	70				
Relevant knowledge products prepared and disseminated to key stakeholders.	16. Number of knowledge products produced and disseminated ^(RIMS)	0	At least 2	At least 5	– PCU records – PSC and KM working group minutes	Annually	M&E Officer	

** For these indicators, the number of male and female beneficiaries, and the number of “youth” (defined as a person below the age of 40), will be reported separately.

(A) A cluster will be assessed as functional if cluster meetings are organized at least 2 times per year and are well attended by a diversity of stakeholders. Detailed criteria will be defined in the M&E Manual

Annex 3 – Theory of change underlying project design



405. The chart on previous page represents the RCTP Problem Tree (as per the terminology used in the logical framework approach). This Problem Tree synthesizes the various problems - and the main causal relationships between these - affecting rural smallholders in northern and causing them, ultimately, to remain poor.

406. At the top of the chart, poverty and lack of smallholders' resilience to climate change is the main problem that RCTP was designed to address. To this end, the **theory of change** underlying the project design can be described as follows:

- **If the following goods and services are delivered....:**
 - Formation and facilitation of clusters of smallholders and poor farmers, input suppliers, traders, buyers, agri-business around four commodities with market demand and marketing potential.
 - Facilitation of bilateral meetings between individual buyers/traders and smallholders, so that they agree on business or trading plans
 - Provision of matching grants to value chain actors to invest in production, processing, storage, transportation or any strategic investments along the value chain.
 - Rehabilitation or upgrading of farm access roads,
 - Construction of rain-harvesting water structure and other water supply systems

- **... then, one can expect that the following results will be achieved...:**
 - The provision of matching grants will enable and stimulate capital investments in production and all along the value chain, where there are bottlenecks.
 - Clustering of farmers will help aggregate production, hence reducing transaction costs for buyers and traders and attracting demand for commodities that have market potential.
 - Suppliers will find new clients, and input supply will become more reliable for farmers, who will be able to access private service providers' technical advice against payment.
 - Improved farm-gate roads in strategic locations will remove the bottlenecks hampering the consolidation of clusters of producers; and they will reduce transportation costs for farmers and buyers, thus save time and money. Farmers will also become more accessible by public extension staff for the provision of technical advice or essential vaccination services; and they will become more resilient to climate change.
 - Improved access to water for livestock or irrigation during period of rain shortfalls will help improve animal productivity and agricultural yields; and farmers will become more resilient to climate change.

- **.... provided that the following assumptions, that cannot be controlled by the project, hold true:**
 - Macro-economic conditions continue to be supportive for doing business.
 - Smallholders' and VC actors are willing and interested to participate in selected VCs.
 - VC suppliers are willing and able to respond to technical support requests by smallholders.
 - Marketing potential for berries remains high.
 - There is no political interference in the choice of investments.

Annex 4: Draft Terms of Reference for the conduct of baseline survey

1) Background

- A) Project objectives and expected results
- B) Log-frame indicators
- C) Target groups and target area

2) Purpose

The proposed baseline survey aims at: (a) the collection of quantitative and qualitative information on the socio-economic conditions of potential project beneficiaries; and (b) the quantification of the initial baseline values for the project Log-frame indicators (impact and outcome level).

Baseline data collected will be primarily used, at mid-term and project completion, as a reference for the measurement of project effectiveness and impacts. They may also be used to inform the planning of certain project interventions, or the process of beneficiaries' selection.

Among others and in relation with the specific project objectives and target groups, the baseline survey shall provide information on the following:

- General socio-economic situation in targeted municipalities (school enrolment, literacy rate, access to healthcare, poverty rate, etc.).
- Households' characteristics (number of members, age, sex).
- Baseline information/number for each of the four priority commodities/VCS
- Ownership of, and access to productive/arable land, irrigated land, forests (ha owned, rented, actually utilized).
- Agricultural production: Key crops grown by households (number of ha grown, average yield/ha) and income derived; Current level of production of berries, potatoes and seeds potatoes.
- Livestock production: Types and number of animals owned by households; number of animals sold/year; Dairy production (type, quantities produced and sold); Annual income from livestock and dairy.
- Other sources of income; Total household annual income; Total farming income; Number of income contributors.
- Key assets owned.
- Access to quality inputs.
- Access to agricultural extension or livestock husbandry services.
- Access to domestic water, irrigation water and water for livestock.
- Access to financial capital and credit.
- Access to roads and state of roads.
- Access to markets, traders and buyers; Access to market information.
- Effects of climate change on livelihoods and household-level adaptation strategy.
- Key drivers of rural poverty.

Since there are often losses in food transformation process, the RCTP could attempt to reduce part of these losses (in the VCS/commodities it will focus on). The baseline survey could try assessing post-harvest losses (establishment of a baseline, information might be available with Universities or Universities might help collecting the information) and the RCTP could later on monitor progress made in reducing post-harvest losses throughout the modernization process.

3) Methods of data collection

After a review of the PDR, the PIM and other relevant documents, such as the MARD sector documents or municipal statistics, the Consultant shall prepare a detailed methodological note highlighting

the sampling strategy, process and tools for data collection, including survey questionnaires and interview guides.

The following methods shall be used:

Households' survey: A quantitative survey will be carried out among a representative sample of rural households living in the targeted municipalities. The sample shall be representative of the key characteristics of future project primary, secondary and tertiary beneficiaries in targeted municipalities. The purpose will be to collect quantitative data on rural households' livelihoods, income and socio-economic status, as well as on the extent of their access to essential production inputs, knowledge and markets.

One-on-one interviews with key informants: Semi-structured, open-ended interviews will be conducted with key informants (village or community leaders, municipal staff) in order to gain an in-depth understanding on specific aspects (e.g. drivers of poverty, production and marketing constraints, production levels).

Focus group discussions: In order to better comprehend the complex issue of resilience to climate change, semi-structured interviews will be organized with groups of producers sharing common characteristics (E.g. groups of dairy producers, women, crop producers).

Use of secondary data: A thorough review of available secondary data for targeted municipalities will be carried out in order to provide background, macro-level information on targeted municipalities (access to education, health, agricultural production and sales).

4) Sampling strategy and framework

Ideally, the survey should be conducted among a sample of actual beneficiaries, but the process for their selection will last over two years, at least. Thus, at the time of baseline survey, the exact list of Component 1 or the location of Component 2 infrastructure will not be known. The Consultant will suggest an appropriate sampling strategy and sample size, keeping in mind the estimated size of potential beneficiary households and the various characteristics of the targeted municipalities (e.g. in terms of poverty rate, population size or agro-ecological potential). IFAD usually recommends that a sample of 900 households (30 households in 30 localities) be followed. Depending on the extent of homogeneity of target groups' socio-economic characteristics and agro-ecological potential across the targeted municipalities, the consultant will consider the need to apply a purposeful, stratified cluster sampling method, or if other sampling methods appear more appropriate.

5) Key tasks to be performed

Before field work:

- Conducting a review of the IFAD Guide for Impact Surveys, and use these guidelines for the development and implementation of the RIMS impact survey.
- Preparation of a draft detailed methodological note: This document will describe, among others: (a) the proposed methodology, processes and tools; (b) the sampling framework (including specific on the design methodology and sample size calculation); (c) the field implementation plan with protocols for the enumerators and supervisors; (d) a calendar or activities; (e) Survey questionnaire and interview guide; and (f) survey report outline.
- Finalization of the methodological note based on feedback from the PCU and IFAD.
- Recruitment, training and coaching of enumerators and supervisors.
- Pre-testing and finalization of the questionnaire and interview guides.
- Database development.

In the field:

- Coordination with local partners and the PCU.
- Notification to partners and communities.
- Organization of survey logistics (material, transportation, lodging, etc.).
- Sample households' selection based on agreed sampling method and identification of key informants in sample villages/localities.

- Administration of the questionnaire and data collection through KII and FGD.
- On-site, quality control of data by supervisors before entry in database (if questionnaires are completed manually) or before uploading to database (if using electronic tablets).
- Tabulations and pre-analysis of FGD and KII responses

After field work:

- Data entry in database (if not using electronic tablets) and quality control.
- Data analysis and preparation of draft report
- Finalization of survey report based on PCU and IFAD comments
- Delivery final report and electronic files and raw data
- Presentation of final survey results to the PCU

6) Key deliverables

At the end of the assignment, the following products will have been delivered by the Consultant:

- Detailed methodological note
- Research questionnaires and interview guides
- Draft survey report
- Final survey report
- Five printed and 2 electronic copies on CDs of the final report, including raw data and database.

The Survey Completion Report shall present the results of the quantitative survey using charts, tables and narratives according to the agreed outline, while findings from FGD, KII and secondary data will provide contextual information and help deepen or complement survey findings. It shall also include a detailed description of the procedures and processes used during the field work, the description of problems faced during the exercise (if any) and the solutions adopted to overcome these issues. The raw data collected shall be annexed to the report and will also be submitted electronically.

7) Consultant selection

The selection of the consultant will be according to the agreed procurement plan. At the minimum, the consultant or team leader should have the following profile:

- A University Degree in a Social Science or a related field from an accredited university.
- At least seven (7) years of experience in the conduct of development research, socio-economic and impact surveys.
- At least seven (7) years of practical experience in conducting qualitative surveys, preferably with a background in rural development.
- Specific experience in data and information analysis and report writing.

Prior experience in conducting baseline and impact surveys for UN agencies or the EU will be a plus.

Annex 5 – Guidelines for RIMS reporting

407. IFAD has established a corporate results' monitoring system, the "Results and Impact Management System" (RIMS), which consists of the systematic tracking, for its entire portfolio of projects, of annual achievements against a set of standard output indicators (called "level 1" indicators), outcome indicators (called "level 2" indicators) and outreach indicators. Annual reporting is mandatory for all IFAD-funded projects.

408. The IFAD *First- and Second Level Handbook*⁶⁸ provides the complete list of RIMS indicators and associated definitions, not all of whom, however, are relevant for the RCTP. The tentative⁶⁹ list of IFAD RIMS indicators that are relevant to the project, partly included in the project Logframe, is provided below. This list will need to be revised once the new RIMS indicators will be published by IFAD.

Project Logframe indicator	Corresponding RIMS indicators	Comments
Outreach:	Outreach:	
– Number of VC smallholders involved in the production of selected commodities*	– Households receiving project services*	<i>Given that a number of smallholders benefiting from Component 1 services will also benefit from Component 2 investments, careful monitoring will be required in order to avoid double-counting, and these households should only be counted once when reporting on outreach.</i>
– Number of households with improved access to roads and water supply systems*		
Output level:	Level 1 indicators:	
– Number of VCF grant recipients	– People accessing development funds – Enterprises accessing facilitated financial services	<i>There is no RIMS indicator to capture grants' recipients (only borrowers and savers are included). Smallholders receiving grants will be reported under the indicator "people accessing development funds", while suppliers or agri-businesses will be reported under "enterprises accessing facilitated financial services"</i>
– Number of smallholders trained in business development*	– People trained in business and entrepreneurship	
– Number of water supply schemes newly constructed or rehabilitated	– Livestock water points constructed or rehabilitated – Rainwater harvesting systems constructed or rehabilitated – Fish ponds constructed or rehabilitated	<i>The project M&E system will report separately on the various types of water supply schemes constructed.</i>
– Number of km of roads rehabilitated or upgraded	– Roads constructed/rehabilitated	
– Number of households with improved access to roads and water supply systems	– Number of smallholder households supported in coping with the effects of climate change	

⁶⁸ The RIMS guidelines are available at: <https://www.ifad.org/documents/10180/9c36cfc5-28d3-401e-b30c-acec8d6acd00>

⁶⁹ At the time of project design, the RIMS indicators (output and outcome) were being revised, and the list of RIMS indicators provided in this annex will need to be revised once the new list of RIMS indicators will be published by IFAD. The RIMS methodology will also be changed: the future RIMS will no longer be concerned with the measurement of impact and of "third level" indicators. These upcoming changes were anticipated for RCTP, and the project Logframe does not include the traditional RIMS impact indicators.

409. For each relevant RIMS indicator, annual reporting to IFAD will consist in the reporting of output-level achievements against planned, annual targets (as identified in the AWPB); and in the reporting of cumulative achievements to date compared with global targets (as identified in the project Logframe). RIMS data will be reported to IFAD done using the template shown below⁷⁰.

RIMS table template for annual reporting

Project indicator	Corresponding RIMS indicator	Unit	Annual target			PDR / Logframe target		
			Planned target	Achieved target	% target met	Global target	Cumulative achievements	% target met

⁷⁰ The Excel file will be sent by IFAD to the PCU upon project start

Annex 6 – Annotated outline for Project Completion Report

Map of the project target area

Table of Contents

List of acronyms

Acknowledgements

Project at a Glance

A table including key quantitative information is presented at the beginning of the document.

Executive Summary

The Executive Summary highlights the key findings and conclusions of the completion review regarding project relevance, effectiveness, efficiency and sustainability. The most significant lessons learned from project implementation, main implementation challenges and main success factors are summarized. The Summary also highlights the prospects for post-project sustainability strategy.

A. Introduction

The introduction presents the objectives of the project completion review, the main process followed during the completion review, key dates of the in-country work – including date of the final wrap-up meeting - and the key persons met by the mission (the composition of which is provided in a footnote). It introduces the project rationale at the time of project design and any significant changes in the country context that may have occurred since the project appraisal — political, economic and climatic. Delays in project start-up or implementation and key project dates (start-up, Mid-Term Review, last supervision mission) are also presented.

B. Project description

B1. Project context

This section describes the context at the time of project design, that is the main socio-economic and political conditions that were prevailing in the country and the project area when project design was undertaken. It also describes the project target area (e.g. natural settings and natural resource base, livelihood means, socio-economic and demographic characteristics).

B2. Project objectives

This section presents the project's goal, purpose, outcomes and main outputs, with reference to the project Logframe. The main problems that the project designers intended to address are also described and discussed in this section. Any modifications to the original design (as per the Project Design Report) and rationale for these changes are presented and discussed. If the design includes any innovative features, these are also described.

B3. Implementation modalities

The section presents the project budget, project financiers, implementation partners, and implementation strategy and modalities as originally planned, and any modification that may have occurred in the course of implementation. If the design includes innovative implementation arrangements, these are also described.

B4. Target groups

The section presents the necessary details related to the project target groups – their characteristics, livelihoods sources, main problems faced, etc. – and describes the socio-economic setting of the project target area. The targeting strategy proposed by project designers is presented. If relevant, a description of the specific conditions of vulnerable groups and of gender roles or gender relations is also provided here.

C. Assessment of project relevance

C1. Relevance vis à vis the external context

This section provides an assessment of the relevance of project objectives and activities in terms of: (a) the national strategies and policies for agriculture and rural development and poverty reduction, (b) the key challenges and opportunities for poverty reduction prevailing at the time of project design, (c) the priorities and needs of the project target groups at the time of project design and at completion. The section also considers whether the major design features of the project were appropriate in the context of the socio-politico-economic conditions prevailing at the design stage.

The section also assesses the extent to which the initial project design has remained relevant or if any significant changes in the external environment or IFAD's or Government policies have had implications on its relevance in today's context.

C2. Internal logic

This section examines the extent to which the design was based on an in-depth problem analysis and the soundness of the project's interventions logic or the "theory of change" that underlies project design. It also assesses the quality of the Project Logframe, its vertical and horizontal logics and the appropriateness of all elements in the Logframe, including assumptions made and indicators selected.

It also analyses whether proposed project activities were commensurate to achieve proposed objectives and realistic given project budgetary resources and implementation timeframe. It also assesses the extent to which the project implementation modalities were appropriate for an efficient, cost-effective project implementation and if the budget allocated was sufficient to produce expected results.

C.3 Adequacy of design changes

The section presents the changes made in the course of project implementation in the initial project design or implementation modalities, and discusses the relevance and appropriateness of such changes. The section also discusses the reactivity of main stakeholders and the extent to which they took timely, adequate action with regard to changes in the environment.

D. Assessment of project effectiveness

As an introduction, a table presents the project results' framework with achieved quantitative targets.

D1. Physical targets and output delivery

With specific reference to output Logframe indicators, this section presents the physical outputs achieved during project implementation and assesses the extent to which all quantitative targets were met. The section also assesses the quality of the processes that were followed for achieving these outputs and the extent to which these outputs meet expected quality standards or norms and the needs of intended target groups. It also assesses compliance with schedules and timetables for output delivery and includes a comparison of the results achieved with the targets set out in the PDR, MTR and AWPB. The main internal or external factors which may have affected output delivery are also highlighted, as well as the factors that have facilitated project implementation.

D2. Project outcomes and impacts

With specific reference to outcome and impact Logframe indicators, this section assesses the extent to which the immediate project objectives (or project purpose) were met, both in terms of quality and scope; and the contributions made by the project to the attainment of the overall project goal.

All findings and conclusions related to project impact are to be organized around the relevant IFAD impact domains, namely: (a) Households' incomes and assets; (b) Food security; (c) Human and social capital and empowerment; (d) Agricultural productivity; (e) Access to markets; (f) Natural resources and the environment; (g) Climate change adaptation; (h) Gender equality and women empowerment; (h) Institutions and policies.

Findings and conclusions related to outcomes are to be clearly anchored in a sound analysis of the project design "theory of change" (explaining how the achievement of outputs may have led to

specific outcomes) and are to be evidence-based (through the use of quantitative and qualitative data and comparisons with pre-project situation or control groups). The main external circumstances that may have played a role in observed changes are also presented and analyzed, together with the main success factors or reasons of failure.

As a conclusion, the section presents the overall mission findings and conclusions regarding the overall project impact.

D3. Targeting and outreach

This section presents the number and typology of beneficiaries that were reached out during project implementation (in terms of social groups, gender, income status, net asset holdings, occupation, etc.) and identifies the specific benefits that they have derived from participation in project activities. A description of indirect project benefits and indirect project beneficiaries is also presented.

The section also assesses the extent to which the initial targeting strategy, as designed and implemented, was successful in reaching out to the intended target groups. The specific measures implemented to reach out to specific groups, such as vulnerable groups, are described together with the specific project activities that were targeted to them.

D4. Innovation, replication and scaling up

This section describes the characteristics of the innovation(s) promoted by the project, how these were pilot-tested and what were the results or benefits. It examines what were the key success factors for successfully-piloted innovations or the factors that led to failure.

The section also describes the steps that have been already taken by the Government or other partners in order to replicate, adopt or scale-up successful interventions, implementation approaches or innovative features implemented or tested during project implementation. Alternatively, the section examines the potential for wider replication and adoption of successful innovations and the necessary conditions for this to happen.

E. Assessment of project efficiency

E1. Project costs and financing

The section presents the annual project allocations and expenditures since project start, by Component, while detailed tables showing final expenditures by Cost Category are presented in annex. An assessment is made of the adequacy of the financial projections included in the original design, highlighting significant cost deviations from original estimates and the reasons for such deviations. The timeliness and adequacy of financing contributions from IFAD, ASAP, government, beneficiaries, domestic and/or external co-financiers is also described. Significant revisions to the financing arrangements are noted. The section also highlights any evidence of cost savings made during implementation, or of expenditures that could have been avoided or minimized.

E.2 Quality of project management

The section reviews the quality of project management, its responsiveness to changes in the environment or the recommendations made during supervision missions. The adequacy of staffing within the PCU and staff motivation are also examined, together with the quality of the various project management tools (AWPB, Procurement Plan, M&E Plan) and systems (MIS) that were put in place during project implementation. The ability of the Project Steering Committee to resolve problems and guide implementation is also considered.

The section also includes an assessment of the performance of the project monitoring and evaluation (M&E) system, highlighting if this system has produced adequate and reliable information to monitor project implementation performance and measure project outcomes and impact. The extent to which the M&E system was used for planning and decision-making purposes is also analyzed. The quality and reliability of the RIMS data is also discussed. The section also assesses the extent to which a sound knowledge management strategy was implemented.

E.3 Quality of financial management

This section reviews the quality of financial management, as reported in annual supervision mission reports and as observed by the mission. Issues related to flow of funds, procurement, bookkeeping

or the timely preparation of quality financial reports are highlighted and their consequences analyzed. The section also reviews the extent to which sufficient efforts were deployed during project implementation in order to solve any particular issue related to financial management.

E.4 Partners' performance

The section examines the performance of the various implementing partners (other than the PCU and IFAD which are examined in E2 and E4 respectively). It examines in particular the performance of the grass-roots institutions involved in daily project activities, their capacities, motivations, strengths and weaknesses and the capacities of local-level or deconcentrated government agencies involved in project implementation. The capacities and performance of the main service providers are examined; and the timeliness of service delivery, value for money, adherence to schedules and contracts are considered.

The section also examines the contributions of the Borrower to project design and implementation, its compliance with the covenants of the loan agreement and due follow-up of the recommendations of supervision and implementation support missions. Other areas to be explored are also the timely provision of adequate counterpart funding and adherence with decisions taken (e.g. changes in policies or the legal framework).

The section also assesses the performance of project co-financiers, including the timely provision of funds in the level expected. Their support to facilitate project implementation, supervision or oversight (e.g. harmonization of reporting requirements or financial management practices) is also considered.

E.5 Quality of supervision and implementation support

This section critically reflects on the support provided by IFAD throughout project implementation, on the relevance and timeliness of guidance and solutions proposed to implementation bottlenecks and on the flexibility in dealing with changes in the project environment, including amendments to the loan agreement. Measures taken to adjust the project in response to inadequacies in the original design or to changes in the external environment (policy or institutional changes, natural disasters or external shocks) are also assessed.

The section also discusses IFAD's responsiveness and timeliness of response with regard to procurement reviews, AWPB reviews and loan administration. The quality and usefulness of IFAD-led supervision missions (frequency, team composition, relevance of recommendations) is also examined. The section also assesses the quality to any implementation support, or capacity-building, provided in the course of implementation by IFAD.

E.6 Project internal rate of return

This section presents an analysis of the actual project internal rate of return and compares it with the IRR estimated at the time of project design and appraisal, based on actual costs, changes made during implementation and changes in economic prices and market conditions.

In case the IRR was not estimated at the time of project design and at a minimum, this section presents a costs-benefits analysis for all the investments realized by the project under each main component, showing actual costs and inputs (capital costs, operation and maintenance costs, labor costs, taxes), value of traded goods and non-traded goods, estimated economic benefits (revenues, value of self-consumed production) and estimated social benefits.

The section also presents conclusions regarding the "inputs to outputs" cost ratio using comparable local or national benchmarks, the "loan costs per beneficiary" and the "administrative costs per beneficiary".

F. Assessment of sustainability

This section presents conclusions regarding the prospects for the continuation of project activities or benefit streams after project closure and the durability of changes and impacts brought about by the project. The analysis also examines if actual and anticipated results will be resilient to risks and all the factors influencing sustainability. The various dimensions of sustainability are taken into account: political (government commitment, stakeholders' interests); social (social acceptability, social capital, community ownership); institutional (policy and institutional implications); environmental (positive/negative contributions, resilience to external environmental shocks, suitability of

agricultural approaches in the context of climate change); technical (rural producers' capacities, appropriate technologies, access to inputs) and economic (market conditions, prices).

The section also identifies a suitable hand-over strategy and the conditions necessary for post-project sustainability. The key actions and steps required in order to ensure post-project sustainability, and the various responsibilities, are also identified.

G. Lessons learned and knowledge

The section focuses on the main learning gained from project implementation or the specific lessons that have significance beyond the project and that the Borrower or IFAD should retain for future use or that can be relevant to other organizations. This new knowledge or understanding may be positive, as in a successful experiment, or negative, as in a mishap or failure.

All lessons learnt presented should be *significant* in that they have a real or assumed impact on operations; *valid* in that they are factually and technically correct; and *applicable* in that they identify a specific design, process, or decision that reduces or eliminates the potential for failures and mishaps, or reinforces a positive result.

H. Conclusions and recommendations

The section presents overall conclusions regarding overall project performance, highlighting key project's achievements and shortfalls and key reasons for success or failure. It also describes key recommendations related to post-project sustainability and future IFAD's or Borrower's, programming.

Appendix 7: Fiduciary management and disbursement arrangements

A. Inherent risks: country issues, entity risks and project design

410. **The country risk is rated as Medium.** Transparency International's Corruption Perception Index ranked Montenegro 61st out of 168 countries in 2015 (unchanged compared to 2014) with a score of 44/100 (42/100 in 2014). In line with the overall governance indicators that serve as a foundation for anti-corruption performance, Montenegro has been performing stable efforts on a range of corruption indicators. However, the country needs further improvements to catch up with the EU standards. The 2013 PEFA report highlighted progress in several areas compared to the 2009 report. These progress were related to aggregate revenue outturn, expenditure payment arrears, classification of the budget, management of cash, debt and guarantees, procurement controls, competition and value for money and use of national procedures for international aid. The report noted some major weakness for the following indicators: inter-governmental fiscal transparency, unreported operations, tax collection, annual financial statements and internal controls (non-salary).

411. **Regarding the audit performance.** The Supreme Audit Institution (SAI) audits all public sector entities on a rotation basis, covering about 66% of all expenditure in 2012. SAI's recommendations are routinely endorsed by the Parliamentary Committee on Economy, Budget and Finance. Montenegro's SAI is a member of the International Organization of Supreme Audit Institutions-INTOSAI and has endorsed international standards and practises. The PEFA report concluded that "it appears that there is a strong GoM commitment to PFM reform, which is a necessary part of the requirements for accession to the EU."

B. Financial management risk assessment

412. To determine the project specific control risks, a Financial Management (FM) risk assessment of the RCTP and its fiduciary arrangements has been completed at a first stage. This assessment concluded that the project financial management arrangements and internal control systems will satisfy IFAD's minimum requirements to provide accurate and timely information on the progress of project implementation and appropriate accountability for funds. The residual financial management risk is rated as **low**, after the implementation of appropriate risk mitigation measures to ensure accountability of funds such as competitive recruitment of fiduciary staff, training and support in FM and procurement at start-up and during PY1, PIM and software as disbursement conditions.

C. Proposed FM and disbursement arrangements

Financial management organization.

413. The RCTP financial management team will be part of the PCU, which will be fully embedded and located within the MARD, and vested with financial and administrative autonomy. The financial team will be composed of finance and procurement officers, seconded from MARD staff or hired through a competitive process. In both cases, there will be two types of contract for PCU staff: (i) The staff that cannot be sourced from MARD will be *competitively recruited* on contracts that are annually renewable, upon satisfactory performance; and (ii) subject to IFAD no-objection on proposed profiles, GoM will *second* competent staff to the PCU ensuring that relevant competencies are identified and that full-time availability is guaranteed.

414. **Accounting and financial reporting arrangements.** The borrower/recipient will open two EUR denominated Designated Accounts (DAs) for the IFAD loan and ASAP grant in a commercial bank acceptable to IFAD in order to receive loan and grant resources. The authorized allocation will be equal to approximately 12 months of project expenditure, from both IFAD and ASAP resources

415. The State Treasury under the MoF maintains the accounts of general budget public institutions and executes their payments. For that purpose, MoF has developed a web-based Public Expenditures and Accounting Information (the SAP system). PCU payments from IFAD loan, ASAP grant and

GoM counterpart contribution will be processed through the MoF system and in EUR. The SAP system includes budget, procurement and contract management, monitoring and evaluation modules, etc. However, the system will not enable the PCU to directly generate financial reports, withdrawal applications and statements of expenditure as per IFAD reporting requirements, which would lead to the use of an Excel based financial reporting mechanism. Consequently, as conditions for the first disbursement, the project will (i) acquire and configure a financial, accounting and operational software to support all the transactions, budget and cash forecasts analysis, operational and financial dashboards and (ii) prepare a draft Project Implementation Manual, acceptable to IFAD, including financial, accounting and administrative arrangements for project activities. At the beginning of each fiscal year, the project will submit to IFAD an annual work plan and budget (AWPB) showing all activities planned during the given year, disaggregated by quarter and by financier.

416. All accounting policies and procedures related to the project will be clearly documented in the financial, accounting and administrative procedures manual, which will make reference to the MoF system manual. The PCU will record eligible expenditures following international accounting standards (cash basis). The PCU will submit monthly financial reports analysing cumulative disbursements, AWPB execution, treasury position and forecast, implementing partners' financial situation, procurement plan execution and any salient administrative issues.

417. Interim unaudited financial reports for all financing sources (IFRs) will be submitted to IFAD no later than 45 days after the end of each calendar quarter during the project implementation period. A comprehensive, tabulated review of planned activities and their cost is sufficient. A few pages with analytical comments should be added, listing key achievements, major deviations from the AWPB, implementation issues, resource constraints, and proposed solutions. The Interim Financial Reports should reflect all project activities, financing, and expenditures, including counterpart funds. They could also reflect any substantive contributions in kind such as labour and accommodation.

418. Annual reports shall be prepared. The nature of annual reports is different from that of quarterly reports. In addition to a simple review of implementation progress, this requires analysis by project management. A full picture of project resources, achievements of the past year and since the beginning of the project, as well as annual and cumulative expenditure need to be presented. Analysis is required of successful approaches and outputs, failures and constraints, performance of implementing partners, and whether progress is being made towards achieving project objectives. Such analyses should lead to conclusions about the effectiveness of project strategies, the need for modification of the logical framework, and planning for the following year. The annual reports should also reflect contributions in kind such as salaries and office space.

419. **Flow of funds.** A chart of the proposed flow of funds arrangements for the project is shown in Annex 1 to this Appendix.

420. **Counterpart funding.** The GoM contribution to project costs will be in the form of tax exemptions, cash contributions to cover certain activities, and in kind contributions (mainly office space, utilities, salaries). Payment of counterpart expenditure will be managed directly by State Treasury.

Audit.

421. The Borrower, through the PCU, will appoint independent auditors acceptable to IFAD, under terms of reference cleared by IFAD, and in line with the IFAD Guidelines for Audits. The costs associated with the independent auditors will be financed from the proceeds of the IFAD loan under the "Recurrent Costs" category of expenditures. The contract for the audit will be awarded during the first year of project implementation and thereafter, extended for a maximum of two years with the same independent auditor, subject to satisfactory performance and IFAD clearance.

422. The Borrower, through the PCU, will use the IFAD Guidelines for Project Audits in preparation of audit contracts and terms of reference (TORs). The auditors will give a separate opinions on financial statements, designated accounts and SOEs on each project account with respect to the funding mechanism, the use of project resources, the adherence to procurement rules, and the accountability of project participants. The auditors will also provide a management letter addressing the adequacy of the accounting and internal control systems. The Borrower, through the PCU, will submit the above-mentioned certified items to IFAD not later than six months after the end of the fiscal year to which they relate. The Borrower, through the PCU, will also submit to the Fund the reply to the management letter of the auditors within one month of receipt thereof.

423. In addition, the State Audit Institution will be encouraged to include RCTP in their annual audit programme. In addition to external audit activities, the internal audit unit of MARD will include the audit of the project's internal controls system in its annual work plan for the period 2019-2022.

424. **Internal controls.** All internal control mechanisms will be detailed in the financial volume of the PIM, to be prepared before disbursement. IFAD will be requested to provide no-objection on the PIM.

425. **Budgeting.** All project activities for all components and subcomponents will be included in an AWPB. The AWPB will indicate which budgeted expenditures are intended to be financed from each financing source (IFAD loan, ASAP grant, counterpart funds and beneficiaries contributions). Budgets will be in a format that includes the quarterly financing requirements for each financier separately.

426. The approved budget will be incorporated in State Treasury Strategic Planning and Budget Systems in accordance with government budgetary charts of accounts. Management Information System will include a module that will allow for budgeting that facilitates tracking of actual against budgeted expenditures by financing category, component and AWPB activity. To facilitate course correction for variance from budget, a monthly project management meeting will be conducted to review the financial performance against the budget and to determine which actions are required.

D. Anticorruption and good governance framework

427. The primary responsibility of detecting fraud and corruption lies with the borrower. However, the project should note that IFAD applies a Zero Tolerance Policy towards fraudulent, corrupt, collusive or coercive actions in projects financed through its loans and grants. "Zero Tolerance" means that IFAD will pursue all allegations falling under the scope of this policy and that appropriate sanctions will be applied where the allegations are substantiated. IFAD shall take all possible actions to protect from reprisals individuals who help reveal corrupt practices in its project or grant activities and individuals or entities subject to unfair or malicious allegations. Given IFAD's Zero Tolerance described above, it is important that the staff and all stakeholders of the project are familiar with IFAD's as well as national anticorruption policies and whistleblowing procedures. The IFAD anticorruption policy is available on the IFAD website at www.ifad.org/governance/anticorruption/index.htm. The IFAD website also provides instructions on how to report any alleged wrongdoing to the Office of Audit and Oversight (<http://www.ifad.org/governance/anticorruption/how.htm>).

428. The dissemination of IFAD's anti-corruption policy amongst project staff and stakeholders, as well as the adoption of IFAD procurement guidelines for RCTP procurement, should reinforce the use of good practices. In addition, RCTP will promote good governance through the involvement of municipalities and beneficiaries in (i) the preparation of the annual work plans and budgets, (ii) the procurement process at community level, and (iii) the monitoring and evaluation of project activities.

E. Supervision and implementation support plan (Fiduciary aspects)

429. In light of the risk assessment, in the first two years of implementation the supervision plan of project will especially focus on the following actions:

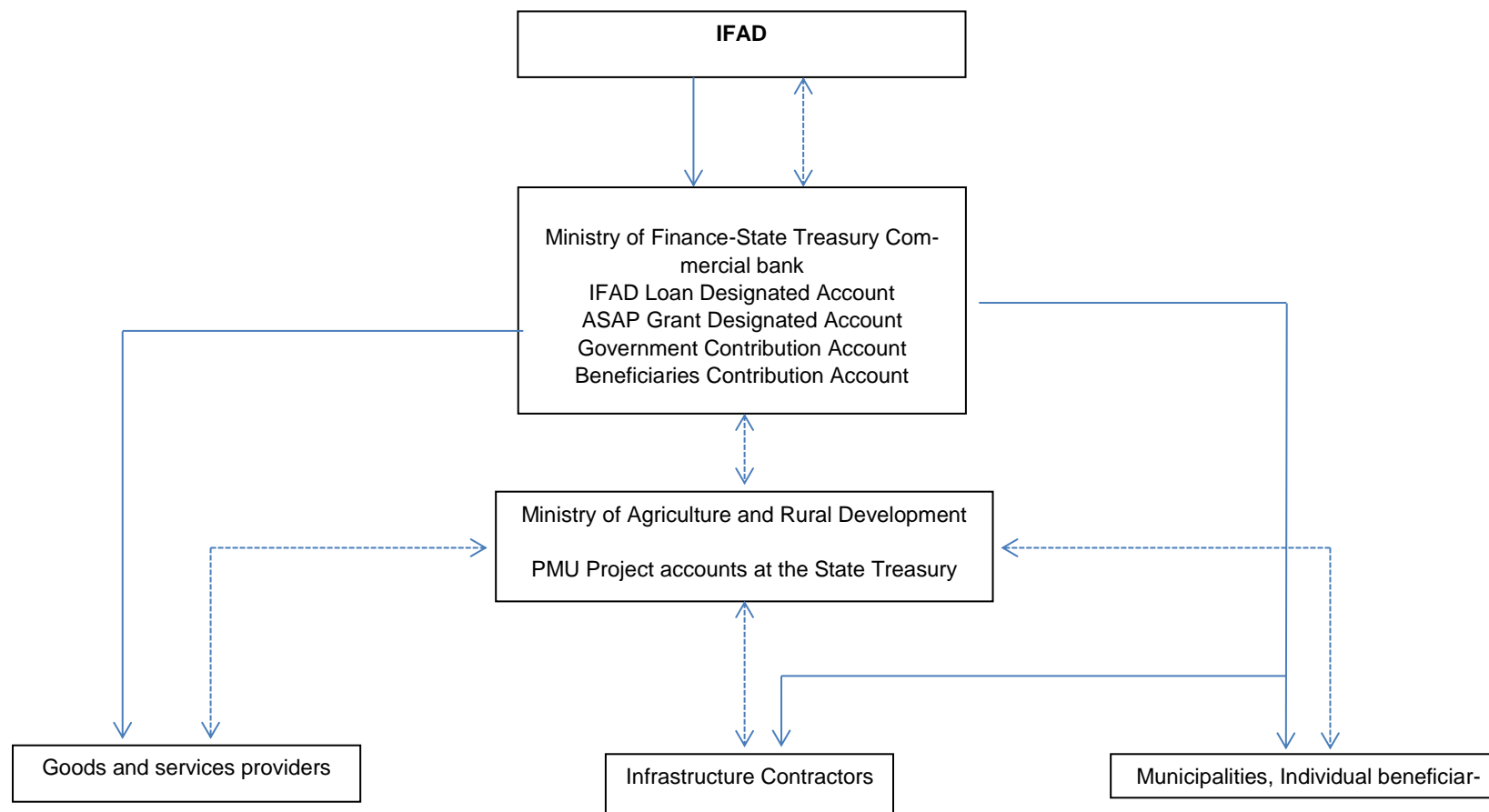
- At least two on-site visits that will involve inter alia visits to sites where civil works were done, to beneficiaries and updating the FM risk assessments.
- Detailed review of adequacy of the staffing arrangements.
- Detailed review of the FM arrangements in the PIM, including relevant policies, guidelines and criteria with regard to all activities.
- Detailed review of the financial and accounting reports produced by the system and the use of budget controls by the PCU.
- Detailed review of the fixed asset register.
- Detailed review of records management, back up and the use of the Statement of Expenditure (SOE) procedure and applicable SOE-thresholds (adequacy of supporting documentation).

- Follow-up on work performed by the Internal audit department and the external auditors.
430. The supervision process will be complemented by desk review of progress and financial reports, the project's annual financial statements, internal audit reports, and annual audit reports.

