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Government of the Republic of Sierra Leone Ministry of Agriculture, Forestry and Food Security

LOMA MOUNTAINS NATIONAL PARK

Preliminary Management Plan 2013-2017

VOLUME I THE MANAGEMENT PLAN



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LIST OF ABBREVIATIONS

ВСР	Sierra Leone Biodiversity Conservation Project
BT	Bumbuna Trust
°C	Degrees Centigrade
CSMC	Conservation Site Management Committee
CSMT	Conservation Site Management Team
DC	District Council
DD	Data deficient
EN	Endangered
EPL	Exclusive Prospecting License
FD	Forestry Division
FIRMS	Fire Information for Resource Management System
GEF	Global Environment Facility
ha	Hectare
HWC	Human Wildlife Conflict
IUCN	World Conservation Union
km	Kilometre
km ²	Square kilometre
LC	Least concern
LMNP	Loma Mountains National Park
m	Metres
MAFFS	Ministry of Agriculture, Forestry and Food Security
METT	Protected Area Management Effectiveness Tracking Tool
ML	Mining Licence
mm	Millimetre
NGO	Non-governmental Organisation
NT	Near threatened
NTFP	Non-timber Forest Products
ÖBf AG	Österreichische Bundesforste AG
PA	Protected Area
PF	Process Framework
tCO ₂	Tonnes of Carbon Dioxide
TRA	Threats Reduction Assessment
US\$	United States Dollars
VU	Vulnerable
WB	World Bank
WWF	World Wide Fund for Nature



FOREWORD

The Government of Sierra Leone is in the process of declaring the Loma Mountains Non-Hunting Forest Reserve a National Park which will be completed by the end of 2012. The development of this Preliminary Management Plan for the Loma Mountains National Park (LMNP) is intended to guide the initial operation and management of the LMNP, once established. The LMNP, which is a globally unique protected area is an important step forward in the process of strengthening the national protected areas system of the country. Over the long term, the Plan will assist in raising the management effectiveness of conserving the biodiversity of the Loma Mountains.

To meet the challenges of effectively managing the national protected areas system in Sierra Leone this "Preliminary Management Plan" plan is part of a process of building the GoSL's experience of protected areas management and planning by involving a broad spectrum of stakeholders. It introduces new concepts (e.g. inter alia, devolving user rights to non-state actors, what might be loosely termed community-based natural resource management, providing an enabling environment and resource use system that allows wildlife to be viewed as a competitive and viable land use option and on-farm asset)as well as different approaches to conservation management that are not yet fully supported by the legal framework but are integral parts of the newly approved Conservation and Wildlife Policy (2010). Sierra Leone is in the process of developing a progressive framework for the management of biodiversity resources, one which is more in tune with rural Africa and better reflects local values and customs. The 2010 Wildlife Policy is the first step in the direction of this reform process, the revision of the Wildlife Act is following guided by the Policy and the development and implementation of the LMNP Management Plan is the next step; from policy to practice. Therefore considerable space is dedicated, within the management plan, to explaining the principles and building the arguments to justify the approaches that the plan is advocating.

This "Preliminary Management Plan" aims at conserving the biodiversity of Loma Mountains National Park by protection and sustainable utilisation of resources in partnership with the village communities of Neya and Nieni Chiefdoms in the Koinadugu District of Sierra Leone. It recognises that protected areas cannot exist in isolation; indeed they need to be fully integrated within the local and national land use planning. The implementation phase of this plan, while proposing institutional arrangements for the internal management of the LMNP, also concentrates on strengthening village communities by devolving user rights over renewable natural resources found on Traditional Authority, or customary, lands surrounding the national park, whilst granting conditional user rights for certain resources within the park that can be sustainably utilised under comanagement agreements. The major task will be to facilitate the formation of accountable community-based institutions at village level that recognizes the system of the Traditional Authority and the structures of the modern state administration while protecting the core area which is the national park.

The LMNP Management Plan will, to a large extent, depend upon trust. Trust between the state agencies and communities, trust between modern and traditional forms of governance, and trust between the members of the communities themselves. However, *trust* is a key component of any governance



system, as it is in any commerce. From a purely utilitarian perspective, trust increases efficiency and significantly reduces transaction costs. Therefore building trust should be a worthy goal of the management plan.

This management plan has been developed for a period of five years and is based on the current Conservation and Wildlife Policy, which strongly advocates for rights-based governance systems as well as the devolution of authority for wildlife management to the most appropriate level. Furthermore it draws on principles and ideals established in the country's National Constitution as well as international obligations to the Convention on the Conservation of Biological Diversity (CBD).

Dr. Sam Sesay Minister of Agriculture, Forestry and Food Security Republic of Sierra Leone



APPROVAL

This Management Plan for Loma Mountains Non-hunting Forest Reserve, in the process to be declared Loma Mountains National Park, has been reviewed by the Forestry Division of the Ministry of Agriculture and Food Security and, after consultation with all relevant parties, approved for implementation.

Sheku A. Mansaray
Director
Forestry Division
Ministry of Agriculture, Forestry and Food Security



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Many thanks also go to the Koinadugu District Council, especially the Environment officer, Mr. Eric H Tommy and the Ward Councillors of Ward153 Sheku T. Marrah and Ward 157, Augustine K. Koroma who spared their time to be part of the consultation process so that the council development aspiration for the communities are reflected in this plan.

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Our thanks also go to the Project Management Unit of the Bumbuna Offset project team of the Ministry of Energy and Water Resources for their support and comments on the draft management plan. We owe special thanks to Joseph Kaindaneh and Abdulai Barrie for sparing their time to attend these meetings.

We also thanked the Project Management Team of the Sierra Leone Biodiversity Conservation Project for organising all the consultative meetings and bringing together the relevant stakeholders.

Last but not the least we would like to thank the Park Manager Mr. Alfred G. Momoh and his dedicated team for their active participation in the entire process and especially sending out invitation letters to community representatives and the District Council.



EXECUTIVE SUMMARY

Loma Mountains Forest Reserve (to be proclaimed as National Park within 2012) forms a unique ecosystem in Sierra Leone and has been identified as a key area in the national protected areas system. The territory has been declared a forest reserve in 1952 and should now be gazetted as a National Park to off-set the environmental impact caused by the creation of the Bumbuna dam on the Sele River. However, this is the first attempt to develop a plan to guide the management of the protected area in achieving biodiversity conservation.

This management plan is the first management plan to be developed for Loma Mountains National Park (LMNP) and had to be developed in a relatively short time frame (from April to August 2012) due to the closure of the Bumbuna Hydroelectricity Project. The plan proposes an institutional framework which will enable effective management of the protected area itself as well as the surrounding village territories. It is termed to be a "Preliminary Management Plan" since the implementation phase will be mainly concerned with setting-up and strengthening the institutions at various levels, from national public authorities (e.g. Forestry Division, District Council) down to village level traditional institutions (e.g. Village Chiefs and the advisory councils).

In developing the management plan it was explicitly recognised that:

- LMNP is of global importance and extremely vulnerable to a variety of threats. As such the core areas and values of the national park will need to be strictly protected.
- The natural values (particularly biodiversity) of LMNP are increasingly vulnerable to changes in land use in the communal lands surrounding the national park. A critical policy objective must therefore include a strategy to positively influence land use outside the national park in favour of sustainable biodiversity management, in particular to try to avoid further land clearance for conventional agriculture.

Prohibitive measure in communal land are unlikely to reduce the rate of land clearance for new farms and therefore a package of initiatives designed to promote the sustainable use of biodiversity resources off-reserve is an integral component of this MP. This approach, while new to Sierra Leone, is broadly supported by the Wildlife Conservation Policy of 2010.

This preliminary management plan serves as the basis for effective and adaptive management of Loma Mountains National Park (LMNP) and the participation of the neighbouring communities on Traditional Authority, or customary, lands in both the management of LMNP and the renewable natural resources surrounding the park in order to achieve their common vision. The management plan provides a structured set of objectives and activities that are intended to gradually improve long term park management effectiveness.

Its preparation has followed a structured participatory and consultative process involving the Forestry Division, the Koinadugu District Council, the Traditional Authorities of Neya and Nieni Chiefdoms and residents of the villages neighbouring Loma Mountains National Park.



The Vision for the Loma Mountains and surrounding communities was described through a participatory process with the different levels of the Traditional Authority, the District Council and the Forestry Division as:

"LMNP is effectively managed by the responsible government institution with the full participation of local stakeholders securing all the biological resources and providing environmental goods and service for the benefit of local communities and wider society.

Local communities have agreed rights of access to certain areas and resources and worship sites.

The lands surrounding LMNP are sustainably managed by the local communities supplying them with a rich source of farmland, bushmeat and other resources and ecosystem services for their self-sufficiency and economic development.

Non-timber forest products, including bushmeat, are making a significant contribution to local social and economic development."

The same process developed, the following nine Management Objectives in order to achieve the common Vision:

Objective 1: Biodiversity conservation by protection

Conservation of biological diversity by protection of important and vulnerable habitats, species, aesthetic and representative landscapes.

Objective 2: Biodiversity conservation by sustainable use

Conservation of biological diversity by sustainable use of species, habitats and ecosystems goods and services.

Objective 3: Sustainable socio-economic development

Sustainable economic and social development of the Loma Mountains National Park local communities through the sustainable utilisation of the natural and cultural resource base.

Objective 4: An enabling implementation environment

An enabling environment supportive of biological diversity conservation through protection, sustainable utilisation, and the social and economic development of Loma Mountains communities creating a functionally efficient policy, legal and institutional framework and a broad public awareness and support for the national park's Vision.

Objective 5: Financial sustainability

Financial sustainability of Loma Mountains National Park in order to implement the management plan and achieve the long-term vision.

Objective 6: Research and monitoring

Research and monitoring to increase understanding of social, economic and environmental processes and ensure that management is adaptive.

Objective 7: Environmental education

Development of Loma Mountains National Park as an educational resource for present and future generations.



Objective 8: Effective and efficient management Efficient and effective professional protected areas administration and management.

Objective 9: Visitor management Visitor management to enhance the visitor experience and protect the core values of Loma Mountains.

In order to ensure the integration of the national park into the wider landscape this management plan includes a second standalone Community Action Plan (CAP). The management plan and the Forestry Division have primacy in planning and management within LMNP whereas the surrounding communal lands are subject to a multiplicity of authorities and responsibilities. Indeed the management plan legally has little influence on the activities of people immediately surrounding LMNP. Therefore objectives 2, 3 and 4 are the focus of the CAP which is designed to align the objectives of local community development with the objectives of LMNP. The approach taken by the CAP is intended to empower local communities in such a way that they are capable of planning and managing the biodiversity resources on communal land. As the *de facto* managers of these resources they will be the primary beneficiaries of sustainable management.

The integration of the national park and communal lands is an important step for Sierra Leone in introducing a community-based natural resource management (CBNRM) approach as an additional tool to support the national protected areas system and sustainable rural social and economic development.

The management plan embraces principles of rights-based resource governance, sharing the management authority and responsibility with identified local level stakeholders, devolving management rights to the most appropriate levels, as set out in the Wildlife Conservation Policy of 2010.

A Provisional Budget for implementing the management plan was developed and estimates a cost of US\$1.7 million for the five year period.



1. INTRODUCTION

1.1. Purpose of the management plan

"In simple terms, a Management Plan is a document which sets out the management approach and goals, together with a framework for decision making, to apply in the protected area over a given period of time. Plans may be more or less prescriptive, depending upon the purpose for which they are to be used and the legal requirements to be met. The process of planning, the management objectives for the plan and the standards to apply will usually be established in legislation or otherwise set down for protected area planners.

Management Plans should be succinct documents that identify the key features or values of the protected area, clearly establish the management objectives to be met and indicate the actions to be implemented. They also need to be flexible enough to cater for unforeseen events which might arise during the currency of the plan. Related documents to the management plan may include more detailed zoning, visitor and business plans to guide its implementation. However the Management Plan is the prime document from which other plans flow, and it should normally take precedence if there is doubt or conflict" (Lee and Middleton, 2003).

The Ministry of Agriculture, Forestry and Food Security (MAFFS) fully agrees with these statements particularly that a management plan should be short and concise. However, this management plan is a "first generation" plan. Therefore the experience of developing and implementing the management plan for Loma Mountains National Park (LMNP) is still being built, so are the systems for implementing the plan.

While developed for implementation over a period of five years (2013-2017), this plan is set in an ever changing environment on ecological, social and economic level and therefore needs to be adapted as need arises in order to react to changing conditions accordingly. Furthermore, management planning is a process and therefore does not end with a plan. Annual work planning and budgeting as well as monitoring and evaluation will be needed to adapt the plan constantly in order to bring us closer to our vision.