F. Taxation

431. IFAD loan and ASAP grants proceeds cannot be utilized for the payment of taxes.

Annex 1. Flow of Funds



→ Cash flows
 - - - - - Flows of information, approvals on implementation

Annex 2. Project Control Risk – Summary

Risk Category	Initial FM Risk Rating (H/M/L)	Proposed Risk Mitigating Measures	Residual FM Risk Rating (H/M/L)
Inherent Risks			
<u>Country Level</u>			
TI rating have lowered putting Montenegro at 61/168 countries in 2015.	Medium		Medium
<u>Entity and Project design</u>			
First IFAD project in the country and entire unit dedicated to the project in the technical ministry.	Medium	PCU staff partly selected competitively from the local market and partly seconded by MARD. IFAD will provide guidance and assistance (particularly in 1 st year of implementation) on FM and procurement	Medium
Project Control Risks			
<p>1. <u>Organization & Staffing</u></p> <p>A. Institutional and organizational aspects due to change on Public entities budget requirements may result in coordination problems, flow of information bottlenecks, reporting delays and disbursement effectiveness.</p> <p>B. The matching grants may be used by beneficiaries for other purposes than those intended during the Project Implementation or directed to elite capture.</p>	High	<p>a) Finance and Accounting supervisor to be recruited.</p> <p>b) Staff ToRs (drafted in PDR) to be cleared by IFAD before recruitment and/or secondment.</p> <p>c) All Finance Team of PCU will be required to complete FM training on IFAD procedures and provide certification.</p> <p>d) The beneficiaries financed by the project must respect eligibility criteria and guidelines of matching grants stated in the PIM and approved by relevant committees. Complaint handling mechanism for community members will be introduced and monitored centrally by PCU and internal controllers.</p>	Medium
<p>2. <u>Budgeting</u></p> <p>A. Timely submission and coordination with the different implementing agencies/partners will be challenging.</p> <p>B. Under spending, absorbing capacities and unrealistic budgets.</p>	Medium	<p>a) Budget preparation and coordination will remain with PCU.</p> <p>b) To ensure that timely inputs are received, the project Director will initiate the process 3 months before budgets are due.</p> <p>c) To ensure a realistic budget, deliverables on previous budgets will be reviewed by the technical and financial teams; major variances will be investigate regularly, and corrective actions will be documented.</p> <p>d) Budgets to include all sources of financing separately and to show estimates by quarter.</p> <p>e) Interim financial reports showing progress against budgets to be submitted to IFAD quarterly; IFAD will provide the necessary support remotely and during field visits.</p>	Low

<p>3. <u>Funds Flow & Disbursements</u></p> <p>A. IFAD funds flow through Central Bank and GoM through MoF System monitored by the State Treasury</p> <p>B. Implementation delays due to lack of knowledge of IFAD procedures and limited abilities to align forecast liquidity needs with designed categories.</p>	<p>High</p>	<p>a) Budgeting issues will be mitigated, thereby facilitating the forecast of funds utilization.</p> <p>b) Clearly detailed fund flow arrangements and continuous follow-up of the same within the first year of implementation to ensure any needed corrections will be made to mitigate risk of liquidity problems and ensure smooth flow of funds.</p> <p>c) Financial procedures manual will be a condition to disbursement and knowledge of the same will be mandatory for all staff involved in finance.</p>	<p>Medium</p>
<p>4. <u>Accounting Systems, Policies & Procedures</u></p> <p>A. MoF Web based Public Expenditures system is mandatory for executing any payment from national budget including international funded projects. Manuals for the system are also available and updated whenever system is upgraded.</p>	<p>Medium</p>	<p>a) Categories of expenditures designed in State Treasury System are not aligned with project categories of expenditures and suffer from flexibility. The finance team should made more efforts to customize the expenditures categories and detailed accounts.</p>	<p>Low</p>
<p>5. <u>Reporting & Monitoring</u></p> <p>A. The accounting system should be designed to implement donor-funded projects.</p> <p>B. Accounting is on cash basis.</p> <p>C. Adequate procedures are in place for accounting.</p> <p>D. Large volume of reports requested on quarterly basis by the State Treasury</p>	<p>Medium</p>	<p>a) Training on the new accounting and financial system (Budget and Financial Reporting Module) will be provided for all finance staff involved.</p> <p>b) Reporting and monitoring requirement detailed within PIM.</p> <p>c) Data recorded in Project accounting system to be reconciled on monthly basis with MOF system and ensure timely correction for any identified discrepancies.</p>	<p>Low</p>
<p>6. <u>Internal Audit</u></p> <p>A. Periodic reporting of internal control weaknesses to MARD internal audit.</p>	<p>High</p>	<p>a) Internal controllers of MARD to report on annually basis on effectiveness of Internal Control.</p> <p>b) Internal Audit will be carried periodically through inter-ministerial audit plans. The internal audit cover will include IFAD projects.</p> <p>c) TOR of external auditors to be extended to include review of internal controls and field visits.</p>	<p>Low</p>
<p>7. <u>Auditing</u></p> <p>A. The Project will appoint private firm for external audit.</p>	<p>Low</p>	<p>a) External auditors scope should be extended to cover all contributions in the project including those in kind.</p>	<p>Low</p>
<p>Project Fiduciary Risk at design:</p>			
<p>OVERALL FM RISK</p>		<p>MEDIUM</p>	<p>LOW</p>
<p>* H=High, M=Medium, L=Low</p>			

Appendix 8: Procurement

A. National procurement system

432. The foundation of the Montenegrin public procurement system rests on the Public Procurement Law (PPL) and the Law on Amendments to the PPL (adopted in January 2012 and April 2015, respectively), both developed in close cooperation with the EU in the context of the country's future accession to the EU. In addition, several rulebooks were developed to assist in the implementation of the law. The main bodies involved in public procurement in Montenegro are the following:

- a) The Ministry of Finance, as the line ministry in the field of public procurement, elaborates the related laws, regulations and development strategies, and monitors their implementation.
- b) The Public Procurement Administration (PPA), an independent state institution, is responsible for enforcing the PPL, monitoring the performance of the public procurement processes, advising the contracting authorities and implementing the public procurement training and certification program. The PPA has established a public procurement portal where contracting authorities are required to publish procurement plans, invitations to bid and bidding documents, award notifications and contracts. The PPA also maintains updated lists of contracting authorities, bidders and common procurement vocabulary on the portal.
- c) The Administration for Inspection Affairs is an independent body responsible for inspection in various fields, among which public procurement (with a focus on procurement plans, qualifications of public procurement officers, bidding documentations and the implementation of anti-corruption and conflict of interest prevention measures. However, this inspection service lacks the capacities to fulfil these responsibilities.
- d) The Commission for Concessions only reviews appeals related to procedures for the award of concessions contracts.
- e) The State Commission for the Control of Public Procurement (also an autonomous body, reporting to Parliament), as protector of bidders' rights, is in charge of reviewing and ruling on complaints and appeals related to public procurement proceedings, and publishing the related decisions on the portal.

433. Although the above arrangements have greatly contributed to improving the efficiency, competitiveness and transparency of the Montenegrin public procurement, the system still faces major challenges⁷¹ that may hinder project implementation. Firstly, difficulties are highlighted in the practical implementation of the law, due to (i) gaps in the implementation and monitoring tools available (e.g. procedures manuals, administrative rules and instructions, standard documents, etc.); (ii) the predominance of price as the only selection criteria; (iii) cumbersome/unnecessary bidding requirements potentially resulting in costly and time-consuming bidding processes; and (iv) the stringent application and interpretation of the PPL, limiting the acceptance of minor deviations. Secondly, there is a need for increased capacity in the public procurement institutions such as the PPA and the State Commission, both in terms of staffing and training (so as to strengthen control mechanisms, supervision/assessment of procurement processes and reporting, and also to implement e-procurement). Furthermore, the training program for the procurement officers in the contracting authorities⁷² needs to be reinforced, particularly in the areas of procurement planning and monitoring, e-procurement and contract management. Thirdly, the complaints mechanism suffers from (i) understaffing of the State Commission resulting in long delays in the processing of appeals, (ii), the suspension of the procurement proceedings during the appeal's examination, (iii) abuses of the right to appeal by some bidders taking advantage of gaps in the PPL provisions, and (iv) the interference of other laws/regulations and legal protection entities. Finally, corruption and conflicts of interest are persistent challenges that the authorities endeavour to address through stricter rules, risk assessment methodologies, improved procurement planning and needs identification by contracting authorities, better contract monitoring, increased supervision and control, and more transparency in reporting.

⁷¹ Also refer to the 'Strategy for Development of the Public Procurement System in Montenegro for the period 2016-2020' published by the government of Montenegro in December 2015.

⁷² According to the EC Montenegro 2015 Progress Report (2015), only 48% of the procurement officers are certified.

434. Both the EU and the WB⁷³, in their latest assessments of the country's procurement arrangements, have highlighted these weaknesses, as well as the persistent perception in the general public of high corruption levels in the country's public procurement. Both have concluded on the need to take measures in order to increase efficiency and transparency, prevent corruption, and ensure the effective implementation of the procurement rules and procedures. Following these recommendations, the government has formulated a new 'Strategy for Development of the Public Procurement System in Montenegro for the period 2016-2020'. As part of this strategy, a new PPL is currently being drafted (which aims at harmonizing the law with the latest EU directives on procurement), and an e-procurement system is being developed, among other measures.

435. As part of the review of the national procurement system, an assessment of the procurement capacity of MARD, as lead agency, was also conducted. The MARD Procurement Department is only responsible for the ministry's internal procurement, and has never been involved in procurement for donor-funded projects. The department consists of only two staff (one officer and one assistant) reporting to the head of the MARD Accounting Department. Procurement for MARD averages EUR 2 million per year (essentially for goods and services, with virtually no works) and consists mainly of national competitive bidding and shopping. International competitive bidding, expressions of interest and pre-qualification procedures are usually not practised. In most cases, evaluation committees consist of three individuals including the Procurement Officer. It was noted that:

- a) There is no procurement procedures manual (the procurement process is conducted using the PPL and related rulebooks as guidelines);
- b) The procurement plans (PP), which are based on the PPL format, are not fully informative; in addition, the Procurement Department does not have an effective system for monitoring PP execution on a real-time basis;
- c) Although the monitoring of payments is handled by the Accounting Department, there is no formal system in place in the Procurement Department for contract monitoring.

B. RCTP procurement arrangements

436. IFAD's approach is to adopt, whenever possible, the national procurement systems in order to enhance ownership and effectiveness of development aid, in accordance with the principles adopted in the Paris Declaration. However, in the case of Montenegro, due to the weaknesses identified in the public procurement system, it is recommended to adopt IFAD Procurement guidelines for the RCTP – as is the case with the projects funded by other multilateral partners such as the WB and the EU.

437. The PCU will be required to prepare and submit to IFAD (together with the AWPB) for no objection, an annual procurement plan organized by type of procurement (goods, works and services) and by project component. The PP will show for each procurement: the reference to the AWPB, the estimated cost, the procurement method, the detailed timeline (from preparation of TOR/specifications to signature of contract) and the need for IFAD prior review. Each item in the PP will show a "planned" line and an "actual" line to facilitate the monitoring of PP execution. Thresholds for the applicable procurement methods will be as follows:

⁷³ European Commission Montenegro 2015 Progress Report (November 2015) and World Bank Country Program Snapshot (April 2016).

Table 28: Thresholds for applicable procurement methods

Method	International Competitive Bidding	National Competitive Bidding	Shopping
Goods	> US\$ 200,000 (or > EUR 188 000)	> US\$ 50,000 ≤ US\$ 200,000, or > EUR 47,000 ≤ EUR 188,000	≤ US\$ 50,000 (or ≤ EUR 47,000)
Non-consulting services	> US\$ 200,000 (or > EUR 188 000)	> US\$ 20,000 ≤ US\$ 200,000, or > EUR 18,800 ≤ EUR 188,000	≤ US\$ 20,000 (or ≤ EUR 18,800)
Works	> US\$ 1,000,000 (or > EUR 940 000)	> US\$ 100,000 ≤ US\$ 1,000,000, or > EUR 94,000 ≤ EUR 940,000	≤ US\$ 100,000 (or ≤ EUR 94,000)
Consulting services	> US\$ 100,000 'International' shortlists (or > EUR 94 000)	≤ US\$ 100,000 'National' shortlists (or ≤ EUR 94,000)	N/A

438. **The acceptable selection methods for consulting services** will include (i) Quality- and Cost-based Selection; (ii) Quality-based Selection; (iii) Selection under a Fixed Budget; (iv) Least Cost Selection; (v) Selection based on Consultants' Qualifications; (vi) Single-source Selection of consulting firms; (vii) Procedures for competitive selection of Individual Consultants; and (viii) Single-source procedures for the Selection of Individual Consultants.

439. **IFAD's prior review procedures** will be on TORs, bidding documents, evaluation reports and contracts, and will apply to the procurement of goods valued at US\$ 50,000 or more (or EUR 47 000 or more), non-consulting services valued at US\$ 20,000 or more (or EUR 18,800 or more), works valued at US\$ 100,000 or more (or EUR 94,000 or more), and consulting services valued at US\$ 20,000 or more⁷⁴ (or EUR 18,800 or more). Furthermore, IFAD's prior review (or prior no objection) will be required for all procurement under direct contracting or single source selection, regardless of the contract value.

440. **The applicable rules and procedures related to project procurement will be detailed in the RCTP financial, accounting and administrative manual.** All bidding documents will mention the applicability of IFAD's anti-corruption policy. In addition, bidding documents will contain a provision allowing IFAD to inspect the contractors' accounts, records and other documents related to their bid submission and contract performance or to have them audited by an auditor appointed by IFAD, in accordance with IFAD's Project Procurement guidelines. With regard to the bid opening and bid evaluation committees, the procedures manual will detail the provisions related to conflicts of interest, in particular the obligation for committee members to declare any real or apparent conflict of interest, and to withdraw from the committee if deemed necessary.

441. It will be necessary that the Procurement Officer be fully dedicated to the RCTP implementation. He/she will be responsible for (i) the preparation and updating on a real-time basis of the annual procurement plans; (ii) the conduct of the procurement process in accordance with applicable rules and procedures; (iii) the monitoring of the procurement plan execution, and the related reporting on a monthly basis; and (iv) the management of contracts. The RCTP Procurement Officer will work closely with the MARD procurement unit with a view to strengthening their capacity while transferring knowledge particularly on IFAD procurement guidelines and procedures. It is envisaged that the Procurement Officer will only be needed during the first 5 years of project implementation. Any procurement required in Year 6 would be carried out by the MARD procurement unit. A capacity building program will be put in place by IFAD in the area of procurement, and the MARD procurement staff will be strongly encouraged to participate in this program. Capacity building activities will be conducted, as needed, via:

- a) Implementation support throughout project life, and in particular at project start;
- b) Technical assistance, particularly during the first year of the project;
- c) Workshops or training sessions.

⁷⁴ These thresholds may be revised when the LTB is issued.

442. Contracts below the prior review thresholds will be subject to post review as part of the IFAD supervision missions. Additionally, the RCTP auditors will be requested to ensure that procurement for goods, non-consulting services, works and consulting services funded from the IFAD loan and ASAP grant is conducted in compliance with the provisions of the financing agreement, the letter to the borrower and the IFAD Project Procurement guidelines. Any exception noted will have to be mentioned in the audit report and/or the management letter issued by the auditors.

C. Draft RCTP procurement plan for 18 months

443. A draft and indicative procurement plan is presented in Annex 1 (next page). It is supposed to guide the RCTP team at start and will be reviewed/discussed during the RCTP start-up workshop. It presents (draft) procurement for goods, non-consulting services, works and consulting services.

444. The following needs to be noted (and can be revised at start):

- a) For Component 1, some activities are to be carried out by the PCU, and some others, by an individual consultant or by a firm. The information contained in the draft procurement plan is therefore assumptions made (to be re-discussed when validated first AWPB and PP at start);
- b) Recurrent costs (except for the audit and the office/IT supplies) are not included in the draft PP, as they do not normally follow a 'regular' procurement process (e.g. staff salaries or travel allowances). Likewise, meetings or workshops have not been in the PP;
- c) Assumption was made that the 1st audit will be for the period from entry into force until 31/12/18, therefore the selection of the audit firm will happen in 2018;
- d) The start dates of the procurement processes in this draft PP are of course only tentative.

Annex 1: Draft eighteen (18) month procurement plan for RCTP

Borrower : REPUBLIC OF MONTENEGRO													
Project name: RURAL CLUSTERING AND TRANSFORMATION PROJECT (RCTP)													
Period covered by the procurement plan: 01/07/2017 - 31/12/2018													
GOODS and NON-CONSULTING SERVICES													
Costa b ref.	Description	Quantity	Estimated cost EUR	Procurement method	IFAD prior or post	Technical specifications	Preparation bid docs	IFAD NO on bid documents	Bid advertisement or invitation	Bid opening	Evaluation report	IFAD NO on evaluation	Contract signature
Component 1: Value Chain Clustering for resilient rural transformation													
Sub-component 1.3: Technical assistance and capacity building on agri-cluster development													
DT1	IT equipment (tablets for BSFs and PMU staff)	145	29 000	NS	Post	01/08/2017	03/08/2017	N/A	05/08/2017	15/08/2017	16/08/2017	N/A	18/08/2017
DT1	Mobile phone packages (for VC specialists and key BSFs)	50	70 000	NCB	Prior	15/07/2017	20/07/2017	28/07/2017	31/07/2017	30/08/2017	06/09/2017	14/09/2017	21/09/2017
DT1	IT server	1*	15 000	NS	Post	01/07/2017	03/07/2017	N/A	05/07/2017	15/07/2017	16/07/2017	N/A	18/07/2017
DT1	Vehicles 4x4	2*	40 000	NCB	Prior	01/07/2017	06/07/2017	14/07/2017	17/07/2017	16/08/2017	23/08/2017	31/08/2017	07/09/2017
DT1	Printing of knowledge products	various	10 000	NS	Post	15/09/2017	17/09/2017	N/A	19/09/2017	29/09/2017	30/09/2017	N/A	02/10/2017
	<i>Sous-total 1.3</i>		114 000										
	Total component 1		114 000										
Component 3: Project Management Unit													
DT3	Accounting software	1	20 000	NS	Post	10/07/2017	12/07/2017	N/A	14/07/2017	24/07/2017	25/07/2017	N/A	27/07/2017
DT3	Computers/peripherals and printers	8 computers - 2 printers*	9 000	NS	Post	01/07/2017	03/07/2017	N/A	N/A	11/07/2017	14/07/2017	N/A	16/07/2017
DT3	MS Office licences	8	1 600	DC	Prior	05/07/2017	N/A	13/07/2017	N/A	N/A	N/A	N/A	16/07/2017
DT3	Photocopier	1	3 500	NS	Post	20/07/2017	22/07/2017	N/A	24/07/2017	03/08/2017	04/08/2017	N/A	06/08/2017
DT3	Office furniture	1 set	3 000	NS	Post	20/07/2017	22/07/2017	N/A	24/07/2017	03/08/2017	04/08/2017	N/A	06/08/2017
DT3	Vehicle (compact)	1*	15 000	NCB	Prior	01/07/2017	06/07/2017	14/07/2017	17/07/2017	16/08/2017	23/08/2017	31/08/2017	07/09/2017
DT3	Office and IT supplies	various	4 500	NS	Post	01/07/2017	03/07/2017	N/A	N/A	11/07/2017	14/07/2017	N/A	16/07/2017
	Total component 3		56 600										
TOTAL GOODS and NON-CONSULTING SERVICES			170 600										
Legend													
NCB	National Competitive Bidding												
NS	National Shopping												
ICB	International Competitive Bidding												

Borrower : REPUBLIC OF MONTENEGRO													
Project name: RURAL CLUSTERING AND TRANSFORMATION PROJECT (RCTP)													
Period covered by the procurement plan: 01/07/2017 - 31/12/2018													
WORKS													
Costa b ref.	Description	Quantity	Estimated cost EUR	Procurement method	IFAD prior or post	Technical specifications	Preparation bid docs	IFAD NO on bid documents	Bid advertisement	Bid opening	Evaluation report	IFAD NO on evaluation	Contract signature
Component 2: Cluster supportive rural infrastructure													
Sub-component 2.1: Rural Water supply													
DT2	Construction of water ponds for livestock	3	126 900	NCB	Prior	15/01/2018	20/01/2018	28/01/2018	31/01/2018	02/03/2018	09/03/2018	17/03/2018	24/03/2018
DT2	Construction of multiple use water supply schemes	2	169 200	NCB	Prior	15/02/2018	20/02/2018	28/02/2018	03/03/2018	02/04/2018	09/04/2018	17/04/2018	24/04/2018
	<i>Subtotal 2.1</i>		296 100										
Sub-component 2.2: Rural Roads improvement													
DT2	Construction of rural roads	17.31 km	1 220 355	ICB	Prior	15/03/2018	20/03/2018	28/03/2018	31/03/2018	30/04/2018	07/05/2018	15/05/2018	22/05/2018
	<i>Subtotal 2.2</i>		1 220 355										
	Total component 2		1 516 455										
TOTAL WORKS			1 516 455										
* To be grouped in lots with identical procurements in the other components													
Legend													
NCB	National Competitive Bidding												
NS	National Shopping												
ICB	International Competitive Bidding												

Montenegro
Rural Clustering and Transformation Project (RCTP)
Final Design Report
Appendix 8: Procurement

Borrower : REPUBLIC OF MONTENEGRO																	
Project name: RURAL CLUSTERING AND TRANSFORMATION PROJECT (RCTP)																	
Period covered by the procurement plan: 01/07/2017 - 31/12/2018																	
CONSULTING SERVICES																	
Costab ref.	Description	Estimated cost EUR	Selection method	IFAD prior or post review	IFAD NO on TOR	Preparation of shortlist	IFAD NO on shortlist	Preparation of RFP docs	IFAD NO on RFP docs	RFP invitation	RFP closing	Evaluation of technical proposals°	IFAD NO on technical evaluation	Financial evaluation opening	Final evaluation (Tech and	IFAD NO on final evaluation	Contract signature
Component 1: Value Chain Clustering for resilient rural transformation																	
Sub-component 1.1: Cluster initiation, facilitation and business skills training																	
DT1	Rapid cluster mapping and validation	6 000	ICS	Post	N/A	05/08/2017	N/A	N/A	N/A	N/A	N/A	10/08/2017	N/A	N/A	N/A	N/A	18/08/2017
DT1	Annual cluster tracking survey (incl. cluster baselines)	12 000	QCBS	Post	01/09/2017	04/09/2017	12/09/2017	15/09/2017	23/09/2017	26/09/2017	26/10/2017	02/11/2017	10/11/2017	12/11/2017	12/11/2017	20/11/2017	27/11/2017
DT1	Development of training material on BST	13 000	ICS	Post	N/A	10/08/2017	N/A	N/A	N/A	N/A	N/A	15/08/2017	N/A	N/A	N/A	N/A	23/08/2017
DT1	ROI training to BSI's on business skills class and data entry	10 000	ICS	Post	N/A	01/04/2018	N/A	N/A	N/A	N/A	N/A	06/04/2018	N/A	N/A	N/A	N/A	14/04/2018
	Subtotal 1.1	41 000															
Sub-component 1.3: Technical assistance and capacity building on agri-cluster development																	
DT1	Value chain development expert (international consultant)	180 000	ICS	Prior	15/08/2017	18/08/2017	26/08/2017	N/A	N/A	N/A	N/A	31/08/2017	N/A	N/A	N/A	N/A	08/09/2017
DT1	Cluster development training	30 000	ICS	Prior	15/09/2017	18/09/2017	26/09/2017	N/A	N/A	N/A	N/A	01/10/2017	N/A	N/A	N/A	N/A	09/10/2017
DT1	IT specialist	26 683	ICS	Prior	20/07/2017	23/07/2017	31/07/2017	N/A	N/A	N/A	N/A	05/08/2017	N/A	N/A	N/A	N/A	13/08/2017
DT3	Web page design	2 500	ICS	Post	N/A	01/10/2017	N/A	N/A	N/A	N/A	N/A	06/10/2017	N/A	N/A	N/A	N/A	14/10/2017
	Subtotal 1.3	239 183															
	Total component 1	280 183															
Component 2: Cluster supportive rural infrastructure																	
Sub-component 2.1: Rural Water supply																	
DT2	Feasibility studies (5 in 2017 and 11 in 2018)	9 024	QCBS	Post	20/08/2017	23/08/2017	31/08/2017	03/09/2017	11/09/2017	14/09/2017	14/10/2017	21/10/2017	29/10/2017	31/10/2017	31/10/2017	08/11/2017	15/11/2017
DT2	Supervision of water supply schemes construction (5 in 2017 and 11 in 2018)	3 760	ICS	Post	N/A	01/02/2018	N/A	N/A	N/A	N/A	N/A	06/02/2018	N/A	N/A	N/A	N/A	14/02/2018
	Subtotal 2.1	12 784															
Sub-component 2.2: Rural Roads improvement																	
DT2	Feasibility studies (17.3 km in 2017 and 25.9 km in 2018)	51 865	QCBS	Prior	20/09/2017	23/09/2017	01/10/2017	04/10/2017	12/10/2017	15/10/2017	14/11/2017	21/11/2017	29/11/2017	01/12/2017	01/12/2017	09/12/2017	16/12/2017
DT2	Supervision of road construction (17.3 km in 2018)	27 661	ICS	Prior	10/04/2018	13/04/2018	21/04/2018	N/A	N/A	N/A	N/A	26/04/2018	N/A	N/A	N/A	N/A	04/05/2018
	Subtotal 2.2	79 526															
	Total component 2	92 310															
Component 3: Project Management Unit																	
DT3	Baseline survey	30 000	QCBS	Prior	01/07/2017	04/07/2017	12/07/2017	15/07/2017	23/07/2017	26/07/2017	25/08/2017	01/09/2017	09/09/2017	11/09/2017	11/09/2017	19/09/2017	26/09/2017
DT3	Translation of PIM/other docs	7 500	ICS	Post	N/A	05/09/2017	N/A	N/A	N/A	N/A	N/A	10/09/2017	N/A	N/A	N/A	N/A	18/09/2017
DT3	PIM - Operations manual	8 500	ICS	Post	N/A	10/07/2017	N/A	N/A	N/A	N/A	N/A	15/07/2017	N/A	N/A	N/A	N/A	23/07/2017
DT3	PIM - Finance manual	4 500	ICS	Post	N/A	10/07/2017	N/A	N/A	N/A	N/A	N/A	15/07/2017	N/A	N/A	N/A	N/A	23/07/2017
DT3	M&E system design (Excel database)	15 000	ICS	Prior	05/07/2017	08/07/2017	16/07/2017	N/A	N/A	N/A	N/A	21/07/2017	N/A	N/A	N/A	29/07/2017	06/08/2017
DT3	Start-up technical assistance (IFAD approach and M&E)	13 000	SSS	Prior	01/08/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15/08/2017
DT3	Start-up technical assistance (procurement)	12 000	SSS	Prior	01/08/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15/08/2017
DT3	Start-up technical assistance (financial management)	12 000	SSS	Prior	01/08/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15/08/2017
DT3	Staff training (in-country/regional) - 1	5 000	SSS	Prior	01/10/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15/10/2017
DT3	Staff training (in-country/regional) - 2	5 000	SSS	Prior	01/10/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15/10/2017
DT3	External audit	9 000	QCBS	Prior	01/06/2018	04/06/2018	12/06/2018	15/06/2018	23/06/2018	26/06/2018	26/07/2018	02/08/2018	10/08/2018	12/08/2018	12/08/2018	20/08/2018	27/08/2018
	Total component 3	121 500															
	TOTAL CONSULTING SERVICES	493 994															
GRAND TOTAL PROCUREMENT PLAN		2 010 449															
Legend																	
ICS Individual Consultant Selection																	
QCBS Quality and Cost based Selection																	
SSS Sole Source Selection																	
° Evaluation of CVs for individual consultant selection																	

Appendix 9: RCTP cost and financing

455. Project costs have been derived from the data obtained during the design missions in August and November 2016, from consultations with staff of MARD and other practitioners working with food, agriculture and livestock; and from interviews with village communities and from other donor agencies. The main assumptions underlying the cost derivation are as follows:

456. **Project Period.** The proposed project is financed over a six-year period.

457. **Inflation.** An inflation rate of 0.2% was used for the duration of the project - the same rate as the current Eurozone rate.

Table 29: Inflation and exchange rates

	Up to						
	Project Start	2017	2018	2019	2020	2021	2022
Inflation (in %'s) /a							
ALL							
Annual rates							
Local	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Foreign	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Compounded rates							
Local	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Foreign	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Exchange rates (Local/Foreign) /b							
ALL							
Rates actually used	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Constant purchasing parity rates	0.93	0.93	0.93	0.93	0.93	0.93	0.93
% deviation	0.80	1.60	1.60	1.60	1.60	1.60	1.60

458. **Exchange Rate.** Given that the Euro is the currency denomination of Montenegro and the intended loan is in Euro, no exchange rate is foreseen for the project. The IFAD-ASAP grant of US\$ 2 million and IFAD loan of US\$ 4.124 million were used as a benchmark for defining the euro equivalent, using an exchange rate of US\$/EUR of 0.94.

459. **Taxes and Duties.** Most items procured under the Project will be purchased locally VAT (19%) will be financed by GoM and all other identifiable taxes and duties, in line with the practice of externally financed projects in Montenegro.

460. **Expenditure Accounts.** The physical contingencies are estimated at less than 3% of base costs to cover the cost of any items that cannot be reasonably estimated. The average rate of foreign exchange used in the analysis is listed in the below table.

Table 30: Foreign exchanges losses, duties and taxes.

	(Euro '000)				
	Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%			
1. Value Chain Clustering for Resilient Rural Transformation	5,135.3	37.7	180.1	4,948.2	7.0
2. Cluster Supportive Rural Infrastructure	7,262.3	53.4	2,098.7	4,020.5	1,143.2
3. Project Management Unit	1,213.3	8.9	80.4	1,064.4	68.4
Total PROJECT COSTS	13,610.9	100.0	2,359.2	10,033.0	1,218.6

461. **Basis for Cost Estimates.** Project costs are estimated as of August 2016 prices. Estimates for costs of works, equipment, salaries, local technical assistance, operation and maintenance were based on recent data provided by the MARD. Professional staff at the PCU will be either seconded by GoM or contracted on an annual basis. All prices are VAT included, using 15.96% in the calculations. Various import and excise duties apply for imported goods and services.

462. All international technical assistance (ITA) is assumed to be free of tax. For directly recruited local staff the government would cover employer's tax. Where otherwise expressed, figures are expressed in thousands of EUR.

A. Project costs

463. The total investment and incremental recurrent project costs, including physical and price contingencies, is estimated at EUR 13.6 million. The project has three components as follows: (i) VC Clustering for Resilient Rural Transformation; (ii) Cluster Supportive Rural Infrastructure; and (iii) Project Management Unit (including M&E and KM activities).

464. Table 31 below presents the Components costs summary; Table 32 shows Component costs by year - including contingencies; and Table 33 presents expenditure accounts by component.

Table 31: Project costs by Component (EUR and US\$)

	(Euro '000)			(US\$ '000)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
1. Value Chain Clustering for Resilient Rural Transformation	4,945	178	5,124	5,261	190	5,451	3	39
2. Cluster Supportive Rural Infrastructure	4,910	1,979	6,888	5,223	2,105	7,328	29	52
3. Project Management Unit	1,130	80	1,210	1,203	85	1,287	7	9
Total BASELINE COSTS	10,985	2,237	13,222	11,686	2,380	14,066	17	100
Physical Contingencies	241	99	340	256	105	361	29	3
Price Contingencies	26	23	49	27	25	52	48	-
Total PROJECT COSTS	11,252	2,359	13,611	11,970	2,510	14,480	17	103

Table 32: Project Components by Year – Totals including contingencies (EUR'000)

	Totals Including Contingencies						
	2017	2018	2019	2020	2021	2022	Total
1. Value Chain Clustering for Resilient Rural Transformation	3,504	369	451	384	231	197	5,135
2. Cluster Supportive Rural Infrastructure	44	1,700	2,769	2,730	19	-	7,262
3. Project Management Unit	349	149	166	165	156	229	1,213
Total PROJECT COSTS	3,897	2,218	3,386	3,278	407	425	13,611

Table 33: Expenditure accounts by Components – Total including contingencies (EUR'000)

	Value Chain Clustering for Resilient Rural Transformation	Cluster Supportive Rural Infrastructure	Project Management Unit	Total
	I. Investment Costs			
A. Consultancies	677	242	146	1,064
B. Equipment and Materials	55	-	53	108
C. Goods, Services and Inputs	211	-	-	211
D. Grants	3,246	-	-	3,246
E. Training	437	-	48	485
F. Vehicles	40	-	-	40
G. Workshops	-	-	63	63
H. Works	-	6,925	-	6,925
Total Investment Costs	4,666	7,166	309	12,141
II. Recurrent Costs				
A. Operating Costs	90	-	276	366
B. Salaries and Allowances	380	96	628	1,104
Total Recurrent Costs	469	96	904	1,469
Total PROJECT COSTS	5,135	7,262	1,213	13,611
Taxes	7	1,143	68	1,219
Foreign Exchange	180	2,099	80	2,359

465. Investment costs make up 86% of the total projected baseline costs whereas recurrent costs amount to 11%. Works account for the largest expenditure category with 48% of the total; grants 23% and consultancies at 8%. The complete set of summary tables as well as detailed cost tables can be found in Annex 1.

B. RCTP financing

466. The project base cost is forecast to total EUR 13.2 million of which EUR 5.1 million (or 39% of total base costs) will go to finance Component 1, EUR 6.9 million (or 52% of total base costs) to finance Component 2, and EUR 1.2 million (or 9%) for Component 3.

467. The IFAD loan of EUR 3.9 million (or US\$ 4.124 million equivalent) will fund 28.5% of total project costs, of which funding for Components 1, 2 and 3 will comprise of loan contributions of 44%, 13% and 60%, respectively (including contingencies). An IFAD grant of EUR 1.88 million (or US\$ 2 million equivalent) will be used to finance: i) climate smart assistance to farmers and farmers associations in component 1 and ii) climate smart works in component 2, which in total equates to 13.8% of funding.

468. GoM will finance taxes and duties of EUR 1.2 million (or 9%) of the total budget. In addition, GoM will make a budget contribution (in cash) towards Component 2 for the amount of EUR 2.5 million (or 34%) of the component's total project budget, excluding local municipal government contributions of EUR 1.3 (or 18%) towards component 2, including contingencies. GoM will also make budget contributions towards Component 1 (in cash), for the amount of EUR 0.176 million (or 3.4% of the component's total project budget), and Component 3 (in cash and in kind) for the amount of EUR 0.423 (or 35% of the component's total project budget). Exact figures can be found in the Costab/Excel files.

469. Approximately EUR 1.6 million (or 12% of the total) will be provided by the primary beneficiaries within the project area, mainly as contributions in small-scale agriculture investments. Local municipalities will also contribute to local investments in rural infrastructure to the tune of EUR 1.3 million (or 10%) of the total budget. Local SMEs are also likely to co-finance grant funding activities to the tune of approximately 25% of grant investment funding or EUR 0.6 million (or 4.6% of the total).

470. To avoid artificially inflating the magnitude of project financing needs the Costab excluded any operating capital needs and restricted estimated figures to investment costs only. This is considered a more prudent approach to the financing requirements of the project and in line with common practice at IFAD. Rather, some consideration of operating capital needs was made in the EFA instead.