1.2. Participatory planning process

The Bumbuna Hydroelectricity Project, partly funded by the World Bank, has commissioned ÖBf AG to develop a Preliminary Management Plan for Loma Mountains Non-hunting Forest Reserve (to be proclaimed National Park) in April 2012. Due to the closure of the project, the management planning process had to be concluded by September 2012. A comprehensive participatory planning exercise was not possible in this time, as was explained in the Technical Proposal by ÖBf AG. Certain aspects, which from experience, take considerably longer to establish and agree-upon had to be shifted to the implementation phase of the management plan. Following this approach it was avoided that all parties accept a hastily developed management plan under time pressure, knowing that its management actions, especially with regards to resource use restrictions, will not be adhered to. Given the short time for management planning, the planning process had to rely on existing data and information and concentrate on the



most pressing management needs to effectively conserve biodiversity in the park. Certain aspects that require more time in terms of a meaningful participatory process will have to be addressed in the implementation phase of the preliminary management plan.

Therefore, this management plan should be regarded as the first basis of an adaptive management approach, taking into account that over the next years additional knowledge and data will be generated which will need to be incorporated in the preliminary management plan.

This management plan followed a structured participatory and consultative process, including the Forestry Division of the Ministry of Agriculture, Forestry and Food Security, the Koinadugu District Council, the Traditional Authorities of Neya and Nieni Chiefdoms at various levels (Paramount Chief, Section Chiefs, Village Chiefs and Village Councils), ward councillors and community members. The Project Management Unit of the Bumbuna Hydroelectricity Project, the Project Management Team of the Sierra Leone Biodiversity Conservation Project as well as the World Bank (as funding agency of the two Projects) were involved in each stage of the planning process.

The planning process started by participatorily developing a common Vision for the Loma Mountains National Park and its surrounding areas. The next step involved to identify threats to biodiversity, using the GEF Threats Reduction Assessment (TRA) tool. Based on the threats, participants of two chiefdoms, the District Council and the Forestry Division formulated management objectives. The Consultant team developed measures and activities based on the management objectives which were brought back to the local level for verification. A twofold institutional framework was developed with stakeholders which ensures the participation of decision makers at all levels. The framework builds on the creation of a Loma Mountains National Park Management Committee which will govern the management of the protected area as well as local level village and/or section level institutions, building on the existing Traditional Authority structures to effectively involve land users in the management of their village territories as well as co-management of the national park.



2. DESCRIPTION OF THE LOMA MOUNTAINS

2.1. General information

2.1.1. Location

Loma Mountains are part of Koinadugu District (with 12,121 km², Sierra Leone's largest but least populated District) in the Northern Province (compare with Figure 1).

The district headquarters town is Kabala. Koinadugu is one of the least developed districts in the country and compared to other districts, has a relatively low population density.

The Loma Mountains National Park is situated in two Chiefdoms, namely the Neya Chiefdom (on the eastern side) and Nieni Chiefdoms (on the western side of the protected area). The chiefdom headquarters towns are Kurubonla and Yiffin respectively.

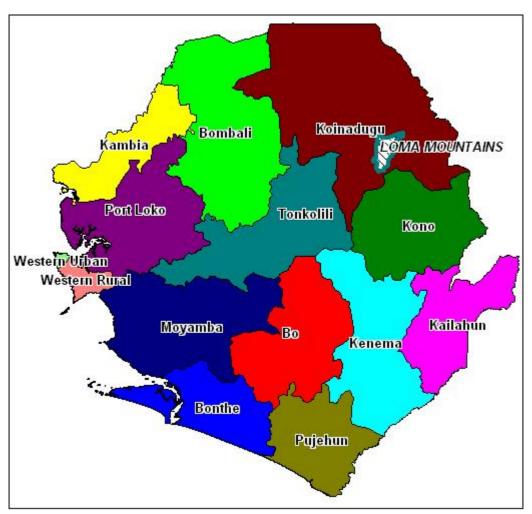


Figure 1: Loma Mountains in Koinadugu District, North-East of Sierra Leone

The Loma Mountains massive is one of seven key Guinean Montane Forests in West Africa consisting of scattered mountains and high plateaus, covering areas of Guinea, Cote d'Ivoire, Liberia and Sierra Leone. Mount Bintumani (Loma



Mansa) constitutes the highest peak in West Africa (west of Mount Cameroon) rising to 1,947 metres above sea level.

The mountainous area is part of the Afromontane archipelago-like regional centre of endemism. The mountainous character with diverse elevations caused the evolution into different plant associations on an altitudinal gradient. Falling into the northern margin of the Western Guinean Lowland Forest Ecoregion, three main plant communities can be found:

- 1. Closed forests and Guinea savannah (from 460 to 915m),
- 2. Sub-montane shrub savannah and sub-montane gallery forest (915 to 1,700m) and
- 3. Montane grassland (above 1,700m).

2.1.2. History of the area

The territory of Loma Mountains was part of Samoury Toure's (1830 – 1900) Wassoulou Empire which extended over the mountainous areas in Sierra Leone and Guinea in the 18th and 19th century. It was ruled by Banda Kerefaya on behalf of Samouray Toure. In 1898, after Toure's defeat by the French, the British administration distributed the territory of today's Wollay Section to former worriers of Toure. At this time, the British administration reportedly started to demarcate a forest reserve around Loma Mountains with concrete pillars. Later on, the area was divided administratively into two Sections, the Wollay Section and the Nyedu Section, which belong to two Chiefdoms today. The gazette notice establishing the Loma Mountains non-hunting forest reserve was enacted in 1952.

With the onset of the creation of Bumbuna dam, a suitable site for off-setting the ecological impact created by the dam was sought in the early 2000s. After detailed studies, Loma Mountains Forest Reserve was found suitable due to comparable habitats. Besides, Loma Mountains have even higher species diversity and therefore are well suited to compensate for the impact caused by Bumbuna dam. Thus the Government of Sierra Leone expressed its intention to step up the conservation status of Loma Mountains Forest Reserve to a National Park.

In this process it was decided to re-demarcate the protected area in order to exclude any settlements and farming areas that have been established within the reserve boundaries in the past. The boundary demarcation process followed a participatory process and was finalised in a Reserve Settlement Court procedure. The report on the Reserve Settlement Court is due to be submitted with a recommendation to the Parliament that Loma Mountains be declared a National Park.



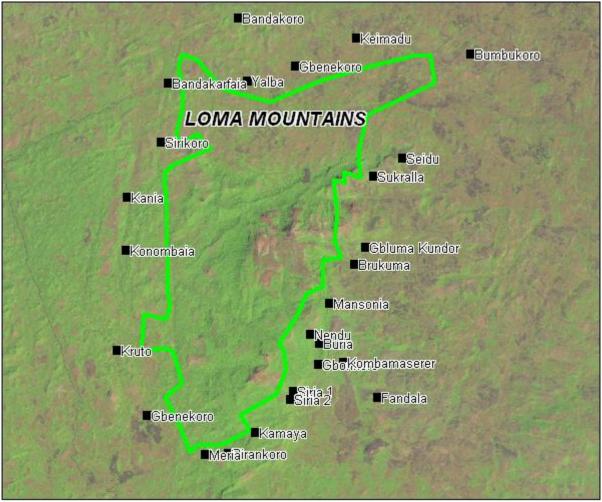


Figure 2: LMNP boundary (green line) and adjacent villages

2.1.3. Boundaries

The original boundary of Loma Mountains forest reserve has been described by boundary marks and bearing in an Order of 1952. Due to inconsistencies in the original boundary description and the fact that people moved into the area over time it was decided to re-demarcate the area and establish a new boundary (compare with Figure 2).

A new boundary, excluding human settlements, was drawn up in 2010 with support of the World Bank, following natural contour lines, inter-village pathways and water courses. This newly proposed boundary has gone through an extensive participatory process, including a public resettlement court, with the Traditional Authorities and village communities of Nieni and Neya Chiefdoms in 2012. Concrete pillars have been erected along the 97.1km long new boundary. The planting of 20,000 trees of *Tectona grandis*, *Mangifera indica* and *Heritiera utilis* along the boundary to serve as live markers has been started.

As a result of the boundary re-demarcation, the size of the proposed Loma National Park reduced to 28,731ha (the size before the re-demarcation was 33,021ha).



2.1.4. Ethno-cultural location

Koinadugu District is mainly inhabited by the Limba, Yanloka, Mandigo and Kuranko people. Nieni and Neya Chiefdoms belonging to the Kuranko people. They are mainly of Muslim faith or follow their traditional ethnic religion (compare to Figure 3).

The Kuranko occupy the mountainous region in north-eastern Sierra Leone, extending into Guinea. They are primarily crop farmers but keep some livestock and gather wild fruits. Rice constitutes the main staple food, whilst maize, potato, pumpkin, cotton and yams are grown as supplementary crops. Fish and meat are the main sources of protein and hunting is an important cultural activity. Livestock includes mainly goats, sheep, cattle and chickens.

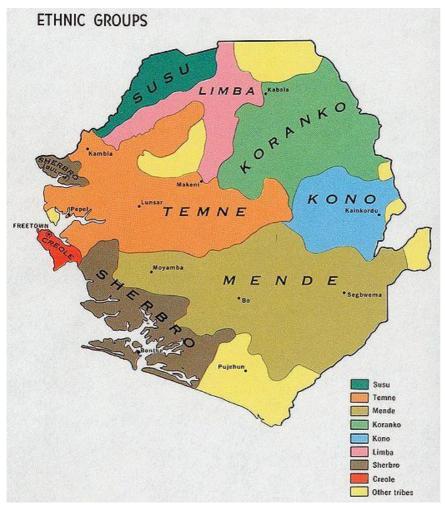


Figure 3: Ethnic groups in Sierra Leone

The Loma Mountains are shared between two chiefdoms, the Neya and Nieni Chiefdoms. The boundaries of three other chiefdoms, Sengbe, Mongo and Sandor reach close to the park boundary (see Figure 4).



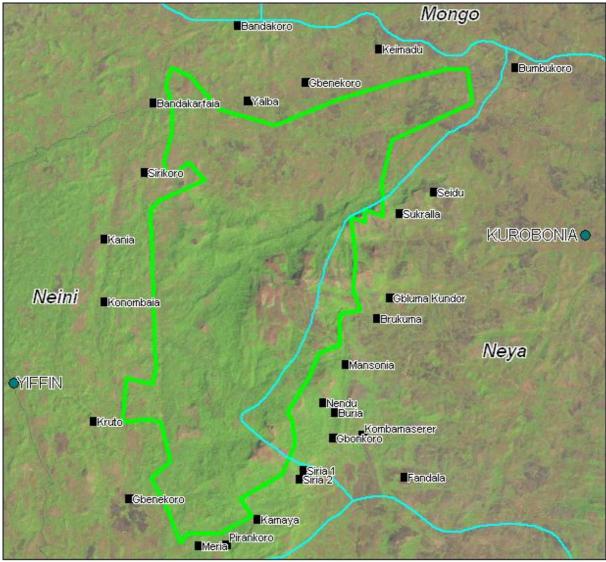


Figure 4: The chiefdoms surrounding the Loma Mountains
Park boundary in green; chiefdom boundaries in blue

The headquarters towns of Nieni and Neya Chiefdoms are Yiffin and Kurubonla, respectively. Each Chiefdom is headed by a Paramount Chief and is subdivided into five sections each, headed by a Section Chief (compare to Table 1). Thirty villages share direct boundaries with LMNP which are headed by Village Chiefs.

Table 1: Chiefdoms, Towns, Sections and Villages surrounding LMNP

Chiefdom	Neya Chiefdom	Nieni Chiefdom
Headquarters town	Krubola/Kurubonla	Yiffin
Sections	Kulor Neya I Neya II Saradu Nyedu	Barawa Kalian Sumbaria Wollay Nieni Section
Villages (with common boundaries to	Bumbukoro Seredu Sukurella	Krutor (Nieni Section) Gbenekoro (Nieni Section) Meria (Nieni Section)



Chiefdom	Neya Chiefdom	Nieni Chiefdom
LMNP)	Mansonia Bulumakundor/ Gblumakondor Borokuma Nendu Buruya/Buria Bonkokoro Komba Mansaraya Kanyadu Siraya 1/Seria 1 Siraya 2/Seria 2 Kamaya Fesanigbema Toloforaya	Pirankoro (Nieni Section) Yalba (Wollay Section) Gbenekoro (Wollay Section) Bandakoro (Wollay Section) Kemedu (Wollay Section) Sinikoro (Wollay Section) Bandakarifaia (Wollay Section) Konombia (Wollay Section) Kania (Wollay Section) Sokurela (Wollay Section) Bagbefeh (Wollay Section)

2.1.5. Area in the context of national protected areas system

The Loma Mountains are one of eight "protected area complexes" that have been identified in Sierra Leone's Biodiversity Strategic Action Plan to contain 80 to 90% of terrestrial biodiversity found in the country, namely:

- 1. Outamba-Kilimi National Park
- 2. Loma-Tingi Complex
- 3. Western Area Peninsula Non-hunting Forest Reserve (proposed to become a National Park)
- 4. Gola Forest National Park
- 5. Mamunta-Mayoso Wildlife Sanctuary (proposed Game Sanctuary)
- 6. Yawri Bay
- 7. Mape and Mabesi Lakes
- 8. Kangari Hills Forest Reserve

The Loma Mountains, as the largest remaining montane forest in Sierra Leone, have a unique biodiversity compared to the lowland forests (e.g. Gola Forest National Park). Due to the relatively low human population and difficult access, the forests are much less impacted compared to most other forest in the country. Forest and wildlife species composition and presence indicate that the ecosystem is relatively intact. Loma Mountains has national and regional biodiversity values, which warrant its place as one of the key protected areas in Sierra Leone deserving utmost attention and protection.