Table 34: Disbursement Accounts by Financiers (EUR'000)

	Government Budget		IFAD Loan		ASAP Grant		Beneficiary		SME Contr.		Government (taxes)		Municipal Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Technical Assistance, Training, Studies and Workshops	-	-	1 485.2	97.3	-	-	-	-	-	-	41.0	2.7	-	-	1 526.2	11.2
B. Matching Grants	-	-	686.8	20.2	806.3	23.7	1 282.7	37.8	620.6	18.3	0.0	-	-	-	3 396.4	25.0
C. Equipment and materials	2.6	4.8	41.8	79.2	-	-	-	-	-	-	8.4	16.0	-	-	52.8	0.4
D. Works																
1. Works for Multi-Purpose Water Reticulation Systems	-	-	18.0	1.0	1 000.2	56.0	96.5	5.4	-	-	285.1	16.0	386.7	21.6	1 786.5	13.1
2. Works for Climate Smart Road Improvements	2 475.1	46.0	798.4	14.8	73.5	1.4	234.9	4.4	-	-	858.1	16.0	939.6	17.5	5 379.6	39.5
Subtotal	2 475.1	34.5	816.4	11.4	1 073.7	15.0	331.4	4.6	-	-	1 143.2	16.0	1 326.3	18.5	7 166.1	52.6
E. Staff and Allowances	134.0	28.2	341.8	71.8	-	-	-	-	-	-	-	-	-	-	475.7	3.5
F. Operating Costs	462.7	46.6	504.9	50.8	-	-	-	-	-	-	26.0	2.6	-	-	993.6	7.3
Total PROJECT COSTS	3 074.4	22.6	3 876.9	28.5	1 880.0	13.8	1 614.1	11.9	620.6	4.6	1 218.6	9.0	1 326.3	9.7	13 610.9	100.0

Table 35: Financing by Financier (EUR'000)

	Government Budget		IFAD Loan		ASAP Grant		Beneficiary		SME Contr.		Government (taxes)		Municipal Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1. Value Chain Clustering for Resilient Rural Transformation	176.1	3.4	2 242.6	43.7	806.3	15.7	1 282.7	25.0	620.6	12.1	7.0	0.1	-	-	5 135.3	37.7
2. Cluster Supportive Rural Infrastructure	2 475.1	34.1	912.6	12.6	1 073.7	14.8	331.4	4.6	-	-	1 143.2	15.7	1 326.3	18.3	7 262.3	53.4
3. Project Management Unit	423.1	34.9	721.7	59.5	-	-	-	-	-	-	68.4	5.6	-	-	1 213.3	8.9
Total PROJECT COSTS	3 074.4	22.6	3 876.9	28.5	1 880.0	13.8	1 614.1	11.9	620.6	4.6	1 218.6	9.0	1 326.3	9.7	13 610.9	100.0

Annex 1 : List of tables

Table 36: VC Clustering for Resilient Rural Transformation – Detailed Costs

Table 37: Cluster Supportive Rural Infrastructure – Detailed Costs

Table 38: Project Management Unit – Detailed Costs

Table 39: Components Project Cost Summary

Table 40: Expenditure Account Project Cost Summary

Table 41: Project Components by Year – Including Contingencies

Table 42: Expenditure Account by Years

Table 43: Components by Financier

Table 44: Expenditure Account by Financier

Table 45: Disbursement Accounts by Financier

Table 36: VC Clustering for Resilient Rural Transformation – Detailed Costs (EUR)

	Unit	Quantities							Unit Cost (Euro)	Base Cost (Euro '000)						Totals Including Contingencies (Euro '000)							
		2017	2018	2019	2020	2021	2022	Total		2017	2018	2019	2020	2021	2022	Total	2017	2018	2019	2020	2021	2022	Total
I. Investment Costs																							
A. Cluster Initiation, Facilitation and Business Skills Training																							
1. Cluster Initiation and Facilitation																							
a. Rapid cluster mapping and validation	number	6	-	1	4	-	-	11	1,000	6.0	-	1.0	4.0	-	-	11.0	6.0	-	1.0	4.0	-	-	11.0
b. Climate smart and market-orientated mobilization of smallholders and VC actors /a	number	20	40	40	-	-	100	200	150	3.0	6.0	6.0	-	-	15.0	30.0	3.0	6.0	6.0	-	-	15.1	30.1
c. Multi-stakeholder meetings (cluster-level) /b	event	12	12	14	22	22	22	104	400	4.8	4.8	5.6	8.8	8.8	8.8	41.6	4.8	4.8	5.6	8.8	8.8	8.8	41.8
d. Business-to-business/service follow-up meetings (village-level) /c	meeting	48	48	56	88	88	88	416	100	4.8	4.8	5.6	8.8	8.8	8.8	41.6	4.8	4.8	5.6	8.8	8.8	8.8	41.8
e. New cluster and/or location demonstration, testing and initiation activities	lump sum	-	1	1	1	-	-	3	20,000	-	20.0	20.0	20.0	-	-	60.0	-	20.1	20.1	20.1	-	-	60.2
f. Annual cluster tracking survey (incl. cluster baselines) /d	survey	6	6	7	11	11	11	52	1,000	6.0	6.0	7.0	11.0	11.0	52.0	6.0	6.0	7.0	11.0	11.0	11.0	52.2	
Subtotal										24.6	41.6	45.2	52.6	28.6	43.6	236.2	24.7	41.8	45.4	52.8	28.7	43.8	237.1
2. Business Skills Training for Smallholder Farmers (including the business climate smart dimension)																							
a. Consultant for developing training material on BST with drawing and visual aid, and farmers diary onclimate resilient VC and conducting ToT /e	pers-days	60	5	5	-	-	-	70	200	12.0	1.0	1.0	-	-	14.0	12.0	1.0	1.0	-	-	-	-	14.1
b. Business Skills Training material and Farmer Diary /f	set	-	500	1 000	1 000	-	-	2 500	15	-	7.5	15.0	15.0	-	-	37.5	-	7.5	15.1	15.1	-	-	37.7
c. ToT Training to Business Skills Facilitator (BSF) on Business Skills Class & Data Entry on Tablets /g	course	-	1	2	2	-	-	5	10,000	-	10.0	20.0	20.0	-	-	50.0	-	10.0	20.1	20.1	-	-	50.2
d. Business Skills course roll-out at group level /h	course	-	25	50	50	-	-	125	250	-	6.3	12.5	12.5	-	-	31.3	-	6.3	12.6	12.6	-	-	31.4
e. Incentive for BSF to facilitate BSC at Group Level /i	course	-	25	50	50	-	-	125	150	-	3.8	7.5	7.5	-	-	18.8	-	3.8	7.5	7.5	-	-	18.8
f. BSF partial remuneration for data collection+MIS entry via tablet	pers-year	-	25	75	125	125	125	475	100	-	2.5	7.5	12.5	12.5	12.5	47.5	-	2.5	7.5	12.6	12.6	12.6	47.7
Subtotal										12.0	31.0	63.5	67.5	12.5	12.5	199.0	12.0	31.1	63.8	67.8	12.6	12.6	199.8
Subtotal										36.6	72.6	108.7	120.1	41.1	56.1	435.2	36.7	72.9	109.1	120.6	41.3	56.3	436.9
B. Value Chain Financing Facilities																							
1. Value Chain Fund (matching grants) /j																							
a. Value chain fund (project grant) /k	lump sum	1	-	-	-	-	-	1	1,062,150	1 062.2	-	-	-	-	-	1 062.2	1 066.4	-	-	-	-	-	1 066.4
b. Value chain fund (grantee) /l	lump sum	1	-	-	-	-	-	1	1,810,189	1 810.2	-	-	-	-	-	1 810.2	1 817.4	-	-	-	-	-	1 817.4
Subtotal										2 872.3	-	-	-	-	-	2 872.3	2 883.8	-	-	-	-	-	2 883.8
2. Sector Development Facility /m																							
a. Public fund (95% of total investment)	grant	1	-	-	-	-	-	1	200,000	200.0	-	-	-	-	-	200.0	200.8	-	-	-	-	-	200.8
b. Beneficiary contribution (5% of total investment)	grant	1	-	-	-	-	-	1	10,526.32	10.5	-	-	-	-	-	10.5	10.6	-	-	-	-	-	10.6
Subtotal										210.5	-	-	-	-	-	210.5	211.4	-	-	-	-	-	211.4
3. Increasing access to finance /n																							
a. Pilots of improved financing products and mechanisms /o	lump sum	-	1	1	1	-	-	3	50,000	-	50.0	50.0	50.0	-	-	150.0	-	50.2	50.2	50.2	-	-	150.6
b. TA on agri finance/VC finance with partner banks /p	lump sum	-	-	1	1	1	-	3	50,000	-	-	50.0	50.0	50.0	-	150.0	-	-	50.2	50.2	50.2	-	150.6
Subtotal										-	50.0	100.0	100.0	50.0	-	300.0	-	50.2	100.4	100.4	50.2	-	301.2
Subtotal										3 082.9	50.0	100.0	100.0	50.0	-	3 382.9	3 095.2	50.2	100.4	100.4	50.2	-	3 396.4
C. Technical Assistance and Capacity Building on Climate Smart Agri-Cluster Development																							
a. Climate resilient Value Chain Development Expert /q	pers-month	4	4	3	1	-	-	12	22,500	90.0	90.0	67.5	22.5	-	-	270.0	91.1	91.1	68.3	22.8	-	-	273.3
b. Cluster development training /r	course	1	-	1	-	-	-	2	30,000	30.0	-	30.0	-	-	-	60.0	30.1	-	30.1	-	-	-	60.2
c. Study tour on cluster development /s	lump sum	1	-	-	-	-	-	1	29,760	29.8	-	-	-	-	-	29.8	29.9	-	-	-	-	-	29.9
d. IT Specialist	pers-year	1	0.2	0.2	0.2	0.2	0.2	2	22,236	22.2	4.4	4.4	4.4	4.4	44.5	22.3	4.5	4.5	4.5	4.5	4.5	4.5	44.7
e. IT equipment /t	unit	135	10	10	10	10	10	185	200	27.0	2.0	2.0	2.0	2.0	37.0	27.1	2.0	2.0	2.0	2.0	2.0	2.0	37.1
f. Mobile phone package /u	per year	25	25	25	25	25	25	150	1,400	35.0	35.0	35.0	35.0	35.0	210.0	35.1	35.1	35.1	35.1	35.1	35.1	35.1	210.8
g. IT Server	unit	1	-	0.2	-	-	-	1.2	15,000	15.0	-	3.0	-	-	-	18.0	15.1	-	3.0	-	-	-	18.1
h. Vehicle (4x4)	unit	2	-	-	-	-	-	2	20,000	40.0	-	-	-	-	-	40.0	40.2	-	-	-	-	-	40.2
j. International Study Tour /v	lump sum	-	1	-	-	-	-	1	25,000	-	25.0	-	-	-	-	25.0	-	25.4	-	-	-	-	25.4
k. Web page design /w	lump sum	1	-	-	-	-	-	1	2,500	2.5	-	-	-	-	-	2.5	2.5	-	-	-	-	-	2.5
l. Knowledge products /x	lump sum	-	1	2	2	2	2	9	10,000	-	10.0	20.0	20.0	20.0	90.0	-	10.0	20.1	20.1	20.1	20.1	20.1	90.4
Subtotal										291.5	166.4	161.9	83.9	61.4	61.4	826.7	293.4	168.2	163.1	84.5	61.7	61.7	832.5
Total Investment Costs										3 411.0	289.0	370.6	304.0	152.5	117.5	4 644.8	3 425.3	291.3	372.7	305.4	153.2	118.0	4 665.9
II. Recurrent Costs																							
a. Value Chain Specialist /y	pers-year	2	2	2	2	2	2	12	20,385.38	40.8	40.8	40.8	40.8	40.8	40.8	244.6	40.9	40.9	40.9	40.9	40.9	40.9	245.6
b. Extension staff /z	per year	1	1	1	1	1	1	6	22,236	22.2	22.2	22.2	22.2	22.2	133.4	22.3	22.3	22.3	22.3	22.3	22.3	22.3	134.0
c. Regional Offices /aa	year	2	2	2	2	2	2	12	3,500	7.0	7.0	7.0	7.0	7.0	42.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	42.2
d. Website maintenance /bb	lump sum	1	1	1	1	1	1.5	6.5	600	0.6	0.6	0.6	0.6	0.6	0.9	0.6	0.6	0.6	0.6	0.6	0.6	0.9	3.9
e. Vehicle O&M (fuel, insurance and maintenance)	per year	2	2	2	2	2	2	12	3,600	7.2	7.2	7.2	7.2	7.2	43.2	7.3	7.3	7.3	7.3	7.3	7.3	7.3	43.8
Total Recurrent Costs										77.8	77.8	77.8	77.8	77.8	467.1	78.2	78.2	78.2	78.2	78.2	78.2	78.2	469.4
Total										3,488.8	366.9	448.5	381.9	230.4	195.7	5,111.9	3,503.5	369.4	450.9	383.6	231.3	196.5	5,135.3

- \a Assumes 25 HH per 'group', 1 day per group.
- \b Two times per year per cluster.
- \c Four per multi-stakeholder meeting.
- \d Per cluster, per year. In year 4, and using resources from this same budget line, a national workshop will be held, to assess progress under the cluster approach/model developed
- \e National consultant.
- \f Per farming household.
- \g 20-30 BSF per class for 10 days training.
- \h 20 HH for 10 sessions by BSF (incl. stationary and refreshments).
- \i 10 sessions at 15 per session.
- \j For private investment
- \k Grant amount, up to 30% of total investment. Any required technical advice or training to farmers, including on climate smart options, will be included in investment plans for MGs
- \l Grantee/beneficiary contribution, 70% of total investment.
- \m To be managed as sub-project for investment in "public goods" essential for cluster development.
- \n To improve access for smallholder and agri-SMEs to mainstream bank financing.
- \o To improve accessibility for smallholders and agri-SME. Pilots might include intra-chain VC financing via tri-partite partnership with lead firms, banks and the project or market.
- \p 50:50 cost sharing
- \q International calibre, includes all international travel and DSAs.
- \r Project team and key implementing partners and stakeholders. 20 person per course
- \s For 10 key staff of project and implementing partners for 1 week. Flight cost €1,500 /person. DSA €100/person day. Local guide and travel €400/day, + 20% contingency.
- \t Tablets for BSFs and PMU staff with additional to compensate for breakage
- \u For the two VC experts and some key BSFs
- \v Learning route for extension staff in the region.
- \w Including maintenance each year.
- \x Including studies, policy briefs, media products, guidelines, operational tools and project flyers for project visibility, especially at outset.
- \y National
- \z 50% crop and 50% livestock expert from MARD
- \aa Includes: utilities (electricity, heating, water), office and equipment maintenance, office supplies and asset insurance.
- \bb Includes hosting.

Table 37: Cluster Supportive Rural Infrastructure – Detailed Costs (EUR)

	Unit	Quantities						Unit Cost (Euro)	Base Cost (Euro '000)						Totals Including Contingencies (Euro '000)								
		2017	2018	2019	2020	2021	2022		Total	2017	2018	2019	2020	2021	2022	Total	2017	2018	2019	2020	2021	2022	Total
I. Investment Costs																							
A. 2.1. Rural Water Supplies																							
a. Feasibility Study	pond_scheme	5	11	11	-	-	-	27	564	2.8	6.2	6.2	-	-	-	15.2	3.0	6.5	6.5	-	-	-	16.1
b. Construction of water ponds for livestock	pond	-	3	6	6	-	-	15	42,300	-	126.9	253.8	253.8	-	-	634.5	-	134.5	269.1	269.1	-	-	672.7
c. Construction of multiple use water supply	scheme	-	2	5	5	-	-	12	84,600	-	169.2	423.0	423.0	-	-	1,015.2	-	179.4	448.5	448.5	-	-	1,076.4
d. Supervision	pond_scheme	-	5	11	11	-	-	27	752	-	3.8	8.3	8.3	-	-	20.3	-	4.0	8.7	8.7	-	-	21.4
Subtotal										2.8	306.1	691.3	685.1	-	-	1,685.2	3.0	324.4	732.8	726.3	-	-	1,786.5
B. 2.2. Rural Road Improvement																							
a. Feasibility Study /a	kilometre	17.31	25.965	25.965	-	-	-	69.24	1,198.5	20.7	31.1	31.1	-	-	-	83.0	21.9	32.8	32.8	-	-	-	87.5
b. Construction	kilometre	-	17.31	25.965	25.965	-	-	69.24	70,500	-	1,220.4	1,830.5	1,830.5	-	-	4,881.4	-	1,293.9	1,940.8	1,940.8	-	-	5,175.5
c. Supervision /b	kilometre	-	17.31	25.965	25.965	-	-	69.24	1,598	-	27.7	41.5	41.5	-	-	110.6	-	29.2	43.7	43.7	-	-	116.6
Subtotal										20.7	1,279.1	1,903.1	1,872.0	-	-	5,075.0	21.9	1,355.8	2,017.3	1,984.5	-	-	5,379.6
Total Investment Costs										23.6	1,585.2	2,594.4	2,557.1	-	-	6,760.3	24.8	1,680.3	2,750.2	2,710.8	-	-	7,166.1
II. Recurrent Costs																							
b. Rural Infrastructure Engineer	pers-year	1	1	1	1	1	-	5	19,162,257	19.2	19.2	19.2	19.2	19.2	-	95.8	19.2	19.2	19.2	19.2	19.2	-	96.2
Total Recurrent Costs										19.2	19.2	19.2	19.2	19.2	-	95.8	19.2	19.2	19.2	19.2	19.2	-	96.2
Total										42.7	1,604.4	2,613.6	2,576.3	19.2	-	6,856.1	44.1	1,699.5	2,769.4	2,730.1	19.2	-	7,262.3

\a Estimated cost 1.5% of construction cost.

\b Supervision is estimated at 2% of construction cost.

Table 38: Project Management Unit – Detailed Costs (EUR, '000)

	Unit	Quantities						Unit Cost (Euro)	Base Cost (Euro '000)						Totals Including Contingencies (Euro '000)									
		2017	2018	2019	2020	2021	2022		Total	2017	2018	2019	2020	2021	2022	Total	2017	2018	2019	2020	2021	2022	Total	
I. Investment Costs																								
A. Equipment and Goods																								
a. Accounting software /a	unit	1	-	-	-	-	-	1	20,000	20.0	-	-	-	-	-	20.0	20.3	-	-	-	-	-	20.3	
b. Computers and peripherals	unit	8	-	-	-	-	-	8	1,000	8.0	-	-	-	-	-	8.0	8.1	-	-	-	-	-	8.1	
c. Software licenses (office productivity)	unit	8	-	-	-	-	-	8	200	1.6	-	-	-	-	-	1.6	1.6	-	-	-	-	-	1.6	
d. Printer	unit	2	-	-	-	-	-	2	500	1.0	-	-	-	-	-	1.0	1.0	-	-	-	-	-	1.0	
e. Photocopier /b	unit	1	-	-	-	-	-	1	3,500	3.5	-	-	-	-	-	3.5	3.5	-	-	-	-	-	3.5	
f. Office furniture /c	set	1	-	-	-	-	-	1	3,000	3.0	-	-	-	-	-	3.0	3.0	-	-	-	-	-	3.0	
g. Vehicle (passenger) /d	lump sum	1	-	-	-	-	-	1	15,000	15.0	-	-	-	-	-	15.0	15.2	-	-	-	-	-	15.2	
Subtotal										52.1						52.1	52.8						52.8	
B. Studies																								
a. Baseline Survey	lump sum	1	-	-	-	-	-	1	30,000	30.0	-	-	-	-	-	30.0	30.4	-	-	-	-	-	30.4	
b. Mid-term Impact Survey	lump sum	-	-	-	1	-	-	1	20,000	-	-	-	20.0	-	-	20.0	-	-	-	20.3	-	-	-	20.3
c. Outcome Survey /e	lump sum	-	-	1	-	1	-	2	7,500	-	-	7.5	-	7.5	-	15.0	-	-	7.5	-	7.5	-	-	15.1
d. Impact Assessment	lump sum	-	-	-	-	-	-	1	30,000	-	-	-	-	30.0	-	30.0	-	-	-	-	-	30.4	30.4	
e. Completion Process	lump sum	-	-	-	-	-	1	1	5,000	-	-	-	-	5.0	-	5.0	-	-	-	-	-	5.0	5.0	
f. Translation /f	lump sum	1	-	-	-	-	-	1	7,500	7.5	-	-	-	-	-	7.5	7.5	-	-	-	-	-	7.5	
Subtotal										37.5		7.5	20.0	7.5	35.0	107.5	37.9		7.5	20.3	7.5	35.4	108.7	
C. Training and Workshops																								
a. PIM - Operations Manual /g	lump sum	1	-	-	-	-	-	1	8,500	8.5	-	-	-	-	-	8.5	8.5	-	-	-	-	-	8.5	
b. PIM - M&E manual and system design /h	lump sum	1	-	-	-	-	-	1	15,000	15.0	-	-	-	-	-	15.0	15.1	-	-	-	-	-	15.1	
c. PIM - Financial & Admin procedures manual /i	lump sum	1	-	-	-	-	-	1	4,500	4.5	-	-	-	-	-	4.5	4.5	-	-	-	-	-	4.5	
d. Start-up technical assistance (IFAD approach, procurement, FM,	lump sum	1	-	-	-	-	-	1	37,000	37.0	-	-	-	-	-	37.0	37.1	-	-	-	-	-	37.1	
e. In-country training for PCU staff /k	lump sum	1	-	1	-	-	-	2	10,000	10.0	-	10.0	-	-	-	20.0	10.0	-	10.0	-	-	-	20.1	
f. Start-up Workshop (Podgorica) /l	lump sum	1	-	-	-	-	-	1	5,000	5.0	-	-	-	-	-	5.0	5.0	-	-	-	-	-	5.0	
g. Start-up Workshop (north-east and north-west clusters) /m	lump sum	2	-	-	-	-	-	2	2,150	4.3	-	-	-	-	-	4.3	4.3	-	-	-	-	-	4.3	
h. Information campaign /n	lump sum	7	-	-	-	-	-	7	3,550	24.9	-	-	-	-	-	24.9	24.9	-	-	-	-	-	24.9	
i. Planning Workshops for AWPB /o	lump sum	1	1	1	1	1	1	6	2,000	2.0	2.0	2.0	2.0	2.0	2.0	12.0	2.0	2.0	2.0	2.0	2.0	2.0	12.0	
j. IFAD implementation workshops	lump sum	1	1	1	-	1	-	4	4,000	4.0	4.0	4.0	-	4.0	-	16.0	4.1	4.1	-	4.1	-	4.1	-	16.3
Subtotal										115.2	6.0	16.0	2.0	6.0	2.0	147.2	115.7	6.1	16.1	2.0	6.1	2.0	148.0	
Total Investment Costs										204.8	6.0	23.5	22.0	13.5	37.0	306.8	206.4	6.1	23.7	22.3	13.6	37.4	309.5	
II. Recurrent Costs																								
A. Salaries and Allowances																								
a. Project Coordinator/VC Specialist	pers-year	1	1	1	1	1	1.5	6.5	30,740.56	30.7	30.7	30.7	30.7	30.7	46.1	199.8	30.9	30.9	30.9	30.9	30.9	46.3	200.6	
b. Monitoring & Evaluation Officer /p	pers-year	1	1	1	1	1	1.5	6.5	15,262.48	15.3	15.3	15.3	15.3	15.3	22.9	99.2	15.3	15.3	15.3	15.3	15.3	23.0	99.6	
c. Procurement Officer /q	pers-year	1	1	1	1	1	1	6	15,262.48	15.3	15.3	15.3	15.3	15.3	15.3	91.6	15.3	15.3	15.3	15.3	15.3	15.3	91.9	
d. Finance Officer /r	pers-year	1	1	1	1	1	1.5	6.5	15,262.48	15.3	15.3	15.3	15.3	15.3	22.9	99.2	15.3	15.3	15.3	15.3	15.3	23.0	99.6	
e. Admin Assistant /s	per day	1	1	1	1	1	1	6	13,954.48	14.0	14.0	14.0	14.0	14.0	14.0	83.7	14.0	14.0	14.0	14.0	14.0	14.0	84.1	
f. Domestic Travel Allowances /t	lump sum	1	1	1	1	1	1	6	8,640	8.6	8.6	8.6	8.6	8.6	8.6	51.8	8.7	8.7	8.7	8.7	8.7	8.7	52.0	
Subtotal										99.1	99.1	99.1	99.1	99.1	129.8	625.4	99.5	99.5	99.5	99.5	99.5	130.3	627.9	
B. Travel and Other Operating Costs																								
a. Podgorica Office /u	lump sum	1	1	1	1	1	1.5	6.5	24,000	24.0	24.0	24.0	24.0	24.0	36.0	156.0	24.1	24.1	24.1	24.1	24.1	36.1	156.6	
b. Podgorica office utility costs /v	per year	1	1	1	1	1	1	6	2,400	2.4	2.4	2.4	2.4	2.4	2.4	14.4	2.4	2.4	2.4	2.4	2.4	2.4	14.5	
c. Audit fees /w	lump sum	1	1	1	1	1	2	7	6,000	6.0	6.0	6.0	6.0	6.0	12.0	42.0	6.0	6.0	6.0	6.0	6.0	12.0	42.2	
d. Office & IT supplies	lump sum	1	1	1	1	1	1	6	3,000	3.0	3.0	3.0	3.0	3.0	3.0	18.0	3.0	3.0	3.0	3.0	3.0	3.0	18.1	
e. Other operating costs /x	lump sum	1	1	1	1	1	1	6	5,000	5.0	5.0	5.0	5.0	5.0	30.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	30.1	
f. Vehicle O&M	per year	1	1	1	1	1	1	6	2,400	2.4	2.4	2.4	2.4	2.4	2.4	14.4	2.4	2.4	2.4	2.4	2.4	2.4	14.5	
Subtotal										42.8	42.8	42.8	42.8	42.8	60.8	274.8	43.0	43.0	43.0	43.0	43.0	61.0	275.9	
Total Recurrent Costs										141.9	141.9	141.9	141.9	141.9	190.6	900.2	142.5	142.5	142.5	142.5	142.5	191.3	903.8	
Total										346.7	147.9	165.4	163.9	155.4	227.6	1,206.9	348.9	148.6	166.1	164.8	156.1	228.8	1,213.3	

- \a Includes installation and training
- \b All-in-one printer, photocopier, scanner.
- \c In-kind contribution of government.
- \d For use by Podgorica office.
- \e Will be done by PCU M&E Officer + enumerators (6 municipalities x 3 days x 4 pers = €5,040 DSA + €1,500 travel + €960 fees for enumerators) = €7,500 for each survey
- \f €15/page (500 pages for the 3 volumes of the PIM) = €7,500
- \g Developed internally by IFAD with help of international consultant for review and finalization: Fees 15 days €6,750 + DSA 7 days €950 + Travel €800. Total around €8,500
- \h Using spreadsheet
- \i National consultant will adapt an existing IFAD manual: 15 days @ €300 = €4,500
- \j International consultants on retainer contracts: Fees 60*€400 + 5 travels €5,000 + DSA 60 days €8,00
- \k In-country or regional - in M&E, poverty/targeting, gender or other subjects.
- \l Approximately 60 participants, including breaks and lunch, followed by Project Steering Committee on second day.
- \m Approximately 50 participants over one day, with two breaks and light lunch.
- \n One in each municipality. Approximately 50 participants each.
- \o One-day event, one in each municipality per year. Includes breaks and light lunch.
- \p Includes €400 per month contribution from IFAD loan financing
- \q Includes €400 per month contribution from IFAD loan financing
- \r Includes €400 per month contribution from IFAD loan financing
- \s Bilingual (Local language and English). Includes €300 per month contribution from IFAD loan financing
- \t Calculated as 4 persons x 10 DSAs per month @ €18/day x 12 months = €8,640
- \u In-kind office space contribution by government. Includes Internet, cleaning, fixed phone lines.
- \v Covers heating, water and electricity
- \w One audit each year, plus last audit for 6 months (completion to closing).
- \x Other operating costs include: publication/advertisements, office and equipment maintenance, office supplies, asset insurance and bank charges.

Table 39: Components Project Cost Summary (EUR, '000)

	(Euro '000)			(US\$ '000)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
1. Value Chain Clustering for Resilient Rural Transformation	4,945	178	5,124	5,261	190	5,451	3	39
2. Cluster Supportive Rural Infrastructure	4,910	1,979	6,888	5,223	2,105	7,328	29	52
3. Project Management Unit	1,130	80	1,210	1,203	85	1,287	7	9
Total BASELINE COSTS	10,985	2,237	13,222	11,686	2,380	14,066	17	100
Physical Contingencies	241	99	340	256	105	361	29	3
Price Contingencies	26	23	49	27	25	52	48	-
Total PROJECT COSTS	11,252	2,359	13,611	11,970	2,510	14,480	17	103

Table 40: Expenditure Account Project Cost Summary (EUR, '000)

	(Euro '000)			(US\$ '000)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
I. Investment Costs								
A. Consultancies	852	197	1,049	907	210	1,116	19	8
B. Equipment and Materials	81	26	108	86	28	114	24	1
C. Goods, Services and Inputs	210	-	210	224	-	224	-	2
D. Grants	3,239	-	3,239	3,446	-	3,446	-	24
E. Training	484	-	484	515	-	515	-	4
F. Vehicles	40	-	40	43	-	43	-	-
G. Workshops	49	13	62	53	14	66	21	-
H. Works	4,584	1,979	6,563	4,876	2,105	6,982	30	50
Total Investment Costs	9,541	2,215	11,756	10,150	2,357	12,506	19	89
II. Recurrent Costs								
A. Operating Costs	343	22	365	365	23	388	6	3
B. Salaries and Allowances	1,101	-	1,101	1,172	-	1,172	-	8
Total Recurrent Costs	1,444	22	1,466	1,537	23	1,560	1	11
Total BASELINE COSTS	10,985	2,237	13,222	11,686	2,380	14,066	17	100
Physical Contingencies	241	99	340	256	105	361	29	3
Price Contingencies	26	23	49	27	25	52	48	-
Total PROJECT COSTS	11,252	2,359	13,611	11,970	2,510	14,480	17	103

Table 41: Project Components by Year – Including Contingencies (EUR, ‘000)

	Totals Including Contingencies						
	2017	2018	2019	2020	2021	2022	Total
1. Value Chain Clustering for Resilient Rural Transformation	3,504	369	451	384	231	197	5,135
2. Cluster Supportive Rural Infrastructure	44	1,700	2,769	2,730	19	-	7,262
3. Project Management Unit	349	149	166	165	156	229	1,213
Total PROJECT COSTS	3,897	2,218	3,386	3,278	407	425	13,611

Table 42: Expenditure Account by Years (EUR, '000)

	Base Cost						Foreign Exchange		
	2017	2018	2019	2020	2021	2022	Total	%	Amount
I. Investment Costs									
A. Consultancies	274	199	267	167	82	60	1,049	18.8	197
B. Equipment and Materials	95	2	5	2	2	2	108	24.5	26
C. Goods, Services and Inputs	35	35	35	35	35	35	210	-	-
D. Grants	3,089	50	50	50	-	-	3,239	-	-
E. Training	75	73	119	120	41	56	484	-	-
F. Vehicles	40	-	-	-	-	-	40	-	-
G. Workshops	40	6	6	2	6	2	62	20.7	13
H. Works	-	1,524	2,520	2,520	-	-	6,563	30.2	1,979
Total Investment Costs	3,647	1,889	3,002	2,896	166	155	11,756	18.8	2,215
II. Recurrent Costs									
A. Operating Costs	58	58	58	58	58	76	365	6.0	22
B. Salaries and Allowances	182	182	182	182	182	193	1,101	-	-
Total Recurrent Costs	239	239	239	239	239	269	1,466	1.5	22
Total BASELINE COSTS	3,887	2,128	3,241	3,136	406	424	13,222	16.9	2,237
Physical Contingencies	1	80	130	128	-	-	340	29.1	99
Price Contingencies									
Inflation									
Local	8	4	6	6	1	1	26	-	-
Foreign	1	6	8	8	0	0	23	100.0	23
Subtotal Inflation	9	10	15	14	1	1	49	47.6	23
Devaluation	-	-	-	-	-	-	-	-	-
Subtotal Price Contingencies	9	10	15	14	1	1	49	47.6	23
Total PROJECT COSTS	3,897	2,218	3,386	3,278	407	425	13,611	17.3	2,359
Taxes	41	273	447	440	6	11	1,219	-	-
Foreign Exchange	95	561	847	831	7	19	2,359	-	-

Table 43: Components by Financier (EUR, '000)

	Government Budget		IFAD Loan		ASAP Grant		Beneficiary		SME Contr.		Government (taxes)		Municipal Government		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
1. Value Chain Clustering for Resilient Rural Transformation	176.1	3.4	2 242.6	43.7	806.3	15.7	1 282.7	25.0	620.6	12.1	7.0	0.1	-	-	5 135.3	37.7	180.1	4 948.2	7.0
2. Cluster Supportive Rural Infrastructure	2 475.1	34.1	912.6	12.6	1 073.7	14.8	331.4	4.6	-	-	1 143.2	15.7	1 326.3	18.3	7 262.3	53.4	2 098.7	4 020.5	1 143.2
3. Project Management Unit	423.1	34.9	721.7	59.5	-	-	-	-	-	-	68.4	5.6	-	-	1 213.3	8.9	80.4	1 064.4	68.4
Total PROJECT COSTS	3 074.4	22.6	3 876.9	28.5	1 880.0	13.8	1 614.1	11.9	620.6	4.6	1 218.6	9.0	1 326.3	9.7	13 610.9	100.0	2 359.2	10 033.0	1 218.6

Table 44: Expenditure Account by Financier (EUR, '000)

	Government Budget		IFAD Loan		ASAP Grant		Beneficiary		SME Contr.		Government (taxes)		Municipal Government		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
I. Investment Costs																			
A. Consultancies	-	-	840.2	78.9	87.0	8.2	75.3	7.1	-	-	61.8	5.8	-	-	1 064.3	7.8	198.9	803.6	61.8
B. Equipment and Materials	2.6	2.4	97.0	89.8	-	-	-	-	-	-	8.4	7.8	-	-	108.0	0.8	26.6	73.0	8.4
C. Goods, Services and Inputs	-	-	210.8	100.0	-	-	-	-	-	-	-	-	-	-	210.8	1.5	-	210.8	-
D. Grants	-	-	611.5	18.8	806.3	24.8	1 207.4	37.2	620.6	19.1	0.0	-	-	-	3 245.8	23.8	-	3 245.8	-
E. Training	-	-	477.4	98.4	-	-	-	-	-	-	7.7	1.6	-	-	485.1	3.6	-	477.4	7.7
F. Vehicles	-	-	40.2	100.0	-	-	-	-	-	-	-	-	-	-	40.2	0.3	-	40.2	-
G. Workshops	-	-	52.6	84.0	-	-	-	-	-	-	10.0	16.0	-	-	62.6	0.5	13.1	39.6	10.0
H. Works	2 475.1	35.7	700.3	10.1	986.7	14.2	331.4	4.8	-	-	1 104.6	16.0	1 326.3	19.2	6 924.5	50.9	2 098.7	3 721.2	1 104.6
Total Investment Costs	2 477.7	20.4	3 030.2	25.0	1 880.0	15.5	1 614.1	13.3	620.6	5.1	1 192.6	9.8	1 326.3	10.9	12 141.5	89.2	2 337.2	8 611.7	1 192.6
II. Recurrent Costs																			
A. Operating Costs	210.9	57.7	128.8	35.2	-	-	-	-	-	-	26.0	7.1	-	-	365.8	2.7	22.0	317.7	26.0
B. Salaries and Allowances	385.7	35.0	717.9	65.0	-	-	-	-	-	-	0.0	-	-	-	1 103.6	8.1	-	1 103.6	-
Total Recurrent Costs	596.7	40.6	846.7	57.6	-	-	-	-	-	-	26.0	1.8	-	-	1 469.4	10.8	22.0	1 421.3	26.0
Total PROJECT COSTS	3 074.4	22.6	3 876.9	28.5	1 880.0	13.8	1 614.1	11.9	620.6	4.6	1 218.6	9.0	1 326.3	9.7	13 610.9	100.0	2 359.2	10 033.0	1 218.6

Table 45: Disbursement Accounts by Financier (EUR, '000)

	Government Budget		IFAD Loan		ASAP Grant		Beneficiary		SME Contr.		Government (taxes)		Municipal Government		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
A. Technical Assistance, Training, Studies and Workshops	-	-	1 485.2	97.3	-	-	-	-	-	-	41.0	2.7	-	-	1 526.2	11.2	212.0	1 273.2	41.0
B. Matching Grants	-	-	686.8	20.2	806.3	23.7	1 282.7	37.8	620.6	18.3	0.0	-	-	-	3 396.4	25.0	-	3 396.4	-
C. Equipment and materials	2.6	4.8	41.8	79.2	-	-	-	-	-	-	8.4	16.0	-	-	52.8	0.4	26.6	17.8	8.4
D. Works																			
1. Works for Multi-Purpose Water Reticulation Systems	-	-	18.0	1.0	1 000.2	56.0	96.5	5.4	-	-	285.1	16.0	386.7	21.6	1 786.5	13.1	530.1	971.3	285.1
2. Works for Climate Smart Road Improvements	2 475.1	46.0	798.4	14.8	73.5	1.4	234.9	4.4	-	-	858.1	16.0	939.6	17.5	5 379.6	39.5	1 568.6	2 953.0	858.1
Subtotal	2 475.1	34.5	816.4	11.4	1 073.7	15.0	331.4	4.6	-	-	1 143.2	16.0	1 326.3	18.5	7 166.1	52.6	2 098.7	3 924.3	1 143.2
E. Staff and Allowances	134.0	28.2	341.8	71.8	-	-	-	-	-	-	-	-	-	-	475.7	3.5	-	475.7	-
F. Operating Costs	462.7	46.6	504.9	50.8	-	-	-	-	-	-	26.0	2.6	-	-	993.6	7.3	22.0	945.6	26.0
Total PROJECT COSTS	3 074.4	22.6	3 876.9	28.5	1 880.0	13.8	1 614.1	11.9	620.6	4.6	1 218.6	9.0	1 326.3	9.7	13 610.9	100.0	2 359.2	10 033.0	1 218.6

Appendix 10: Economic and Financial Analysis

A. Introduction

471. This Appendix presents the financial and economic analysis. The financial analysis aims at demonstrating that on-farm income generating activities, as proposed in the RCTP are profitable and therefore sustainable for farmers. On the flip side, the economic analysis aims to demonstrate that, from an economic and societal perspective, the project as a whole is viable, taking into account, as much as possible, all quantitative and non-quantitative benefits in situations with and without project. All detailed tables are presented at the end of the Appendix.

B. Data sources and general assumptions

472. The data used in this analysis was collected during a field visit to Montenegro in August 2016, using information from meetings with government officials and representatives, livestock extension staff, local agricultural practitioners, food-processors and mission estimates.

473. **Prices.** Input and output prices are also in constant terms of 2016. Financial prices were collected by the field team in August 2016 and their economic values were calculated by using a standard conversion factor of 1.1 for imported chemicals and 1.01 for exported agricultural goods. While a shadow price of 0.81 was used for labour to compensate for the ILO figure of 19% for unemployment in Montenegro, due to migration and seasonal jobs outside of agriculture, the availability of willing agricultural labourers was cited as a common problem among farmers. For this reason no differences were cited in the financial and economic prices of labour among respondents, when in the field. The prices used in the financial analysis represent estimates of average seasonal prices of commodities.

C. RCTP quantifiable benefits

474. The two main areas of investment by the RCTP are: (i) VC Clustering for Resilient Rural Transformation and (ii) Cluster Supportive Rural Infrastructure.

475. The main quantifiable benefits expected from VC clustering measures comprises of the following elements: (i) improved household incomes; (ii) increased assets; (iii) adoption of climate-resilient agricultural practices; and (iv) increased backward and forward market linkages for value-added produce in domestic and international markets. Benefits from investments in cluster supportive rural infrastructure comprises of the following: (i) impact of climate smart infrastructure; and (ii) increased irrigated area through the development of improved water resources management; resulting in increased production and a move to higher value crops.

D. Financial analysis

476. Nine crop budgets including apple, barley, oats, plum, potato (seed rain fed, seed irrigated, ware rain fed and ware irrigated models) and raspberry were prepared to show the impact of investments in project areas. Summary of the crop budgets and underlying technical assumptions on which these models are based, are presented below. These budgets indicate that yields are expected to incrementally increase by an average of approximately 40% compared to the “without” project situation due to improved agricultural practices and increased and more secure water availability, without any price increases factored in.

477. Three household models at the farm level were developed to capture the multitude of complex coping strategies developed by households living on mountainous terrain, with fruit trees, sheep and soft fruits (berries) as their underlying activities. While capturing the coping strategies developed by households, the models account for variations in yield, farm management and performance differences. Livestock was integrated into the household models using a mix of sheep meat and sheep milk and dairy related products as the main products. One processing model on cheese production was developed to capture the benefits of value chain development assistance. Operating margins on all activities demonstrated healthy margins with value added at each level of operation. For cheese

production an operating 30% is possible, signifying a real opportunity to add and retain value for farmers.

478. Although Montenegro remains an EU candidate country and a Euro denominated economy a financial discount rate of 12% was used to reflect the opportunity cost of capital, given that the interest rate spread (this is the margin that banks charge) was, according to the World Bank, 7.5% in 2015 (see following link: <http://data.worldbank.org/indicator/FR.INR.LNDP?locations=ME>). Compared to the EU average of 4.3%, the difference is significant. Add to this the risk of market failure from doing business in high remote mountainous areas and one might argue that such a high rate is well justified. In the economic budgets a social discount rate of 6% was used in line with the Ramsey formula where economic growth for Montenegro was 3.3% in 2015 (WB technical paper, Discounting Cost and Benefits in Economic Analysis, March 2016) using a factor of 2 for the marginal utility of consumption and by reflecting the cost of sovereign debt, which was just below 6% in 2014 (<http://cbonds.com/emissions/issue/136943>).

Primary Production Models

479. **Apple production (existing).** While fruit orchards are common on the sloping mountainous lands, the stock of fruit tree is aging and less productive. The project intends to address this issue by improving pest management, fertilizer usage, and most importantly better and more regular pruning, while the addition of water harvesting in certain areas will add to the productivity of the area. The incremental net benefit per hectare of the project intervention is EUR 345 and NPV is EUR 2,881.

480. **Increased barley/oat production (mainly produced for use on the farm and not for sale).** Idle land, accessible rangeland and sloping hills mean that farmers under-value cultivating their own forage even though livestock plays a significant role within the homestead. Nevertheless, long and harsh winters prelude a need to supplement hay with fodder crops to feed livestock over, at the least, a two month period. The project intends to increase output per hectare with improvements in weed control and cutting methods. The incremental net benefit of the project intervention per hectare equates to EUR 421 and NPV of EUR 4,574 for barley and EUR 180 and NPV of EUR 1,666 for oats.

481. **Plum production.** Plum, as a long standing fruit orchard and by virtue of its importance as a key ingredient for local fruit brandy (*rakija*), plays an important part of local communities' social fabric. While expanded production is not promoted by the project its sustained production, as a fruit, is important from a cultural perspective, and given the limited labour resources an important activity among an aging rural population. Improved pruning of fruit trees, pest management and fertilizer usage are important interventions aimed at farmers by the project. The net incremental benefit of project interventions per hectare is EUR 439 and NPV is EUR 2,268.

482. **Potato production.** In an environment where no fruit is borne above 1,300 metres above sea level, highland varieties of potato are an important mainstay for certain households in the area - mainly in the north-west part of the project area - on a semi-commercial, commercial basis. Seed production is the high-end value product that most producers aim to achieve, with ware potato a by-product. While production levels are low, the high altitude environment offers a competitive advantage to potato growers with its disease free environment. The trouble that most growers have is a lack of consistency in the output of seed quality produce, making commercialisation as a reliable supplier difficult. The project aims to improve the production of certified seed grade material through improved land preparation and fertilizer and manure usage, with the assistance of the biotechnical faculty. In-field ponds will also provide the essential amount of water needed for the hot and dry period over the summer during a period of four weeks with three dressings of water, in the middle of the growing season.

483. **Raspberry production.** In recent years soft fruit production has experienced a steady increase in the region, especially within Serbia and Bosnia & Herzegovina. Likewise, a number of keen farmers of soft fruits prevail within the east of Montenegro, hence its selection as a crop model. The model assumes the use of high-yielding Glen Amble certified seedlings, with higher yields than the non-certified versions used by the farmer today, and a reduction in post-harvest losses through better packaging and a supply contract with a processor. Supply of the high-yielding certified seedling is secured by a local nursery that has the rights to produce them. The net incremental benefit of project interventions per hectare is EUR 28,420 and NPV is EUR 161,064.

484. Financial results per crop, per hectare are summarised in the table below.

Table 46: Summary Yield, Financial Crop Budgets and Incremental Net Benefit

	Yields (ton/ha)			Gross revenue (EUR/ha)			Income without family labor (EUR/ha)			Return on family labor (EUR/pers-day)			NPV	Benefits /costs
	WOP	WP	Incram.	WOP	WP	Incram.	WOP	WP	Incram.	WOP	WP	Incram.	WP	WP
Apple	20	24	20%	4,000	4,800	20%	2,850	3,420	20%	21	23	10%	2,881	1.54
Barley / oats (rainfed)	3	4	40%	695	1,050	51%	-511	-90	82%	-171	-51	70%	4,574	1.01
Plum	18	24	37%	4,375	6,000	37%	3,774	4,438	18%	36	38	5%	2,268	1.80
Seed Potato (irrig.)	-	25	#DIV/0!	5,130	10,656	108%	-33.9	7,802	23115%	-26	131	603%	59,305	1.67
Seed Potato (rainfed)	-	14	#DIV/0!	3,942	8,640	119%	-1,072	2,336	318%	-57	94	263%	34,369	1.55
Ware Potato (irrig.)	20	25	25%	4,050	5,130	27%	-124	2,656	2244%	-29	28	198%	4,938	0.95
Ware Potato (rainfed)	19	19	0%	4,380	4,380	0%	413	2,228	439%	-12	20	257%	2,951	1.00
Raspberry	-	24	N/A	-	35,625	#DIV/0!	-	30,020	N/A	#DIV/0!	350	#DIV/0!	161,064	3.23

¹WP at full development

²WP using financial prices

⇒ **General note:** An analysis of the summary table above shows that seed potato (irrigated) and raspberry are by far the most promising crops in terms of financial return, with a number of profitability indicators to support this assertion, such as: income without family labour, return on family labour to NPV that show much greater rates of incremental growth and actual figures than tree crops (apples and plums). While apples and plums may appear to generate more income per hectare than ware potato, the majority of potato activity will weigh on seed production, where the return is much higher than ware and fruit trees. Equally the return on family labour is much lower for apple and plums, at a mere 10% and 5%, compared to over 603% for seed potato. Raspberry has a much higher return given that it is likely to supplant previously idle land. As an existing activity the benefit cost ratio for apples and plums remains high relative to other indicators and is likely as an activity to continue within the project area. It is expected however that some aging tree stock may not be replaced and a move to berries may transpire over time. This may be the case for other crops, but as an illustrative example tree crops, which are widespread in the area, were chosen for comparison.

485. **Livestock models.** Support to sheep for meat production and some dairy products are important livestock income models that form a part of the support to VCs.

486. **Sheep 20-20-30.** The model aims to provide support to farmers to enter into a virtuous cycle that elevates their income to a point where they are close to earning a net income of approximately EUR 500-600 per month, before labour. It is assumed that such a level of income is a good measure to convince the continuation as farming as a family, given that the income level is over twice the minimum wage. The model assumes the appropriation of new sheep - with a mix of funding using project grant, agro-budget support and own-private finances to fund increments of new ewe by 20-20-30 (number of incremental sheep introduced per year for the first 3 years of the RCTP), for and existing farmer with 30 sheep. The model aims to target farmers that remain below or near the threshold of the government's agro-budget program of assistance that is aligning itself with EU CAP policies on agriculture and rural development. At present, farmers with less than 50 sheep do not qualify for government subsidies. The net incremental benefit of project interventions for a dynamic model of sheep flock is EUR 5,221 and NPV is EUR 61,649, before financing. After financing the figures are EUR 5,221 and EUR 68,287.

487. **Farm Level Analysis.** Three models were developed – potato, sheep (meat) and soft/berry fruit (raspberry) - to illustrate the impact of project interventions in the selected value chains at the farm level. All models benefit from improved varieties of certified seed/seedling and better agro-technical measures (e.g. better land preparation, optimum fertilizer and IPM usage, weed control, pruning and other agro-technical measures) that all contribute to improved production figures. Farm models vary between two and 10 hectares in size, in line with studies on targeting prior to the design mission.

488. **Market Linking Infrastructure Model.** The project intends to invest in improving feeder roads in difficult to access areas that are unable to access or be accessed by milk collectors and processors, and visit nearby markets to market their produce easily. Equally, reliable water sources are an issue since little is harvested in the high altitude areas. The model attempts to capture improvements in road infrastructure as a result of project intervention over a 20 year period with some positive results in increasing access of goods to market. The EIRR is calculated at 28% and NPV at EUR 16,442.

489. Financial results at the farm level are summarized below.

	Net production value ¹			Total outflows			Cash-flow Before Labour			Return per hectare		
	WOP	WP	Incr.	WOP	WP	Incr.	WOP	WP	Incr.	WOP	WP	Incr.
Model 1: Seed & Ware Potato	15,395	17,922	16%	18,256	13,236	-27%	-124	7,896	-6483%	-31	1974	-6483%
Model 2: Raspberry	9,870	20,643	109%	7,175	13,288	85%	7,254	12,663	75%	1,813	3,166	75%
Model 3: Sheep (meat)	19,792	41,668	111%	22,426	37,957	69%	3,272	12,536	283%	4,363	16,714	283%

	Return on family labour-day			Cash-flow after financing			Benefits/costs ratio		NPV @ 12%	
	WOP	WP	Incr.	WOP	WP	Incr.	WOP	WP	Before financing	With financing
Model 1: Seed & Ware Potato	6	-37	-722%	-2,181	33,680	-1644%	0.8	1.4	44,159	120,380
Model 2: Raspberry	-54	50	-192%	2,932	10,471	257%	1.4	1.6	54,541	58,592
Model 3: Sheep (meat)	-0	0	-186%	-1,914	8,347	-536%	0.9	1.1	59,579	88,718

1. Financial budgets used in figures.

490. **Micro-Processing Model.** Production of dairy products is widespread in Montenegro, an activity that continues in the highlands during the summer. Poor access and remoteness make it difficult to get the raw milk to processors in good condition and on time. The RCTP aims to assist local dairy producers working with 5-10 families - with the valorisation of produce nearby or in-situ with micro-scale dairy processing plants of 500-1,000 litres per day in capacity. This would help local producers retain more of the margin while increasing the artisanal influence in the product offer of Montenegro. The envisaged net incremental net benefit is EUR 19 493, the NPV is EUR 123,077, and BCR is 1.31.

E. Economic analysis

491. **Benefits Stream.** The analysis identifies all the possible quantifiable incremental benefits generated by the RCTP's implementation at the crop, farm and programme level, while including market linkage infrastructure and CO₂ emission benefits. The benefits stream corresponds to: (i) the farmers' benefits analyzed in the financial analysis – i.e. increased agricultural production in the upstream area of the value chain. The illustrative financial models described previously have been used as a basis for the calculation of the overall (economic) benefit stream, after conversion of the financial prices into economic values.

492. For the purpose of this analysis, the benefits derived from 2 475 participating household farmers have been aggregated and treated as a whole. The numbers of physical activities (properly phased in time) were multiplied by their respective net economic returns per unit as calculated in the crop budgets. An adoption rate of 90% at full development was used in the calculations to acknowledge that copycat activities may see a doubling of participation figures, with some decline in rural population balancing out the figures.

493. **Cost Stream.** In order to estimate the project's economic viability, in terms of Economic Internal Rate of Return (EIRR), the cash flow calculated includes the project base costs (as extracted from the COSTAB tables) with their physical and price contingencies in EUR. These costs include all investment and recurrent costs for components 1, 2 and 3 - mainly for operation and maintenance.

494. **Project Level Analysis.** For the purpose of the analysis, a social discount rate of 6% was used for the calculation of NPV and EIRR, based on: (i) 5-year Montenegro Government bond yield of 5.37% (May, 2014) (ii) the Ramsey formula, where economic growth for Montenegro was 3.3% in 2015 (WB technical paper, Discounting Cost and Benefits in Economic Analysis, March 2016) and (iii) the figure of 5% for major EC projects in cohesion countries (source: Discount Rate Technical Note, WB; March 2016). Overall project analysis suggests an EIRR of 33% over 20 years and an NPV of around EUR 64 million. Benefits exceed costs by a factor of four with NPVb just over EUR 84 million and NPVc close to EUR 21 million.

495. **Sensitivity Analysis.** The sensitivity analysis assessed the effect of the main risks for the project and the adverse situations that would arise and have a negative impact on the project in terms of benefits and costs and various lags in time.

Table 47: Summary Table of Economic Returns at the project Level

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10-20
Project benefits										
Total project benefits	-	113	1,224	5,115	5,729	8,528	8,568	8,932	11,408	10,588
Project costs										
Investment and Recurrent costs	3,884	2,128	3,241	3,136	406	424	-	-	-	-
Other costs										
Maintenance of roads	516	624	624	624	624	624	624	624	624	624
Other operating capital	2,666									
Total project costs	7,066	2,752	3,865	3,760	1,030	1,048	624	624	624	624
Total project incremental net benefits	-7,066	-2,639	-2,642	1,355	4,699	7,480	7,944	8,308	10,784	9,964
NPV @ 6% (EUR '000)	63,562									
IRR	33%									
Project benefit stream	-	113	1,224	5,115	5,729	8,528	8,568	8,932	11,408	10,588
NPV @ 6%	84,498									
Project cost stream	7,066	2,752	3,865	3,760	1,030	1,048	624	624	624	624
NPV @ 6%	20,937									
Project net incremental benefits	-7,066	-2,639	-2,642	1,355	4,699	7,480	7,944	8,308	10,784	9,964
NPV @ 6%	63,562									

Switching values	Appraisal value	Switching value	% change
Incremental benefits	84,498	20,937	-75%
Incremental costs	20,937	84,498	304%
BCR	4.04		

Inc.
Costs 100% cost
Benefits 100% ben

496. Sensitivity analysis shows that a decrease in benefits by 20% and an increase in costs by 20%, with a two-year time lag, a 20% decrease in price and loss of export markets for potato seed and raspberry as the most adverse scenario, remaining surprisingly robust with an EIRR of 16% and a benefit/cost ratio of 2.06. Switching value analysis suggests a further decline in benefits of 51% and cost increase of 106% would result in an overall negative project return. The probability of such a scenario is low with a 4% probability of such a case occurring within the lifetime of the project.

Table 48: Risk Linked Sensitivity Analysis Summary Matrix

% COST	BENEFIT				
	-20	-10	0	10+	20+
-20	33%	37%	39%	42%	45%
-10	30%	33%	36%	39%	41%
0	28% ⁵	31% ⁴	33%¹	36%	38%
10+	26%	28% ⁶	31% ²	33%	36%
20+	24% ⁷	26%	29% ³	31%	33%

Scenario	EIRR (%)	NPV (€)	BCR
1. Base case	33	63,562	4.04
2. Costs overrun by 10%	31	61,468	3.67
3. Cost overrun by 20%	29	59,374	3.36
4. Scenario 3, plus decrease in benefits by 10%	26	50,924	3.03
5. Scenario 3, plus Decrease in benefits by 20%	24	42,475	2.69
6. Benefits delayed by two years	17	29,997	2.19
8. Scenario 3, 5, 6 and prices decline by 20%	16	27,523	2.10
9. Plus decline in export markets for raspberry and potato seed	16	26,550	2.06

497. Insurance against loss of benefits as a result of climate change or natural disasters was reviewed during the design mission as a possible means to reduce the impact of such a scenario; however, it found that even large farmers with strong business acumen were averse to the bureaucratic hurdles associated with securing such a policy. Given the low levels of financial intermediation in lending, insurance is at an early stage of development and beyond the reaches of the project at hand.

F. Non quantifiable benefits

498. In addition to the quantified benefits described above, the RCTP is expected to generate a number of benefits that are extremely difficult to evaluate in monetary terms. The loss of soil, soil erosion, flooding and damage by natural disasters were not quantifiable by the field team during the mission. Reliable data and the issue of negative accounting were major issues in trying to establish a method for their measurement. Estimation of the net benefits from natural resource rehabilitation and erosion control measures, intensification and diversification of farming systems remain difficult to quantify.

Appendix 11: Draft RCTP implementation manual

499. The RCTP activities are integrated within a separate PCU. In accordance with the provisions of the financing agreement, the operating modalities and procedures applicable to RCTP are set out in a Project Implementation Manual (PIM), which includes 3 volumes:

500. **Volume 1. Operations manual.** The manual describes in details the implementation arrangements for each technical component, and provides information on target groups selection criteria and targeting mechanisms. This Appendix contains information related to the implementation of the first component, and particularly the matching grant and SDF mechanisms and criteria, as well as the main implementation arrangements under component 2 (infrastructure). This *draft* manual will be reviewed, validated with PSC and IFAD, and finalized at project start-up.

501. **Volume 2. Financial and administrative manual.** The manual is intended to be a readily operational and practical guide, describing the approved rules, procedures and workflows for the administrative, financial, budgetary and accounting management of the project. These rules and procedures stem from a combination of IFAD guidelines, GoM regulation, and generally accepted rules and principles used in development projects. This Appendix presents the *outlines* of the financial and administrative manual. The manual will then be prepared and validated within three months to project effectiveness.

502. **Volume 3. M&E manual.** The manual describes the project cycle and logical framework, the baseline situation and monitoring indicators, as well as the M&E system and guidelines to be followed. This Appendix presents the *outlines* of the M&E manual, a problem tree, as well as *draft* terms of reference for the RCTP baseline survey. The manual will be prepared and validated within three months to project effectiveness.

Volume 1 : RCTP operations manual (DRAFT)

Component 1: Value chain clustering for resilient rural transformation

503. Component 1 activities are described in the PDR main text, in Appendices 4 and 5.

504. While the implementation (both in terms of delivery and in terms of responsibilities) with respect to the multi-stakeholder cluster meetings, the B2B meetings, as well as the business skills and enhancing social capital and agro-technology knowledge of farmers is quite straight forward, and can be customized from Appendices 4 and 5 in the PIM/Volume I, the VCF guidelines as well as the SDF guidelines will need to be further elaborated after the RCTP start-up and following an in-depth discussion with the MARD team, especially on (i) how to mobilize grant applications, screen and make award decisions, and (ii) how to strike the right balance between proper due process and cost efficient grant administration procedures. These aspects should be finalized with the help of an international TA within 3 months of project start.

A. VCF

505. This section provides with draft outline for the VCF “*modus operandis*”, as well as a few draft and preliminary information, which will further guide the PIM preparation.

(a) Overview of VCF : objectives and inclusiveness

506. *This sub-section will explain the link between the VCF and the multi-stakeholder cluster processes in setting priorities.*

507. **Objectives.** The VCF provides direct financial support for investment opportunities arising under the RCTP project, and will provide highly targeted investment incentive matching grants to “first mover” and early adopter investors to address specific identified bottlenecks in the development of the supported climate resilient VC clusters. The matching grants (MGs) will therefore be dedicated to private investments promotion, and will be offered on a competitive basis to smallholders and SMEs engaged in the clusters. For example, this may be on investments in small commercial nurseries to increase supply of certified berry seedlings, expansion of smallholder production to increase the supply of products in a target locality, and/or investment in collection/storage/processing facilities to absorb smallholder production. Any required technical advice or training to farmers, including on climate smart options for matching grants, will be included in the investment plans, and will be provided by specialised service providers on a contractual basis.

508. **Inclusiveness.** The VCF will operate two windows for its grants. The first one will be fully dedicated to smallholder investments in primary production and initial post-harvest activities. This window will specifically target the RCTP primary beneficiaries, and within this group, particularly the commercial and economically active smallholders (to receive at least 60% of the MGs), and the poorer farmers (semi subsistence farmers, to receive at least 7% of the MGs). Elite capture will be attenuated by the relatively low ceiling for the MGs (e.g. by fixing the initial beneficiary contribution to the investment by smallholders to EUR 500 for smallest feasible investment step) and a differentiation in the contributions requested from the beneficiary associations. As a guide, in order to be considered accessible for poorer smallholders, two elements of an inclusive investment pathway would be:

- (i) the initial minimum investment (which can include in kind contribution, cash or both) should not be more than EUR 2,000 per smallholder and generate sufficient increased net income to allow further reinvestment and expansion without additional external financing; and
- (ii) a net income of +EUR 500 per month per person (full time equivalent worker) is achievable in under 4 years if starting with the initial minimum investment (above) and reinvesting part of the increased income.

509. Moreover, there will be a process to ensure farmers' perspectives are considered during the cluster prioritization (via the multi-stakeholder cluster meetings). Robust mobilization events and multiple rounds of grants in villages will provide opportunities for “*poorer risk averse farmers*” to join in the clusters after they have seen their neighbours have some initial success. Initial mobilization in the

villages needs to emphasise this two-step process and highlight to all farmers the likely benefits of larger local production to achieve economies of scale and attract increasing number of buyers, and hence the benefit to progressive "first mover" farmers to support their neighbours to copy successes later on.

510. The RCTP will have close involvement of Regional Extension Service staff in farmer outreach and mobilization as they are well respected by stakeholders with excellent local knowledge of villages in project areas. "Progressive" grant mechanisms, with clear criteria based awards and high degree of transparency will provide proportionally larger support to smaller investments by farmers.

511. Finally the PCU will emphasise transparency in information outreach campaign and publishing outcomes of grants and tenders on the web, local news outlets and via multi-stakeholder meetings.

(a) The VCF two windows

512. **Window 1 will be dedicated to smallholder investments in primary production and initial post-harvest activities in the targeted clusters.** The maximum grant per household will initially be set as EUR 1,000. Grants will be awarded as a percentage of the total investment being made by the households according to the following progressive weighting system to provide proportionately most support to those only able to afford the smallest initial investments as these are more likely to be the poorer households (the table below provides with an example of grant calculation for window 1).

- (iii) First EUR 1000 of total eligible investment: 50% grant funding
- (iv) EUR 1001-2500 of total eligible investment: 33.3% grant funding
- (v) EUR 2501+ of total eligible investment: 0% grant funding

Total eligible investment EUR	Grant amount by investment tranche			Total grant amount Max. EUR1000
	EUR 0-1000 50% grant	EUR1001-2500 33.3% grant	EUR 2501+ 0% grant	
1000	500 (1000x50%)	-	-	500
2000	500	333 (1000 x 33.3%)	-	833
2500	500	500 (1500 x 33.3%)	-	1000
4000	500	500	0 (1500 x 0%)	1000

513. From a practical perspective, minimizing the transaction costs of awarding and administering a large number of small grants needs to be a key consideration in the detailed design of the grant selection and management process. This may include setting a minimum grant amount, of say EUR 500, and/or requiring batches of 10 or more grant applications for similar purposes (e.g. expansion of berry production) to be submitted by smallholders in a given location which would both help clustering of production to attract buyers as well as increasing efficiency of service delivery.

514. **Window 2 will be for SME investments in post-harvest handling, storage, processing, marketing etc.** that buy from or supply inputs and services to smallholders in the target clusters. It will not support investments in primary production (except by SMEs acting as nurseries, breeding farms, etc. to produce critical inputs for smallholders). Grants to individual recipients will initially be capped at 30% of the total investment plan up to a maximum grant of EUR 13,000. Grant applications will be prioritized based on credible projected impact on target smallholders if the proposed investment is fully implemented. For larger agri-business investment (where total investment is larger than EUR 40,000), the enterprise, co-operatives and associations will be supported to make application to IPARD for grant support. The grants will be targeted to investments within pre-identified high value clusters and typically be part of a series of coordinated investments and activities along the VC. The non-financial risks are likely to be substantially reduced compared to the stand-alone investments more typical under IPARD. The share of grant funding is then generally aimed to be somewhat lower than the 50% offered under IPARD with the exception of small grants to smallholders for minimum initial investments in primary production which will also attract up to 50% grant support (see above).

515. *The percentage share of grant offered and other aspects such as grant amounts and fund administration will need to be detailed when finalizing the PIM, and reviewed and adjusted if necessary during the course of the project.*

(a) Eligibility and selection criteria

516. *This sub-section has not been presented/detailed either in the main text or in Appendices 4 and 5. It will need to be carefully reviewed, adjusted, and negotiated with MARD while finalizing the PIM.*

517. **Eligibility criteria applying to both windows**: Some criteria would apply to both windows. They could include, for instance, the following indicators/criteria⁷⁵:

- Eligible actors are all private actors working in the targeted value chain clusters, including producers, traders, agribusinesses, service providers, input providers; etc.;
- Producers may be individuals or those organized in informal farmer groups or formal associations or agricultural cooperatives, but priority will be given to investments that have large spill over effect, in particular to poorer segments of the rural society willing to work in groups and in a business-like manner;
- Individuals applying for a MG must have a minimum farm-level practical experience (broadly defined) of 3 years in their respective livelihood domain, e.g. dairy, potato farming, animal husbandry etc.; in the case of groups, this condition should be met by the majority of members/shareholders;
- The applicant has basic operational knowledge and practical experience, and with some supplementary coaching, is able to implement a simple farm-level business plan;
- The VCs/clusters/commodities that are intended to be supported (i) have been approved by the PSC of the RCTP; (ii) shall address confirmed specific priorities and/or "bottlenecks" which have been explicitly endorsed as a significant constraint by a majority of either producers or buyers or both through the multi-stakeholder clusters meetings (*need to further define here, during the PIM finalization, what is defined as a priority constraints to the VC growth*);
- Applicants have demonstrated to have access to sufficient funds for investment and working capital, and the intended project is financially viable and technically feasible;
- Solid but simple business plans which include (i) a proper assessment of markets; (ii) a proper assessment of risks, including climate risk (and opportunity dimension); (iii) technical feasibility, financial viability, cost per beneficiary, reliability of other actors in the VC;
- No double financing of the same activity under different grant mechanisms of whatever source (especially no duplication with IPARD);

518. **Selection criteria for both windows**: For each application, ratios will be calculated and presented in the application form. They will include, for instance : (i) the internal rate of return over the average lifespan of the investment to be made; (ii) the way potential climate risks are covered and climate related needs are addressed; (iii) the cost-benefit ratio of the investment; (iv) the number of benefitting households, if possible disaggregated by directly benefiting households versus households indirectly benefiting (trickledown effect/backward linkages); (v) the average value of grant per beneficiary; (vi) the net benefit for the involved household(s) over a period of 3 years; etc.

519. **Specific eligibility selection criteria for window 1**: In addition to the above mentioned common eligibility criteria, specific eligibility criteria would be applied to window 1, aiming at reflecting the expected outreach of this window. For instance, the additional criteria would include⁷⁶:

- Only smallholder investments to expand primary production up to a pre-defined limit for each crops/livestock (including dairy) and initial post-harvest activities in the targeted clusters will be eligible. The initial proposed limits for production are: (i) berries = 3,000m²; (ii) potato seed = 3 ha; (iii) sheep / goat herds for meat = 60 breeding ewes/goats; and (iv) cheese = either 6 cows or 60 milking goats - only if linked to a local cheese dairy;

⁷⁵ Again, the above list is not exhaustive and is only provided to guide the preparation of the PIM after start-up.

⁷⁶ Same as for the previous footnote, i.e. the list is not exhaustive and is only provided to guide the preparation of the PIM after start-up (i.e. the proposed additional criteria can be amended, modified, revised, etc.).

- Any investment costs that increase production beyond these limits would not be eligible when calculating the total investment for grant support. This is to ensure grants support farmers to reach a viable initial scale but that they do not finance the expansion of established and successful farms. Putting a cap on the maximum land holding/asset ownership of individual households to be eligible to receive grants will also ensure grants are not captured as subsidies by rich/richer farmers.
- *List to be further elaborated/reviewed/amended when finalizing the PIM and after discussion with MARD.*

520. **Specific eligibility selection criteria for window 2:** In addition to the above mentioned common eligibility criteria, specific eligibility criteria would also be applied to window 2, aiming at reflecting the expected outreach of this window. For instance, the additional criteria could include⁷⁷:

- No investment in primary production (except by SMEs acting as nurseries, breeding farms, etc. to produce critical inputs for smallholders);
- Recipients must be registered legal private entities (businesses, co-operatives, etc.), and not individuals (further consultation with MARD will be needed on this point at start-up to make sure that important sections of the RCTP target groups are included);
- *List to be further elaborated/reviewed/amended when finalizing the PIM and after discussion with MARD.*

521. **Eligible and non-eligible items:** In principle, only investment costs can be supported under the VCF, not working capital. The fact that all required items may not be eligible for grant support (see table below) does not indicate that these items are not needed. It only means that they cannot be included under the grant and that the potential investor may have to provide the needed finances from third party, such as a financial institution. The following table shows tentative eligible and non-eligible cost items for funding under the VCF.

Eligible cost items	Non eligible cost items
Investments into production and processing Equipment which are climate smart/resilient	Working capital
Cost of preparation of business plans (which may also be used for loan applications, whenever possible)	Acquisition of land and buildings
Costs for technical assistance (especially TA on climate smart options), extension services and certification	Office construction and equipment
<i>List not exhaustive and to be further elaborated/reviewed/amended/completed when finalizing the PIM and after discussion with MARD</i>	

(a) Grant origination, appraisal and decision process

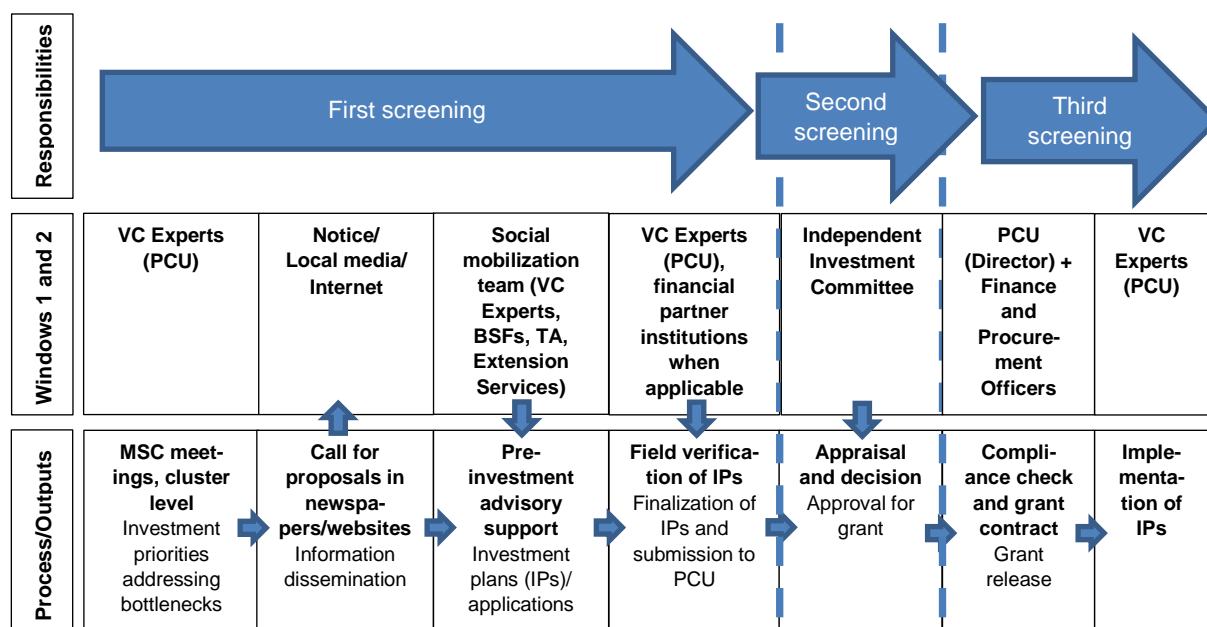
522. This section will need to be developed when finalizing the PIM and after in-depth joint review and adjustment with MARD. The PCU will act as the fund administrator for the VCF but with an Independent Investment Committee established to make grant award decisions. As fund administrator, the PCU will ensure compliance with agreed grant application, eligibility, award and implementation procedures set-out in the PIM. The PCU will also prepare, sign and administer the grant contracts with each grantee and administer disbursement of grants, ensuring these are released against confirmed performance against contracted milestones. The PCU's Finance Officer and Procurement Officer will play a key role in the VCF administration. The first screening will be made by the PCU staff, while the second screening will be done by the Independent Investment Committee that makes the final decision on grant awards. This Independent Investment Committee should include both government and non-government representatives, to ensure reasonable independence and minimize the fiduciary risks. As per IFAD's standards, this would be best practice.

523. The main risks are not related to direct mismanagement but more related to the matching grants being directed towards some beneficiaries rather than others, for reasons not related to the

⁷⁷ Same as for the two previous footnotes.

RCTP objectives. There is therefore a need to design specific aspects of the VCF operation to reduce the scope that this can happen undetected. For example, this will include a system for wider promotion of the VCF calls for proposals as well as being able to capture and log all enquires and application as directly as possible. To complement this, mechanisms and selection criteria (see above) will need to be put in place to ensure a high degree of transparency to facilitate a fair rule-based use of the VCF.

524. *The below figure and paragraphs are suggestions regarding procedures which could be applied in the implementation of the VCF. This will need to be fully revised when finalizing the PIM. The process for grant appraisal and awards could be simplified for smaller grants (Window 1) for administrative efficiency. The whole process of awarding grants will be transparent and there will be a regular reporting to both the MARD, by the PCU, and to IFAD by the PCU and the MARD. Quarterly reports are recommended to be prepared by the PCU (as it was done in the context of the EU-WB financed MIDAS), while supervision and implementation support missions will also check on the transparency of the process. As it done already by the MARD for the MIDAS project (as well as for the EU grant programme), calls for submission of applications for grant support will be published in the newspapers, and posted on the RCTP website (they could also be published on the MARD's website). Similarly, the list of approved applications (grant awardees) and signed grant agreements will be published on the RCTP/MARD website (hereafter is copied the link to the MIDAS project, which shows how the information will be publically communicated to the public: <http://www.midas.co.me/indexEn.html>). Moreover, the RCTP annual external auditors will also audit the VCF (and the SDF).*



525. The following procedures could be applied in the implementation process of the VCF. This screening process substitutes the standard project procurement rules for goods and services procured by using project funds.

526. **Paths of appraisal.** There are different instances which operate independent of each other: (i) the VC Experts of the PCU (reinforced by consultants/TA), mobilization team and partner financial institutions, when involved; (ii) Independent Investment Committee; and (iii) the PCU, represented by its Director.

527. **First screening.** It would include: (i) Compliance with the multi stakeholders clusters meetings' recommendations; (ii) Common and specific eligibility criteria; (iii) Correctness of application; (iv) Availability of funds at the applicant for the project; (v) Field verification of data; and (vi) Validity of business plan.

528. **Second screening.** It would include: (i) Compliance with the multi stakeholders clusters meetings' recommendations on investment priorities; (ii) Common and specific eligibility criteria; (iii) Selec-

tion criteria; (iv) Validity of business plan; (v) Availability of sufficient funds for project, and parallel principal approval of loan by partner financial institutions, when involved; (vi) Formal correctness of application and compliance with procedures; (vii) Plausibility of field verification; (viii) Eligibility of expenditure items; and (ix) Availability of funds for the project.

529. **Third screening.** It would include: (i) Formal correctness and completeness of application; (ii) Compliance with selection criteria; (iii) Availability of funds for the project; (iv) Plausibility of data; (v) Availability of funds, and eventual approval of parallel loan from partner financial institutions, when involved.

530. **Grant contract, release and monitoring.** Larger grants could be released in tranches under result-based contracts with the recipients subject to verified completion of the agreed performance milestones agreed for each investment. For grants under Window 2, final tranches will be released subject to milestones clearly demonstrating backward linkages and benefits to the primary target groups e.g. actual volumes of products purchased from smallholders are in line with those projected in the approved investment plan. Of course, MGs can be sought and approved without parallel loan under the project. One of the conditions to be met by an applicant is evidence for the availability of sufficient capital for the entire project, including investments and working capital. As many potential investors may not have sufficient funds, they may be interested to obtain loans to close the gap between equity funds and the MGs, and the entire project costs. For these reasons, access to finance from different institutions may be arranged for potential investors, where these express their interest in such support.

531. *Again, this sub-section is to be detailed and revised once finalizing the PIM. If need be, different appraisal process can be put in place for the two windows. Will also need to be described : (i) the responsibilities in grant mobilization, screening, award and monitoring processes; (ii) the role and composition of the Independent Investment Committee; and (iii) Code of conduct for key person involved in VCF management and administration.*

(a) Disbursement of grants

532. *Arrangements will be described in details when finalizing the PIM. Below are a few suggestions.*

533. **Disbursements in tranches.** Disbursement of MGs under window 1 could be made in 2 equal tranches. Disbursement of grant under window 2 could be according to the disbursement schedule and verified fulfilment of the associated performance milestones included in the grant agreement. All disbursements of the grant to the grant recipient must be made through a bank account.

(a) Reporting

534. *Arrangements will need to be described in details when finalizing the PIM. Below are just a few guidance.* Reporting could be on the amounts and numbers of transactions and balances by date in the following stages: (i) Grant application submitted by applicant; (ii) Field appraisal; (iii) Grant approval in principle by Independent Investment Committee; (iv) Release of first tranche of the grant; (vii) Grants cancelled; (viii) Implementation of the investment and impact on environment; etc.

(a) Accounting

535. *The following regulations will need to be revised/completed when finalizing the PIM.*

- All transactions are conducted in EUR, all accounts are kept in EUR, and all reports are prepared using the EUR as currency;
- Following the nature of the investments and the structure of the VCF, an unknown number of grants are to be disbursed fully only sometime after the closure of the RCTP project. As a result, the standard IFAD rules for statement of expenditure of the VCF shall be altered. All disbursements for grants under the VCF shall be treated as expenditure on the day of payment, and not as advances that are to be justified;

(a) Inspection and external audits

536. *This sub-section needs to be prepared when finalizing the PIM.*

(a) Procurement

537. *The following regulations will need to be revised/completed when finalizing the PIM.*

- The procedures substitute standard procurement regulations where applicable.
- Grant recipients are to fully document the procurement process.

B. SDF

(a) Overview of SDF: objectives

538. **Objectives.** The SDF will be dedicated to investment in "public goods" that address specific bottlenecks to the cluster development identified by the primary actors themselves. The SDF will focus on "public good" investments only that cannot reasonably be delivered through private investment in the current context of the specific clusters.

(b) Management and implementation

539. Investments under the SDF will be managed directly by the PCU, as distinct sub-projects, implemented with the support of suitably qualified contracted organization from either the public or private sector, whenever needed. Selection of the implementing partner for each sub-project will be based on purposeful selection of the best qualified to deliver the sub-project objectives and activities but with an element of competition where multiple equally-well qualified and interested potential partners are available. Final sub-project design may be defined jointly with the selected implementing partner in order to incorporate their technical expertise.

(c) Eligibility and criteria selection

540. While SDF will focus on "public goods" for the VC, the private actors in the VC will be expected to make a financial contribution of at least 5% to all SDF sub-projects in order to confirm that these are indeed an immediate priority for the value chain actors themselves.

541. For SDF sub-projects of more than US\$ 20,000 value (or EUR 18,800 value), the Investment Committee (see VCF) shall be responsible for making the final decision on the selection of the implementing partner and approval of the sub-project.

542. The types of investments possible under the SDF will include, for example: action research on production/post-harvest issues, variety/production trials, upgrading public testing labs or sanitary and phytosanitary (SPS) inspection capacity at local level, piloting novel or untested business models, initial demonstration and promotion of new technologies or production systems, actions research, market studies etc. All eligible investments will have to include a climate risk analysis, demonstrate climate resilience, and demonstrate no negative impact on environment.

543. The SDF Guidelines shall govern the contracting of IFAD proceeds under a Private Public Partnership Framework/Model unless these resources are used to procure goods, civil works and consultancy services which would then be governed by the GoM and IFAD Procurement Guidelines.

544. *The SDF guidelines should be prepared when finalizing the PIM.*

Component 2: Cluster supportive Rural Infrastructure

545. The Component will award competitive funding for investments in broad range of public (for common use) infrastructure that will enable and enhance private sector investments and activities in rural areas of project municipalities as well as access to markets, and would be undertaken in close partnership with municipalities.

A. Introduction

546. The main types of infrastructure that will be eligible under the Component will include public infrastructure such as economic/productive water infrastructure including livestock water ponds, multiple-use household water supply systems and last mileage of local or feeder roads including required ancillary structures. The Component will consist of following two sub-components:

547. **Sub-component 2.1: Investment in Rural Water Supplies (RWS)** in the project area communities on a pragmatic basis based on demand and supporting the objectives of Component 1. The investments will focus on multiple use facilities providing households with domestic water supply as well as water to cater for livestock or processing facilities, and possibly small scale irrigation systems to cope with recorded climate change. These investment will typically include ponds and facilities for rain water harvesting for livestock watering, spring capping, gravity conveyance and distribution network with polyethylene pipes and other facilities as required by site specific conditions.

548. **Sub-component 2.2: Investment in Rural Roads Improvements (RRI)** will be directed in rural roads and ancillary structures that complement and strengthen project investments under the component 1, for example by assuring adequate access to RCTP-supported value chains/commodity production areas and facilitating marketing of their produce. The roads to be improved will comprise mainly of last mileage of local or uncategorised roads in rural areas. Eligible investments will include also road ancillaries such as small bridges, drainage facilities and erosion protection works to ensure climate resilience of the rehabilitated roads.

549. Given the dispersed nature of the interventions to be carried out and the relatively small-scale nature of the works involved, for the infrastructure investment a programmatic approach will be adopted where project works will not be pre identified before the start of the operation but will be selected on a periodic (annual) basis on specified set of criteria and demand by participating municipalities. The implementation of the Component will be managed by the PCU under the MARD. The staff involved in implementation will consist of a Rural Infrastructure Engineer, and a Financial and Economic Analyst/consultant contracted on a short term basis during the selection phases in PY1, 2 and 3. Coordination of the infrastructure activities will be the responsibility of the PCU Rural Infrastructure Engineer. Draft Sample Terms of References for Rural Infrastructure Engineer and a consultant for Financial and Economic Analysis of proposed investments are provided in Annex 1.

550. The main tasks of the PCU will be:

- To publicize the availability of the competitive funding for infrastructure rehabilitation support.
- To undertake technical and financial analysis of investment proposals.
- Based on technical and financial analysis to review, evaluate and rank proposed applications in accordance with the guidelines and mechanisms described.
- Submit recommendations for infrastructure funding award with required supporting documents for PSC and IFAD approval.
- To conduct procurement of civil works and submit evaluation reports to IFAD for review and written no-objection.
- To monitor and carry out supervision of civil works implementation of investment projects by contractors.

551. Development of engineering designs for proposed investments (including independent technical review and Environmental Assessment as per the applicable law of Montenegro) will be carried out through the participating municipalities. In addition, the municipalities will undertake the operations and maintenance of the scheme over the life of the project and these will be financed from their own budgets. Municipality will be responsible for collection of household beneficiary cash contribution of 5% of construction cost.

B. Detailed Selection Procedures

552. **Information and Awareness Campaign.** Information and awareness campaign will be undertaken by the PCU staff in their respective area of responsibilities through workshops organized within three months after the loan effectiveness, and will include municipal authorities, rural entrepreneurs, agro-processors, and producer and village associations, small and medium-size farmers. The objective of these workshops will be to sensitize rural communities about the component, its objectives and eligibility criteria, and application and selection procedure.

553. **Application.** Following the information workshops, request for funding from the infrastructure component will come from municipalities based on thorough consultation with farmers' interest groups, formal producers' associations, other associations, community (*Mjesna Zadjednica*) authori-

ties and local entrepreneurs/businesses. The application will be done in writing and should consist of required information and data for PCU decision making. Sample application forms are provided in the Annex 2. All applications will go through three steps selection process of: (i) pre-qualification; (ii) screening and ranking; and (iii) final selection. The three steps are described below.