Its unique habitat composition is not only of academic interest but also gives potential for eco-tourism and environmental awareness as its habitat as well as wildlife diversity can be observed and experienced by the visitor. Its gallery forests, flanked by numerous streams and grassland areas have a good game viewing potential which is an added value in comparison to lowland forested protected areas where wildlife can be hardly observed by the visitor.

2.1.6. Accessibility

Access to the Loma Mountains is given via a number of routes. One route leads via Kabala, the capital of Koinadugu District, situated 100 km to the northwest of the Loma Mountains. From Kabala there leads a road to Yiffin, the headquarters



town of Nieni Chiefdom. The road is accessible throughout the year, although it is generally in poor condition, manageable only by 4x4 vehicles in the wet season (compare to Figure 5).

Yiffin can also be reached from Magburaka via Bumbuna Town in the dry season.

Another access route leads through the Kono District, via Kayeima to Kurubonla, the headquarters town of Neya Chiefdom. Kurubonla can also be accessed from Kabala.

Both chiefdom headquarters towns are accessible in the rainy season, although not without difficulties. The travel time in the wet season from Kabala to Yiffin is approximately four hours whilst the route from Kabala to Kurubonla can take up to seven hours.



Figure 5: Main routes to the Loma Mountains

Currently (June 2012) there are major improvement works underway on the road between Falaba and Bendugu, funded by IFAD. These works include the renewing of all bridges and culverts along this route, which will greatly improve access to this remote part of Koinadugu District.

The road to Konombaia, the village that will host the park headquarters (to be constructed), is not accessible throughout the year. This lack of accessibility of



the planned headquarters in the rainy season adds to the challenge to effectively manage the national park and show a continuous presence within and around the protected area as well as for ecotourism development.

Some villages are connected to each other by hand-hewn bush tracks that are only motorable when dry.

The national park and Mount Bintumani are reachable by foot path only. There are foot paths to the mountain peak from various villages near the boundary of the park, including Kruto, Konombaia, Sukralla, Sinikoro and Mansonia. From the west (e.g. Konombaia, Yiffin, Kruto) the peak can be reached within two days trekking. From the East (e.g. Kurunbonla, Mansonia and Sukralla) the trip to the peak is manageable within two days trekking. Guides and porters can be organised through the respective Chiefs.

2.1.7. Infrastructure and equipment

Conservation management infrastructure

Currently there is no protected area infrastructure in place, except a rented house for staff accommodation. A temporary research facility was established on the slopes of the mountain but has since dilapidated beyond recoverable state.

Currently there are plans to construct much needed park infrastructure, such as headquarters and outposts through the Bumbuna Hydroelectricity Project. This construction work shall include:

- An administrative block and water well with pump in Konombaia
- A three bedroom staff quarter and water well with pump in Konombaia
- A ranger post, two bedroom staff quarter and water well with pump in Bandakarfaia
- A ranger post, two bedroom staff quarter and water pump in Mansonia
- A ranger post, two bedroom staff quarter and water pump in Bandakoro

Tourism infrastructure

Currently there is no specific tourism infrastructure available. Visitors, arriving at one of the villages on the boundary of the park, are currently provided a site where to put up their tents and make camp for the night before entering the park on foot.

Designated and maintained campsites or simple guest houses in those villages would be a low cost initiative to enhance the tourism product of the park. A site close to some water source, cleared of vegetation and larger stones, with a fireplace and a table would provide all necessary facilities for self-equipped visitors. Additionally, services such as providing cooked meals and uncooked food supplies can be offered on demand.

Road infrastructure



The location for the planned headquarters building in Konombaia is currently only reachable by 4x4 vehicle in the dry season and there are currently no funds to upgrade this road to enable an all-year-round access to the planned headquarters.

A recent cost estimate revealed that road rehabilitation, including the construction of culverts and a bridge over the Bagbe River would cost around 420,000 US\$.

Equipment

Certain equipment has recently been provided by the Bumbuna Hydroelectricity Project and the Sierra Leone Biodiversity Conservation Project, including:

- Transport equipment (a Toyota Land Cruiser Station Wagon, six motorbikes and bicycles)
- Personal equipment (uniforms and personal utility items)
- Monitoring equipment (GPS devices, camera traps, pocket field guides, Binoculars, etc.)

2.1.8. Staffing

Currently, LMNP has a staff outfit of 15 people, including one National Park Manager, two Rangers and twelve Game Guards. Additionally MAFFS provides one driver for the vehicle.

None of the staff have formal professional training in conservation, administration, communication and sensitization, etc. in regards to the management of a protected area. However, the staff is responsible to cover various management functions, including patrolling and law enforcement, monitoring and evaluation, administration and reporting, visitor management and communication, community liaison, sensitization and environmental awareness raising.

At the moment (at a time when no ranger posts are constructed yet) a group, consisting of one Ranger with six Game Guards are posted in Bandakarafaia and Mansonia each (see Figure 4).

There are identified community liaison officers (from the community) collaborating with the park staff. However, currently these positions are provided by the communities on a voluntary basis. The park management team will have to recruit or identify suitable community outreach officers and provide appropriate training.

In the medium turn it is expected that the staffing will have to be increased by at least five individuals in order to take account of the various functions to be fulfilled by the park management team without compromising on its core functions.



2.2. Socio-economic background

A recent socio-economic survey commissioned by the Bumbuna Hydroelectricity Project (EEMC, 2012) estimated the population of Neya and Nieni Chiefdoms at about 73,000 people. Households are typically large as can be seen in Table 2.

Table 2: Household size

Source: EEMC, 2012

1-5	6-10	11-15	16-20	21+
persons	persons	persons	persons	persons
5%	25%	33%	6%	27%

The majority of people (66%) have no formal education and the educational facilities comprise mainly community schools at primary level (grades I-VI) that are not always officially registered or recognised by the Ministry of Education, Youth and Sports.

The main household income is generated by farming activities (90% of households derive their main income from farming), which demonstrates the importance of subsistence farming in the area. Protein demand is met by bushmeat (60%), followed by fish (30%) and small livestock (10%). Honey is an important resource for most households and beekeeping is commonly practiced as well as the harvesting of wild honey. Most farming activities are for subsistence purposes, although some crops are predominantly cash crops, such as groundnuts. Livestock production is more market orientated and used for wealth accumulation.

There are almost no formal employment opportunities available, except for a few opportunities in public service.

Due to high transport costs as well as general high costs of manufactured goods, people are completely dependent on the forest to meet their building material demands (e.g. poles, timber, thatching grass, reeds, etc.).

In both chiefdoms there is no grid-electricity available and the main source of energy is provided by fuel-wood. Communication facilities (cellular network, landline, internet) are absent with the exception of two VHF-radio links in Kurubonla and Yiffin, provided by the health centres.

Both chiefdoms have very limited health facilities that are reportedly understaffed, if staffed at all. The vast majority of people have neither access to safe drinking water nor advanced sanitary facilities. Medicinal plants play an important role in household-level health care due to lack of access to modern medicine as well as lack of funds to afford modern medicine.

The area around LMNP has a poor road network, which makes market access difficult, especially during the wet season.

There are rudimentary extension services available but only in the main centres. Most villages do not have access to extension services.



Just a few NGO's are active in the area, mainly involved in health care and agricultural extension services.

There are a few individuals who have previously guided visitors up to Mt. Bintumani. However, there is no visitor management and information system in place. Visitors can currently not expect to find hospitality services readily available, such as accommodation, food, safe parking, guides and porters, etc. readily. Advance booking or planning is not possible due to a lack of counterparts on location as well as lacking communication facilities. Currently visitors pass by the respective Chiefs who organise guides and porters for a trekking tour to Mt. Bintumani.

The socio-economic survey yielded that the vast majority of people (90%) generally have a positive attitude towards the protected area and view it as beneficial in light of enhanced development opportunities in the future, in which people have high expectations.

2.3. Geo-physical information

2.3.1. Climate

Mean annual precipitation is 1,600-2,400mm and temperatures range from 10-33°C. The dry season extends from November to April whilst the wet season occurs during the months of May to October (see Figure 6).

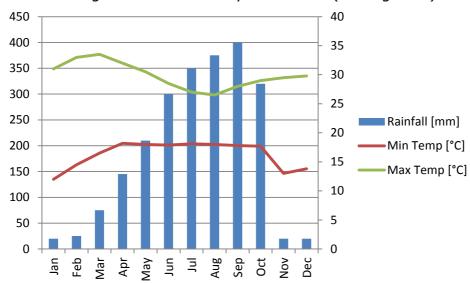


Figure 6: Annual Rainfall and mean Temperatures

2.3.2. Geology and soils

The Loma Mountains are underlain by rocks of the Precambrian age (Archaean and Proterozoic), consisting of dolerite, gneiss, schist and quartzite. Soil composition in slopes is generally excessively leached, with low aluminium and organic matter content, and considered unsuitable for cultivation. Valley soils and swamps are hydromorphic and relatively fertile. Due to low organic matter and high rainfall, intensive cultivation away from swamps is not viable without extensive fallow periods and/or excessive fertiliser input.



2.3.3. Hydrology

The northern highlands of Sierra Leone are source of major river systems in Sierra Leone and Guinea. Tributaries originating from the Loma Mountains and the Tingi Hills are flowing into the Niger River and the Sewa River.

Part of the Sewa River originates in the Loma Mountains through the Bagbe and Bafi rivers, flowing into the Waanje River, then forming the Kittam River, which drains into the Atlantic Ocean. The Sewa River is considered Sierra Leone's most important commercial river and is extensively mined for diamonds. Agriculture is also an important commercial activity along the river.

The Sewa River has a total length of 385km and a drainage area of 14,200km². Its tributaries are rocky and torrential in their upper courses but open into wide estuaries, which penetrate far inland and are bordered by mangrove swamps and floodplains.

2.4. Biodiversity information and status

In terms of biodiversity data and status there is more information available for Loma Mountains than for most other protected areas in Sierra Leone. The mountainous character has attracted researchers and ecologists from early on.

More recently, through the Bumbuna Hydroelectric Project and its endeavour to step up the conservation status of Loma Mountains as an ecological off-set project for the creation of the Bumbuna dam, much of the previous data was summarised as well as new field studies conducted and published in 2009 as the "Loma Mountains Biodiversity Report".

The report contains detailed studies on Loma's flora, avifauna and small and large mammals. The species inventories given in these reports give a good account of the biodiversity found in the Loma Mountains. Whilst these studies form a very good data baseline there is still a lack of data for some genera (e.g. fish, amphibians, reptiles).

In terms of conservation status the Loma Mountains are one of the largest remaining areas of high forest in Sierra Leone and the region with the special feature of its unique habitat diversity due to its elevation changes. There are several endemic species found in the Loma Mountains and it might harbour one of the most dense chimpanzee populations in West Africa. However, most other large mammals are considered to be present at relatively low densities.

Further details are given in the subchapters below.

2.4.1. Integrity and connectivity to other protected areas

Although Loma Mountains Forest Reserve, as constituted in 1952 as well as the re-demarcated area of the proposed LMNP is a relatively small protected area it contains all biomes, including Guinean savannah, upland savannah, riparian forest, dry forest and rainforest. Therefore, there is no need to consider any change of the current boundary to include any specific feature found in the proximity of the protected area but not in the protected area. However, the area is relatively small and its long term conservation will depend on the existence of



suitable habitats in its proximity. Currently, there are large areas of high forests and secondary forests found within the proximity of the protected areas which should be sustainably utilised and valorised in order to maintain with forest habitats around LMNP as well.