554. **Pre-qualification.** The first step will consist of a desk review of the applications submitted to the PCU. It will be carried out by PCU Rural Infrastructure Engineer shortly after the set deadline for submission of applications for infrastructure funding. The following applications will be refused without further consideration: (i) application is not provided in accordance with agreed format or missing key data; (ii) investment proposals are out of the project area; (iii) infrastructure other than roads and water supply systems; and (iv) investment benefitting urban rather than rural communities/villages. Following the desk review the PCU will conduct field visits to verify the accuracy of the provided data, link with the RCTP target group and activities supported under the Component 1. The field review will also assess the current condition of the proposed infrastructure and technical feasibility of the proposed investment. Only investment proposals estimated to less than of US\$ 0.1 million (or less than EUR 94,000) under the RWS sub-component and US\$ 0.2 million (or EUR 188,000) under the RRI sub-component will be considered at this stage for further processing.

555. **Screening and Ranking.** The prioritization of investment proposals passing the pre-qualification and field assessment by the PCU will still require further data collection and analysis to be complied in investment-specific feasibility studies. These studies will be outsourced to qualified consulting companies and reviewed by the relevant PCU staff. The feasibility studies shall mandatory cover the key engineering and socioeconomic aspects that would enable generating the net benefit stream arising from the proposed investments and therefore comparing the viability of each investment proposal with a view at maximizing the benefits for the farmers per 1,000 US\$ (or EUR 940) invested. For easier comparison a synthetic indicator such as the Internal Rate of Return (IRR) will be computed. A minimum cut-off level for the IRR will be applied at this step of the selection process. Proposals showing an IRR lower than 10% will be rejected.

556. All the remaining pre-qualified investment proposals will be ranked, based on the outcomes of the feasibility studies, using the following system. The highest score for each of the evaluation criteria will be given a score of 1.00. The scores for evaluation criteria of the other proposals will then be computed on a sliding scale as a proportion of the highest score.

557. Investments ranking for proposals will be based on the Objective Ranking System (ORS). The ORS will consist of the calculation, for pre-qualified project proposals, of a synthetic indicator including: (i) financial viability and (ii) number of beneficiaries per US\$ 1,000 (or EUR 940) spent. The respective weights given to the two factors would be 0.5 each (i.e. the financial viability and the number of beneficiaries will be the main determinants for investment's prioritization). The following formula will be used for calculation of the ranking value:

$\text{Ranking Value} = 0.5 \times (A) + 0.5 \times (B)$ <p><i>A</i> – Score for IRR <i>B</i> – Score for number of beneficiaries per US\$ 1,000 (or EUR 940) spent</p>

558. The proposals will then be ranked in descending order until all the available funds for a given year are allocated. Details of ORS ranking procedure are provided in Annex 3. The main responsibility for carrying out ranking of investments will rest with the PCU, based on the data and calculations provided in the outcomes of feasibility studies. All the proposals for infrastructure investment funding award will be approved by the Project Steering Committees (PSC). The PCU will review and evaluate applications and provide recommendation to the PSC for funding award. To ensure competitiveness the PSC meetings will be held once a year (preferably at the end of the year), to review and approve proposals for the next year funding award. The number of infrastructure investments for each year will depend on the size of each investment and budget allocation for particular year. After approval by the PSC a request for review and no-objection for each proposal will be sent to IFAD prior to final decision on funding award.

559. **Final Selection.** The PCU will submit the results of the selection process to the PSC for final selection and inclusion in the AWPB. The implementation of eligible investments in excess of annual

budget would be postponed to the following AWPB. Approval by IFAD of the selection of sub-projects will be required prior to the start of their implementation.

560. Allocated Budget per Project. No fixed pre-allocation of funds per municipality will be undertaken for infrastructure investments. The award of competitive funding will be on a voluntary, demand-driven basis for eligible investment proposals. Proposals targeting to an individual businesses or with limited possibilities for future multiplier effect will not be considered as eligible under the infrastructure component investment.

561. Environmental Guidelines. Given the small scale and rehabilitative nature of the interventions, no significant negative environmental impacts are expected from the investment. The main foreseeable environmental concerns are the ones associated with the management and disposal of excavated materials and construction debris. However, all approved proposals/designs that are to be implemented through the infrastructure component will be required to meet requirements of the environmental legislation of Montenegro. Submission of required documents for Environmental Assessment as per existing legislation will be under the responsibility of municipalities and will be financed from their budgets. Documents from the relevant Environmental Agency approvals considered as part of engineering designs, therefore they will be available for PCU scrutiny.

C. Payment of contributions, procurement of works, execution and O&M

562. Beneficiary Contribution. To ensure sufficient commitment and ownership of benefitting municipalities and household to the requested infrastructure a contribution in equity is required from them. Given the limited funds available for the infrastructure component and anticipated great number of applications the contribution can be paid only in cash. The contribution in equity by the applicants will represent a minimum of 20% and 5% of the total estimated value of the investment from the municipality and benefitting households respectively. Donors and public funding sources may not grant equity contribution on households' behalf. However, co-financing will be permissible in the case of larger projects or as additions to the minimum commitments from primary applicants.

563. Contribution Payment. Procedures for contribution payment will be discussed and agreed during the project start up workshop and provided in the final version of the PIM.

564. Operation and Maintenance. The essential requirement for the sustainability and longevity of the infrastructure investment is operation and maintenance responsibility. The application must consist of an endorsement letter from the relevant municipality that the rehabilitated/constructed infrastructure (fixed assets) will be revalued on their balance sheet and provisions will be made in the budget for maintenance of the infrastructure.

565. Procurement and Execution of Works. The PCU will have the main responsibility for procurement of works under the component. Procurement of works will be carried out in accordance with the IFAD Procurement Guidelines and Sample Bidding Documents for procurement of civil works (National Competitive Bidding => *To be provided during start-up and included in the final PIM*).

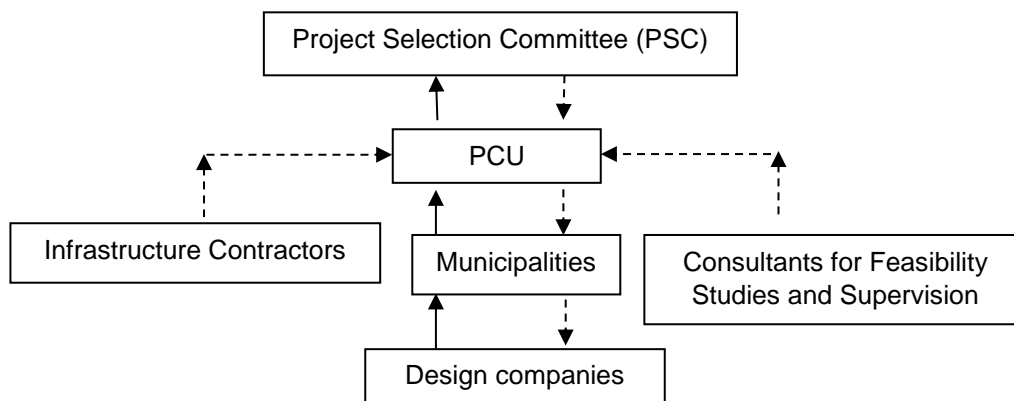
566. Supervision of Civil Works. Supervision of civil works will be carried out by licensed companies (supervisor) as per the relevant legislation of Montenegro under the direct guidance of the PCU Rural Infrastructure Engineer. The Rural Infrastructure Engineer and supervisor will verify bill of completed quantities, cumulative bill of quantities, and requests for interim payment, as well as completion certificate prepared by Contractors. Representatives of relevant municipalities will be members of the acceptance committee issuing the Certificate of Final Completion on the works. *The detailed formats of works supervision as well as the TORs for consultancy services will be discussed and included in the PIM during the project start up workshop.*

Summary of implementation arrangements under Component 2

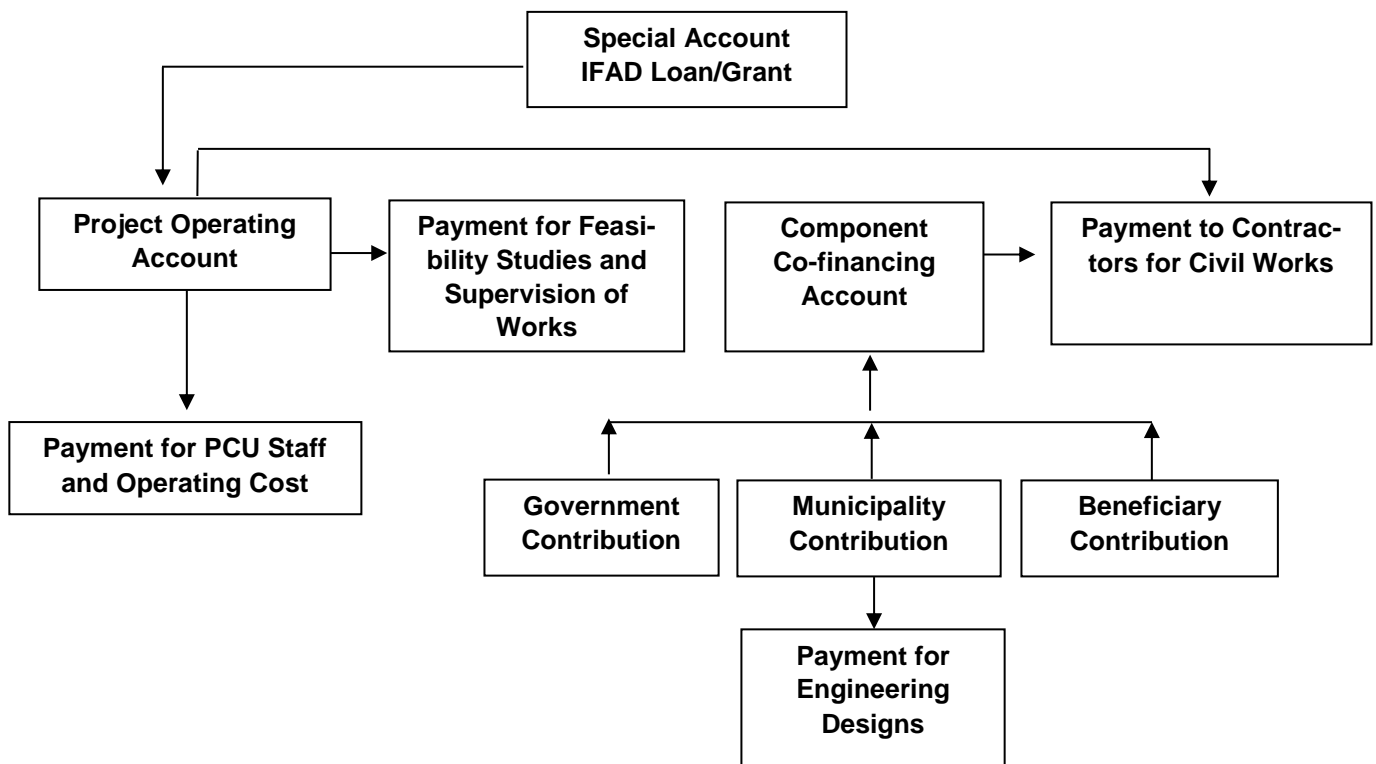
Steps	Activities and process	Responsibilities
Information and awareness campaigns.	<ul style="list-style-type: none"> Awareness and information workshops, within 3 months after loan effectiveness (including municipal authorities, rural entrepreneurs, agro-processors, producer & village associations, small & medium-size farmers). Advertisement of availability of competitive funding for infrastructure rehabilitation support with clear deadline and application forms and formats. 	PCU
Application	<ul style="list-style-type: none"> Collection of request for funding from the infrastructure component, based on thorough consultation with farmers groups, formal producer associations, other associations, community authorities (Mjesna Zadjednica), and local entrepreneurs and businesses. Application/request done in writing, consisting of required information and data for PCU decision making. Sample application forms and required supporting documents will be provided in the PIM. 	Municipalities
Pre-qualification, screening, ranking and final approval of proposals	<ul style="list-style-type: none"> Pre-qualification of the investment proposals based on the set of initial criteria (detailed in the PIM). 	PCU
	<ul style="list-style-type: none"> Screening through feasibility studies and financial and economic analysis of proposed investments, outsourced to consulting companies (procured by PCU and paid from RCTP resources, IFAD Grant) 	Consulting companies
	<ul style="list-style-type: none"> Ranking of technically feasible, and financially and economically viable proposals based on the ORS 	PCU
	<ul style="list-style-type: none"> Presentation of selected infrastructure investment funding award to PSC for approval (for the next year funding award) based on the allocated budget for that year. 	PCU/PSC
	<ul style="list-style-type: none"> Request for IFAD no-objection on the AWPB which includes the selected proposals 	PCU/IFAD
Signing of investment agreements with selected municipalities	<ul style="list-style-type: none"> After final selection, agreement signed between PCU and relevant Municipality, with clear identification of responsibilities and implementation deadline (details in the PIM, while the agreement format and procedure for contribution payment will be developed during the start up when the PCU staff is on-board, and included in the PIM). 	PCU/ Municipalities
Development of engineering designs for proposed investments	<ul style="list-style-type: none"> Development of engineering designs, including Environmental impact assessment (EIA), mandatory as per Montenegrin law and considered as part of the engineering design. Paid by Municipalities from their own resources. 	Municipalities through licensed design companies
	<ul style="list-style-type: none"> Independent expertise technical review and validation of EIA with relevant environmental agencies as per the Montenegrin law. Paid by Municipalities from their own resources. 	Municipalities
	<ul style="list-style-type: none"> Submission of final approved engineering design package to PCU as per the deadline set in the implementation agreement. 	
Contribution Payment	<ul style="list-style-type: none"> Based on the engineers estimates, payment of contribution in cash only, including minimum 20% from Municipality resources and 5% from the beneficiaries as per the schedule set in the implementation agreement. Municipalities will be responsible for collection of 5% contribution from individual beneficiaries. Payment modality will be agreed during the start up when PCU staff is on board and included in the PIM. 	Municipalities/ PCU
Procurement of works	<ul style="list-style-type: none"> Based on the submitted engineering design preparation of bidding documents for works implementation 	PCU
	<ul style="list-style-type: none"> Bid advertisement and evaluation 	
	<ul style="list-style-type: none"> Evaluation report approval by IFAD and contract signing 	IFAD/PCU

Works implementation	<ul style="list-style-type: none"> • Payment to contractors as per current allocations include: • For water works: about 56% IFAD Grant, 20% Municipality, 5% beneficiaries, and 19% Gov. tax • Roads: about 9% IFAD loan, 47% Gov. cash, 5% beneficiaries, 20% municipalities and 19% Gov.tax. • Forms for completed works and payment certificates, etc. will be developed at start up when the PCU staff are on board. 	PCU
Supervision of civil works implementation	<ul style="list-style-type: none"> • Done through contracting of licensed companies (supervisor) as per the relevant legislation in Montenegro. Procurement of consulting services by PCU. Paid from IFAD Loan resources. 	PCU/Supervisor
Handover of completed works	<ul style="list-style-type: none"> • Upon satisfactory completion of works, the rehabilitated assets are handed over to Municipalities` balance sheets. Form of certificate for works completion, guarantee period and handover as well as signatories of these certificated will be developed at start up when the PCU Engineer and Accountant on board. 	PCU/ Municipalities
Operation and maintenance	<ul style="list-style-type: none"> • Operations and maintenance of the schemes through the Municipal level enterprises as per the current setup. - For roads: O&M paid from the Municipal budget; - For water structures: O&M paid through the service fees paid by beneficiaries. Fees are established by Municipal councils. 	Municipalities

Organizational Chart of the CSRI Component



Flow of Funds Arrangements for the CSRI Component



D. Monitoring indicators to be collected by PCU for Component 2

567. The PCU's M&E staff will be responsible for collecting information for the project output indicators under the infrastructure Component. *The M&E system will be set-up within two months after the project start-up with the IFAD support and incorporated into the PIM. See volume 3 of the PIM.*

568. The indicators that will be required for the infrastructure component would include at least:

- **Output indicators (by gender, as applicable):** (i) Number of water systems and roads outputs in terms of typology and km as applicable; (ii) Number of people benefiting from each type of infrastructure; and (iii) Distribution of the above by municipalities and types of infrastructure.
- **Outcome and impact indicators (by gender, as applicable):** For rural water supplies: (i) Total water usage; (ii) Price of water (before and after investment); (iii) time spent to procure water; (iv) Increase in livestock heads and productivity; (v) Decrease in water losses; (vi) Ha of irrigated land; (vii) Crop structure; (viii) Yields and prices of agricultural and livestock production attributable to the investment; (ix) Volumes and prices of produce sold attributable to the investment; (x) Increase in income for farmers attributable to the investment; (xi) Increase in farmers' assets attributable to the investment; (xii) Improvement in socioeconomic situation attributable to the investment; (xiii) Operation and maintenance. For rural roads improvement : (i) Transportation time/costs reduced; (ii) Increase in producer (received prices) for production; (iii) Reduction in production losses; and (iv) Operation and maintenance.

Annex 1 : Short terms national consultancy service

FINANCIAL AND ECONOMIC ANALYSIS FOR INFRASTRUCTURE INVESTMENT PROPOSALS

Introduction

The International Fund for Agricultural Development (IFAD) is funding the Rural Clustering and Transformation Project (RCTP) in Montenegro. The project will be executed over a period of six years, commencing in _____ 20__.

Infrastructure investments under the RCTP are managed, on behalf of the Ministry of Agriculture and Rural development by the Projects Coordination Unit (PCU). The project area for RCTP is the area of municipalities of Niksic, Shavnik, Plusina, Andrijevic Berena and Bijelo Polje.

This assignment is aiming at: (i) assisting the PCU Rural Infrastructure Engineer and project area municipalities in assessing of financial and economic viability of the proposed infrastructure investments; and (ii) providing the PCU the required data for ranking of proposals as per the agreed Objective Ranking System for the purpose of selection of eligible infrastructure for competitive funding award in the framework of the Cluster Supportive Rural Infrastructure (CSRI) component of the RCTP.

Cluster Supportive Rural Infrastructure Component

Sub-component 2.1: Investment in Rural Water Supplies (RWS) in the project area communities on a pragmatic basis based on demand and supporting the objectives of component 1. The investments will focus on multiple use facilities providing households with domestic water supply as well as water to cater for livestock or processing facilities, and possibly small scale irrigation systems to cope with recorded climate change. These investment will typically include ponds and facilities for rain water harvesting for livestock watering, spring capping, gravity conveyance and distribution network with polyethylene pipes and other facilities as will be required by site specific conditions.

Sub-component 2.2: Investment in Rural Roads Improvements (RRI) will be directed in rural roads and ancillary structures that complement and strengthen project investments under the component 1, for example by assuring adequate access to RCTP-supported value chains/commodity production areas and facilitating marketing of their produce. The roads to be improved will comprise mainly of last mileage of local or uncategorised roads in rural areas. Eligible investments will include also road ancillaries such as small bridges, drainage facilities and erosion protection works to ensure climate resilience of the rehabilitated roads.

Request for funding from the Component 2 will come from municipalities based on thorough consultation with farmers' interest groups, formal producers' associations, other associations, community (*Mjesna Zajednica*) authorities and local entrepreneurs/businesses. All applications will go through three steps selection process of: (i) pre-qualification; (ii) screening and ranking; and (iii) final selection.

Main Activities of the Consultant

The main activities of the consultant will be undertaking of Financial Analysis of the pre-qualified investment proposals provided by the PCU. In addition, the consultant will conduct training in financial and economic analysis principles for infrastructure investment to the relevant PCU staff.

Financial Analyses

Methodology. The internal rate of return (IRR) will be used in the financial analysis to assess the viability and robustness of proposed investments. Using the IRR as the measure, the proposals' sensitivity to changes in parameters will be assessed by varying the cost of investments and estimated revenues (sensitivity analysis).

Key Assumption for Infrastructure Investment Financial Analyses. Straight line depreciation of any Project investment will be taken into account and included in the operation and maintenance cost of rehabilitated/constructed infrastructure.

Tasks of the Consultant

In cooperation with PCU Rural Infrastructure Engineer and applicant municipalities the following main tasks will be undertaken for financial analysis:

- identifying the required investment and benefits associated with the proposed investment;
- value costs and benefits using unit costs and current market prices;
- calculate the *Net Revenue* per unit “with” proposed investment and “without” it and to determine the *Incremental Net Revenue* per unit;
- determine the required investment costs;
- develop *Net Incremental Benefit Stream* (for infrastructure projects usually for 20-25 years);
- calculate the Net Present Value (NPV) and Internal Rate of Return (IRR) for the proposed investment.
- Evaluate how sensitive the NPV and IRR to increased construction costs, or to a fall in prices? In infrastructure investment projects usually increase in investment costs, decrease in anticipated revenue (benefit) and delay of construction period are assumed for sensitivity analyses.

Output

At the end of this assignment the consultant shall submit to the PCU a separate report for each infrastructure proposal requested by the PCU. The proposed content of the reports is as follows:

- Introduction
- Background and Proposal
 - existing socio-economic conditions
 - detailed description of proposed infrastructure investment
- Anticipated cost and benefits
 - Identification of the costs and benefits that would arise “with” the proposed investment and the situation as it would be “without” the investment
- Marketing Assessment
 - Production
 - Processing
 - Export
- Financial Analyses
- Infrastructure Operation and Maintenance

Annex 2: Draft sample application forms for infrastructure investments

For Rural Water Supplies (RWS)

Date:
Municipality:
Community (Mjesna Zajednica):
Village(s):
Number of households:
Proposed investment in RWS infrastructure (include type, indicative lengths, water source):
Rationale/expected direct benefits from investments (current service level, improved live-stock and agricultural production, sanitary and health problems etc.):
Direct beneficiaries from the system (people/households):
Expected maximum amount of municipality and households contribution (sources and how it will be secured):
Setup for infrastructure operation and maintenance and source of financing:
Complementarity with the RCTP other activities and other projects:
Would the proposed investment support the development or expansion of small business in the community? (description):
Would the investment improve the water supply for livestock as well? Number of animals?
Would the investment provide opportunities for irrigation? Estimated area and crops:
Proposed source (type, existing or to be developed) and users sharing the source:
Proposed mitigation of any adverse environmental impacts/conflicts among water users:
Estimated total investment cost:

Attachments:

- Water Extraction Right from the proposed source
- Endorsement by municipality and Mjesna Zajednica to provide the required contribution and follow up O&M of the assets.
- Decision of municipal council for submission of proposal.

Annex 2: Draft sample application forms for infrastructure investments (continued)

For Rural Roads Improvements (RRI)

Date:
Municipality:
Community (Mjesna Zajednica):
Village(s):
Number of households:
Proposed investment in RRI infrastructure (include type, indicative width and length):
Rationale/expected direct benefits from investments (current condition, improved livestock and agricultural production, etc.):
Direct beneficiaries from the road (people/households):
Expected maximum amount of municipality and households contribution (sources and how it will be secured):
Setup for road operation and maintenance and source of financing:
Complementarity with the RCTP other activities and other projects:
Would the proposed road support the development or expansion of small business in the community? (description):
Would the investment improve the livestock production as well? Number of animals?
Proposed mitigation of any adverse environmental impacts/conflicts among water users:
Estimated total investment cost:

Attachments:

- Water Extraction Right from the proposed source
- Cadastral map (showing the proposed road, connections, rural settlements and sections to be improved).
- Endorsement by municipality and Mjesna Zajednica to provide the required contribution and follow up O&M of the assets.
- Decision of municipal council for submission of proposal.

Annex 3: Objective ranking system (ORS)

An Objective Ranking System (ORS) as described further will be employed to ensure that the proposed investments are appropriately targeted. The main criteria, initial weightings and ranking procedure are described in the main part of the PIM. In this Annex an example of ranking is illustrated for a number of assumed indicative infrastructure investment proposals. In the table below (in US\$ only) the required data (assumption) for ORS for 3 different infrastructure investment proposals are illustrated. These data are the main outcomes from the feasibility studies of the pre-qualified proposals.

Investment Proposal	Estimated Investment Cost (US\$)	Number of Beneficiaries	IRR (%)	Number of individuals assisted per US\$1,000 spent
(1)	(2)	(3)	(4)	(5)=(3)x1000/(2)
Water pond for livestock (1,000 cubm.)	45,000	67	25.0	1.49
New water supply system from a spring	100,000	125	23.5	1.25
Rehabilitation of existing piped system	75,000	370	15.2	4.93

The first step is the scoring of each criterion. The highest score for each of the evaluation criteria would be given a score of 1.00. From the initial data (table above) the highest score of 1.00 is given for IRR to the investment in water pond proposal (the highest IRR of 25.0%), for number of individuals assisted per US\$ 1000 (EUR 940) to the rehabilitation of existing piped system (the highest number of people of 7.60). The scores for evaluation criteria of the other proposals would then be computed on a sliding scale as a proportion of the highest score.

Scoring of Proposals

Investment Proposal	IRR (%)	Score	Number of individuals assisted per 1000 USD	Score
Water pond for livestock	25.0	1.00	1.49	0.30
New water supply system from a spring	23.5	0.94	1.25	0.25
Rehabilitation of existing piped system	15.2	0.61	4.93	1.00

The next step is to calculate the ORS value for each proposal using the following formula:

$$I = 0.50 \times (A) + 0.50 \times (B), \text{ where}$$

A – IRR Score;

B – Number of individuals assisted per US\$ 1 000 (EUR 940) spent Score.

ORS Value

Investment proposal	IRR (Score)	ORS Value	People Assisted per 1000USD (Score)	ORS Value	Total
Water pond for livestock	1.00	0.50	0.30	0.15	0.65
New water supply system from a spring	0.94	0.47	0.25	0.13	0.60
Rehabilitation of existing piped system	0.61	0.31	1.00	0.50	0.81

Now, the proposals can be ranked in descending order.

Proposals Ranking

Investment Proposal	Total ORS Value	Rank	Estimated Investment Cost (US\$)	Estimated Investment Cost (EUR)
Water pond for livestock	0.65	II	45,000	42,300
New water supply system from a spring	0.60	III	100,000	94,000
Rehabilitation of existing piped system	0.81	I	75,000	70,500

Thus, from the 3 proposals in this example the highest priority for investment under the infrastructure component will have the proposal for rehabilitation of an existing piped system followed by water pond for livestock and construction of a new system.

Volume 2 : RCTP administrative and financial manual outline

569. The manual describes in detail the applicable procedures, the workflows, the staff responsible for the various tasks, the processing periods, the control and authorization processes, as well as the computerized documents and procedures used in the project. It also contains Annexes which show the forms, model documents, and other relevant information needed for the financial and administrative management of the project. Below are presented the financial and administrative manual outline. The manual itself will be finalized at project start.

A. Introduction

- a) Presentation of the project (brief description of project and financing)
- b) Presentation of the manual (objectives of the manual, periodic revision and update)

B. Organizational basics

- a) Project structure (including roles of the various stakeholders)
- b) Project description and implementation modalities (brief – by component)
- c) Supervision, evaluation and reporting modalities
- d) Legal framework (applicable regulations, rules and procedures)
- e) Anti-corruption policy
- f) Internal controls system (general principles, internal verifications and external controls)

C. Administrative management

- a) Project Coordination Unit (role, composition, structure, organization)
- b) Office administration (office management procedures, working hours and holidays, etc.)
- c) Project correspondence (incoming and outgoing)
- d) Information and communication systems (equipment and software, utilization, websites)
- e) Filing, archiving and storage of project documents
- f) Official travel (travel authorization, DSA, transportation and accommodation, handover, travel claims, back-to-office reports)
- g) Meetings and workshops (approval, budgeting, logistics, expenditure, reporting)

D. Personnel

- a) Types of contracts and categories of personnel
- b) Identification and selection of candidates (roles and responsibilities, vacancy announcements, interview and testing)
- c) Remuneration package (salary and entitlements)
- d) Recruitment and contracting of personnel (preliminary recruitment steps and work contract)
- e) Administration of personnel (induction and administrative formalities, personnel files, payroll, social security and tax filings, leave management, performance evaluation, contract renewal)
- f) Conduct of personnel and disciplinary measures (obligations of personnel, confidentiality, outside interests, use of project facilities and equipment)
- g) Contract termination
- h) Temporary personnel (approval, recruitment and contractual modalities)
- i) Individual consultants (approval, recruitment and contractual modalities)

E. Assets management

- a) Definition of assets
- b) Assets monitoring (monitoring system, identification and tagging, physical inventory)
- c) Maintenance and security of assets
- d) Project vehicles (use and control of vehicles, maintenance and security, fuel management)
- e) Disposal of assets (thresholds, approval procedures, disposal methods)
- f) Management of supplies (procurement, stock management, receipt and distribution)

F. Procurement

- a) General (regulatory framework and applicable procedures, types of contracts and methods of procurement, distribution of roles, procurement modalities and prior/post review control procedures, procurement monitoring system, procurement cycle)
- b) Procurement planning (format and content of the procurement plan, link with AWPB, preparation timeline, approval, update of PP and monitoring of procurement plan execution)
- c) Purchase requisition (content, approval and processing)
- d) Technical specifications and terms of reference (definitions and requirements)
- e) Identification and shortlisting of suppliers (thresholds for procurement methods and prior review, description of methods, composition of the various procurement committees, identification of suppliers, preparation and publication of bidding documents, sale of bidding documents, receipt of bids, opening of bids)
- f) Selection of suppliers: bid opening, evaluation of bids (procedures for the various types of procurement and contract values)
- g) Award, drafting and signature of contracts (different types of contracts, advances, contract amendments)
- h) Contract management (technical and administrative management, monitoring software and module, register of contracts, individual contract monitoring forms, management of disputes)
- i) Delivery of goods, works and services (roles/responsibilities and procedures)
- j) Payment and reporting

G. Financial management

- a) General (general principles of financial management, project financial cycle, structure and organization of FM unit, financial and accounting system)
- b) Budgeting (preparation of annual budget, budget monitoring and reporting, budget revisions)
- c) Expenditure (expenditure requests, expenditure authorizations, payment requests)
- d) Disbursement (payment procedures by check, bank transfer or petty cash)
- e) Matching grants disbursements
- f) Implementing partners (list of IPs, types of agreements, payment modalities, financial reporting by IPs)
- g) Contributions from donors
- h) IFAD and ASAP funds (initial advances, withdrawal applications: special account replenishment, direct payment, and reimbursement procedures)
- i) Counterpart funds (request and approval procedure for GoM cash contributions, tax exemption procedures, accounting for expenditure from counterpart funds and payment modalities, evaluation and recording of in kind contributions)
- j) Contributions from municipalities (list of municipalities, nature of contributions, inclusion in annual budget, procedures for funds mobilization, accounting for expenditure, payment modalities)
- k) Beneficiary contributions (nature of contributions, procedures for mobilization of funds, evaluation and recording of in kind contributions).
- l) Treasury management
 - Cash forecasting
 - Flow of funds
 - Management of bank accounts (opening of accounts, use and operation, signatories, bank reconciliations)
 - Petty cash (ceiling, replenishment, use, controls)
- m) Financial reporting (monthly financial management report, IFAD interim financial reports, IPs financial reports – content, deadlines, recipients)
- n) Supervision missions (fiduciary review: objectives, content, advance preparation)
- o) Project completion and financing closure.

H. Accounting procedures and audit

- a) Accounting rules and principles
- b) Financial information system (software, general accounting and analytical coding, organization of the accounting function)
- c) Recording of transactions (principles, procedures, accounting entries, transaction vouchers, journals/other accounting reports, backup of accounting data, filing of accounting documents)
- d) Monthly and annual closing of accounts (procedures and deadlines)
- e) Financial statements (content, preparation, verification)
- f) Internal audit (scope, TOR, frequency, reporting)
- g) External audit (auditor selection, TOR, audit preparation and conduct, calendar, audit report)

Volume 3 : RCTP M&E manual outline

570. The manual describes with all necessary operational details the M&E system, the methods, processes, tools and responsibilities for the monitoring of project execution, the assessment of results and the evaluation of performance and impact. It also contains a number of annexes which describe the forms, templates, guidelines, outlines and other relevant information needed to fulfil the M&E function. Below are presented the manual outline. The information contained in Appendix 6 will also be used to finalize the M&E manual.

A. Introduction

- a) Presentation of the project (brief description of project and financing)
- b) Presentation of the manual (objectives of the manual, periodic revision and update)

B. Purpose of the M&E Manual

- a) Project objectives and expected results
- b) The underlying theory of change
- c) Targeting and expected outreach

C. Part 1: Key definitions and M&E system overview

- a) Key terms and definitions
- b) Purpose of the M&E system
- c) System overview
 - Implementation monitoring
 - Monitoring implementation results
 - Performance targets and results' indicators
 - The IFAD RIMS
 - Key M&E actors

D. Part 2: Detailed M&E tools and processes

- a) Tools and processes for the monitoring of execution
 - The AWPB
 - Data collection methods
 - Data analysis and synthesis
 - Performance evaluation
 - Data verification
- b) Tools and processes for results' monitoring and measurement
 - Data collection methods
 - Data analysis and synthesis
 - Performance evaluation

E. Part 3: Information management and detailed roles & responsibilities

- a) Detailed data requirements
- b) Data management and recording
- c) Data reporting
- d) Detailed roles and responsibilities

Annexes

- Annex 1 - Project Log-frame
- Annex 2 - Monitoring and Evaluation Matrix
- Annex 3 - AWPB Template
- Annex 4 - Implementation Monitoring Template
- Annex 5 - Output and Outreach Monitoring Tables

Annex 6 - Monthly Activity Report Template

Annex 7 - Progress Report Templates (monthly, six-monthly, annual progress reports) (*outline included hereafter*)

Annex 8 - Project Completion Review guidelines and Report Outline

Annex 9 - TOR for baseline, mid-term and completion survey

Annex 10 - Baseline/mid-term/completion survey Questionnaire

Annex 11 - TOR for qualitative surveys

Annex 12 - Implementation performance monitoring tables

Annex 13 - Results' monitoring tables

Annex 7: Annotated outline for annual progress report (template)

Title page
Map of project area
Table of contents
Table of figures and tables
Acronyms

1. INTRODUCTION (2 pages max.)

- Introduce basic facts about the project, the project area and key project implementation dates.
- Introduce the main project objectives and key project interventions, as originally designed; and identify any changes that may have been brought to project original design or financing plan.
- Discuss overall implementation progress and present global AWPB execution rate. Highlight key implementation features and global service providers or implementers' performance.
- If relevant, highlight the main changes in the policy, regulatory or institutional framework that may have affected the agricultural or rural development sectors, or the MARD, during the year under review and that may bear relevance on project implementation.

2. PROJECT RESULTS AND IMPACT

2.1. ACTIVITIES AND OUTPUTS

- For each project component, present the following information:
 - ***Main physical achievements***: Describe key activities implemented in the past 12-months and main outputs delivered against AWPB targets; and present cumulative achievements to date against appraisal targets. Discuss and explain variances between expected results and achievements; as well as prospects for meeting appraisal targets at project completion.
 - ***Implementation context and challenges***: Analyze the key external factors or circumstances that may have affected project implementation, positively or negatively, during the year. Identify key implementation problems and bottlenecks, their cause and possible solutions.
 - ***Detailed recommendations***: Present the detailed actions that will be taken in order to address key implementation challenges.
- Key data shall be presented in tables, while detailed data will be annexed. Issues such as quality and reliability of data collected, or data gaps, should also be presented if relevant. If no progress was achieved, this should be clearly stated and reasons for delays explained.

2.2. OUTCOMES AND IMPACT

- For each Component, present available outcome and impact data, or field observations, and analyze positive or negative trends and unintended effects. Key data shall be summarized in tables and charts
- Present and analyze the external factors that may have contributed, negatively or positively, to observed changes and impact.

2.3. TARGETING AND OUTREACH:

- Present a table showing, the total number of primary, secondary and tertiary beneficiaries reached during the past 12 months against annual and appraisal targets (the number of women and youth being reported separately).
- Present targeting approach followed in current year and potential challenges.

2.4. SUSTAINABILITY

- Analyze current prospects of post-project sustainability, looking at issues such as beneficiary groups' self-sufficiency, capacities of local institutions, infrastructure operation and maintenance, etc.

3. IMPLEMENTATION PERFORMANCE

3.1. PROJECT IMPLEMENTATION PERFORMANCE

- Discuss service providers', grass-roots implementers' and PCU performance in implementing and supervising project interventions.

3.2. PERFORMANCE OF M&E

- Describe key M&E activities undertaken and discuss data quality, reliability and timeliness of reporting by all M&E actors.

3.3. FINANCIAL MANAGEMENT AND DISBURSEMENTS

- Present global and component-wide figure on: (a) annual expenditures versus annual budget approved; and (b) cumulative expenditures to date versus overall budget. Discuss financial management or flow of funds issues, as well as mitigating measures taken.

3.4. PROCUREMENT

- Present procurement activities undertaken during the year against the activities planned in the procurement plan. Identify issues and bottlenecks, as well as mitigating measures.

4. CONCLUSIONS, LESSONS LEARNED AND RECOMMENDATIONS

4.1. CONCLUSIONS

- Summarize global project performance by comparing actual physical achievements with annual targets; and cumulative physical achievements to date with global targets. Reflect on the likelihood that all project objectives shall be met by project completion date.
- Present project's strengths and weaknesses.
- Analyze main implementation bottlenecks and/or facilitating factors.

4.2. LESSONS LEARNED

- Present main lessons learned from project implementation, based on the analysis of what learning from experience may be applicable to future, similar projects.
- Present best practices or practices worthwhile replicating.

4.3. RECOMMENDATIONS

- Highlight key recommendations, changes that need to be introduced or further actions required in order to facilitate project implementation or enhance project results.
- Clearly identify responsibilities for main recommendations and timeline for follow-up.

ANNEXES

Detailed, updated Project Results' Framework (*Showing: annual planned vs. achieved targets*)

Detailed financial expenditures table (*Showing: annual allocations, annual expenditures, global allocations, cumulative expenditures to date*)

Appendix 12: Compliance with IFAD policies and Social Environmental and Climate Assessment Procedures, Review Note

571. This Appendix contains the RCTP compliance with IFAD policies, as well as the social, environmental and climate assessment procedures note (SECAP).