Currently there is little information available on the connectivity with other protected areas in the region. There is little evidence that suggests that there are existing wildlife corridors to other protected areas. Due to relatively high levels of illegal hunting and relatively low wildlife numbers it can be assumed that wildlife populations remain within the protected area and surrounding communal areas without any migrations to protected areas further away.

Connectivity with other protected areas and wildlife corridors could become more important once species densities increase. Whether settlements and roads infrastructure, etc. will allow for the establishment of wildlife corridors is currently unknown. There are forest reserves close to Loma Mountains (e.g. Tonkoli forest reserve in the south-west and Tingi Hills forest reserve in the south-east) with lower legal biodiversity protection status, which are currently unmanaged (compare to Figure 7). However, the integration of these areas into a wider landscape protection model could be considered in the future.

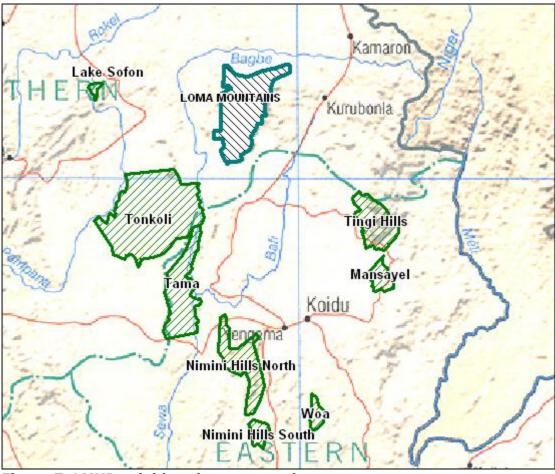


Figure 7: LMNP neighbouring protected areas



2.4.2. Mammals Small Mammals

A rapid assessment on the species diversity on small mammals was conducted in 2008, commissioned by the Bumbuna Hydroelectricity Project (Ministry of Energy and Water Resources, 2010).

The survey established that there is a fairly high diversity of bat species having confirmed the presence of 17 species and assuming that there are even more species present which would need to be investigated in more detailed surveys. This survey expanded the list of known species for Loma Mountains as well as for Sierra Leone. Several bat species are listed under Least Concern (LC) status.

Rodents were also rapidly surveyed and several species were confirmed. However, the survey did not expand the known species diversity of Loma Mountains. Some species are listed under Least Concern (LC) or Data Deficient (DD).

Large Mammals

Long-term monitoring of large mammals has listed 48 species, including twelve species of primates, four species of large rodents, twelve species of carnivores, three species of scaly ant-eaters and 21 species of ungulates. This represents about 70% of Sierra Leone's large mammal diversity.

Endangered species include the Chimpanzee (*Pan troglodytes verus*), the Western Red Colobus (*Piliocolobus badius*), the Diana Monkey (*Cercopithecus diana diana*) and the Pigmy Hippo (*Hexaprotodon liberiensis*).

At risk of extinction in Sierra Leone are the Pygmy Hippo, the Bongo (*Tragelaphus eurycerus*) and the Zebra Duiker (*Cephalophus zebra*). The Pygmy Hippo and Bongo have been recorded in recent years (2006 to 2008). The Zebra Duiker has last been recorded in 1992. Its current presence and status should therefore be investigated.

The survey from 2008 indicated that the relatively high presence and abundance of forest dependent species (Western Pied Colobus, *Colobus polykomos*, Western Red Colobus, *Piliocolobus badius badius*, Diana Monkey, *Cercopithecus diana diana*, Bay Duiker *Cephalophus dorsalis* and Black Duiker *Cephalophus niger*) was a sign for a healthy forest ecosystem in the Loma Mountains.

The presence of large predators in Loma Mountains, including Leopard, Golden Cat and Civet as well as the Crowned Eagle also indicate a stable prey population and hence ecological balance.

The Loma Mountain Biodiversity studies, commissioned by the Bumbuna Hydroelectric project in 2008 estimate Chimpanzee density to be between 5.75 and 7.41 weaned individuals per km². Chimpanzee density was recorded highest in riverine forest. This density represents one of the highest Chimpanzee densities recorded in West and Central Africa (compare to Figure 8).



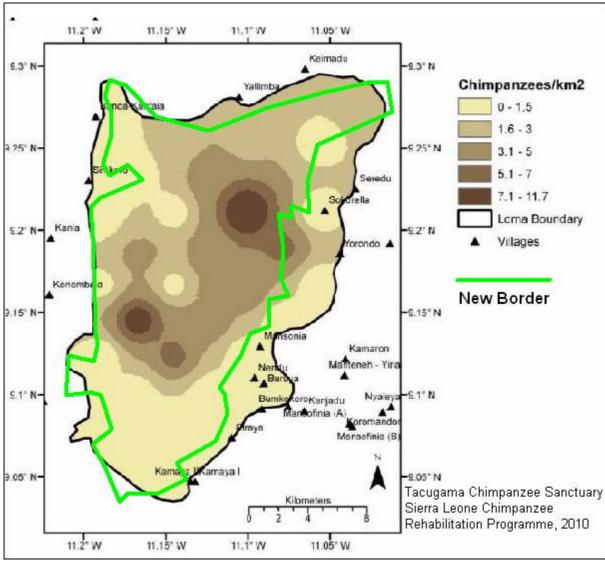


Figure 8: Chimpanzee density in LMNP with overlaid new boundary Source: Tacugama, 2010

For other large mammal species, population densities are unknown but thought to be below carrying capacity. Table 3: Mammals in LMNPTable 3 lists endangered, vulnerable, near threatened and data deficient mammal species in LMNP.



Table 3: Mammals in LMNP

Endangered (EN)	Vulnerable (VU)	Near threatened (NT) and Least concern (LC)	Data deficient (DD)
 Chimpanzee Pan troglodytes verus Western red colobus Piliocolobus badius Diana monkey Cercopithecus diana Diana pigmy hippo 	 Golden cat Caracal aurata Zebra duiker Cephalophus zebra 	 Western pied colobus Colobus polykomos Sooty mangaby Cercocebus atys Campbell's guenon Cercopithecus campbelli Lesser spot-nosed Guenon Cercopithecus petaurista Giant ground pangolin Smutsia 	Water chevrotain Hyemoschus aquaticus
Hexaprotodon liberiensis		 gigantea Tree pangolin Phataginus tricuspis Long-tailed pangolin Uromanis tetradactyla Red river hog Potamochoerus porcus Forest buffalo Syncerus syncerus nanus 	
		 Bongo Tragelaphus euryceros Waterbuck Kobus ellipsiprymnus Bushbuck Tragelaphus scriptus Maxwell's duiker Philantomba maxwelli Bay duiker Cephalophus dorsalis 	
		 Black duiker Cephalophus niger Yellow-backed duiker Cephalophus silvicultor Red flanked duiker Cephalophus rufilatus 	
		·	



There are no recent sightings of elephant in the Loma Mountains, although there are records from farmers in 2006, 2007 and 2008 that give evidence of their seasonal occurrence in the lowland areas, close to the Bagbeh River just to the west of Loma. A confirmation of these sightings is currently absent. However, if elephant occurrence is confirmed its implication on the integrity of the park boundary would have to be investigated.

2.4.3. Avifauna

The Loma Mountains are classified as one of ten Important Bird Areas in the country.

The Upper Guinea forests, of which Loma Mountains are part of, are one of 34 biologically rich and most endangered terrestrial eco-regions on the globe and have been identified as an Endemic Bird Area based on its biological importance and current threat level.

A study commissioned by the Bumbuna Hydroelectric Project in 2008 recorded 257 bird species in a rapid survey which brings the total number of bird species recorded in the Loma Mountains to 332 out of 55 families, which represents about 50% of bird species found in Sierra Leone. Of the 332 species, 282 are resident, 31 Palearctic migrants and 16 Intra-Africa migrants.

Table 4 lists endangered, vulnerable, near threatened and data deficient bird species in LMNP. Table 5 provides a comparison of bird species diversity in LMNP and Sierra Leone.

Table 4: Birds in LMNP

Endangered (EN)	Vulnerable (VU)	Near threatened (NT)	Data deficient (DD)
Rufous Fishing Owl Scotopelia ussheri	 Lesser Kestrel Falco naumanni Yellow-bearded Greenbul Criniger olivaceus Sierra Leone Prinia Schistolais leontica Yellow-headed Picathartes Picathartes gymnocephalus 	 Pallid Harrier Circus macrourus Yellow-casqued Hornbill Ceratogymna elata Black-headed Rufous Warbler Bathmocercus cerviniventris Rufous-winged Illadopsis Illadopsis rufescens Copper-tailed Glossy Starling Lamprotornis cupreocauda 	 Baumann's Greenbul Phyllastrephus baumanni Emerald Starling Lamprotornis iris



Endangered (EN)	Vulnerable (VU)	Near threatened (NT)	Data deficient (DD)
		 Brown-cheeked Hornbill Bycanistes cylindricus 	

Table 5: Comparison of Bird Species Diversity in LMNP and Sierra Leone

	Loma Mountains	Sierra Leone
Species of conservation concern	12	29 (30)
Endangered - EN	1	2
Vulnerable - VU	4	10
Near Threatened - NT	6	14 (15)
Data Deficient - DD	2	3
Restricted-range species	9	14
Guinea-Congo Forests biome species	128	174
% of total recorded in Sierra Leone	73,5%	100&
Sudan-Guinea Savannah bime species	6	28
% of total recorded in Sierra Leone	21.5%	
Total number of species	332	633
% of total recorded in Sierra Leone	52.5%	

In terms of restricted-range species, nine of 14 restricted-range species and 128 (73.5%) of the 174 Guinea-Congo Forest biome species recorded in Sierra Leone are present in Sierra Leone.

A full account on confirmed bird species can be found in the Loma Mountains Biodiversity Report of 2009.

2.4.4. Amphibians

A complete inventory of amphibians occurring in Loma Mountains does not exist but up until now, 41 species have been recorded. Previous surveys have shown that the species assembly is typical of for the Upper Guinean forest block as well as specific for the montane grasslands and gallery forests in the mountains.

Some habitat specific species found in the Loma Mountains are considered endangered, such as *Arthroleptis crusculum*, which is restricted to the montane grassland. Table 6 lists endangered, vulnerable, near threatened and data deficient amphibian species in LMNP.

Table 6: Amphibians in LMNP

Endangered (EN)	Vulnerable (VU)	Near threatened (NT)	Data deficient (DD)	
Arthroleptis crusculum	•	 Bufo togoensis Kassina cochranae Leptopelis macrotis 	 Ptychadena retropunctata Ptychadena submascarenie nsis 	



Endangered (EN)	Vulnerable (VU)	Near threatened (NT)	Data deficient (DD)
		 Petropedetes natator Phrynobatrachus alleni Phrynobatrachus guineensis Phrynobatrachus liberiensis Phrynobatrachus phyllophilus Ptychadena superciliaris 	

2.4.5. Reptiles

Currently there is no systematic data on reptiles available in the Loma Mountains.

2.4.6. Fish

Although there are numerous streams found in the Loma Mountains which hold a considerable fish stock which is also one of the mayor protein sources of the people living in the area, very little is known on the species composition and diversity. In consideration of the absence of data of a genus that forms an important natural resource in the area, it is recommended to study this topic further.

2.4.7. Arthropods

Several new species of insects have been reported for the Loma Mountains, including *Promecolanguria lomensis*, *Barbaropus bintumanensis* and *Barbaropus explanatus*. A summary of WWF predicts that it is likely that the mountains in the region (Loma, Nimba, Tingi, etc.) contain single-site specific endemic invertebrates. However, any empirical data is missing. (http://www.worldwildlife.org/science/wildfinder/profiles/at0114.html)

2.4.8. Vegetation and habitats

A botanical survey commissioned by the Bumbuna Hydroelectric Project in 2008 concluded that Loma Mountains is a mosaic of Guinean savannah, upland savannah, riparian forest, dry forest and rainforest and harbours high plant diversity (contained in the Loma Mountains Biodiversity Report of 2009). Further, the report stated that the montane ecosystem of Loma is unique in the subregion, having the most expansive area of intact rainforest.

The authors of the study also came to the conclusion that due to the isolation of anthropogenic activities and generally high plant diversity, Loma Mountains present a unique opportunity to conserve a significant portion of flora species found in the country.



At least 1,576 vascular plant species have been recorded, belonging to 757 genera and 135 plant families (compare also to Figure 9), where Rubiaceae and Leguminosae make up the most. Nine endemic species can be found in the Loma Mountains, which include Afrotrilepis jaegeri, Digitaria phaeotricha var. patens, Gladiolus leonensis, Ledermanniella Dissotis sessilis, jaegeri, jaegeriana, Loxodera strigosa, Schizachyrium minutum (S. brevifolium) and Scleria monticola. Regionally endemic plant families are present in Loma, such as peltatum (Dioncophyllaceae), *Triphyophyllum* Octoknema borealis (Octoknemataceae), Bersama abyssinica (Melianthaceae) and Napoleonaea leonensis (N. vogelii) (Lecythidaceae).

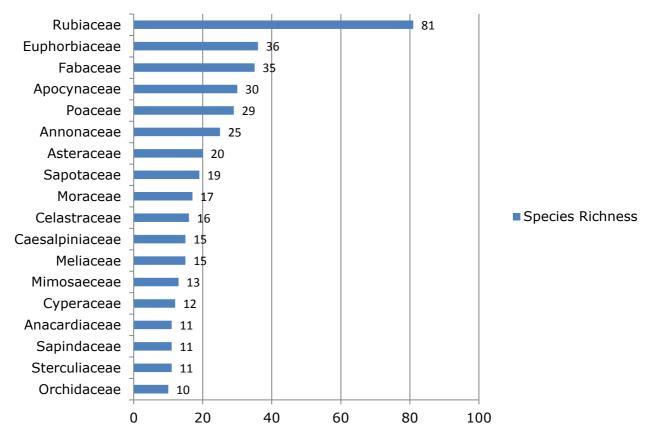


Figure 9: Plant species richness by family in LMNP

Source: Loma Mountains Biodiversity Study, 2009

2.5. Ecosystem services

Apart from direct values, such as the provision of non-timber forest products or opportunities for eco-tourism and diversified livelihood strategies, Loma Mountains provide a number of indirect ecosystem services which accrue to the whole nation and are a precondition for sustainable development and poverty alleviation.

The Loma Mountains and its forests have an important hydrologic function in terms of water catchment and all year release of water to ensure a steady flow of streams. Furthermore, forests play an important role in terms of water quality through filtration and providing potable water. As the tributary to one of the



most important rivers of Sierra Leone, the Sewa, the hydrologic service provided by the Loma Mountains does not only benefit neighbouring communities but is an essential service for any downstream activity and land use down to their estuaries into the Atlantic Ocean. Therefore, effective watershed protection is benefiting the entire nation and a precondition for sustainable development on a national basis.

Any future downstream hydroelectricity developments will greatly benefit from reduced sedimentation levels in river waters due to effective soil stabilisation and erosion control fulfilled by the forest cover of the Loma Mountains. Studies in other countries have shown that these avoided costs are usually far greater than the cost of effective protected areas management.

It can also be assumed that irrigated agriculture and its need for river water will grow in the future. Hence, effective biodiversity conservation and protection of the watershed of major rivers of the country will be a good investment into the sustainable development of the Nation at large.

The Loma Mountains and its forests fulfil an environmental service mitigating global climate change by sequestering carbon dioxide from the atmosphere, and avoiding emissions from deforestation and forest degradation in case of effective PA management. The carbon sequestration potential of the forests in Loma has not been studied yet. Using the average forest ABG density reported by Saatchi et al. (2011) for Sierra Leone (134 t/ha), it can be conservatively assumed that the forests in Loma NP store at least 300 tCO $_2$ per ha since they are in better shape than the average. Thus, it should be assessed whether there is a potential to develop a payment mechanism for ecosystem services (i.e. REDD+) which will mainly depend on a credible baseline proofing the deterioration of the forest under the business as usual scenario. Although quantitative data about historical deforestation in the reference area around Loma NP are lacking, it is fairly safe to assume that deforestation has been comparatively low due to the remote location of the forests. Therefore, the financial viability of a REDD+ project will mainly depend on the future threats to the LMNP.

The forests in LMNP also significantly contribute to the adaptation to climate change. They serve as an effective natural barrier against the impacts of climate change, drought, mitigating flooding, changing precipitation patterns, landslides and storm surges and keep natural resources healthy and productive by protecting natural ecosystem processes.

2.6. Land use and impact in the national park and surrounding community areas

Knowledge of resource use by households residing within and outside the reserve is critical if the management plan has to meet its desired goal. The following section summarizes the results of a Process Framework (PF) for defining the acceptable uses based on Sierra Leonean laws and the World Bank's policy on involuntary resettlement (OP4.12). This section lists land uses as well as land use related impacts in the national park as well as beyond its boundaries in the communal areas. The list of land uses is not exhaustive but tries to summarise the main land uses and related impacts.



In the Socio-economic Survey (EEMC, 2012), a total of 120 households were interviewed using a survey questionnaire. Group discussions and consultations were also held with community groups comprising Paramount Chiefs, Regents, Town Chiefs, Mummy Queens, councilors, tribal Authorities, Youth Chairmen, Leaders of identifiable community associations, etc. These people were chosen based on their dependence on natural resources in the Loma Mount Forest Reserve.

2.6.1. Settlements

Before the new boundary was drawn-up and agreed upon in 2012, which specifically tried to exclude currently farmed area, several villages were situated in the forest reserve. The NKUK Report (2010) indicated that eight villages were located within the reserve and another five villages on its boundary, whilst another eleven villages, although outside the reserve, had fields in the reserve or were likely to encroach in the future. The new boundary was developed and agreed-upon in participation of affected villages and excludes any settlements and farmed areas. In the future it will be important to avoid any new encroachment into LMNP by effective law enforcement.

The following data (*in italics*) in this section originates from a Socio-economic Survey (EEMC, 2012) conducted in 2011 and 2012.

It is estimated that the total population using resources in the broader Loma Mountain area lie in the two chiefdoms of Neya and Neini. As of 2004 Census, the population in these chiefdoms reached approximately 72,533, as shown in the two tables below.

Population Figures in Neya Chiefdom Sections

Section	Inhabitants	Percent
Kulor	3,130	9.4
Neya I	10,148	30.4
Neya II	6,944	20.8
Nyedu	6,015	18
Saradu	7,189	21.5
Total	33,426	100

Population Figures in Nieni Chiefdom Sections

Section	Inhabitants	Percent
Barawa	6,197	15.8
Kalian	13,931	35.6
Sumbaria	6,228	15.9
Wollay	3,017	7.7
Yiffin	9,734	24.9
Total	39,107	100

The household survey reveals that average household size is about 5 members. The highest numbers of respondents in the household survey were from middle



age groups, between 36-45 and 46-55 years of age.

Most households indicated that they were born locally in the Loma Mountain area, with over 81% of the respondents living in the Loma Mountain area over 20 years. There are no sizeable number of migrants who have settled into the area. The only few migrant population came to the area as public servant teachers. The main inhabitants provided various reasons for living in the area. Principal among the reasons was for agricultural opportunities, traditional and family ties.

Reasons Cited for Settlement in the LM Area.

Reasons for Settlement	Number	Percentage
Availability of land for Cultivation	35	38%
Availability of Land for Grazing	4	4%
Availability of Water	6	7%
Good Climate	2	2%
Availability of Market for Produce		
Availability of Fish	8	9%
Availability of Infrastructure (Schools, health services, road etc)	6	7%
Displaced by Conflicts		
Homeland/Born Locally	20	22%
Others	10	11%

Estimated Distance of Respondent's Village from LMNP

0< Distance<5km	5< Distance<10km	10km< Distance	Don't Know
1-2hrs	3-6hrs	6-9hrs	
32%	25%	39%	4%
27	21	33	3

The analysis of the socio-economic baseline survey results reveals that 90 percent of the households in the area rely on farming as their primary source of income. The other income sources are domestic/household work, selling/trading and teaching which represents 3%, 1% and 5%.

Occupation of Household/Income Sources

Occupation/Income Sources	No	Percentage
Agriculture/Farming	82	90%
Domestic/Household Work	3	3%
Construction	0	0
Grazing of Livestock	0	0
Shop Keeping/ Selling	1	1%
Others(Teaching)	5	5%



The main source of water for the neighbouring communities is water from the Loma Mountains and nearby water bodies or streams. Water from these water-bodies serves as the communities sources of drinking water, washing and all other domestic purposes. There are few borehole facilities in certain communities but most of them are not working. The Paramount Chief for the Neini Chiefdom disclosed that there are 30 bore holes, 120 streams and Gravity Water Supply system for 4 communities.

The main source of energy for cooking and lighting is wood collected from the bush. Torch lights powered by dry cell batteries are widely. In few instances kerosene lanterns are also used.

There are limited health services facilities and health personnel available in the Loma Mountain area communities. The entire Neini Chiefdom has Seven (7) Health Care Centers with only one (1) Community Health Officer and seven (7) Supervising Nurses. The situation is no better in the Neya Chiefdom. The community people therefore mainly depend on local herbalists and medicinal herbs form the Loma Forest for their health needs. Maternity facilities for women are lacking. Traditional birth attendants are therefore the care providers for pregnant women in many communities in the Loma Mountain areas. Ambulance services are not available. Under emergency circumstances, patients are carried on shoulders and at the back of men and walking on foot to very far locations for orthodox medical attention. In the process of this many patients and women lose their lives.

2.6.2. Farming and livestock

Following the demarcation of the new boundary of the national park there are no villages located within the national park. However, in view of a growing population, it will be necessary to show a constant presence in the area to avoid any future encroachment.

The following data (*in italics*) in this section originates from a Socio-economic Survey (EEMC, 2012) conducted in 2011 and 2012.

Among respondents interviewed, 68 persons out of 88 respondents (representing 77%) indicated that they owned land. Majority of the respondent land owners (i.e. 40 out of 68) representing about 59% do not know the size of their land nor do they know whether the piece of land they owned is within the Loma Mountain Forest Reserve boundary or not. There were 27 (40%) respondents who indicated that their parcels of land were within the LMNP.

Land Ownership and Tenure System

Land Ownership	Number	Percentage	Type of Tenure	Number	Percentage
Inherited	87	100%	Freehold	32	41%
Bought	-	-	Leasehold	1	1%
Rented	-	-	Customary	13	16%



Squatter	-	-	Community Land	33	42%
Others	-	-	Squatter	-	

Land Owned by Respondents

Acreage of Land Owned	No	%	Acreage of Land in LMFR	No	Percentage %	Land Outside LMFR	No.	Percentage %
1-5acres	11	28%	1-5acres	8	30%	1-5acres	8	44%
6- 10acres	8	21%	6- 10acres	6	22%	6- 10acres	4	22%
11- 15acres	5	13%	11- 15acres	3	11%	11- 15acres	2	11%
16- 20acres	3	8%	16- 20acres	3	11%	16- 20acres	-	
21- 25acres	2	5%	21- 25acres	2	7%	21- 25acres	-	
26- 30acres	2	5%	26- 30acres	1	4%	26- 30acres	-	
>30acres	6	15%	>30acres	4	15%	>30acres	4	22%
	39			27			18	

NB: 40 respondents neither know the size of land nor the location within or outside the LMFR

In the communal areas surrounding the national park, the Kuranko practice (rain fed) slash-and-burn agriculture in the forest ("upland farming") as well as more permanent cropping systems in valley swamp areas (where soil moisture can be controlled to a certain extent). The cropping-fallow periods usually last for about three years. Typically, intended fields are cleared of fuel-wood and the remaining biomass is burned before the fields are prepared for seeding. Usually large trees are not felled, however it was observed and seems to be custom that the remaining large trees in the fields, that are not required for fuel-wood or timber, are ring-barked, so that they die off. This is done to reduce shading, especially in rice fields. Farm sizes vary widely among households ranging from one to six hectares and serve mainly as a measure of the family size and wealth. Farms are located relatively close to villages extending a radius of approximately four kilometres. Crops grown include mainly rice, cassava, legumes (*Cajunus cajan*) and groundnuts.

Additionally, poultry and small livestock (sheep and goats) are kept by most households. Cattle are seen frequently but not in very large numbers. Fulani herders drive their cattle herds into the area seasonally. Grazing is reported to occur within the boundary of the national park but its extent and impact has to be established. Generally few cash crops are grown in the absence of markets but surplus subsistence produce is sold for cash.

2.6.3. Non-timber forest products

The Loma Mountains continues to be a source of medicinal plants, wild fruits and herbs as well as building materials and will *de facto* continue to do so. Plants collected include kola and bitter kola, yams, various resins, wild honey, various



spices, etc. as well as building materials and materials for daily use (e.g.: leaves for rapping food). Non-timber forest products are essential in most livelihood strategies and are essential for seasonal nutrition supplements, cash crops as well as building materials.

The following data (*in italics*) in this section originates from a Socio-economic Survey (EEMC, 2012) conducted in 2011 and 2012.

The 2011 survey results reveal dependence on the natural resources by the communities. For example, respondents noted that the Loma Mountains provided water for domestic purposes (85%), building poles for houses and other structures (90%), sources of bush meat (89%), collection of wild fruits such as cola and bitter cola nuts (84%) and collection of medicinal herbs (75%). Since none of the household respondents have electricity in their homes, most of them rely on firewood and charcoal for their energy needs.