A. Compliance with IFAD Policies

Compliance with the country strategy note (CSN)	<ul style="list-style-type: none"> Montenegro does not have a Result Based Country Strategic Opportunities Programme (RB-COSOP), as IFAD has insufficient country knowledge and the 2016-2018 PBAS allocation is only of US\$ 5 million. However, instead of a RB-COSOP, a CSN was prepared and approved in May 2016. The CSN describes how IFAD will align with the MARD strategy and complement the EU/IPARD assistance. RCTP is fully aligned with the two strategic objectives of the CSN, which are: (SO1) Improve climate resilience of the rural sector; and (SO2) Promote inclusive and competitive value chains that can integrate poor smallholders in commercial markets with higher profitability. The CSN was written concurrently with the RCTP's conceptualisation and hence there is a strong compliance.
Compliance with the IFAD strategic framework 2016-2015	<ul style="list-style-type: none"> RCTP is fully aligned with the IFAD strategic framework 2016-2025 aiming at an enabling inclusive and sustainable rural transformation. Indeed, the project will aim at transforming northern Montenegro's smallholders to become commercially competitive and climatically more resilient. This will be accomplished by strengthening the resilience and improving economic opportunities for the rural poor based on competitive farms and agribusinesses that are connected to and integrated into more profitable value chains, making sustainable use of Montenegro's unique natural resources. Thus, RCTP will contribute to all three of the strategic objectives of the 2016-2025 framework, namely: (i) Increase poor rural people's productive capacities; (2) Increase poor rural people's benefits from market participation; and (3) Strengthen environmental sustainability and climate resilience of poor rural people's economic activities.
Compliance with the IFAD private sector strategy	<ul style="list-style-type: none"> The strategy states that private-sector companies that IFAD will be working with cannot be selected in advance and will depend on the context, opportunities that may arise as implementation goes, and the interest of farmers and the companies themselves. It also underlines that the support or partnership should be driven first and foremost by the interests and needs of small farmers and poor rural producers. In that perspective, several small and medium-sized private sector actors were consulted during RCTP design, as well as several farmers already engaged in a commercial partnership with these private actors. Whenever possible and requested by the smallholders themselves, and if a clear win-win situation can be achieved, the RCTP will facilitate linkages and contract farming opportunities the private sector. The project will also comply and contribute to the operationalization of the IFAD private sector strategy by involving in project's implementation lead farmers and agro-enterprises who can serve as champions/ models to demonstrate the viability of new approaches to increase rural resilience and provide potential development pathways for the poor.
Compliance with the IFAD policy on rural enterprises	<ul style="list-style-type: none"> The RCTP is compliant with this policy as it intends supporting the development of more formalized agribusiness linkages for smallholders better income generation (through skills trainings, improved connectivity, access to new/rehabilitated productive water supply systems).
Compliance with the IFAD policy on gender equality and women's empowerment	<ul style="list-style-type: none"> The design is fully in accordance with the targeting policy. The target groups have been profiled and beneficiary groups for proposed project activities identified. the completed targeting checklist is included as an annex to appendix 2.

Compliance with the IFAD policy on targeting	<ul style="list-style-type: none"> The design is fully in accordance with the gender policy. The specific challenges facing rural women have been identified and opportunities for their economic empowerment, representation and workload reduction identified. The completed gender checklist is included as an annex to Appendix 2.
Compliance with IFAD scaling-up agenda	<ul style="list-style-type: none"> IFAD will pursue opportunities for scaling up results as a key priority. The development of the market-driven "agricultural products with unique characteristics" approach will be piloted by business groups and individuals. The approach, which will promote inclusiveness, will be underpinned by support to capacity development. This capacity development will be technical, managerial and organizational, and be complemented by investments in storage/cooling facilities (through matching grants) and productive infrastructure (productive water supply/last-mile roads). Given the limited funding envelope for this project, the approach will be tested in a limited number of thematic clusters in the northern mountainous region, but with build-in capability to replicate and eventually mainstream in national policy and practices. Scaling up will also be achieved by promoting financial partnerships with the private sector, including public, private, producer partnerships (4Ps) that will anchor the approach on a profitable platform ensuring sustainability and inclusiveness simultaneously. Moreover, by engaging local partners from the onset, IFAD will also expand core institutional-organizational spaces that will allow for domestically led and financed scaling up.

B. Social, Environmental and Climate Assessment Procedures (SECAP)

1. Major landscape characteristics and Issues (Social, natural resources, and climate)

1.1. Socio-cultural context

572. The population of Montenegro was 622 000 in 2014, with an average density of 46.2 inhabitants per km² (24.3 inhabitants/km² in the northern region, 56.8 inhabitants/km² in the central region and 91.8 inhabitants/km² in the southern region). Statistics show that the share of population aged 65 is expected to rise to 15.4% by 2021, while the share of population aged 14 or less is expected to fall to 16.8% by 2021. Although being an upper MIC, wealth distribution is rather uneven throughout the country. The MONSTAT 2011 Poverty Analysis reveals that the average poverty rate is 9.3%, while for the northern region it is nearly three times higher than that in the central and southern regions. The population in the north has limited access to public services, while women and the elderly have a considerably lower income. Unemployment rates in the north are two times greater than the national average, reflecting growing regional disparities. Due to persisting gender-based disadvantages, women are vulnerable and lack political and economic empowerment, including protection against family violence (UNDP, 2012).

573. The rural population represents 36.2% of the total population, with a more marked aging trend (more than 44% of them are older than 55) and significantly lower average level of education (55.3% employed in agriculture had finished high school, and only 9.1% had completed higher school or faculty). Female farmers account for approximately 65% of the work force on family agricultural holdings and 13% of total landholders in the country, a fact that demonstrates their importance to the development of agriculture sector in Montenegro. There is a significantly lower engagement of young people and young women (up to the age of 34) and it is accounted for 17% of the total labour force. The main reasons for low interest of women to remain in rural communities lie in the fact that women rarely own property, as well as their very low participation in decision-making on agricultural production on the farm. In fact, women appear only in 12.87% of cases as holders of family farms. In order to improve the position of women in rural areas of Montenegro, it is necessary to work constantly on their education and to raise awareness about the importance of their role in rural areas.

574. Youth unemployment (15-24 years old) remains high at 35.8 percent and young people aged 15 to 24 years have the highest rate of informal employment at 34 percent (UNDP, 2016). A survey on 'knowledge, attitudes and practices' (KAP) youth show that their aspirations are to 'complete education, find job, form a family' and that over 60 percent claim to prefer self-employment than working for someone else. Despite this, it is considered risky and this is a key reason for not starting their own business include lack of finance (IPSOS, 2013).

575. Women represent 44% of the overall workforce and 31% of employed women have a tertiary education, while only 21% of employed men have the same level of education. However, women only earn 85% of what men earn, own only 10% of businesses and tend to focus on retail and wholesale, despite high levels of competition and resulting low profits. Interestingly women in agriculture, hunting and forestry earned more than men (MONSTAT, 2012). Women are underrepresented in top posts in politics, although often present as deputies (MONSTAT, 2012). The IBRD gender assessment acknowledges important progress and highlights remaining challenges: '(i) low educational attainment for particular population groups; (ii) gender gaps in access to economic opportunities; and (iii) violence against women, and (iv) a lack of female representation in leadership.' (IBRD, 2014).

576. Female farmers account for approximately 65% of the work force on family agricultural holdings and 13% of total farm owners in Montenegro. Less than 6 of the business owners in the category of 'agriculture, forestry and fishing' were women according to MONSTAT (2011).

577. The Strategy for the Development of Agriculture and Rural Areas (2015-2020) does not have a specific indicator for youth and it is not clear whether other indicators relating to participation will be disaggregated by age. The Montenegro Regional Development Strategy (2014-2020) recognizes the need to strengthen entrepreneurial skills in young people. Accession to the EU will entail a number of policy directions to support youth, including in agriculture/business development/rural development (e.g. Compulsory young farmers' payment that are delinked from specific requirements of minimum heads of cattle, holding size, etc., EC, 2015a).

578. Young people make up a minority of the labour force on farms (less than 7 percent), reflecting the pattern of out-migration away from rural areas and farming. In the municipalities visited during the pre-design mission, the Agriculture Census (MONSTAT, 2010) shows a similar pattern – see table below - and the pattern also holds true for 'other labourers' that are not necessarily owners of agricultural holdings.

1.2. Natural resources (NR) and NRM

579. 70% of Montenegro's territory is located between 500 m and 1500 m altitude, with a mean elevation of 1050 m. The country has a highly diverse landform: (i) high mountain ranges in the north along its borders with Serbia, Kosovo and Albania, characterised by significant variations in elevation, with high mountain peaks above 2000 m (e.g. Bobotov Kuk, the highest peak with 2582 m, located in the Durmitor Mountains; Zla Kolata that reach 2534 m, in Prokletije, on the border with Albania in the south-east) and deep gorges (e.g. the Tara River Canyon, the deepest canyon in Europe up to 1300 m depth); (ii) large karst areas in central and western parts, generally at about 900 m altitude, with the highest elevations rising up to 1800 m; (iii) coastal lowland plains situated below 200 m, cover less than 10% of the country and are concentrated in the south and south-east: the narrow Adriatic coastal zone, the flat plains of Ćemovsko and Crmnicko and the Zeta River Valley (or Bjelopavlići Plain), which is the most significant area of flat land in the country, located north of Lake Skadar. The lake is the largest in the Balkans (391 km²), located near to the coast and extending into northern Albania; it occupies a karstic polje depression situated below sea level.

580. Montenegro is characterized by different ecosystem types: (1) Alpine pastures and rocky areas with sparse vegetation; (2) Mountain forests, including conifer forests (spruce, fir and pine species, including the rare Macedonian pine (*Pinus peuce*) and Whitebark pine (*Pinus heldreichii*)), deciduous broadleaf forests (beech, oak and hornbeam species, among others, as well as chestnut with a discontinuous distribution in the coastal mountain ranges in Kotor, Rumija, Ostros, Livari), and mixed broadleaf/conifer forests; (3) dry grasslands; (4) freshwater habitats such as flooded meadows, marshes and riverine forests in the lakes and river systems of lowlands and the coast; (5) coastal Mediterranean and Sub-Mediterranean habitats, including holm oak and Aleppo pine woodlands

hornbeam and pomegranate woodlands, as well as typical Mediterranean maquis and garrigue; (6) Karst habitats, such as caves, dolines, and canyon cliffs with very unique flora and fauna; (7) marine ecosystems over the 2,500 km² of maritime zone, hosting extensive Seagrass beds.

581. In spite of its small size, Montenegro ranks among the leading European countries in terms of diversity of flora and fauna species and the diversity of ecosystems. With 3,250 plant species, Montenegro is considered as one of the most floristically diverse areas of the Balkan Peninsula. Of particular global significance are the 46 locally endemic vascular plants, mostly comprising Tertiary relicts. Of a total of 526 European bird species, 297 can be found regularly in Montenegro, with several additional species registered as occasional visitors. With 204 nesting bird species, Lake Skadar, shared with Albania, is one of the most important wintering sites for waterfowl in Europe. Sixty-five species of terrestrial mammals have also been recorded within the country, including large carnivores (bear, wolf, lynx).

582. National parks are established by a special act promulgated by the parliament, while the government declares Strict Nature Reserves, Wilderness Areas, and Protected Species and Habitats. The local government assemblies proclaim Regional Parks and Nature Parks, Natural Monuments, and Landscapes of Outstanding Qualities.

583. The national network of protected areas currently covers approx. 125,000 hectares (9% of the country) the largest share in terms of coverage being taken by the five national parks: Durmitor, Skadarsko jezero, Lovćen, Biogradska Gora and Prokletije. The rest includes over 40 protected areas with a lower protection status. Skadar Lake is included in the Ramsar List of Wetlands of International Importance, while Durmitor/Tara Canyon and the Kotor-Risan Bay are part of the UNESCO World Heritage Site List. The NBS and the National Strategy for Sustainable Development established the objective of extending protected nature areas to 10% of the terrestrial territory and to protect 10% of the marine area.

Agro-biodiversity

584. Montenegro is traditionally divided into 5 major agro-ecological regions: (i) the coastal region, which covers 11.5% of the country, with about 200,000 ha of cultivable land suitable for fruit trees (including wild fruit tree species, such as pomegranate and fig), olive and vegetable production and is rich in aromatic and medicinal herbs; (ii) the Zeta/Bjelopavlici plain, which covers 14% of the country, suitable for vegetables, fruit trees (e.g. fig, orange, kiwi), and grapes; (iii) the Karst region (area of Cetinje and Niksic), which covers 21% of the country, suitable for livestock breeding and pasture land due to the very limited availability of surface water; (iv) the northern mountains, which cover 32.5% of the country, suitable for growing grains, potatoes and cabbages, and including the largest pastures (both natural and artificial meadows) for livestock raising and milk production; (v) the Polimsko-Ibarski region (valleys of the rivers Lim and Ibar), which covers 20.5% of Montenegro and about 33% of the most fertile cultivable land, suitable for vegetables and fruits.

585. Although a small country, Montenegro has significant diversity of agro-ecological conditions, and a number of distinctive local varieties and breeds. Each of the 5 agro-ecological region holds native varieties of cereals, beans, onions, potatoes, tomatoes, fruits, grape vines and other fruit and vegetables that are still cultivated and consumed locally. However, intensification of agriculture has negatively affected this diversity and some genotypes have already been lost. As far as livestock agro-biodiversity is concerned, among local races is the '*busha*', a small, sturdy and low-maintenance breed of cow, adapted to the harsh, remote, low-nutrient regions of the north and north-east of the country (Plav and Rozaje). The most common sheep breed is the '*pramenka*' of which there are several varieties across the country, each with adaptations to the local environmental conditions, in addition, domestic Balkan goats are predominantly kept in the south of the country in areas unsuitable for sheep for cattle breeding, like the karst areas in Niksic, Cetinje, Podgorica, and coastal areas covered in bushes and low deciduous trees. The red colour variety is considered representative of Montenegro. The small mountain horse is also still used in Montenegro, notably in the more remote and inaccessible mountain areas, while donkeys, though in small numbers, can be found in parts of the south (Ulcinj, Bar, Cetinje).

586. The Biotechnical Faculty works on gathering, making of collections and research of plant genetic resources in the field of agriculture of Montenegro and it has a rich collection of domestic, domesticated and introduced varieties of: (i) grape wine on the Balkans (408 genotype-varieties); (ii) fruit species (35 varieties), (iii) a collection of 180 cultivated and wild varieties of wheat, 68 varieties of maize, 5 of rye, 10 of barley and 5 of oat; (iv) 52 genotypes of potato; (v) 7 genotypes of *Medicago* species, 23 wild population of red clover and 11 populations of cocksfoot; . Furthermore, the Biotechnical Faculty monitors 6 fruit species in different locations, with about 35 accessions. So far, inventory has been made in several locations as well as a herbarium. The Centre for Sub-tropical fruit in the Municipality of Bar monitors different varieties of fig and pomegranate.

Forestry Sector

587. In Montenegro, 743,609 ha or 54% of the state territory are classified as forestland, of which approx. 621,000 ha (45%) is actually covered with forests, while 123,000 ha (9%) is barren forestland (NBSA). With 0.9 ha of forests per inhabitant, Montenegro is one of the most forested countries in Europe. State owned forests and forestland make up 67% of the total surface, while remaining 33% are privately owned. About 56% of the land is managed with a single species type of forest (in either conifers or deciduous trees), while the remainder consists of various mixed species. The total growing stock is estimated at approx. 72 million m³, of which 41% are coniferous trees, and 59% are deciduous species.

588. Forests managed for timber production cover 348,000 ha or 81% of all forests, while protective forests sum up 66,000 ha or 16% of the total. National parks include 12,975 ha or 3% of all the forestland. The most commercially valuable forests cover 212,000 ha and are mainly found in the northern and north-eastern parts of the country.

Water resources and use

589. Montenegro experiences high river discharge levels, with an average total of 40 l/s/km² and is in the top 4% of the world's territory in terms of average outflow. Given that 95% of Montenegrin watercourses are formed within the country, it could be said that water is Montenegro's biggest natural resource. Nevertheless, there are significant differences in the distribution and abundance of water resources ranging from arid karst areas to areas rich in both surface and groundwater. Water from the territory of Montenegro drains into two basins: the Adriatic Sea (45.4% of the territory, rivers Zeta, Morača, and Bojana) and the Black Sea (54.6% of the territory, rivers Ibar, Tara, Piva, Lim and Čehotina).

590. Groundwater is abundant, and the only practical source of water for the population. It is also the main source for industry and agriculture. In 2011, only 3% of the water used in agriculture came from surface sources. Losses in water delivery to the water supply system increased during the period 2005-2011, from 48.19 million m³ to 59.77 million m³, because of poor maintenance of pipelines and irrigation systems. Water consumption levels in industry also increased during the period 2005–2011. The water quality of rivers, lakes, sea and groundwater is considered satisfactory. Prevailing pollutants in Montenegro are mainly the result of wastewater from point sources – settlements and industry. The quality of groundwater in natural conditions is classified as class I for the majority of the year (ICPDR, 2015).

591. The EU Water Framework Directive 2000/60/30 (WFD) is partially transposed by the Law on Water (2007), the Law on Financing Water Management (2008) and several implementing acts. The government is planning to reach full legislative alignment by the end of 2016. Montenegro plans to adopt river basin management plans in line with the EU WFD by 2020, with full implementation by 2030. The Ministry of Agriculture and Rural Development - MARD and the Ministry of Sustainable Development and Tourism - MoSDT share the responsibility for water policy.

Energy sector

592. The Montenegrin energy sector is characterized by a high level of intensity in energy consumption, primarily due to industry's large share of the total amount of electricity consumed. The umbrella document in the field of energy in Montenegro is its Energy Development Strategy (EDS) of Montenegro up to 2030. The most important source of energy is hydroelectric: the EDS estimates an overall

theoretic potential of about 10.6-10.7 TWh. The second most important source of energy is coal, which is found in the north and northeast regions. Research on other types of renewable energy sources in Montenegro was intensified during the period 2007-2012 when an assessment of wind, sun and biomass potential for electricity generation was carried out. Regarding wind and solar energy, the "Estimation on potential renewable energy sources in Montenegro" (2007), indicated that installing wind generators in the most favourable areas (the coastal mountains and the hills in Niksic municipality) and other zones with average potential, could supply 20-25% of the total annual energy consumption in Montenegro. The use of biomass is considered in the form of thermal plants for crop production processes (e.g. driers, dehydrators), in animal production (e.g. on-farm cooling and heating) and in house heating systems. In addition, the importance of collecting and treating manure in anaerobic digesters is widely recognised.

I.3 Climate

593. Montenegro is characterized by a climate gradient between two distinct climatic regions: (i) the southern coastal region and the Zeta-Bjelopavlici plain have a Mediterranean climate type with warm and somewhat dry summers and mild and rather humid winters; (ii) the far north mountainous region has a continental climate with warm to hot (often humid) summers and cold to severely cold and humid winters; (iii) the continental climate in the central and northern regions is markedly influenced by the Mediterranean climate (SNC, 2015). Due to the sharp changes in relief and the presence of large water bodies, the climate changes rapidly from the coastal Mediterranean conditions to the alpine climate on the highest mountains, resulting in numerous, transitional local climates, and micro-climate differences within relatively small areas.

Key Issues

594. **Land Degradation issues.** There is limited availability of agricultural lands and conversion of land into urban and rural settlements, and industrial and infrastructure facilities is fast.

595. Prevailing soils in Montenegro are characterized by limited to low fertility (90% of soils), acid reaction (95% of soils in Montenegro are naturally acidic), often skeletal and shallow, with small retention capacity for moisture and nutrients.

596. The destruction of good quality soil is caused by a number of human activities (e.g. sand, clay and gravel extraction, exploitation and processing of minerals, solid waste and tailings disposal). All these activities lead to ecosystem degradation and threaten the soil quality as well as biodiversity⁷⁸.

597. **Forest fires.** Forest fires are an increasingly serious problem in Montenegro. According to the Forest Administration the average surface of forests affected by fire in the period 2003-2007 was 4,800 ha and the average number of fires was 53. In the last 15 years, more than 1,000 large forest fires were recorded, whereas an area of around 15,300 ha was burned and approximately 500,000 m³ of timber damaged or destroyed. Among the abiotic factors causing forest damages are air pollution, and adverse climatic and edaphic factors. Among the biotic factors, the Forest Administration mentions pathogenic and saprophytic fungi (*Nectria coccinea* and *Nectria galligena*, *Phellinus pini*, *Cytospora friesii*, *Herpotrichianigra*, *Lachnellula fuscocanguinea*) and insects (*Scolytidae*) that has caused significant economic losses. Illegal logging and uncontrolled harvesting of NTFP are also of high concern, although no official data are available on their impact.

598. **Water problems.** Flood risk potentially threatens 24,500 ha of farmland and urban areas in the country. This is particularly pronounced in areas surrounding Lake Skadar and the Bojana River, Zeta/Bjelopavlici Valley, Plav ravine and areas around the Lim, Tara and Cehotina river valleys⁷⁹. The need for flood protection measures is particularly apparent near the larger rivers (e.g. Morača, Lim, Tara, Cehotina, Ibar and Bojana rivers) and the large flat karst plain areas.

⁷⁸ SIDA Environmental Policy Brief Montenegro 2007.

⁷⁹ Large floods in 1963, 1979, 1999, 2000 hit the central and northern parts of the country, specifically the upper Tara and Lim regions.

599. Water quality of Lake Skadar represents a key policy challenge: pollution from recent unchecked development around the lake and industrial waste pose increasing threats to the water quality and the ecosystem services. Overfishing is another major problem. The Montenegrin and Albanian authorities, with WB support, have prioritized the effective cross-border management of the growth, pollution and commercial uses of the largest lake in the Balkans⁸⁰.

600. **Pollution.** Prevailing pollutants in Montenegro are mainly the result of wastewater from point sources – settlements and industry (e.g. aluminium and steel factories, energy plants and shipyard). This poses risks not just to the immediate environment but also to the public health, natural resources and groundwater contamination⁸¹. Enforcement of environmental regulations on industrial pollution is still fairly weak, and waste disposal treatment practices are below EU and other international standards. According to Report of the Agency for Environment Protection on the State of the Environment in Montenegro for 2013, presence of pesticides in agriculture soils do not exceed the established limits. In fact, usage of pesticides in Montenegro is relatively stable, and in accordance with good agriculture practices.

601. **Climate Change Impacts.** According to the Second National Communication to the UNFCCC (SNC) published by the government of Montenegro in 2015, the Montenegrin climate is affected by global climate changes and variability. The clearest indicators include:

602. Changes towards a warmer climate since the 1990s, particularly noticeable in the northern mountainous region: (i) the 2001–2010 decade was the warmest since records began, with the most prominent changes in the northern mountainous region of +1.40C° and in the coastal region of +1.30C°; (ii) in all regions the lowest minimum temperatures increased the most (of about +3°C to +6°C) during the last decade with the exception of the northern mountainous region (above 1,000m), decreasing the number of frost days and very cold days and nights.

603. Regarding precipitation, as described in the SNC, there has been no significant reduction in the total annual precipitation: precipitation has increased during the autumn while has decreased during the spring, summer and winter. Since the 1980s, in the northern mountainous region the annual amount of the snow cover has decreased in relation to precedent periods.

604. Extreme weather events: (i) heat waves are increasingly frequent and their length shows a high year-to-year variability; (ii) storms have become more frequent and more intensive since 1998, bringing with them huge amounts of precipitation, storm to hurricane gusts of wind, high waves and flooding in significant areas along the coast.

605. The analysis of the last decades' climatic patterns (1981-2014) done by IFAD in 2016⁸², in support of the design missions, confirms that climate in Montenegro has already changed and that the main impacts foreseen by the IPCC⁸³ for temperatures and extreme events are becoming evident. In particular, the study highlights an increase in maximum and minimum temperatures all over the country, more pronounced in summer, but also in spring and late autumn.

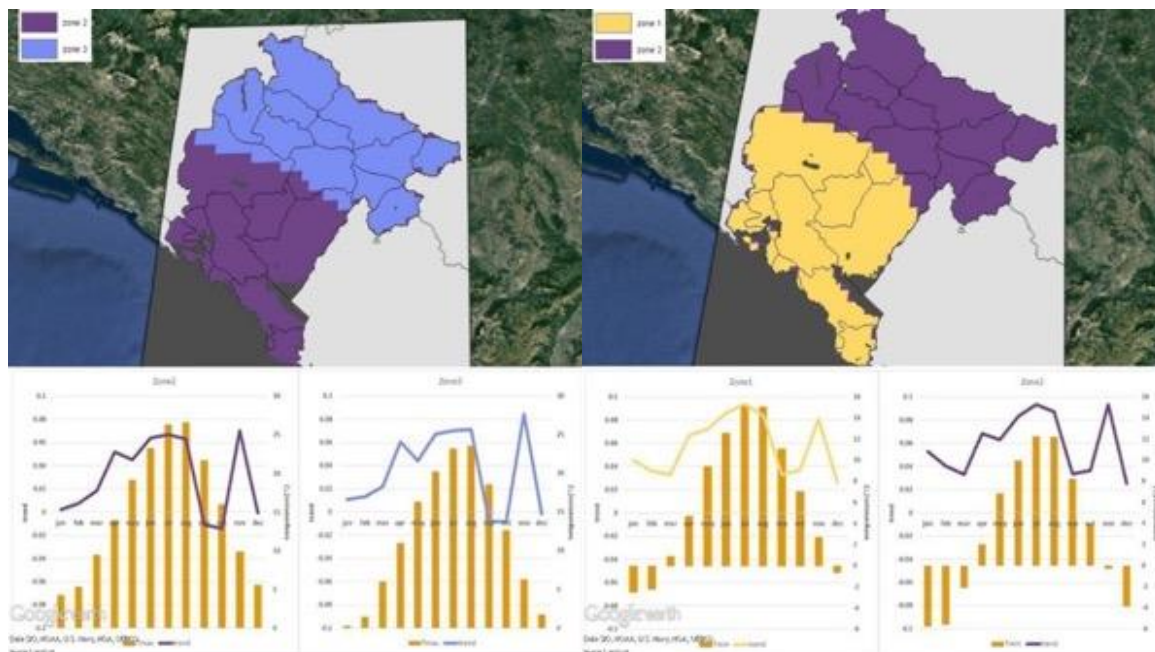
⁸⁰ World Bank Group – Montenegro Partnership Country Program Snapshot, April 2015.

⁸¹ World Bank Group – Montenegro Partnership Country Program Snapshot, April 2015.

⁸² Montenegro Georeferenced Climate Trends Assessment 1989-2016. IFAD 2016

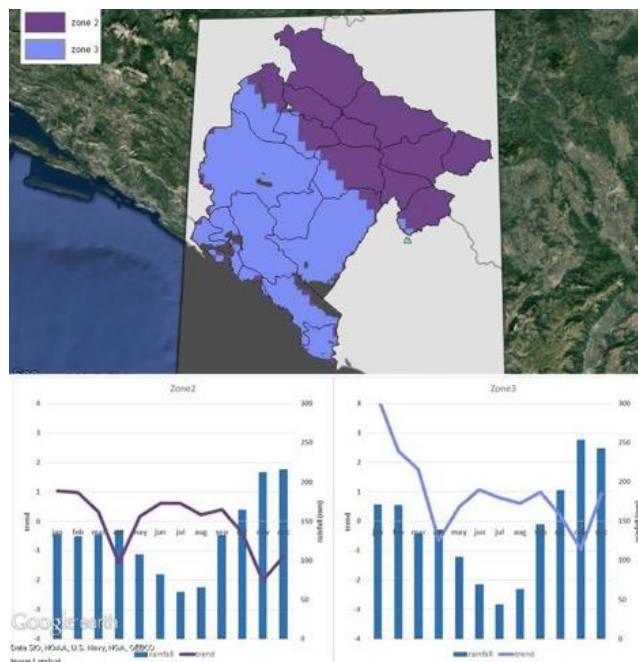
⁸³ A detailed analysis of the main environmental and climate change challenges is presented in the SECAP note.

Intra-annual Maximum and Minimum temperature variability. Data reported in the graphs show that in Montenegro there is an increase in both minimum and maximum temperature especially during summer months.⁸⁴



606. There is an increase of rainfall during winter (January and February), slight increase during summer, and precipitation reduction in spring (mainly April) and autumn.

Intra-annual rainfall variability. Data presented in the graphs for both climatic zones of Montenegro shows a variation in rain patterns.⁸⁵



84 Data source: CHIRPS/Climate Hazards Group-USGS. 1986-2014

85 Data source: CHIRPS/Climate Hazards Group-USGS. 1986-2014

607. The study also analyses changes in a number of municipalities in the Northern part of Montenegro: The north-eastern, more continental municipalities (Bijelo Polje, Petnjica/Berane, and Andrijevica), have experienced slightly higher increase in maximum temperatures (2.52-2.78 °C) and insignificant increase in annual rainfall (1.8-3.2 %), while the north-western municipalities (Niksic, Pluzine and Savnik) have experienced slightly lower increase in maximum temperatures (1.92-2.3 °C) and higher increase in annual rainfall (17.5%-39%). Although snow cover has decrease in relation to precedent periods before the 1980s, the study shows a slight increase of 8 days with snowfall, with sharp inter-annual changes for the period 1981-2013.

608. From the above data we can conclude the following: (i) despite the increase in annual rainfall, rains are more concentrated in winter, increasing the torrential regime and thus the risk of flooding, soil erosion, and reduced infiltration of water in the soils (lower availability of water in spring-summer when water demand for crop production and other human uses is higher); (ii) the very limited precipitation increase during summer cannot compensate for the increased evaporation caused by higher temperatures; (iii) whether or not snowfall is higher, the increase in minimum temperatures cause earlier and faster snow melting, increasing the risk of avalanches and flooding, and reducing water flow in summer.

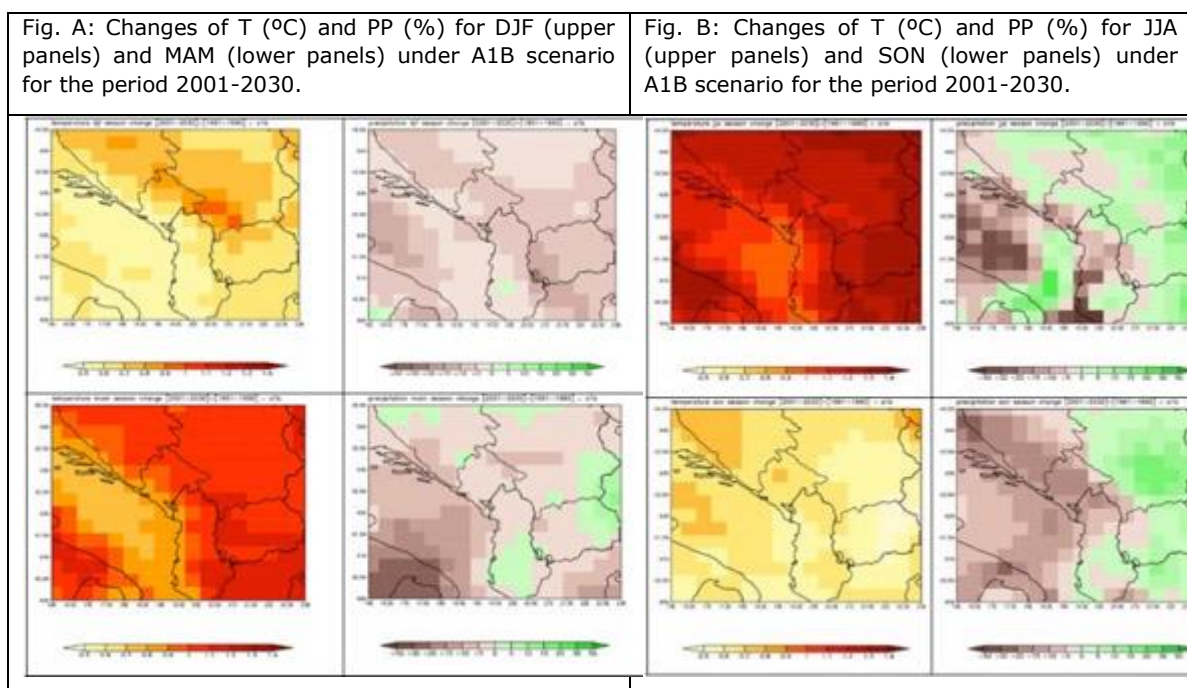
609. The consequences of climate change are already visible in Montenegro and have led to heavy and destructive extreme weather events, such as: floods that have affected the territory of 12 municipalities (Podgorica - town municipalities Golubovci and Tuzi, Ulcinj, Bar, Cetinje, Nikšić, Danilovgrad, Bijelo Polje, Berane, Plav, Andrijevica, Kolašin and Mojkovac) in 2010 (January, November and December 2010); heavy snowfalls were recorded in February 2012, leading to the declaration of state of emergency in Montenegro; more than 1,000 large forest fires were recorded in the last 15 years.

610. Climate change forecasts for Montenegro were made by using the Regional Climate Model EBU-POM for the A1B and A2 scenarios⁸⁶, developed based on global emission scenarios defined in the IPCC Special Report on Emissions Scenarios (SRES). Model results for Montenegrin territory were analysed for the periods 2001-2030 and 2071-2100 for two basic meteorological parameters – temperature and precipitation. Changes (increases) in average seasonal temperature until 2030 will range between 0.6 °C and 1.3 °C depending on the season and the area: except for autumn (SON), changes will be more significant in the northern mountainous region. The highest increase in temperature is expected during summer (JJA) equalling 1.3 °C in the north and 1 °C in the coast. As far as precipitation, the model predicts both negative and positive changes: very small increase (up to 5%) is expected in summer (JJA) in the north/central parts and in spring (MAM) in the far northeast; the most significant deficit (20%) is foreseen for the central and southern part in summer (JJA) and for almost all the entire territory during autumn (SON); up to 10% decrease is expected for other parts and seasons. Changes in temperature for the period 2071-2100 range from +1.6 to +4.8 °C with the highest value in the northern part of Montenegro during summer (JJA). Precipitation projections show a range from +5% to -50% with the largest decrease in the southern part of Montenegro during winter (DJF)⁸⁷. Sea level in the Adriatic could rise by up to 35cm.

⁸⁶ Climate-Adapt Montenegro country report

⁸⁷ According to the IPCC, Rainfall statistics are dominated by inter-annual to decadal-scale variations, and trend estimates are spatially incoherent, with only few regions having data series of sufficient quality and length to assess trends in extremes reliably.

Climate Change Forecast for Montenegro



611. Always according to the SNC, the following sectors are predicted to be particularly vulnerable: water resources, the coastline and the coastal strip, agriculture, forestry and human health.

612. Significant decreases ranging from 20 to 50% depending on the area in runoff and electricity production potential can be expected from the mid-21st century onwards for the rivers in South East Europe, including Montenegro (IPCC, 2007). The White Paper “Adapting to climate change: Towards a European framework for action” (EU, 2009) also highlighted that hydropower production potential could decrease by 25% or more in southern Europe as a result of changing climate by 2070. According to UNDP (2010) estimates of climate change damages to hydro-power generation from the Mratinje Dam on the Piva river in Montenegro, average annual electricity production will fall between 100-160 MWh with an average gross revenue loss between EUR 6.6 million and EUR 13 million.

613. The European Centre for Climate Change Adaptation predicts the following impacts for Montenegro’s natural resources⁸⁸:

Climate Change Impacts in Montenegro

Resource	Impact
<p>Water And Rivers</p>	<p>The yield of water sources would be reduced, and some springs would dry up or experience intermittent flow. The sources of water supply to cities would not have the capacity to meet the water demand. The capacity of accumulations used for industrial and commercial purposes would be reduced, as well as energy generation.</p> <p>Flood waves would become more frequent and stronger due to an increased intensity of rainfall and a change in the type of precipitation. The decrease in snow in the mountains of the North could lead to an increased risk of flooding, as part of the water previously used to be deposited in the form of snow with a delayed discharge over a longer period of time.</p>

⁸⁸ <http://www.climateadaptation.eu>

Agriculture and Livestock	<p>The main potential impacts of CC on the agricultural sector in Montenegro are:</p> <p><i>Increases in CO2 concentrations:</i> Increase in long-term yields of some crops; More rapid growth of weeds and increased competition from weeds for available resources.</p> <p><i>Increases in temperature:</i> Increases in crop yields up to a point followed by decreases; Increases in productivity of livestock, up to a point followed by decreases; Reduced irrigation water supply and increased irrigation water demand; Adverse effects on animal health due to heat stress.</p> <p><i>Lower water availability during cropping season:</i> Even with slightly increase of summer rainfall, increased evaporation and evapotranspiration caused by higher temperatures will reduce crop yields and land productivity; decrease irrigation water supply (lower groundwater recharge and river flow during summer); increase irrigation water demand; cause complex effects on weeds, insects and animal health.</p> <p><i>Increases in magnitude and frequency of extreme events:</i> increase in crop damages due to drought, flooding, torrential rainfall, hail and wind storms; reduction of soil water storage, and river water flow due to the concentration of rainfall in shorter periods with torrential regime, and faster and earlier snow melting due to higher minimum temperatures.</p> <p><i>Increased crop losses</i> due to flooding; Greater livestock loss due to droughts and floods.</p> <p><i>Combination of higher CO2 and higher temperature:</i> Northern part: small positive effects on land productivity and yields; Southern part: reductions in land productivity and yields;</p>
Forests	<p>Most likely impacts include increased risk of forest fires, northward shifts in the distribution of typical tree species, and increased impact of pests. Conifer forests are likely to suffer more damage compared to the broadleaf stands.</p>
Biodiversity	<p>Shifting of vegetation belts in the horizontal and vertical direction and changes in geographic distribution of some plant and animal species and disappearance of certain species. Fragmentation of habitats and changes in the functioning of ecosystems. Species loss is expected, primarily related to freshwater ecosystems, as well as the species vulnerable to significant fluctuations in temperature and humidity in the environment.</p>

Analysis of climate trends in Municipalities visited during design⁸⁹

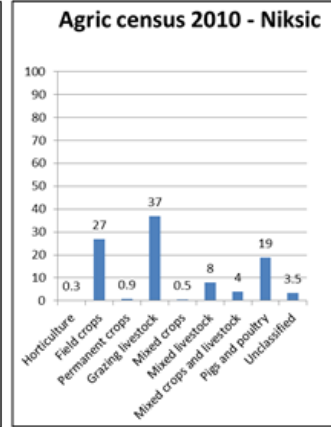
Municipality⁹⁰	Coordinates
Niksic (priority municipality)	42.780330, 18.957046
Pluzine (in a second step)	43.154127, 18.840812
Savnik (priority municipality)	42.957616, 19.093959
Petnjica (priority municipality)	42.906932, 19.960227
Bijelo Polje (priority municipality)	43.403349, 19.750102
Andrijevisa (in a second step)	42.932996, 19.784696

⁸⁹ IFAD is in the process of reviewing remote sensing analysis and areal satellite imagery interpretation for further information on land use.

⁹⁰ Petnjica Municipality was created in 2013, when it was split from Berane municipality. Climate analysis is done partly at Berane district level.

Niksic

Area: 2,065 km²
 Population: 70,798
 Pop. Density: 34 /km²
 Percentage rural population: 21%
 Average household size: 3.4
 Percentage dwellings linked to water: 85%
 Source: Monstat, 2015.
 Average Altitude: 1063m
 Slope: 3.7% (>50%), 96.3% (<50%)
 Percentage forest: 70%
 Roads (km): local(234) + other(163) = 397
 Local: 50% paved; 50% stabilized gravel
 Other: 85% earth; 15% gravel paved



Past climatic data

Annual rainfall

The trend of annual rainfall is characterized by an important increase in rainfall during the last 30 years (19.71mm/y; +33%).

Minimum and Maximum Temperature

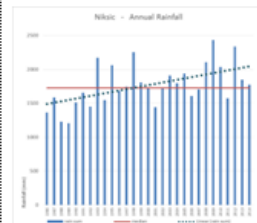
An increase can be noticed for the maximum (0.0652°C/y) and minimum (0.037°C/y) temperature.

NDVI

The NDVI doesn't show major variation (1 e-5/y).

Snow Cover

Increase of 0.1192/y (+5.3%) of 8 days periods occurrence of snow cover from 2001 to 2015.