2.6.4. Hunting

Bushmeat is one of the main protein sources of people (60% of people's protein needs are covered by bushmeat), followed by fish (30%) and is therefore an important livelihood strategy for most people. What is unclear at the moment is the extent of commercial hunting as well as the main target species. A similar study in Gola National Park concluded that most bushmeat is trapped close to fields (e.g. cane or grass-cutter, giant rat, porcupine, etc.) whilst larger species (e.g. Maxwell's duiker) accounted for very little in comparison. In addition to its subsistence value, bushmeat is also dried and sold on markets fetching considerable values (e.g.: the study team was offered a ca. 2kg heavy grasscutter for SLL50,000). It is reasonable to assume that bushmeat hunting is not restricted to the LMNP and areas surrounding the national park could be highly productive in terms of bushmeat resources. However, during the participatory meetings the issue of diminishing bushmeat resources was raised by local community participants as an important concern.

The following data (*in italics*) in this section originates from a Socio-economic Survey (EEMC, 2012) conducted in 2011 and 2012.

About 89% of the respondents in 2011 disclosed that the Loma Mountains area is their primary source of bush meat. According to the community liaison officer interviewed at Krutor, some 60% of their [animal] protein needs come from the LMNP area. The other sources of [anima] protein from LMNP area were fish and domestic sheep/goats (30%).

The socio-economic survey also states that the supply of bushmeat, originating from LMNP has recently declined due to the presence of forest guards and increased law enforcement. While this might signify a willingness to comply with the change of status in practice if these resources are not available to the local communities off-reserve then it is highly likely that they will try to obtain them from the national park.



2.6.5. Fishing

Fish reportedly covers 30% of people's animal protein needs. The streams and rivers inside the national park, as well as in the communal areas are fished by resident communities for subsistence. Local fishing techniques are applied, including line fishing, net fishing, installing fish traps as well as poisoning. Fishing is mainly conducted by women in the dry season. Currently it is unknown whether fishing has a negative impact on fish diversity within or outside the national park. As fishing is certainly an important livelihood strategy it should be investigated further.

2.6.6. Bush fire

Fire is commonly used to clear the vegetation before preparing the fields and planting and sometimes fires get out of control extending way beyond the intended field. Fire is also used by hunters to induce fresh grass growth in order to attract animals to a certain area. The following graph shows the number of fire occurrence within LMNP as well as within a 25km radius around the protected area, originating from the NASA funded Fire Information for Resource Management System (FIRMS) database. The recoding period starts in October 2011 (beginning of the dry season) until March 2012.

In Figure 10 and Figure 11 it can be seen that the number of fire occurrences is far greater in the community areas than in the national park itself. The ecological impact on biodiversity has to be investigated.



Figure 10: Number of fires in LMNP and 25km buffer



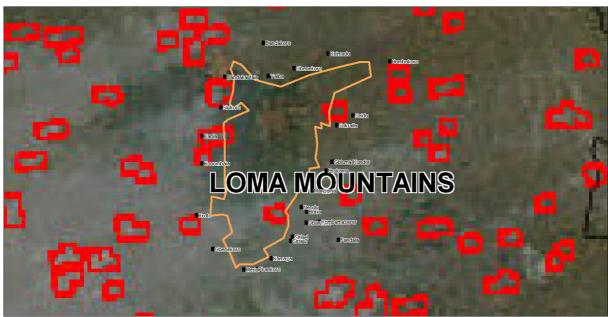


Figure 11: Fire occurrence on the 15th of March 2012

2.6.7. Mining

Currently there is no commercial or artisanal mining in LMNP and its vicinity. However, the territory is part of an "Exclusive Prospecting License" (EPL)¹. According to the Sierra Leone Mining Cadastre published by the Ministry of Mines and Mineral Resources in June 2009 Diamas Resources Ltd holds an EPL, including the territory of LMNP. The license extends over large parts of Koinadugu as well as Kono and Tonkolili Districts encompassing an area of 322,100 hectares for uranium, gold and base metals (compare to Figure 12).

¹ Another report of the Ministry of Mines and Mineral Resources states that an EPL is held by SLDC Exploration Limited for diamonds, precious metals, base metals and associated minerals in an area of 1,246,240 ha in Tonkollili, Kono and Koinadugu Districts including the Chiefdoms of Nieni and Neya.



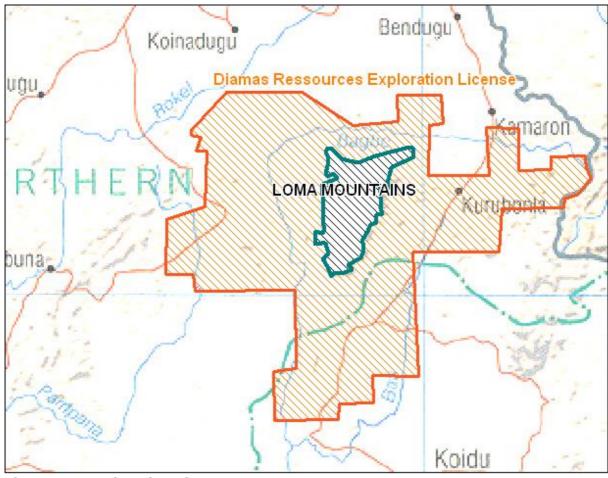


Figure 12: Exploration License 128Source: Ministry of Mines and Minerals, 2009

This EPL represents the largest area given for an exploration license in the country and it is unknown whether the company has found any economically exploitable deposits. Whether it is likely that good depositions are found in or close to the Loma Mountains or whether an environmental impact assessment (EIA) could ever be passed in a national park is unknown. The best risk mitigation in this case would be to exclude the national park territory with a generous buffer zone from the EPL in order to protect its watershed function and services. The issue would need to be closely monitored also in view of recent experiences in Kangari Hills Forest Reserve where a Mining License (ML) was issued within the reserve, which had to be resolved, by the Policy and Strategy Unit in the State House of the President.

2.6.8. Human wildlife conflict

Human Wildlife Conflict (HWC) is occurring in terms of damage to farming cultivations. There is no real threat to human life and no losses of livestock are reported. Some wildlife species cause damage in fields, such as grasscutters and smaller rodents, baboons and monkeys, bush-pigs and some bird species. Cultivation damage caused by small mammals and birds is part of any farming system and farmers are employing mitigation actions, such as fencing, placing scarecrows and guarding fields to fend of intruding animals in the wet season.



Currently it is not known whether the occurrence of damages in the proximity of the protected area is higher than in comparable farming areas elsewhere.

2.7. Threats to biodiversity reduction assessment

In order to analyse threats to biodiversity in LMNP, the "Threats Reduction Assessment" (TRA) tool², developed by the Global Environment Facility (GEF) Biodiversity Support Program, was used in the process of developing this management plan (in 2012).

The TRA was primarily developed as a monitoring tool for conservation projects and is also considered as part of a monitoring system for LMNP in the future, alongside other monitoring system components (e.g. the Management Effectiveness Tracking Tool – METT). It is a simple tool designed to identify threats and quantify them in terms of their extent (area affected), intensity (the impact on biodiversity) and the urgency (how immediate is the threat).

The exercise was conducted separately in two chiefdoms with representatives of the Traditional Authority, communities, District Council and Ministry of Agriculture and Food Security.

The following threats were identified:

Hunting: illegal hunting in LMNP and its vicinity mainly by resident communities as well as partly by people from further away (e.g. Kono).

Wild fire: human induced fire set for preparing fields for cultivation that are not controlled and spread beyond the intended area. This seems to mainly affect the outer boundary of the park. Fires are also set for illegal hunting (e.g. to induce fresh grass growth, attracting game species to that area). This happens in grassand shrub lands throughout the park. Naturally induced fires are not considered in this regard, but would need to be managed as well.

Farming: With the new demarcated boundary, there are only very few fields located in the current new park area. These fields, mainly "upland farming" (e.g. on slopes) are newly cultivated and participants explained that it was possible to convince farmers to leave those fields inside the park after harvest. Farming does occur near the boundaries of the park and it will be important to avoid any future farming encroachment beyond the newly established park boundary.

Collection of non-timber forest products (NTFP): Wild fruits (e.g. cola nut, palm sap, etc.), honey, herbs, medicinal plants, building materials, etc. are collected in the park area as well as in the forests in the vicinity of the park.

Logging: Currently there is no commercial logging occurring in the park. However, some logging occurs, conducted by resident communities. The timber is used for subsistence as well as sold on local markets.

² http://www.worldwildlife.org/bsp/publications/aam/threat/tra.pdf



Fishing: The streams and rivers inside the park, as well as in its vicinity, are fished by resident communities for subsistence. Local fishing techniques are applied, including line fishing, net fishing, installing fish traps as well as poisoning.

Grazing: Some livestock grazing occurs in the park area as well as in its vicinity.

Mining: Currently there is no commercial mining taking place in the area. However, the park area lies within an exploration licence. Artisanal mining does not seem to play a role at the moment. Therefore, mining does not seem to be an immediate threat to the park but might put pressure on the area in the future.

Construction: Future developments could induce the construction of roads, dams, power lines, extensive buildings, etc. within the park boundary. Although this is not currently occurring, it was identified as a future threat to the area.

Having listed the threats, participants were encouraged in group work to rank the threats, as outlined above. Interestingly the two exercises produced very similar results, identifying illegal hunting, bush fires and farming as the most serious threats to biodiversity in LMNP. Some threats, such as fishing, grazing and logging occur in the area but are not thought to be that detrimental to the integrity of the protected area. Other threats that are currently not occurring in the area were also listed, such as commercial mining and construction (including dams, roads, buildings, power lines, etc.). Table 7 and Table 8 show the threat ranking results for Nieni and Neya Chiefdoms.

Table 7: Threat reduction results from Yiffin, Nieni Chiefdom:

Threat	How big is the area of the PA affected by this threat?	How big is the intensity destruction caused by this threat?	How urgent is it to reduce this threat?	Total	Percentage by which the threat could be reduced
Hunting	9	9	9	27	65%
Wild fire	8	8	8	24	50%
Farming	7	7	7	21	64%
Collection of NTFP	6	5	6	17	51%
Logging	5	4	4	13	80%
Fishing	4	3	5	12	71%
Grazing	3	6	3	12	89%
Mining	1	2	2	5	90%
Construction	2	1	1	4	90%

Table 8: Threat reduction results Konombia, Neya Chiefdom:

Threat	How big is the area of the PA affected by this threat?	How big is the intensity destruction caused by this threat?	How urgent is it to reduce this threat?	Total	Percentage by which the threat could be reduced
Hunting	8	8	8	24	60%
Farming	7	6	7	20	90%
Wild fire	6	7	6	19	50%
Logging	4	5	4	13	82%
Collection of	5	3	5	13	30%



NTFP					
Grazing	3	4	3	10	100%
Mining	1	1	1	3	95%
Construction	2	2	2	6	95%

After having listed and ranked the threats, participants were asked to judge by how much each threat was possible to be reduced over the implementation period of the management plan (e.g. the next 5-years). Wild fire had a low percentage as it was felt that it was generally difficult to manage this threat. The collection of non-timber forest products (NTFP) as well as illegal hunting had low percentages in both chiefdoms. Fishing, although only mentioned in one group, also has a relatively lower percentage. This indicates that people are highly dependent on these resources, which would make it more difficult to reduce those threats.

Some threats scored a very high percentage that indicates that they are currently not occurring (e.g. mining) or that they are not crucial in most livelihood strategies in the area (e.g. logging). Farming scored a relatively low percentage in Nieni and a comparatively higher percentage in Neya. This can be explained by the fact that farming is one of the most important livelihood strategies in the area. However, taking into account that the boundary of the protected area was recently reassessed in order to exclude any inhabited or farmed areas, there is almost no farming in the park at the moment. It was judged by the Neya participants that it is possible to reduce farming by a large extent as people can be convinced to leave the recently established fields and establish new fields outside the park.

3. VISION FOR LOMA MOUNTAINS NATIONAL PARK

Stakeholders, comprising the Forestry Division, District Council, community representatives and Traditional Authority, including the two Paramount Chiefs, generated a Vision.

The Vision paints a picture of how people would like to see LMNP and its surroundings in the future (say in 20 years' time). It is consistent with the feedback from various consultations since 2010 (see summary in Annex 3). Therefore, the Vision does not only concern the protected area itself but also the territories of Neya and Nieni Chiefdoms, surrounding the park.

Loma Mountains National Park Vision:

"LMNP is effectively managed by the responsible government institution with the full participation of local stakeholders securing all the biological resources and providing environmental goods and service for the benefit of local communities and wider society.

Local communities have agreed rights of access to certain areas and resources and worship sites.

The lands surrounding LMNP are sustainably managed by the local communities supplying them with a rich source of farmland, bushmeat and other resources and ecosystem services for their self-sufficiency and economic development. Non-timber forest products, including bushmeat, are making a significant contribution to local social and economic development."



4. MANAGEMENT ARRANGEMENTS

4.1. Legal and policy framework

4.1.1. Biodiversity conservation related legal framework

The Wildlife Conservation Act of 1972 and the Forestry Act of 1988 are the two main legal frameworks in regards to biodiversity conservation and protected areas management in Sierra Leone.

Under both laws, the Forestry Division (FD) of the Ministry of Agriculture, Forestry and Food Security (MAFFS) is the national level institution mandated with the management responsibility of protected areas in Sierra Leone.

Both laws are considered to be outdated and are currently under review. This process was started by the development of a new Conservation and Wildlife Policy as well as a Forestry Management Policy, which were both passed in 2011. Based on the approved policies, both laws will be amended in the near future.

Additionally there are plans to create a National Protected Area Authority, mandated with the regulation and management of protected areas and biodiversity related agendas on other lands. Furthermore, a national Conservation Trust Fund shall be created to fund the newly established Authority. The legal act, in this regard, is planned to be passed in 2012.

The most striking difference between the Wildlife Conservation Act of 1972 and the new Conservation and Wildlife Policy is that the general paradigm in protected areas management in Sierra Leone has shifted from a purely protectionist approach, which was based on excluding people from natural resources, their management and governanceThe new policy embraces the inclusion of stakeholders and recognises their rights, which is manifested in the following governance principles:

- Rule of law and its effective enforcement, including national policies and statutory instruments, ratified international agreements, and local, traditional and community-based rules and arrangements supportive of wildlife management.
- Devolution of authority for wildlife management to the most appropriate level for achieving policy objectives.
- Participation by and access to information for all relevant parties to wildlife management decisions and their implementation, and informed consent of those parties directly affected by those decisions.
- Promotion of an informed and knowledgeable population on wildlife conservation issues.
- Clear definition of roles and responsibilities among all relevant partners including all levels and agencies of government, traditional authorities, communities, civil society, academic institutions and the private sector.
- Application of conflict management methods that protect stakeholder interests, but develop consensus solutions and mechanisms that enable agreed conservation actions to continue.



4.1.2. Local government related legal framework

The Local Government Act of 2004 re-established the Local Councils in Sierra Leone. The Act states the function of the District Council as being the highest political authority in the locality and shall have legislative and executive powers to be excursive and shall be responsible for promoting the development of the locality and the welfare of people in the locality with the resources at its disposal and with such resources and capacities as it can mobilise from the central government and its agencies, national and international organisations and the private sector.

In this regard, the Koinadugu District Council is the main institution coordinating sustainable development within all sectors of the economy at the District level. Furthermore, the District Council is an important linkage between local people in villages, wards and chiefdoms with national government institutions through Chiefdom Councils. However, it has to be mentioned that the District Councils are chronically underfunded and lack the human resources to effectively fulfil their mandate.

4.2. Roles and responsibilities

4.2.1. Forestry Division

The Forestry Division (FD) of MAFFS is mandated to effectively conserve biodiversity and is responsible for the management of protected areas in Sierra Leone. The FD provides protected area management staff and equipment to effectively manage LMNP. The FD is responsible to enforce the law with regard to the Wildlife Conservation Act and the Forestry Act. Furthermore, FD is responsible to develop and approve protected area management plans which define the roles and responsibilities of all stakeholders with regard to the management of a particular protected area concerning research, monitoring and evaluation, visitor management, etc.

The Forestry Division can decide to devolve management functions to partner institutions, such as NGO's, community-based organisation, private sector institutions, etc.

4.2.2. Koinadugu District Council

The District Council is mandated to strategize on and prioritise the development needs of district residents. This is captured in District Development Plans. These plans are developed in a participatory manner through the decentralised structures of the District Council down to village level (village-wards-chiefdoms-sections-townships/villages). These plans form the basis for the development strategy and action of the district. Therefore, it is necessary to integrate the Vision and Management Objectives of LMNP with the development aspirations of the District Council in order to form a strong and long lasting partnership, focusing on effective protected areas management on the one hand and sustainable rural development on the other.

4.2.3. Communities

The roles and responsibilities of "communities" depend on how "communities" are defined. One definition looks at a community as holding certain roles and



responsibilities which are critical in the effective management of the Loma Mountains and the surrounding areas. It is not clear or well-defined who is accountable in regards to the roles and responsibilities held by "the community".

Community is a loose term and can mean many things to different people and in the absence of a meaningful and operational definition of what is meant by community the likelihood is high that the community will not fulfil its role and hold its responsibility. Therefore, if effective management of the biodiversity resources in and around Loma Mountains is to take place at the level of the community it is imperative that the community is defined spatially, numerically and legally, effectively defining a as a *body corporate*.

If one agrees that the people living around the Loma Mountains are the *de facto* managers of most natural resources outside the NP boundary (which is a reasonable assumption given the lack of material resources for state management) then it becomes necessary to clearly define who is allowed to manage these resources and who is not. Therefore, another definition of the directly affected communities, or those with legitimate claims, are identified as described above. This definition closely fits with the existing Traditional Authority Township Chief and the existing Council of Elders which has representation from a number of different sectors of the community, in particular the Heads of Families who represent farm ownership and is the first level of collective decision-making and conflict resolution. Once defined in this way communities can enter into specific resource use agreements based on agreed conditions and monitoring by the partners for resources within the NP. Outside the NP, in the off-reserve areas, the authority and responsibility to manage biodiversity can be conditionally devolved to an entity that legitimately represents the local community of resource users. In this case it will likely be the Township Chief or Section Chief level because this provides:

- A recognisable community-level structure for internal collective decision-making and internal conflict resolution.
- A broadly accepted membership.
- A structure that provides an executive that is democratically elected and accountable to external institutions.
- A means to equitably apportion the costs and benefits of natural resource management.

However it currently does not provide:

- A constitution for internal governance amended for agreed natural resource management purposes.
- Associated rules and regulations for internal functioning and resource management.
- Defined areas within the national park where resource utilisation will take place and an agreed plan for resource management.
- An agreed management plan for *off-reserve* natural resources within the community's jurisdiction.



4.2.4. Traditional Authority

The Traditional Authority defines the system of land tenure and provides the legitimacy of the community. In the context of LMNP these are Neya and Nieni Chiefdoms.

The Traditional Authority provides a hierarchical structure for decision-making and conflict resolution that is closely aligned with land tenure (but not necessarily with forest resource tenure). This consists of the Paramount Chieftaincy, Speaker, Section Chief and Township (or Village) Chief.

This hierarchical structure has a number of important characteristics that can lend themselves to an effective sustainable use system and common property management, indeed it is highly likely that the structure evolved because of the need to control common pool resources.

The Traditional Authority system provides the lowest level of collective decision-making and conflict resolution. Where this is not possible there is a mechanism to graduate issues back up to the level of the Paramount Chief depending on the difficulty in reaching a conclusion or because of issues of scale (*i.e.* several communities reaching a decision, *etc.*).

The Traditional Authority provides the security of tenure over land resources to the community, recognising both private property and common pool resources.

4.2.5. Non-governmental organisations

Due to its remoteness, there are currently few NGO's active in this part of Koinadugu District, and none that are directly interacting with or supporting the national park on a permanent basis (e.g. a conservation NGO). The few NGO's active in the area are mainly engaged in agricultural extension or improving health services.

Partnerships should be sought where synergy effects can be expected or common goals are pursued especially in terms of sustainable development in the communal areas surrounding the national park. An integration of district development plans and the LMNP management plan will facilitate better coordination of initiatives.

It can be expected that an increased management effectiveness of LMNP and surrounding areas will create a conducive environment for increased commitment by NGO's to become active in the area. Committed NGO's should then be incorporated in the Loma Mountains Management Committee as feasible.

4.2.6. Private sector

Resource tenure – authority and responsibility

The land resources immediately surrounding LMNP are under the Traditional Authority, they might be described equally as *customary lands*. As such the land,



and to a large extent the resources upon that land, are held in trust for a particular community³. The Traditional Authority is the *custodian* of these resources, they are owned by the Traditional Authority (but not by the Paramount as an individual). On issues of land this is very clear and farm land can be allocated by the Traditional Authority to individuals or Families (which in the case of the lands around LMNP are mostly represented by the Heads of Families).

The non-farm resources (including wildlife found on farms) are presently largely treated as an open access resource or a *res nullius*⁴ resource. Yet in the past there has been a degree of control over these resources that could be recognised as equating to a common property regime in as much as it had a membership (defined by the Township Chiefdom), it was spatially delineated (through the Traditional Authority boundaries) and it had a number of agreed rules of use (again defined the membership and legitimised by the Traditional Authority and in particular through the Township Council, the *Council of Elders*). The rights or "ownership" of these resources conferred by these traditions or in-place institutional dynamics are rarely, if ever, absolute and their strengths will be determined by particular combinations of legal, political and socio-economic factors. What appears to have been happening is a gradual erosion of this *resource tenure* most likely caused by the disconnection of authority and responsibility.

"Authority and responsibility [can be] used as a phrase to cover rights of secure, long-term access to land and resources, their benefits, and the duties associated with these rights. A number of related terms dissect these rights, including "ownership", "property", "proprietorship" and "tenure""

Furthermore:

"Authority and responsibility are conceptually linked. When they are de-linked and assigned to different institutional actors both are eroded. Authority without responsibility becomes meaningless or obstructive; responsibility without authority lacks the necessary instrumental and motivational components for its efficient exercise⁵"

In reality the local farmers, Family Members (for the sake of argument the "local community") are the *de facto* managers of these non-farm resources because it is their actions that decide their fate. However, the authority for these resources is largely vested in the state through the Forestry Division. The lack *de jure* authority for the "local community" to determine the resources use largely determines the way in which they are used. As such they are knowingly or unknowingly gradually managing them to extinction either through excessive consumption or by replacement of habitat with farms. A situation that is quite typical of an open access system where the motivation is to use the resource

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³ The term "community" is used in a very broad sense of the word to determine all those people who fall under a particular Township Chiefdom and therefore under a particular Section Head and Paramount Chiefdom.

⁴ Belonging to no one

⁵ Murphree, M. W., Approaches to Community Participation; in: African Wildlife Policy Consultation, Final Report of the Consultation, p. 155 - 188, ODA, 18 – 19 April 1996,



opportunistically because there is little if any security for investing in the sustainable management.

The proposed off-reserve management system is intended to devolve the authority to the level where people are *de facto* responsible for the fate of these resources and provide the "necessary instrumental and motivational components for its efficient exercise". It would be wrong to state that the Traditional Authority system is operating as a common property regime in the strictest sense of the term, it is not. In reality there are a number of tenure regimes operating at this very local level. Neither is the Council of Elders the first level of collective decision-making and conflict resolution. Below this level the Families represent another level within the dynamic, but for the purposes of biodiversity or natural resource management the scale of the Township Chiefdom has most of the aspects necessary to make decisions on behalf of the members and to internally resolve conflicts arising over the use of these resources. It would be wrong and un-necessary for the facilitators of this process to look into the affairs of households and families, especially so when they are represented by a higher council.

Viewed from a community-based natural resource management perspective it can be argued that efficient resource management of these resources, in the absence of any clearly defined state or private property regime, should consists of three major components, namely:

- 1. Income generation and employment creation through SMEs (small/medium enterprises) that provides the incentive to manage;
- 2. Capacity building of community institutions, improved internal governance, accountability and benefit distribution, *etc.*, that provides the *fairness* within the system, and;
- 3. Management of natural resources at the community level, which provides the sustainability or security of tenure.

In reality there may be many ways in which wildlife and other natural resources will be viewed by the people at this level, be it from crop pest, an additional onfarm resource through to a common property for the agreed benefit of the whole (defined) community. It would be wrong to try to determine these dynamics at this stage. These are issues that will be decided through the development of the system and the implementation of the management plan. The purpose of this process is to secure the tenure of the biodiversity resources so that they are worth more when alive through future managed opportunities than they are being opportunistically killed simply to secure "ownership". It then becomes possible to define the investment in management as an individual or collective decision not to kill an animal because there is security of tenure.

The distinction between the common property and private enterprise is critical to how the system proposed for off-reserve forest resource management will work. Collective enterprises are much harder to sustain than single-owner enterprises and it should be clearly understood that in most instances the community will concern itself with management of, and controlling access to, the resources.