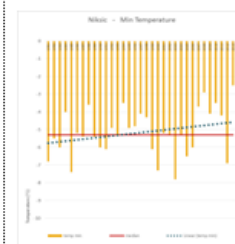
Data source: CHIRPS/Climate Hazards Group-USGS, 1986-2014



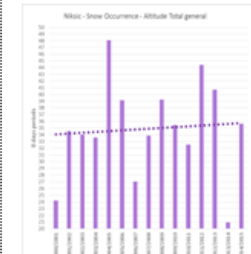
Data source: MODIS Vegetation Indices 16-Day L3 Global 250m (MOD13Q1)/NASA, 2001-2015



Data source: University of East Anglia Climatic Research Unit (CRU), 1981-2013



Data source: University of East Anglia Climatic Research Unit (CRU) 1981-2013



Data source: MODIS Snow Cover 8-Day L3 Global 500m Grid (MOD10A2)/NASA-NSIDC

Possible Impacts

The increase in precipitation can have beneficial impacts on water supply but can increase runoff and erosion especially on the hills surrounding the city of Niksic where the land is already degraded. The increase in temperature both for maximum and minimum temperatures could create increases in crop yields and livestock up to a point followed by decreases. That increase can also have adverse effects on animal health due to heat stress and pests in livestock and also pigs a poultry farming well represented in Niksic and reduce irrigation water supply and increase irrigation water demand in field crops. Moreover increasing temperature can increase forest fire probability in lower altitude Niksic administration forested area (70% of territory forested), and can have impacts on weeds and pests³.

¹ Rain intensity and average annual distribution is still under analysis.

² The NDVI is a measurement of the balance between energy received and energy emitted by objects on Earth. When applied to plant communities, this index establishes a value for how green the area is, that is, the quantity of vegetation present in a given area and its state of health or vigour of growth. The NDVI is a dimensionless index, so its values range from -1 to +1.

³ Callaway, J.M., Kaščelan, S. and M. Markovic, 2010. The Economic Impacts of Climate Change in Montenegro: A First Look. Report prepared for the Office of UNDP, Montenegro, 116 pp.

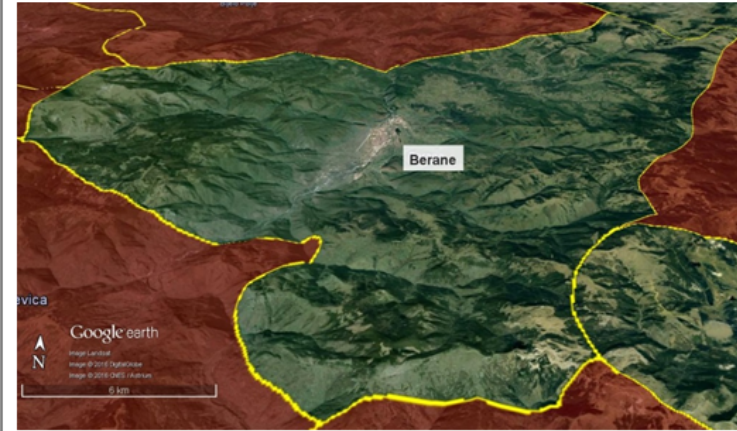
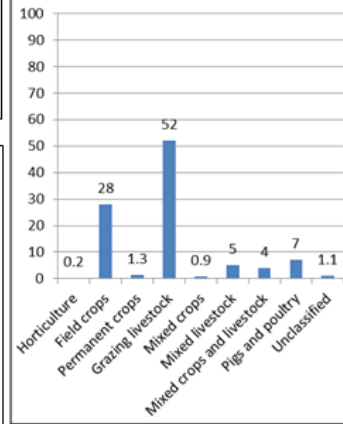
Petnjica

Area: 173 km²
 Population: 5,082
 Pop. Density: 29 /km²
 Percentage urban : 11%
 Source: Monstat, 2015.
 Percentage forest: 49%

Berane

Average household size: 3.5
 Percentage rural population: 67%
 Percentage dwellings linked to water: 72%
 Source: Monstat, 2015.
 Average Altitude : 1221m
 Slope: 17.7% (>50%), 82.3% (<50%)
 Roads (km): local(324) + other(65) = 389
 Local: 50% pave d; 50% stabilized gravel
 Other: 85% earth; 15% gravel paved

Agric census 2010 - Berane



Past climatic data

Annual rainfall

The trend of annual rainfall is characterized by very slight increase in rainfall during the last 30 years (0.94mm/y; +1.8%)¹.

Minimum and Maximum Temperature

The maximum (0.087°C/y) and minimum (0.035°C/y) temperature are increasing.

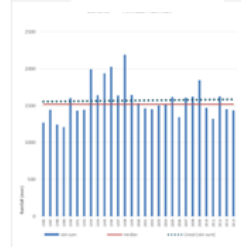
NDVI

NDVI doesn't show major variation (0.0009/y).

Snow Cover

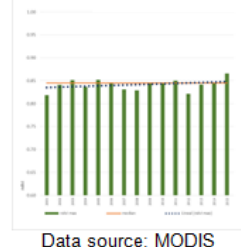
Increase of 0.142/y (+6.4%) of 8 days periods occurrence of snow cover from 2001 to 2015.

Annual rainfall



Data source: CHIRPS/Climate Hazards Group-USGS. 1986-2014

Annual NDVI



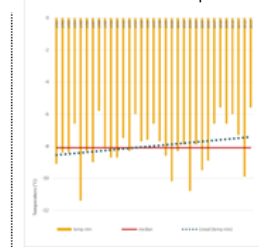
Data source: MODIS Vegetation Indices 16-Day L3 Global 250m (MOD13Q1)/NASA. 2001-2015

Annual Max temperature



Data source: University of East Anglia Climatic Research Unit (CRU). 1981-2013

Annual Min temperature



Data source: University of East Anglia Climatic Research Unit (CRU) 1981-2013

Snow occurrence



Data source: MODIS Snow Cover 8-Day L3 Global 500m Grid (MOD10A2)/NASA-NSIDC

Possible Impacts

The increase in precipitation can have beneficial impacts on water supply but can increase runoff and erosion especially on mountainous bare soils in the West and South of Berane area. The increase in temperature both for maximum and minimum temperatures could create increases in crop yields and livestock up to a point followed by decreases. This increase can have adverse effects on animal health due to heat stress and pests, especially in grazing livestock farming well developed in Berane and shift vegetation zones (belts) in the horizontal and vertical direction. Moreover increasing temperature can increase forest fire probability, half of Petnjica administration being forested it can cause major impacts and can have impacts on weeds and pests³.

¹ Rain intensity and average annual distribution is still under analysis.

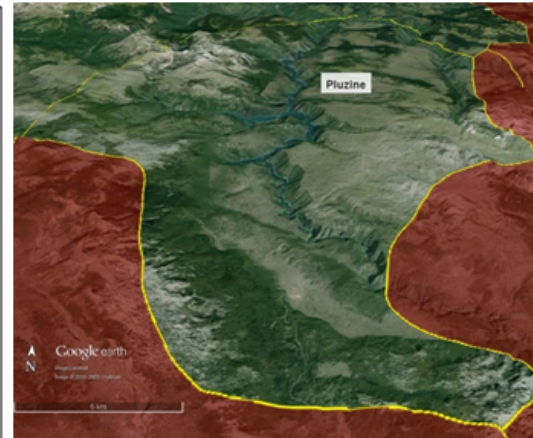
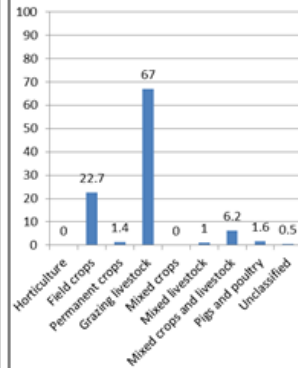
² The NDVI is a measurement of the balance between energy received and energy emitted by objects on Earth. When applied to plant communities, this index establishes a value for how green the area is, that is, the quantity of vegetation present in a given area and its state of health or vigour of growth. The NDVI is a dimensionless index, so its values range from -1 to +1.

³ Callaway, J.M., Kaščelan, S. and M. Markovic, 2010. The Economic Impacts of Climate Change in Montenegro: A First Look. Report prepared for the Office of UNDP, Montenegro, 116 pp.

Plutzine

Area: 854 km²
 Population: 2,772
 Pop. Density: 3 /km²
 Average household size: 2.9
 Percentage rural population: 59%
 Percentage dwellings linked to water: 44%
Source: Monstat. 2015.
 Average Altitude: 1362m
 Slope: 22.3% (>50%), 77.7% (<50%)
 Percentage forest: 51%
 Roads (km): local(263) + other(132) = 395
 Local: 50% paved; 50% stabilized gravel
 Other: 85% earth; 15% gravel paved

Agric census 2010 - Plutzine



Past climatic data

Annual rainfall

The trend of annual rainfall is characterized by an important increase in rainfall during the last 30 years (12.93mm/y; +23.3%)¹.

Minimum and Maximum Temperature

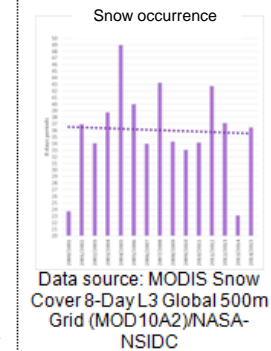
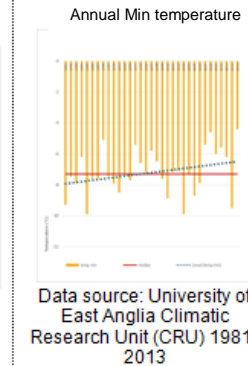
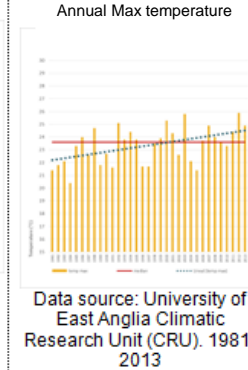
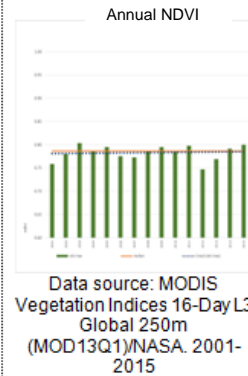
The maximum (0.073°C/y) and minimum (0.045°C/y) temperature are increasing.

NDVI

NDVI doesn't show major variation (0.0003/y).

Snow Cover

Decrease of 0.074/y (-3%) of 8 days periods occurrence of snow cover from 2001 to 2015.



Possible Impacts

The increase in precipitation can have beneficial impacts on water supply but can increase runoff and erosion, already present in Plutzine area. The increase in temperature both for maximum and minimum temperatures could create increases in crop yields and livestock up to a point followed by decreases and can have adverse effects on animal health due to heat stress and pests especially in grazing livestock farming well developed in Plutzine. This increase can lead to the acceleration of eutrophication of mountain lakes in the North West; shift vegetation zones (belts) in the horizontal and vertical direction. Moreover increasing temperature can increase forest fire probability in the West and South of Plutzine area and can have impacts on weeds and pests³.

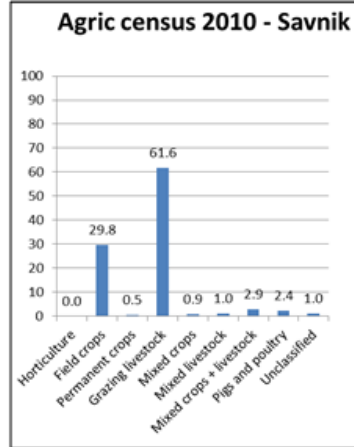
¹ Rain intensity and average annual distribution is still under analysis.

² The NDVI is a measurement of the balance between energy received and energy emitted by objects on Earth. When applied to plant communities, this index establishes a value for how green the area is, that is, the quantity of vegetation present in a given area and its state of health or vigour of growth. The NDVI is a dimensionless index, so its values range from -1 to +1.

³ Callaway, J.M., Kaščelan, S. and M. Markovic, 2010. The Economic Impacts of Climate Change in Montenegro: A First Look. Report prepared for the Office of UNDP, Montenegro, 116 pp.

Savnik

Area: 553 km²
 Population: 1,748
 Pop. Density: 5 /km²
 Average household size: 3
 Percentage rural population: 77%
 Percentage dwellings linked to water: 29%
 Source: Monstat, 2015.
 Average Altitude: 1464m
 Slope: 13.9% (>50%), 86.1% (<50%)
 Percentage forest: 33%
 Roads (km): local(136) + other(254) = 390
 Local: 50% paved; 50% stabilized gravel
 Other: 85% earth; 15% gravel paved



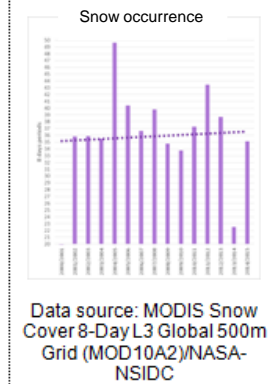
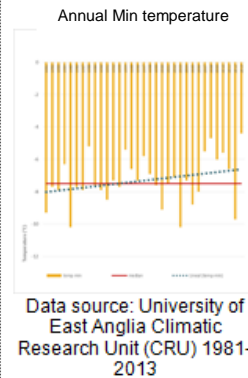
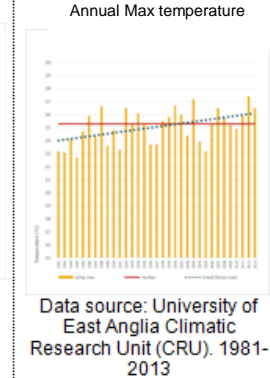
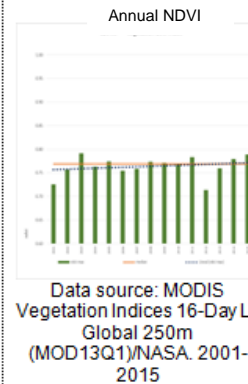
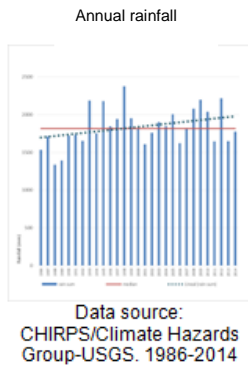
Past climatic data

Annual rainfall
 The trend of annual rainfall is characterized by an increase in rainfall during the last 30 years (10.162mm/y; 16.2%)¹.

Minimum and Maximum Temperature
 An increase can be noticed for the maximum (0.0652°C/y) and minimum (0.0439°C/y) temperature.

NDVI
 The NDVI doesn't show major variation.

Snow Cover
 Increase of 0.0997/y (+4.3%) of 8 days periods occurrence of snow cover from 2001 to 2015.



Possible Impacts

The increase in precipitation can have beneficial impacts on water supply but can increase runoff and erosion especially in the West, South and East high plateaus of Savnik. The increase in temperature both for maximum and minimum temperatures could create increases in crop yields and livestock up to a point followed by decreases and have adverse effects on animal health due to heat stress and pests especially in grazing livestock farming well developed in Savnik. This increase can reduce irrigation water supply and increase irrigation water demand and also shift vegetation zones (belts) in the horizontal and vertical direction. Moreover increasing temperature can increase forest fire probability in the central part of Savnik and can have impacts on weeds and pests³.

¹ Rain intensity and average annual distribution is still under analysis.

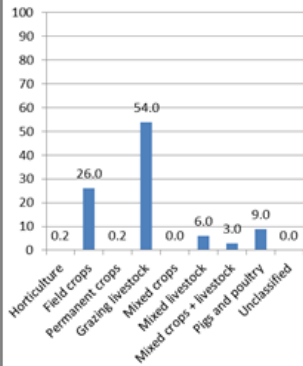
² The NDVI is a measurement of the balance between energy received and energy emitted by objects on Earth. When applied to plant communities, this index establishes a value for how green the area is, that is, the quantity of vegetation present in a given area and its state of health or vigour of growth. The NDVI is a dimensionless index, so its values range from -1 to +1.

³ Callaway, J.M., Kaščelan, S. and M. Markovic, 2010. The Economic Impacts of Climate Change in Montenegro: A First Look. Report prepared for the Office of UNDP, Montenegro, 116 pp.

Andrijevica

Area: 283 km²
 Population: 4,957
 Pop. Density: 17.5 /km²
 Average household size: 3
 Percentage rural population: 79%
 Percentage dwellings linked to water: 47%
 Source: Monstat, 2015.
 Average Altitude: 1357m
 Slope: 26.1% (>50%), 73.9% (<50%)
 Percentage forest: TBU
 Roads (km): local(60) + other(662) = 722
 Local: 50% paved; 50% stabilized gravel
 Other: 85% earth; 15% gravel paved

Agric census 2010 - Andrijevica



Past climatic data

Annual rainfall

The trend of annual rainfall is characterized by a slight increase in rainfall during the last 30 years (1.745mm/y; 2.9%)¹.

Minimum and Maximum Temperature

An increase can be noticed for the maximum (0.0799°C/y) and minimum (0.0336°C/y) temperature.

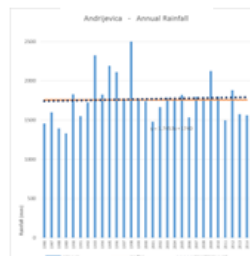
NDVI

The NDVI doesn't show major variation.

Snow Cover

Increase of 0.1897/y (+8.7%) of 8 days periods occurrence of snow cover from 2001 to 2015.

Annual rainfall



Data source: CHIRPS/Climate Hazards Group-USGS. 1986-2014

Annual NDVI



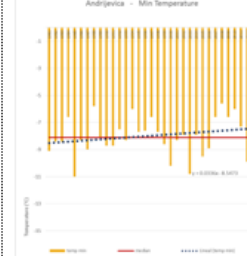
Data source: MODIS Vegetation Indices 16-Day L3 Global 250m (MOD13Q1)/NASA. 2001-2015

Annual Max temperature



Data source: University of East Anglia Climatic Research Unit (CRU). 1981-2013

Annual Min temperature



Data source: University of East Anglia Climatic Research Unit (CRU) 1981-2013

Snow occurrence



Data source: MODIS Snow Cover 8-Day L3 Global 500m Grid (MOD10A2)/NASA-NSIDC

Possible Impacts

The increase in temperature both for maximum and minimum temperatures could create increases in crop yields and livestock up to a point followed by decreases and have adverse effects on animal health due to heat stress and pests especially in grazing livestock farming main agricultural sector in Andrijevica. This increase can reduce irrigation water supply and increase irrigation water demand and also shift vegetation zones (belts) in the horizontal and vertical direction. Moreover increasing temperature can increase forest fire probability in the central and northern part of Andrijevica and can have impacts on weeds and pests³.

¹ Rain intensity and average annual distribution is still under analysis.

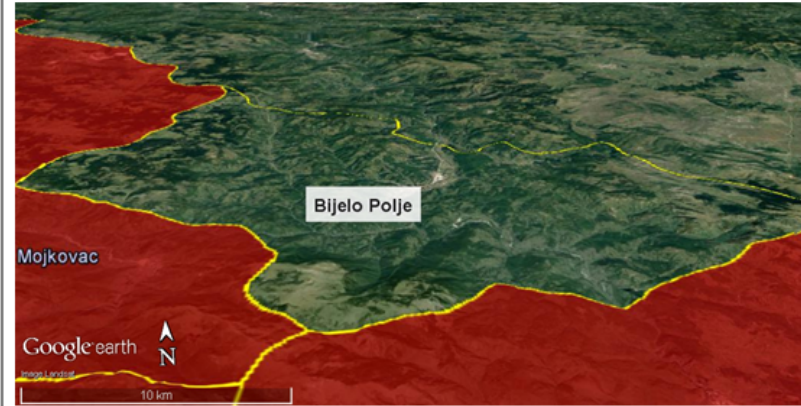
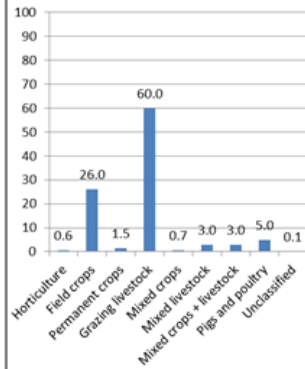
² The NDVI is a measurement of the balance between energy received and energy emitted by objects on Earth. When applied to plant communities, this index establishes a value for how green the area is, that is, the quantity of vegetation present in a given area and its state of health or vigour of growth. The NDVI is a dimensionless index, so its values range from -1 to +1.

³ Callaway, J.M., Kaščelan, S. and M. Markovic, 2010. The Economic Impacts of Climate Change in Montenegro: A First Look. Report prepared for the Office of UNDP, Montenegro, 116 pp.

Bijelo Polje

Area: 924 km²
 Population: 44,958
 Pop. Density: 49 /km²
 Average household size: 3.5
 Percentage rural population: 67%
 Percentage dwellings linked to water: 50%
 Source: Monstat. 2015.
 Average Altitude: 1044m
 Slope: 9.8% (>50%), 90.2% (<50%)
 Percentage forest: TBU
 Roads (km): local(305) + other(76) = 381
 Local: 50% pave; 50% stabilized gravel
 Other: 85% earth; 15% gravel paved

Agric census 2010 - Bijelo Polje



Past climatic data

Annual rainfall

The trend of annual rainfall is characterized by a slight increase in rainfall during the last 30 years (1.664mm/y; +3.2%)¹.

Minimum and Maximum Temperature

An increase can be noticed for the maximum (0.0804°C/y) and minimum (0.0352°C/y) temperature.

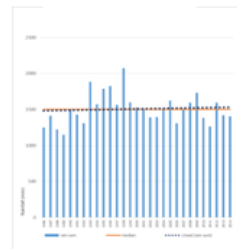
NDVI

The NDVI increases slightly (0.0011/y).

Snow Cover

Increase of 0.1897/y (+8.7%) of 8 days periods occurrence of snow cover from 2001 to 2015.

Annual rainfall



Data source: CHIRPS/Climate Hazards Group-USGS. 1986-2014

Annual NDVI



Data source: MODIS Vegetation Indices 16-Day L3 Global 250m (MOD13Q1)/NASA. 2001-2015

Annual Max temperature



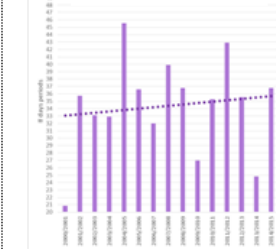
Data source: University of East Anglia Climatic Research Unit (CRU). 1981-2013

Annual Min temperature



Data source: University of East Anglia Climatic Research Unit (CRU) 1981-2013

Snow occurrence



Data source: MODIS Snow Cover 8-Day L3 Global 500m Grid (MOD10A2)/NASA-NSIDC

Possible Impacts

The increases in temperature both for maximum and minimum temperatures could create increases in crop yields and livestock up to a point followed by decreases and have adverse effects on animal health due to heat stress and pests especially in grazing livestock farming main agricultural sector in Bijelo Polje. This increase can reduce irrigation water supply and increase irrigation water demand and also shift vegetation zones (belts) in the horizontal and vertical direction. Moreover increasing temperature can increase forest fire probability in the West part of Bijelo Polje and can have impacts on weeds and pests³.

¹ Rain intensity and average annual distribution is still under analysis.

² The NDVI is a measurement of the balance between energy received and energy emitted by objects on Earth. When applied to plant communities, this index establishes a value for how green the area is, that is, the quantity of vegetation present in a given area and its state of health or vigour of growth. The NDVI is a dimensionless index, so its values range from -1 to +1.

³ Callaway, J.M., Kaščelan, S. and M. Markovic, 2010. The Economic Impacts of Climate Change in Montenegro: A First Look. Report prepared for the Office of UNDP, Montenegro, 116 pp.

2. Impact of Climate Change on Rural Infrastructures

614. The exacerbation of extreme weather events, such as heavy precipitations and early and fast snow melting, will increase the risk of flooding, slope instability, movements of mass, soil erosion/scouring, landslides and avalanches in the mountain slopes. This will require additional climate-proof measures when rehabilitating and constructing rural road networks, and other infrastructures and forestation measures for watershed protection. Moreover, water scarcity during summer period due to higher evaporation, and reduced streamflow and groundwater recharge, together with heat stress due to higher maximum temperatures, will require additional measures to create a network of multi-purpose (e.g. drinking trough, firefighting, irrigation) water points and infrastructures, such as shelters for livestock, thermal insulation in stabling facilities, etc., while promoting at the same time more efficient use of available water (in particular for irrigation purposes).

3. Rural depopulation and labor problems

615. Availability of rural labour is often determined by the number of people in families (2-6 including children) and there is a high proportion of older/unwell smallholders unable to work. It is not easy to hire labour due to out-migration, and many farmers report that skilled labour is also declining⁹¹. On the other hand, traditional and informal support ('moba', lending a hand) between neighbours is available, provided they can physically reach each other. Currently, the semi-subsistence farmers are unable to fully benefit from these networks if they are isolated, and the commercial and economically active with potential struggle during seasonal peaks. Even change agents are unable to employ more people. Despite government support for labour-saving technologies through a variety of measures, poor connectivity compounds the lack of labour, especially in the northern regions.

616. Young people make up a minority of the labour force on farms (less than 7%) reflecting the pattern of out-migration away from rural areas and farming. The main reasons for low interest of young women to remain in rural communities lie in the fact that women rarely own property, as well as their very low participation in decision-making on agricultural production on the farm. Out-migration means that land is increasingly abandoned by people and many prefer to allow neighbours the use of it. Although the semi subsistence farmers may actually own 0 to 2 ha, they can often access up to about 15ha of immediate family, who have left farming, and/or of neighbours, but a total of 6 – 40 ha is usable although of variable quality. Similarly, the commercial and economically active households with potential met may have own 2–15 ha between immediate family, but can similarly access perhaps an additional 50, of which a total of 6–40 ha is usable but of variable quality.

617. The population in the north has limited access to public services. The absence of a good road network prevents smallholders to harvest and produce at a scale non-timber forest products (e.g. berries, mushrooms). Forests are currently little valued by the poor as they incur taxes and only yield firewood.

4. Knowledge gap

618. The semi-subsistence farmers/households and, to a lesser degree, the commercial and economically active households with potential lack updated technical knowledge about primary production and rely on vets and extension workers. The semi-subsistence farmers/households especially may be less of a priority of extension agents as they are typically not accessing the Agro-budget and/or other subsidies.

619. Extension services are limited in the number of people and face budget constraints, for example one municipality has a single car for two extension agents and others and as a result only one third of their time is spent with hard-to-reach farmers. Most extension workers met on the pre-design mission report that they have not had technical updates or learning opportunities. However, some municipalities e.g. Petnica are actively promoting learning from Serbia and overseas. With regard to functional skills, the semi-subsistence farmers/households and the commercial and economically active households with potential – as well as the extension agents met - generally have a weak

⁹¹ Pre-design mission, 2016.

understanding of profit margins and lack business planning skills, whereas change agents are characterized by vision and good business management skills. This is a barrier as access to financial support to improve their holdings often depends on their ability to submit a business plan. Attitudes are also key to connectivity and transformation and encouragingly, most smallholders met – notably youth and women - expressed cautious interest in new approaches if there is a clear business case and sustainable support to help them offset their risks if they change their practices.

620. The semi subsistence farmers/households and, to a lesser degree, the commercial and economically active households with potential lack updated technical knowledge about primary production and rely on vets and extension workers. The semi subsistence farmers/households especially may be less of a priority of extension agents as they are typically not accessing the Agro-budget and/or other subsidies.

5. Potential social, environmental, and climate change impacts and risks of the project

Key potential impacts

621. The project aims at increasing smallholders' resilience and ensure sustainable use of local natural resources. Key policies such as those related to organic production and sustainable use of natural resources will be supported and applied at the smallholder level. Both local and central institutions as well as smallholders and others elements on the identified value chains will be included in a climate adaptation and green value chain process so to ensure avoidance of impacts and maximization of the local available natural potential. In other words, the project will capitalize on the available natural resources that are the foundation of local rural livelihood as well as of future economic growth.

622. **Climate change and adaptation.** Montenegro's climate change adaptation strategy is structured around the main environment and climate change policy framework of the European Union.⁹² Since its independence, Montenegro has started a series of policy processes to ensure compliance with EU standards and regulations and new strategies to ensure environment management and climate change mitigation and adaptation have been developed.⁹³ Nonetheless, the country is still facing a major deficit in terms of climate change adaptation.

623. As confirmed in the 2016 Intended Nationally Derived Contribution (INDC) for the 2016 Conference of Parties (COP22)⁹⁴, Montenegro has not presented any action plan in terms of climate change adaptation nor in terms of climate change and agriculture. While UNDP, FAO, WB and other international actors have been supporting Montenegro in developing national strategies and studies related to climate change impacts, little was done in terms of adaptation strategies for the agriculture sector and nothing in terms of adaptation of rural people. Nevertheless, the National Communication to the UNFCCC has already identified priority areas for adaptation in the agricultural sector: promotion of climate smart agriculture, improvement of agricultural water efficiency (supply and demand), sustainable forest management and share technologies and knowledge.

624. The CC scenario (described in several parts of the PDR as well as in the first chapter of this note) will impact natural resources (forests, water bodies, pastures, others) as well as rural infrastructures such as roads and water points and therefore livelihoods of smallholders and rural people. Neglecting smallholders' adaptation in Montenegro will contribute to socio-economic issues such as rural depopulation (urban population reached 64% of the total population in 2015 - World Bank 2016) and unemployment (20% World Bank 2015) with possible consequences on the country's stability.

625. The project will address climate change adaptation ensuring that the territory and its ecosystems become central in developing climate-resilient value chains both in terms of investments and capacity development. Climate change therefore become central and its impacts such as increase of maximum and minimum temperatures, as well as erratic rain and snow patterns, are fully considered

⁹² EU Screening Report 2013, Chapter 27 Environment and Climate Change

⁹³ MARD & MSDT (2012) Technology Needs Assessment for Climate Change Mitigation and Adaptation in Montenegro. National Strategy and Action Plan. MSPE – The Second National Communication on Climate Change of Montenegro to the UNFCCC (2015). MSPE (2010) National Biodiversity Strategy and Action Plan for the period 2010-2015. MSPE (2007) National Strategy of Sustainable Development of Montenegro.

⁹⁴ www4.unfccc.int/.../INDC/.../Montenegro/1/INDCSubmission_%20Montenegro.docx

and addressed in each component of the project. In other words, the ecosystem goods of the target areas become the main value chains allowing different economic spin offs such as transhumance, beekeeping, non-wood forest product collection as well as traditional farming of berries and crops.

Consequently, the project has established a clear adaptation strategy that include both investments and training/capacity building practices. In details the project will ensure adaptation by targeting directly smallholders and institutions (central and local) as well as infrastructures to ensure their rehabilitation taking into account the main climatic challenges of the target areas.

626. The described activities will support climate change adaptation of over 3000 HH to increase their resilience to climate change, improve soil and water management securing higher crop yields and land productivity, and mitigate the impact of the higher frequency and intensity of increased extreme weather events, such as drought, torrential rainfall/floods and storms.

Investments-infrastructures adaptation⁹⁵:

627. In details the project will ensure infrastructural adaptation of rural people by:

- Improving infrastructures' technical drawings including climate change among the variables to be considered (target → municipal technical offices)
- Rehabilitating, with a climate change impact perspective, the last mileage of local or uncategorised roads in rural areas. Eligible investments will include also road ancillaries such as small bridges, drainage facilities and erosion protection works to ensure climate resilience of the rehabilitated roads.
- Providing households with domestic water supply, as well as water to cater for livestock or processing facilities, and possibly small scale irrigation systems.

Green and resilient value chains⁹⁶:

628. In details the project will ensure green and resilient value chains by:

- Enhancing extension services with capacity building and development that will include as well climate change adaptation measures for smallholders.
- Supporting low-pesticide and organic farming / organic certification of smallholders in the following VC:
 - Berries
 - Meat/Cheese
 - Seed Potatoes
 - Later on : Other non-timber forest products and possibly honey.
- Supporting sustainable uses of available natural resources and building on traditional knowledge (i.e. improved fodder management, water efficient irrigation for berries, etc.) and innovation.
- Supporting diversification and inter value chain permeability) will increase resilience and will support natural resource management.
- Supporting farmers' aggregation and farmers' consortia following the European Alps model (i.e. Consorzio Agrario di Bolzano – Italy, Slow Food and others) will help in maximising agriculture efforts, increasing trade volumes and allowing faster responses to the new emerging climate change impacts.
- Ensuring branding of territory and products as resultants of sound and sustainable management of local natural resources and knowledge.

629. Sound and smart infrastructures, organic and sustainable agriculture associated with targeted branding and market positioning will ensure not only increased added value of products but also protection of the territory and its traditions.

⁹⁵ Kindly refer to the PDR for more details.

⁹⁶ Kindly refer to the PDR for more details.

6. Environmental and social category (A, B, C)

630. The project is considered to be Category B. Overall, the project is not expected to have any significant adverse environmental or social implications and though there may be some environmental risks associated with the rehabilitation of rural roads, these will be taken into account by the Environmental Impact assessments that are mandatory, according to Montenegrin laws for all infrastructures. VC/cluster investments could have an impact on environment (waste treatment, etc.) but the will be small sized: they shall comply with national regulations on environment and social impact to mitigate risks whenever relevant. Furthermore, the project is designed to enhance sustainable and resilient business opportunities of rural poor through climate-smart natural resource management promoting the territory and its environmental integrity as main driver of local economy.

631. Given this B classification, a draft ESMP is in annex and will have to be monitored by the project M&E team as per requested by IFAD procedures.

7. Climate risk category (High, Moderate, Low)

632. The project's climate risk classification is: moderate. Based on assessments undertaken during preparation of the concept note and given the investment/approach adopted at design to cover the risks, the project is expected to be moderately sensitive to climate risks, mainly due to the exposure of the Montenegrin agriculture sector to expected changes in temperature and rainfall. However, a key aim of the project will be to reduce the vulnerability of the rural poor to those risks and climate financing, including ASAP financing, has been mobilized and is being invested to ensure climate adaptation and resilience of both infrastructures and livelihood strategies of rural poor.

8. Recommended features of project design and implementation

Mitigation measures

633. As reported in section IV there may be some environmental risks associated with the rehabilitation of rural roads. Nonetheless, target roads are ancillary roads where major needs are: drainage and protection from erosion and landslides. Each possible negative impact of the rehabilitation of roads will be taken into account by the Rapid Environmental Impact Assessments (REIA) that are mandatory, according to Montenegrin laws, for all infrastructures at design stage. Whether specific issues will be highlighted by the EIA a clear mitigation plan will be prepared by involved institutions.

Activity	Social/ Environmental/ CC Issue Addressed	Risk	Mitigation Mechanism	Note
Component 1: Value chain clustering for resilient rural transformation				
Capacity development for producer service groups, coops	Climate Change Adaptation Deficit Farmers competitiveness	No risk have been identified		Target groups will be supported with organic farming and NRM practices where relevant
Matching grants for rural entrepreneurs	Climate Change Adaptation Deficit Farmers competitiveness	No risk have been identified		Target groups will be supported with unsustainable farming and NRM practices
Component 2: Cluster-supportive rural infrastructure				
Enhanced resilience of farmers to climate change	Climate Vulnerability of Farmers	No risk have been identified		Target groups supported with organic farming and NRM practices where relevant
Productive rural infrastructure constructed/rehabilitated	Infrastructure Vulnerability to Climate Change Reduced connectivity of target beneficiaries	No risk have been identified nonetheless the project will require an REIA for each infrastructure	Mitigation measures will be drafted according to the findings of the REIA	REIA will be covered by both ASAP and State funds

Multi-benefit approaches

634. The project will promote a climate-resilient approach to value chain. Green growth and greening of existing value chains is therefore the constituent of project's theory of change that sees the untouched territory and its ecosystem as the additional value to local products and knowledge. Through a series of activities well defined in the PDR and organized in the two project's component the project will support organic/low pesticide farming, agriculture production and income diversification and climate change adaptation as poverty alleviation tools as well as tools to promote rural economy and territorial development.

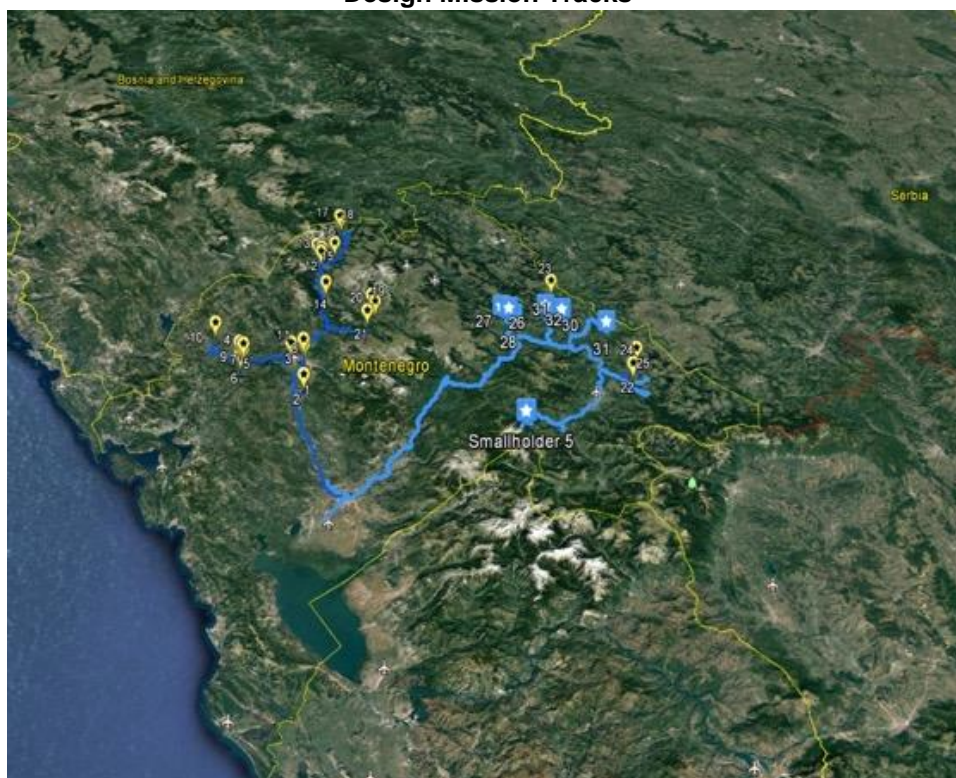
Incentives for good practices

635. Producers involved in organic farming receive state support in the form of a payment per hectare or per livestock unit. This amounts to EUR 150 per hectare for crops and medicinal herbs grown, EUR 250 per hectare for vegetables, perennial plants, seed and planting material, EUR 50 per livestock unit, EUR 2 per head of poultry, EUR 30 per bee hive. Support is also granted for the participation of agricultural producers in the registered quality schemes, already developed by the country to ensure organic production and natural resource management. Additionally, ASAP will provide economic incentives in the form of grants for farmers and VC actors, to acquire and demonstrate the use of climate-resilient equipment and technologies.

Participatory processes

636. Participation of institutions at both central (ministries) and local level (municipalities) as well as of smallholders and civil society was ensured since the concept note state. During design, the team visited in detail each municipality and each village. Meetings and interviews included smallholders as well as other stakeholders including several representative of the formal private sector. In different moments, the design team visited over 32 communities and met with several representative of the civil society. The below reported map clearly highlights the paths followed during the participatory process. As reported in the PDR the project will be georeferenced as was its design.

Design Mission Tracks



637. During project implementation, the same scheme will be maintained ensuring the higher possible participation of beneficiaries and involved institutions. This will be ensured by the PMU and will be included in the M&E process established for the project. Additionally, the project will involve and establish solid linkages among the different actors related to the value chain steps (from production to marketing).

9. Analysis of alternatives

638. The selected VC have been updated during last design mission to build on market dynamics.

639. The project could have targeted the honey VC which is resilient to climate change in mountain areas and which has direct impact on yields for berries etc. Unfortunately, this VC has been abandoned because of a too narrow market, then no cumulative effects will happen on other target commodities. Dairy VC has been abandoned because of scant milk competitiveness in the target zone. Focus will be put on cheese for market and targeting purpose. This is a better alternative as cheese is less demanding in terms of strict cold chain and that usually effluent management is easier. Detailed analyses of strength and weakness of target VCs in a context of climate change are given in Annex.

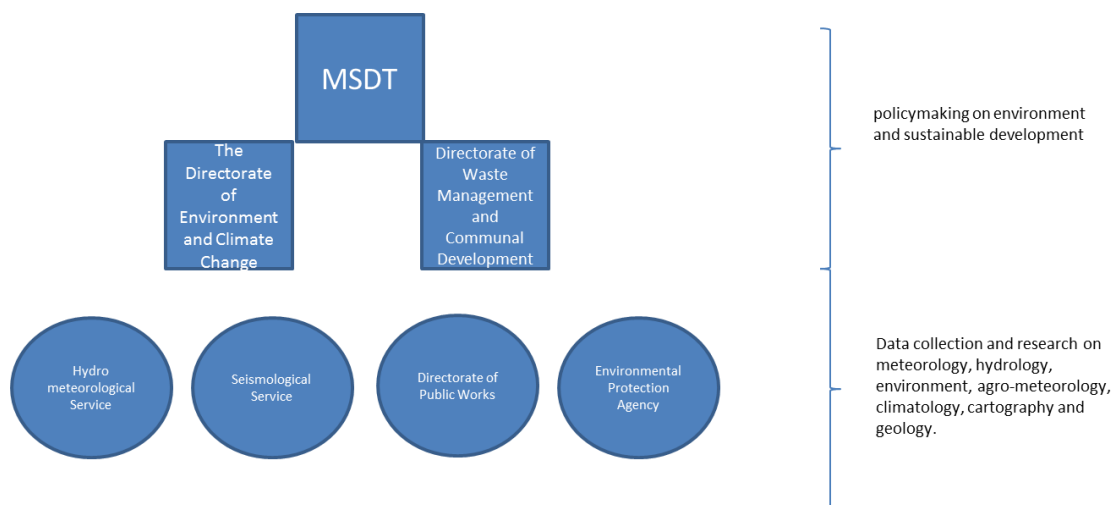
10. Institutional analysis

10.1. Institutional framework

640. Since 2007, substantial institutional changes have taken place in the set-up of environmental authorities in the country. The Environmental Protection Agency (EPA) was established in 2008 and became operational in 2009.

641. The Ministry of Sustainable Development and Tourism (MSDT) is the main governmental authority responsible for policymaking on environment and sustainable development. The Directorate of Environment and Climate Change and the Directorate of Waste Management and Communal Development are directly responsible for environmental policy matters. The Section to Support the National Council for Sustainable Development provides administrative support to the Council. The work of the Ministry of Sustainable Development and Tourism is supported by the Hydro-meteorological and Seismological Service (HSS) - with competences in the areas of data collection and research on meteorology, hydrology, environment, agro-meteorology, climatology, cartography and geology - the Directorate of Public Works and the EPA. The ministry does not have local branches.

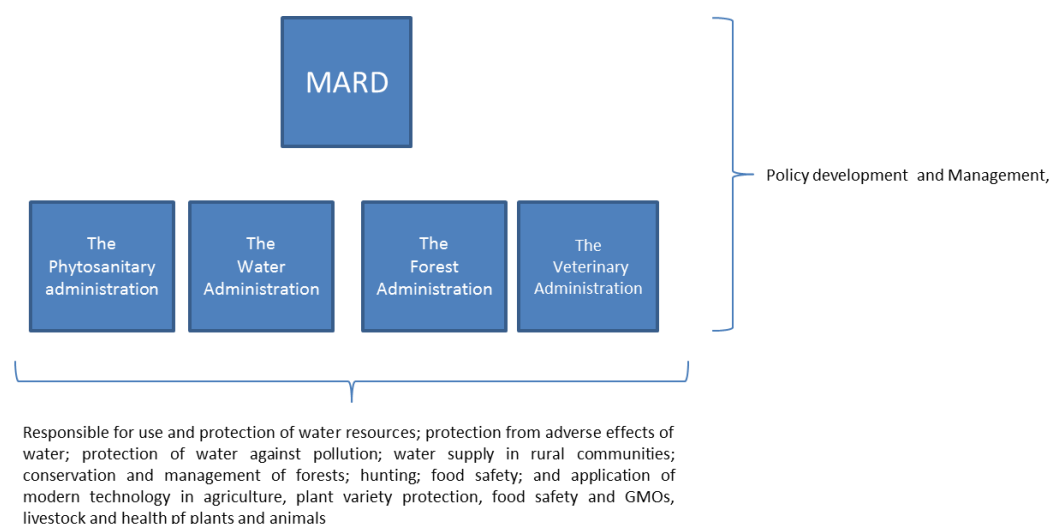
Ministry of Sustainable Development and Tourism Competences



642. The MARD has responsibilities for: the management, use and protection of water resources; protection from adverse effects of water; protection of water against pollution; water supply in rural communities; conservation and management of forests; hunting; food safety; and application of modern technology in agriculture. The ministry not only deals with policy development on these issues but also supervises the authorities responsible for implementation, which are part of the ministry. In particular, the Phytosanitary Administration is responsible for plant variety protection, food safety and GMOs (Genetically modified organisms). The Veterinary Administration is in charge of veterinary control. The Forest Administration deals with the tasks of forest management and protection of forests from illegal logging, poaching and fire.

643. The Water Administration is responsible for water use and allocation, including integrated water resources management, flood control, water use fees and development of the water information system.

Ministry of Agriculture Competences



644. The Ministry of Economy is in charge of development policy, energy policy, energy efficiency, exploitation of mineral resources and other raw materials, geological research, and hydrocarbon exploration and production activities. The Ministry of the Interior is responsible for risk management and civil protection and rescue in the event of natural and technological disasters and other emergency situations, as well as emergencies with regard to radiation safety.

645. The Cooperative Union of Montenegro provides assistance to cooperatives related to their legal status and assets, as well as in the field of development, marketing, organisation, and cooperation. Future support of the Union should be prioritized to apply new green technologies and promote sustainable agriculture among the members of Union. The Association of Agricultural Producers is an umbrella NGO uniting professional associations of agricultural producers in Montenegro. This association includes 40 other associations, which mostly involve producers of the same sectors of agricultural production. In addition, there are a few specialized associations, like the Union of the Beekeeping Organizations, the Association of Tobacco Producers, the Association of Protected Areas Producers, the Association of Poultry Producers, etc.

646. The Faculty of Biotechnology in Podgorica, which is a part of the University of Montenegro, is the only educational and research institution focusing on agriculture. It conducts educational, research-scientific and extension service activities. The extension service activities involve consulting, providing advice, being involved with project implementation, as well as organizing educational round tables on agricultural production. Within the Faculty extension services, there are 45 agronomists in 8 municipalities (called Regional Centres) with around 10,000 users per year. As such, the Faculty is well-positioned to improve the level of knowledge and implementation of sustainable agriculture techniques in Montenegro.

647. Some of the key national NGOs that have been active in nature protection area in Montenegro in the past few years include Green Home, Most, Centre for the Protection of Birds, Greens of Montenegro, and others. Furthermore, a number of international non-profit and non-governmental organizations such as Green Action/WWF and REC have also actively contributed to meeting the nature protection objectives and promoting PAs. The NGO ERGa is promoting the research, development, demonstration, use and commercialisation of the potential technology of biochar production in Montenegro. There are numerous other associations functioning as NGOs, which promote the production of healthy food, organic production, and protection of environment, which could be strongly supportive and encouraging for partners in agriculture to adopt a sustainable approach.

648. The institutions in charge of sectorial policies tend to lack the experience and capacity to integrate climate change and other environmental issues. The Technologies Needs Assessment for Climate Change Mitigation and Adaptation in Montenegro (TNA) indicates that attainment of development, climate and EU integration goals is possible if the government support is redirected towards new technologies that contribute to the achievement of sustainable development goals and generate higher total benefits.

10.2. Capacity development

649. The project considers capacity development and institutional strengthening two pillars of its theory of change. Both component will ensure capacitation of both institutions and beneficiaries. The objective of the process is to reduce the climate change adaptation deficit in rural areas. The project will ensure capacitation in the following domains:

650. Capacity building of technical offices of rural municipalities and villages to ensure climate resilience of infrastructures and services.

651. Capacity development of smallholders, associations and institutions in the field of natural resource management, sustainable agriculture, sustainable livestock, and sustainable tree cropping.

652. Capacity development of local and central institutions to support the branding process of local products as resultants of sound and sustainable natural resource management.

10.3. Additional funding

653. The project is sufficiently funded by IFAD/ASAP to support Climate Change adaptation and to ensure a rational and sustainable use of available natural resources.

11. Monitoring and Evaluation

654. Environment and Climate are well mainstreamed in the logical framework and in the theory of change of the project. The project disposes of a clear and rational logical framework. Natural resources management and climate change adaptation are well reflected into it and clear indicators have been selected.

655. Means of verification as well as the monitoring and evaluation strategy for climate change will be clarified and finalised in the at start-up.

656. The project will be georeferenced contributing to the monitoring and evaluation process (RB-M&E) as well as to a clear and efficient impact assessment. IFAD will provide training to the PMU once recruited.

12. Further information required to complete screening, if any

657. In addition to the present note, the following tools have been designed and share with the mission:

- (a) Google Earth Package Including the following maps, data and analysis;
 - Remote Sensing Analysis of (I) Vegetation, (II) Climate trends.

- Administrative Boundaries (2012)
- Land Cover of Sample areas (2016)
- Land Cover (Corine 2012)
- Topography (2012)
- Soil Map
- Woods Distribution (2012)
- Forest's Structure Map (2012)
- Forest Management Units Map (2012)
- National Parks' Map (2012)
- Map of Populated places and localities (2012)
- Map of Roads (2012)
- Montenegro Digital Terrain Model (DTM – 2016))
- Montenegro Slope (%) Map (2016)
- Map of visited Sites and Communities (2016)
- Map of Mission Tracks (2016)
- Mission Media and Main Documents (2016)

(b) Remote Sensing Climate Trends (1984-2014) Analysis

658. No further information is required.

13. Budgetary resources and schedule

659. The table below shows ASAP contribution to funds allocated for the project.

Activity	ASAP (000 EUR)	% of the Grant
Matching grants for resilient VCs and for Sector Development Facilities (including business/investment plans with climate smart dimension and options, provided with the support from specialised services providers, TA and/or trainings)	805	43%
Feasibility studies and works for efficient Multi-Purpose Water Reticulation Systems and water ponds	1,001.5	52%
Feasibility studies for Climate Smart Road Improvements	73.5	5%
Total	1,880	100%

660. The allocated funds will create the basis for government scaling up and replication in other similar context. Funds will support such process addressing key adaptation deficits and creating the needed and request set of tool to scale up climate smart infrastructure schemes as well as green value chain and territorial approach in Montenegro.

661. Implementation costs of the ESMP (annex 1) are covered by the M&E budget since it is not complex.

14. Record of consultations with beneficiaries, civil society, general public etc.

662. Refer to the Appendix 13.

Annex 1 SECAP : Draft Environmental and Social Management Plan

Parameter	Activity	Performance indicator	Base-line data	Responsible for Monitoring	Monitoring means	Recommended frequency	Estimated monitoring costs
Increased erosion	Capacity building on lesser erosive practices on potato and berry plots	# of trained beneficiaries that applies anti erosive practices	0%	M&E unit	Regular field reporting and supervision	Semestrial	Included in regular monitoring of beneficiaries
Negative socio environmental impact of investments (road, VC, water management)	Compliance to national regulations	100% of tenders apply national environmental and social safeguards 100% of matching grants screened to ensure ex ante compliance with national regulations	0%	M&E unit in collaboration with regional VC experts and procurement officer	Technical offers of applicants Records of civil engineering works	Semestrial	Included in regular monitoring of beneficiaries
Increase in water use	Support only water efficient devices	100% of matching grants for irrigation support more water efficient irrigation (drip, micro sprinkler, etc.)		M&E unit in collaboration with regional VC experts and procurement officer	Technical offers of applicants	M&E unit in collaboration with regional VC experts and procurement officer	Technical offers of applicants

Annex 2 SECAP : Main climate vulnerabilities and adaptation measures for the target commodities

Berries/ Raspberries

Increasing temperatures will expand vegetation season in mountain areas. Observed rise in average temperature in the past years as documented in the SECAP analysis and continuous increase by more than 1°C forecasted by 2030 will *increase water demand of berries in particular in summer*. Even if little increase in precipitation is expected, the increased evapotranspiration will call for complementary irrigation for more stable production by reducing water stress. Frost spells will remain a risk to be accounted for in frost prone areas: even if its frequency will statistically decrease, average damage would increase. To *manage risks on water supply and reduce energy dependency, water efficient irrigation is advised*. Berries have high nutrients needs: prioritizing organic inputs rich in organic matter will cumulatively maintain water retention capacity of the soil.

Higher temperature and longer vegetation season will increase the probability of pest and fungal outbreaks (increased number of generations of fungus or pests). It is then important to *prioritize irrigation devices that will avoid water spraying on fruits and leaves*. Generally, spraying of aerial parts should be limited to frost control.

Berries are tapping significantly in soil fertility. Soil pests can also impede production after a couple of years. Then *crop rotation will be needed usually after 6-10 years* and then irrigation investments and land use planning at the farm scale should be anticipated in this dynamic context. If berries are cultivated on sloped plots, increased winter precipitations will exacerbate erosion risks. *Mulching or plastic films can reduce erosion risks while facilitating water and weed control*. Berry rows should also be *planted perpendicularly to the slope* to limit erosive effects.

Given its medium term investment cycle, the sustained precipitation amounts in the target zone, and the increases growing seasons, *berries are seen as a relatively robust option in a context of climate change* provided water efficient and low erosive practices are developed. Complementarity with honey producer should be sought to increase yields.

Potato seeds

An increase of average temperature by 1°C represents an analogue altitude shift of 160m. Potatoes in mountain areas will benefit from extended vegetation season. Nevertheless, in general the increased average temperature will increase the number of generations of insects and nematodes affecting the plants. *Crop rotations* will need to be followed very thoroughly.

Potato cultivation in altitude is often interesting to manage viral diseases. Nevertheless, as *this crop is very erosive* (and even more when stone removal is necessary at the beginning), it should be avoided in sloped areas. Increased precipitations in winter in our target zone will have high erosive effects damaging soils and washing out inputs and nutrients. In this context, it is important that farmers follow *good agricultural practices such as keeping hedgerows, grass strips and work the soil perpendicularly to the slope*.

Irrigation for high value potatoes such as seed potatoes is recommended to avoid heat stress at tuber induction and tuber bulking stages. For pest management cost, energy and water savings, efficient irrigation should be prioritized. There is also a large choice of variety for such geographical range thus, *based on market demand, more water stress tolerant varieties could be promoted because the demand is looking for seeds to be planted in more water stressed zones*.

Temperature increase and maintained precipitation is a conducive setup for potato cultivation, then *it can be seen as a rather resilient option under good agricultural practices provided erosion is properly controlled*.

Livestock in mountain area (dairy, cheese and meat)

Climate change, through increased temperatures and increased plant evapotranspiration, is challenging grazing and fodder production pattern in mountain areas. Even if increased vegetation period can

allow in theory for longer use of pasture, in practice the seasonality of grass and fodder production will be shifting significantly:

- Increased temperature will lead to earlier pasture production in spring and quicker growth. High energetic (rich in sugars) forage production will then increase quickly but will be stopped earlier because of water stress. A second production period will nevertheless still come about in autumn and for a longer period due to milder conditions.
- Quicker growth and stop in summer will deteriorate the average nitrogenous content of grass reducing then its nutritional contribution to milk and meat production.

Under these conditions the following options have to be considered to adapt livestock feeding in mountain areas and ensure their protein productivity (which is essential for milk quality, cheese processing and meat production):

- Increase capacity to mow and store hay earlier in the season
- Develop fodder crops which can improve nitrogenous intake such as alfalfa and clover, as well as their drying/storage capacities
- Reduce dependence on forage demanding water in summer such as maize
- Insure access to drinking water for animal to maintain or increase milk production.

Increase in temperatures will obviously impact also the dairy and meat cold chain integrity but in a limited way given the climate features of Montenegro mountain areas. Nevertheless, increased average temperature since the last decades and forecasted trends call for increased attention to energy efficient refrigeration units as energy consumption increases swifter than temperature rising (relevant for milk, cheese and meat).

Appendix 13: Contents of the Project Life File

A. List of persons met

Initial meeting with the Ministry of Agriculture and Rural Development (MARD)

Rb	Name	Institution	Mail	Phone
1	Darko KONJEVIC	MARD	darko.konjevic@mpr.gov.me	+382 69 319 141
2	Nemanja KATNIC	MARD	nemanja.katnic@mpr.gov.me	+382 67 670 778
3	Milan LEKOVIC	MARD	milan.lekovic@mpr.gov.me	+382 69 999 198
4	Blagota RADULOVIC	MARD	Blagota.radulovic@mpr.gov.me	+382 69 576 057

Presentation of the Ministry of Agriculture and Rural Development (MARD)

Rb	Name	Institution	Mail	Phone
1	Darko KONJEVIC	MARD	darko.konjevic@mpr.gov.me	+382 69 319 141
2	Nemanja KATNIC	MARD	nemanja.katnic@mpr.gov.me	+382 67 670 778
3	Milan LEKOVIC	MARD	milan.lekovic@mpr.gov.me	+382 69 999 198
4	Blagota RADULOVIC	MARD	Blagota.radulovic@mpr.gov.me	+382 69 576 057

Meeting with the Extension services management (MARD), 7/8/2016

Rb	Name	Institution	Mail	Phone
1	Vukota STANISIC	Ext ser.	vukotas@t-com.me	+382 69 335 127
2	Gojko BABOVIC	Ext ser.	goleb@t-com.me	+382 69
3	Milan LEKOVIC	MARD	milan.lekovic@mpr.gov.me	+382 69 999 198

Meeting with the representative of the EU Delegation to Montenegro

Rb	Name	Institution	Mail	Phone
1	Benoit ESMANNE	EUD	benoit.esmanne@eeas.europa.eu	+382 69 126 616
2	Milan LEKOVIC	MARD	milan.lekovic@mpr.gov.me	+382 69 999 198

Meeting with the representatives of the Ministry of Economy and UNIDO

Rb	Name	Institution	Mail	Phone
1	Ilija MUGOSA	UNIDO	i.mugosa@unido.org	+382 68 619 904
2	Milan LEKOVIC	MARD	milan.lekovic@mpr.gov.me	+382 69 999 198
3	Jaime Moll de ALBA	Chief CPD	i.mugosa@unido.org	+382 68 619 904
4	Fabio RUSSO	SID	i.mugosa@unido.org	+382 68 619 904
5	Ebe MUSCHAILLI	Prog. Off.	i.mugosa@unido.org	+382 68 619 904

Meeting with the representatives of the UNDP to Montenegro

Rb	Name	Institution	Mail	Phone
1	Borko VULIKIC	UNDP/ CSD	borko.vulikic@undp.org	+382 69 178 128
2	IFAD team	IFAD	ifad.mne@gmail.com	+382 67 025 100

Meeting with the representatives of the Investment Development Fund (IRF)

Rb	Name	Institution	Mail	Phone
1	Vladislav DULOVIC	IRF	vladislav.dulovic@irfcg.me	+382 67 808 592
2	Zoran VUJOVIC	IRF	zoran.vujovic@irfcg.me	+382 67 800 029
3	Milan LEKOVIC	MARD	milan.lekovic@mpr.gov.me	+382 69 999 198

Meeting with the representatives of the MARD – Public procurement

Rb	Name	Institution	Mail	Phone
1	Maja VUKASEVIC	MARD	maja.vukasevic@mpr.gov.me	+382 20 482-266
2	Milan LEKOVIC	MARD	milan.lekovic@mpr.gov.me	+382 69 999 198

Meeting with the representatives of the Directorate of Public Procurement (UJN)

Rb	Name	Institution	Mail	Phone
1	Maja VUKASEVIC	UJN	ujn@ujn.gov.me	+382 20 245 798
2	Milan LEKOVIC	MARD	milan.lekovic@mpr.gov.me	+382 69 999 198

Meeting with Darko KONJEVIC, the Ministry of Agriculture and Rural Development (MARD)

Rb	Name	Institution	Mail	Phone
1	Darko KONJEVIC	MARD	darko.konjevic@mpr.gov.me	+382 69 319 141
2	Ghazaryan Samvel	IFAD	Samvel.Ghazaryan@fao.org	+39 327 2270880

Meeting with Darko KONJEVIC, the Ministry of Agriculture and Rural Development (MARD)

Rb	Name	Institution	Mail	Phone
1	Darko KONJEVIC	MARD	darko.konjevic@mpr.gov.me	+382 69 319 141

Meeting with Zorka PRLJEVIC, Phytosanitary, Ministry of Agriculture and Rural Development (MARD)

Rb	Name	Institution	Mail	Phone
1	Zorka PRLJEVIC	MARD	fitosanitarnaupravacg@t-com.me	+382 67 277 201

Meeting with Beekeeping assentation of Montenegro, Danilovgrad, Governing board

Rb	Name	Institution	Mail	Phone
1	Vladimir Radulovic	Chairman	spocg@t-com.me	+382 69 941 505
2	Radule Miljanic	Gen. secr.	spocg@t-com.me	+382 67 628 145
3	Beekeepers of MNE	BKMNE	spocg@t-com.me	+382 67 628 145

Meeting with the representatives of the Municipality of Niksic

Rb	Name	Institution	Mail	Phone
1	Dragan PEROVIC, vice mayor	MNK	dragan.perovic@niksic.me	+382 40 213 107
2	Slobodanka ROGANOVIC	MNK	slobodanka.roganovic@niksic.me	+382 40 214 239
3	Rados SUCUR, vice mayor	MNK	rados.sucur@niksic.me	+382 69 040 687
4	Slavica ZINDOVIC	MNK	slavica.zindovic@niksic.me	+382 40 213 103

Field visit / Municipality of Niksic - Infrastructure

Rb	Name	Institution	Mail	Phone
1	Dragan PEROVIC, vice mayor	MNK	dragan.perovic@niksic.me	+382 40 213 107

Field visit / Municipality of Niksic / Montecap – Miljanic farm, farmers association

Rb	Name	Institution	Mail	Phone
1	Radivoje MILJANIC	Association	miljanic.farma@gmail.com	+382 67 604 199

Field visit / Municipality of Niksic – Goat keeping cheese production

Rb	Name	Institution	Mail	Phone
1	Buturovic Family	Farmer	-	-

Field visit / Municipality of Niksic – Goranovic meet processing

Rb	Name	Institution	Mail	Phone
1	Djordjije GORANOVIC	Goranovic	info@migoranovic.com	+382 69 328 238
2	Ana NIKOVIC	Goranovic	office@migoranovic.com	+382 69 222 494

Debriefing with the representatives of Municipality of Niksic – Trebjesa

Rb	Name	Institution	Mail	Phone
1	Rados SUCUR, vice mayor	MNK	rados.sucur@niksic.me	+382 69 040 687
2	Ratko BATAKOVIC	NGO RRD	rural.me@gmail.com	+382 67 216 889
3	Sonja BACOVIC	Extension	sonjab@t-com.me	+382 40 212 012

Field visit / Municipality of Niksic – Vegetable production

Rb	Name	Institution	Mail	Phone
1	Family Farm	Vegetable	-	-

Debriefing with the representatives of Municipality of Niksic – Vukov Most

Rb	Name	Institution	Mail	Phone
1	Dragan PEROVIC, vice mayor	MNK	dragan.perovic@niksic.me	+382 40 213 107

Meeting with the Vice Mayor of Zabljak

Rb	Name	Institution	Mail	Phone
1	Vasilije JAKSIC	Vice Mayor	sozabljak@t-com.me	+382 69 479 245

Filed visit on Zabljak – Farmer, livestock production, grass cutting

Rb	Name	Institution	Mail	Phone
1	Milutin Krstajic	farmer	-	-
2	Darko STIJEPOVIC	Ext Serv.	agrobiznis@t-com.me	+382 69 106 666

Filed visit on Zabljak – Farmer, livestock production, cheese, kajmak, milk

Rb	Name	Institution	Mail	Phone
1	Vesko GRBOVIC	Farmer	-	-
2	Darko STIJEPOVIC	Ext Serv.	agrobiznis@t-com.me	+382 69 106 666

Filed visit on Zabljak – Farmer, crop production, potato production

Rb	Name	Institution	Mail	Phone
1	Miro STIJEPOVIC	Farmer	-	-

Meeting with the extension service

Rb	Name	Institution	Mail	Phone
1	Branko CETKOVIC	Extension	extension-pg@t-com.me	+382 20 206 710

Meeting with the Delegation of the EU to Montenegro – Economic Development

Rb	Name	Institution	Mail	Phone
1	Dr Dragan RADANOVIC	DEU	dragan.radanovic@eeas.europa.eu	+382 20 444 600

Mojkovac / Meeting at the Municipality representatives

Rb	Name	Institution	Mail	Phone
1	Nikola VLAOVIC	Municipality	nikolavlaovic@t-com.me	+382 67 224 420
2	Milica RISTIC	Municipality	opstinamojkovac@t-com.me	+382 69 325 243
3	Jelena VUCETIC	Municipality	jelenavucetic@yahoo.com	+382 69 863 644
4	Radoslav MEDOJEVIC	Municipality	sek.finansijemo@t-com.me	+382 67 238 796
5	Momcilo KUVELJIC	Ext. service	momokuveljic@t-com.me	+382 67 229 046

Field visit Mojkovac: visit to the young farmers

Rb	Name	Institution	Mail	Phone
1	Bojan Boskovic	Farmer	-	+382 68 873 942
2	Nikola Vlaovic	Municipality	opstinamojkovac@t-com.me	+382 67 224 420
3	Milica RISTIC	Municipality	opstinamojkovac@t-com.me	+382 69 325 243

Field visit Mojkovac: visit to the fruit processor (dry fruit, juice, brandy distillation)

Rb	Name	Institution	Mail	Phone
1	Ljubomir Vukadinovic	Farmer	-	+382 69 376 371
2	Nikola Vlaovic	Municipality	opstinamojkovac@t-com.me	+382 67 224 420
3	Milica RISTIC	Municipality	opstinamojkovac@t-com.me	+382 69 325 243

Field visit Mojkovac: visit to the organic farmers

Rb	Name	Institution	Mail	Phone
1	Nada blazevic	Farmer	-	+382 68 873 942
2	Nikola Vlaovic	Municipality	opstinamojkovac@t-com.me	+382 67 224 420
3	Milica RISTIC	Municipality	opstinamojkovac@t-com.me	+382 69 325 243

Field visit Mojkovac: visit to the katuns, mountain region, infrastructure

Rb	Name	Institution	Mail	Phone
1	Nikola VLAOVIC	Municipality	nikolavlaovic@t-com.me	+382 67 224 420
2	Milica RISTIC	Municipality	opstinamojkovac@t-com.me	+382 69 325 243
3	Jelena VUCETIC	Municipality	jelenavucetic@yahoo.com	+382 69 863 644
4	Radoslav MEDOJEVIC	Municipality	sek.finansijemo@t-com.me	+382 67 238 796

Field visit, Pavino Polje, meeting with Farmer association

Rb	Name	Institution	Mail	Phone
1	Vucko PESIC	Farmer	-	+382 69 665 217
2	Radovan RADENOVIC	Farmer	-	+382 69 658 571
3	Marija PESIC	Farmer	-	+382 69 658 571

Bijelo Polje / Franca - Mesopromet

Rb	Name	Institution	Mail	Phone
1	Hilmija Franca	Mesopromet	Hilmo.f@mesopromet.co.me	+382 69 367 000
2	Sibirjak Terzic	Mesopromet	Hilmo.f@mesopromet.co.me	+382 67 550 558
3	Momcilo Kuveljic	Ext. service	momokuveljic@t-com.me	+382 67 229 046

Bijelo Polje / Cooperation's, livestock production

Rb	Name	Institution	Mail	Phone
1	Sibirjak Terzic	Mesopromet	Hilmo.f@mesopromet.co.me	+382 67 550 558
2	Momcilo Kuveljic	Ext. service	momokuveljic@t-com.me	+382 67 229 046

Bijelo Polje / Center for Development of Agrar (NGO CfDoA)

Rb	Name	Institution	Mail	Phone
1	Dejan ZEJAK	CfDoA	zejakd@t-com.me	+382 69 427 091

Visit to the Franca – Mesopromet Colling storage, New Facility

Rb	Name	Institution	Mail	Phone
1	Hilmija Franca	Mesopromet	Hilmo.f@mesopromet.co.me	+382 69 367 000
2	Sibirjak Terzic	Mesopromet	Hilmo.f@mesopromet.co.me	+382 67 550 558
3	Momcilo Kuveljic	Ext. service	momokuveljic@t-com.me	+382 67 229 046

Visit to the Idrizovic Fish farm, Bistrica, Bijelo Polje

Rb	Name	Institution	Mail	Phone
1	Mirsad Idrizovic	Fish farm	Hilmo.f@mesopromet.co.me	+382 69 367 000

Visit to the livestock producer, Bijelo Polje (unsuccessful mission because of bad road / infrastructure)

Rb	Name	Institution	Mail	Phone
1	Momcilo Kuveljic	Ext. service	momokuveljic@t-com.me	+382 67 229 046

Meeting with the representatives of the Municipality of Andrijevisa

Rb	Name	Institution	Mail	Phone
1	Srdjan MASOVIC	Mayor	soandrijevisa@t-com.me	+382 51 243 610
2	Miodrag IVANOVIC	advisor	menag.andrijevisa@t-com.me	+382 51 243 203
3	Gorica ZONJIC	advisor	goricazonjic@gmail.com	+382 51 243 171

Meeting with the representatives of the Municipality of Andrijevica - Infrastructure

Rb	Name	Institution	Mail	Phone
1	Miodrag IVANOVIC	advisor	menag.andrijevica@t-com.me	+382 51 243 203

Meeting with the association of raspberry growing of Andrijevica

Rb	Name	Institution	Mail	Phone
1	Srdjan MASOVIC	Mayor	soandrijevica@t-com.me	+382 51 243 610
2	Goran STOJANOVIC	association	soandrijevica@t-com.me	+382 67 801 702
3	Vujica Jelic	association	soandrijevica@t-com.me	+382 67 801 702
4	Zarko Vukajlovic	association	soandrijevica@t-com.me	+382 67 801 702
5	Slavko Asanovic	association	soandrijevica@t-com.me	+382 67 801 702

Meeting with the gender office of the Andrijevica Municipality

Rb	Name	Institution	Mail	Phone
1	Gorica ZONJIC	advisor	goricazonjic@gmail.com	+382 51 243 171

Visit to the poultry farming, Andrijevica

Rb	Name	Institution	Mail	Phone
1	Milic Mico Novovic	poultry farm	-	+382 51 243 610

Visit to the farmers of the Municipality of Andrijevica at the Konjuski katun, Stavna, Komovi Mountain

1	Family Vulic	farmer	-	-
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Visit to the farmers of the Municipality of Andrijevica at the Bozicki katun, Stavna, Komovi Mountain

Rb	Name	Institution	Mail	Phone
1	Family Culafic	farmer	-	-

Meeting with the representatives of the Municipality of Petnjica

Rb	Name	Institution	Mail	Phone
1	Samir AGOVIC	Mayor	predsjednik@petnjica.co.me	+382 67 286 246
2	Muslija KALIC	Vice Mayor	lokalna.uprava@petnjica.co.me	+382 69 811 584
3	Adis LICINA	Advisor M	Licinaadis86@gmail.com	+382 69 497 297
4	Irfan AGOVIC	Agr. Adv.	Agovic85@gmail.com	+382 69 537 236

Meeting with Momcilo BLAGOJEVIC, MARD , Water Directorate, Podgorica

Rb	Name	Institution	Mail	Phone
1	Momcilo BLAGOJEVIC	MARD	momcilo.blagojevic@mpr.gov.me	+382 68 068 890

Meeting with BEMAX, Podgorica

Rb	Name	Institution	Mail	Phone
1	Veselin Kovacevic	BEMAX	vesko.kovacevic@bemax.me	+382 69 015 400

Meeting with the Directorate of Public Works, Podgorica

Rb	Name	Institution	Mail	Phone
1	Miomir Perunicic	DPW	miomir.perunicic@djrr.gov.me	+382 20 230-223

Meeting with the representatives of the Monteorganica

Rb	Name	Institution	Mail	Phone
1	Jovan NIKOLIC	M.organica	Jnikolic2000@yahoo.com	+382 67 606 556

Meeting with GIZ, Montenegro

Rb	Name	Institution	Mail	Phone
1	Nenad RAKOCEVIC	GIZ	Nenad.rakocevic@giz.de	+382 69 355 000

Meeting with Danijela STOLICA, MARD, Montenegro, Government of Montenegro

Rb	Name	Institution	Mail	Phone
1	Danijela STOLICA	MARD	danijela.stolica@mpr.gov.me	+382 67 601 279
11	Milan LEKOVIC	MARD	milan.lekovic@mpr.gov.me	+382 69 999 198
12	Ana CABARKAPA	MARD	ana.cabarkapa@mpr.gov.me	+382 67 620 255

Meeting with Nebojsa VELICKOVIC, Extension service, Montenegro, Government of Montenegro

Rb	Name	Institution	Mail	Phone
1	Nebojsa VELICKOVIC	Ext / fruit	extension-pg@t-com.me	+382 69 335 125

Telephone meeting with Zoran JOVOVIC, Potato production, Montenegro

Rb	Name	Institution	Mail	Phone
1	Zoran JOVOVIC	Potato pr.	jovovic@t-com.me	+382 69 072 064

Meeting with the representatives of the MONSTAT, Montenegro

Rb	Name	Institution	Mail	Phone
1	Dragan PEKOVIC	MONSTAT	dragan.pekovic@monstat.org	+382 68 851 509

Meeting with NGO Network for Rural Development

Rb	Name	Institution	Mail	Phone
1	Ratko BATAKOVIC	NGO RRD	rural.me@gmail.com	+382 67 216 889

Meeting with Centre for Development of Agrar (Agriculture)

Rb	Name	Institution	Mail	Phone
1	Dejan ZEJAK	CfDoA	zejakd@t-com.me	+382 69 427 091

Meeting with GIZ, Montenegro

Rb	Name	Institution	Mail	Phone
1	Nenad RAKOCEVIC	GIZ	Nenad.rakocevic@giz.de	+382 69 355 000

Meeting with the representatives of the UNDP to Montenegro

Rb	Name	Institution	Mail	Phone
1	Borko VULIKIC	UNDP/ CSD	borko.vulic@undp.org	+382 69 178 128

Meeting with the representatives of the Union of Municipalities Montenegro

Rb	Name	Institution	Mail	Phone
1	Sasa SCEKIC	UoM	sasa.scekic@uom.co.me	+382 67 219 506

Meeting with the representatives of the Ministry of Economy and UNIDO, Montenegro

Rb	Name	Institution	Mail	Phone
1	Ilija MUGOSA	UNIDO	i.mugosa@unido.org	+382 68 619 904

Meeting with the representatives of the UNDP to Montenegro

Rb	Name	Institution	Mail	Phone
1	Snezana Doljanica	UNDP	snezana.doljanica@undp.org	+382 69 178 128
2	Milan LEKOVIC	MARD	milan.lekovic@mpr.gov.me	+382 69 999 198

Meeting with the representatives of the Director of Directorate for State Treasury of Montenegro

Rb	Name	Institution	Mail	Phone
1	Dragan Darmanovic	MoF	dragan.darmanovic@mif.gov.me	+382 20 202 145
2	Milan LEKOVIC	MARD	milan.lekovic@mpr.gov.me	+382 69 999 198

Meeting with Prof Dr Petar IVANOVIC, Deputy PM and the MARD team

Rb	Name	Institution	Mail	Phone
1	Petar IVANOVIC	Vice PM	-	-
2	Nemanja KATNIC	MARD	nemanja.katnic@mpr.gov.me	+382 67 670 778

B. Main documents prepared during RCTP design

RCTP identification/concept note

- Financing request from government
- RCTP concept note – Minutes of the CPMT of 4 April 2016
- RCTP concept note – Minutes of the CPMT of 9 May 2016
- Country Strategy Note – Approved on 18 May 2016
- RCTP Concept Note – OSC Issues Paper, June 2016
- Approved RCTP Concept Note and OSC minutes of 2 June 2016
- Preliminary note on environmental and climate challenges, June 2016

RCTP detailed design

- Aide Memoire (AM) of the RCTP detailed design mission, 26 August 2016
- RCTP detailed design AM – Minutes of the CPMT of 6 September 2016
- RCTP detailed design PDR – Minutes of the CPMT of 14 October 2016
- Detailed design report and Appendices (September/October 2016)
- Poverty profile and analysis (pre-design, working paper number XX)
- Institutional assessment of farmer associations/cooperatives (pre-design, WP number XX)

RCTP final design

- Aide Memoire (AM) of the RCTP final design mission, 2 December 2016
- RCTP detailed design AM – Minutes of the CPMT of 13 December 2016
- Final design report and Appendices (January 2017)

C. Main documents consulted

National policies, codes, decrees, laws and strategies

- Code of good agricultural practice, MIDAS project, June 2013
- Strategy for the development of agriculture and rural areas 2015-2020, MARD, June 2015
- Action plan for achieving gender equality 2013-2017, Ministry for Human and Minority Rights
- Poverty analysis in Montenegro, Monstat 2010 and 2011
- Decree on promulgation of the law on cooperatives, July 2015
- National climate change strategy by 2030, MSDT/Europe Aid, September 2015
- Technology needs assessment for climate change mitigation and adaptation for Montenegro, National Strategy and Action Plan, MSDT and Ministry of Foreign Affairs, October 2012

Reports, project documents, progress reports and strategies from other development partners

- National Human Development Report for Montenegro, Resources efficiency and Sustainable Human Development, UNDP, 2014
- Instrument for pre-accession assistance (IPA II), Indicative Strategy Paper for Montenegro 2014-2020, the EC, August 2014
- Programme for the development of agriculture and rural areas in Montenegro under IPARD II (2014-2020), MARD/EU, June 2015
- Country partnership strategy for Montenegro for the period 2011-2014, and country strategy progress report for Montenegro for the period 2011-2015, WB, May 2014

- KAP survey – Knowledge, attitudes and practices survey on youth employment and participation, Montenegro, IPSOS/UNDP, July 2013
- Closing the gap : Overview of UNDP results in gender equality in Europe & the CIS, UNDP, 2014
- Regional support facility for improving stakeholder capacity for progress on Roma inclusion, UNDP, Regional Bureau for Europe and the CIS, 2013
- Country programming framework in the Montenegro, 2015-2019, FAO, 2015
- Montenegro assessment report, OECD, 2012

Financial procedures, procurement procedures, financial sector assessments

- Financial sector assessment program, technical note, Framework for non-performing loans workout and insolvency and creditor rights, IMF/WB, March 2016
- Law on public procurement, date?

IFAD policies and strategies

- See Appendix 12

Other IFAD documents

- Matching grants, technical note, September 2012
- Rural Competitiveness Development Project in B&H, PDR, May 2015