The sale of these collectively-owned assets (the common property) will be a common benefit to be distributed amongst the membership – although it is



important to note that the distribution of benefits amongst the membership should reflect the management costs incurred. For instance a villager growing rice may incur greater costs from managing grasscutters (*Thryonomys*) than a villager without rice fields. Therefore the *Council of Elders* is likely the level at which decisions about the management of the resources is made including the decision to sell the resources and to apportion the benefits of sale amongst the membership.

Once the resource has been sold it becomes – for all intents and purposes – a private property to be disposed of, within reason and within the national legal framework, as the purchaser sees fit to do so.

4.3. Governance framework

Governance is the means for achieving direction, control, and coordination that determines the effectiveness of park management. The importance of a well-balanced governance structure becomes apparent when there are contested resources and areas and/or included lands and insufficient financial, material and human resources available to the state to carry out its management role. Hence it is necessary to develop a governance framework for the protected area and its immediate surroundings.

Initially the efforts being pursued by the Sierra Leone Biodiversity Conservation Project (BCP) to establish a Conservation Site Management Committee (CSMC) for LMNP defined a CSMC comprised of representatives of local communities, Forestry Division, District Council, NGO's other local stakeholders, traditional leaders and village committees. However, this has been further refined so that the CSMC now provides a very broad platform at the District-level for the integration of LMNP into the local planning process. Furthermore, the CSMC will serve to hold the FD accountable and provide transparency in the planning and management process.

However, when it comes to the management of off-reserve natural resources the CSMC does not reflect the scale at which day-to-day management decisions are taking place. This is better reflected and more representative if it is placed at the Township Chieftaincy-level, in particular with the Village Council as schematically shown in Figure 13.



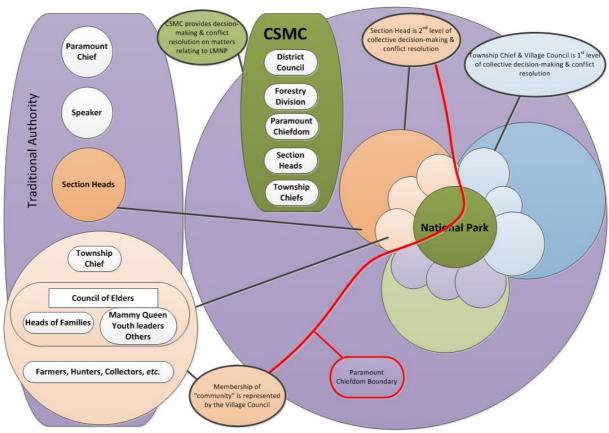


Figure 13: Schematic governance structure

The purpose of the CSMC is to effectively integrate stakeholders, especially those who are responsible for managing LMNP and those who will be affected in the development and management of LMNP.

At this level it provides an accountability and transparency to the national park management, integrates the NP within the District Development planning process but does not obstruct natural resource management at the community level.

The CSMC membership has been provisionally identified as: Executive Members

- 1. District Council (Chairperson)
- 2. Forestry Division (Freetown)
- 3. Paramount Chieftaincy (Neya and Nieni Chiefdoms)
- 4. Section Heads (1 Section from Neya, 2 Sections Nieni)
- 5. Township Chiefs (3 elected from each Section)

Non-executive Members

- 6. NGO's
- 7. Others

The LMNP Manager will be the Secretary for the CSMC.

Initially the CSMC will be established to provide oversight and guidance for the implementation of the BCP. However, at the close of the BCP the CSMC will evolve into the Loma Mountains National Park Management Committee (LMNPMC) and continue in this form to ensure a broad participation, accountability and transparency in the management of the NP.



5. MANAGEMENT OBJECTIVES AND MANAGEMENT ACTIONS

Based on the Vision and threat to biodiversity assessment, stakeholders developed a set of objectives.

As part of the process of participatory management planning the objectives put forward by the stakeholders were then worked on by the Planning Team to ensure that they provide a robust *statement of purpose* to guide the planning. It is important to state for the avoidance of doubt that this is "reworking" of the objectives statement does not ignore the contributions of the stakeholder's workshop, but rather ensures that the views and aspirations are integrated into the planning process. An important point to make is that participatory planning does not abrogate the planners from any responsibility, indeed it places greater responsibilities on the planners to ensure that the views of stakeholders are relevant to planning and are integrated into the management plan is in an effective, transparent and equitable way. Thus the objectives developed in the earlier (May) workshop became:

Objective 1: Biodiversity conservation by protection

Conservation of biological diversity by protection of important and vulnerable habitats, species, aesthetic and representative landscapes

Objective 2: Biodiversity conservation by sustainable use

Conservation of biological diversity by sustainable use of species, habitats and ecosystems' goods and services

Objective 3: Sustainable socio-economic development

Sustainable economic and social development of the Loma Mountains National Park local communities through the sustainable utilisation of the natural and cultural resource base

Objective 4: An enabling implementation environment

An enabling environment supportive of biological diversity conservation through protection, sustainable utilisation, and the social and economic development of Loma Mountains communities creating a functionally efficient policy, legal and institutional framework and a broad public awareness and support for the national park's Vision

Objective 5: Financial sustainability

Financial sustainability of Loma Mountains National Park in order to implement the management plan and achieve the long term vision

Objective 6: Research and monitoring

Research and monitoring to increase understanding of social, economic and environmental processes and ensure that management is adaptive

Objective 7: Environmental education

Development of Loma Mountains National Park as an educational resource for present and future generations



Objective 8: Effective and efficient management

Efficient and effective professional protected areas administration and management.

Objective 9: Visitor management

Visitor management to enhance the visitor experience and protect the core values of Loma Mountains.

5.1. Objective 1: Biodiversity conservation by protection

Conservation of biological diversity by protection of important and vulnerable habitats, species, aesthetic and representative landscapes

Rationale: Given that the particular circumstances of a resource, such as scarcity, level of threat and vulnerability, historic events etc., result in a precarious situation where utilisation of a resource is considered too risky; then protection through prohibitive legislation, core area, effective enforcement, etc., will be the preferred option to ensure sustainability of the resource. However, it is recognised that this is a costly option and these costs, prohibition, enforcement, management, opportunity costs6 etc., are both definable and measurable and, therefore, sustainability can be determined against the ability of society and government to meet these costs. In the light of scarce finances protection needs to be considered against a range of issues, in particular the cost-effectiveness of sustainable utilisation to achieve the same outcome. When protection is the preferred means of management it is important to realise that normally authority and responsibility rest entirely with the state (in the form of the Forestry Division), though the administration can of course decide to outsource protection activities such as quarding to service providers including community associations but under these circumstance it invariably falls upon state budgets to provide financing. The principle tool for achieving this will be the effective enforcement of the national park rules.

Approach and guiding principles: Protection will be achieved through:

- The use of zoning and the application of core zones designed to protect valuable or vulnerable resources from any damaging land use practices, illegal activity or unintentional harm by visitors.
- Hunting and timber logging should not take place in the national park whilst other land use (e.g. of certain non-timber forest products at a specific location/area, at a specific time/season and by a defined "permitted user" group, upon agreed conditions) might be permissible within the national park.
- Rare, threatened or protected species (e.g. according to national legislation, IUCN red list, other red lists, local knowledge, etc.) should be strictly protected within the park territory as well as beyond.
- Improved enforcement of national legislation and protected area regulations.
- The exclusion of land use practices and human activities that result in unsustainable use or damage to the target resources.

⁶ The value of an opportunity that is lost or sacrificed when the choice of one course of action requires that another must be given up



An important principle will be the application of temporary protection measures that will be regularly reviewed in light of the status of the target resource to allow for more cost-effective sustainable use practices to achieve longer-term conservation objectives within the national park.

Management actions:

Habitats, species, landscapes and services that are most vulnerable or threatened, unique and/or representative of the protected area will be protected through a system of zoning. The zoning plan will remain flexible while systems are developed to allow sustainable utilisation and regeneration of specific areas. Different management regimes (e.g. different levels and periods of NTFP collection, total exclusion of local communities and visitors, etc.) will be experimented with in different areas to determine the most effective approach to conservation management.

- Habitat mapping will be carried out in order to identify species and habitats at risk and, through a participatory process, internal zoning will be designed.
- Bylaws will be established to prohibit specific activities that are deemed to be unacceptable within the protected area. Local courts and other local enforcement agencies will be made aware of the additional restrictions and the importance of these specific regulations. In particular the courts and law enforcement officers will be informed of the contractual nature of collaborative management.
- Enforcement staff training and equipment will be improved to provide a high calibre of staff with a strong commitment to conservation and a clear and fairly remunerated career structure.
- Temporary and temporal⁷ protection measures may be introduced to take account of the seasonal distribution of biodiversity or changes in circumstances that may temporarily threaten biodiversity (e.g. exclusion of NTFP collection during critical seasons of high fire risk, closure of trails and access during breeding or flowering periods, etc.).
- Species and habitat recovery plans will be developed by the Management Team for species and habitats which are determined as being particularly vulnerable or threatened. The academic sector and NGO's will be encouraged to participate in this process through the provision of both technical expertise and material resources.
- The impact of bush fires has to be investigated further in order to determine its impact on biodiversity as well as develop a fire monitoring system and feasible fire prevention mechanisms.
- Links with international organisations will be strengthened to promote the management of migratory species.

5.2. Objective 2: Biodiversity conservation by sustainable use

Conservation of biological diversity by sustainable use of species, habitats and ecosystems goods and services

Rationale: Use can improve the status of a resource. Given that a resource can withstand a level of utilisation that is biologically sustainable it is possible to

⁷ Time bound



establish a management regime, which maintains the resource at an acceptable level providing that those who incur the management or opportunity costs are the primary beneficiaries of its utilisation and that they have the appropriate authority and security of resource tenure to do so.

Given the size of LMNP there is a high risk of species extinction despite effective protection measures due to well-recognised processes such as *edge effect*, *stochastic events* such as disease or catastrophic weather events, or the *lack of gene flow* to isolated populations, *etc.* Therefore there is a clear rationale to actively extend the area under conservation management beyond the boundaries of the national park. The most equitable and cost-effective means of extending conservation management is by allowing these resources a focused value in order to create incentives for local land users to manage biodiversity for their material benefit, in other words a keystone of the approach is providing local farmers with an option of biodiversity as a viable land use instead of agriculture or, in association with agriculture.

Approach and guiding principles: When state managers include sustainable use instead of, or as well as, protection, they open the possibility of involving users in the management of the protected area's resources and of extending conservation management beyond the boundaries of the national park. Sustainable use of a resource requires a clear governance framework and adequate pricing mechanisms in which the benefits of wise management are equal to or greater than the costs of management and are captured at a local level where those who are incurring the costs of management are effectively represented.

For the purpose of renewable natural resource management, *authority* and *responsibility* are conceptually linked. That is - authority without responsibility becomes meaningless or obstructive. Conversely, responsibility without authority lacks the necessary instrumental and motivational components for its efficient exercise⁸. The significance of this becomes apparent if the term *authority* is replaced with *control* and *responsibility* by *management* or *use* within the protected areas. In many instances the state may be the *de jure* authority for biodiversity within protected areas, private and communally-owned land, however due to insufficient material and human resources the *de facto* managers may be the local people or communities responsible for day-to-day land management and whose actions will have the most significant impact upon biodiversity. This can cause a disconnection between effective authority and responsibility leaving the natural values such as biodiversity unsecured and vulnerable to loss.

The principle approach for establishing sustainable use as a conservation tool will be collaborative management (within the national park) and community-based natural resource management (on land belonging to the local community) to ensure that:

• Those closest to the resources and bearing the costs of conservation are the primary beneficiaries.

⁸ Murphree, M. *In African Wildlife Policy Consultation: Final Report of the Consultation.* Overseas Development Administration 18-19 April 1996



- Those who are *de facto* managers of the resource and bearing the responsibility for its conservation have sufficient and *de jure* authority to do so.
- There is sufficient security of tenure to encourage long-term investment in the resources management and any perverse incentives that negatively affect the pricing of these resources or are a barrier to effective community-based management are removed or support sustainable management and use.

In summary the underlying philosophy of this approach is that - if the true "value" of wildlife/biodiversity is recognised and communities are given the "authority" to "manage" then an "option" will have been created and they will have the "incentive" to sustainably manage and conserve wildlife.

There will be no presumption against commercial sustainable use over subsistence use, the critical factor being to provide sufficient incentive to manage a species, habitat or other natural value sustainably within acceptable limits of use.

Management actions:

A programme to develop community-based management of critically important resources will be implemented in the immediate *off-reserve areas* on land belonging to the communities. The programme will establish the necessary framework to allow conditional access and acceptable levels of subsistence and commercial use of these resources and seek to remove any perverse incentives that value forest clearance and agriculture over biodiversity management.

The programme will recognise that while these resources notionally remain as the property of the state it may be necessary to manage them as a common property with fairly agreed conditions relating to use and an equitable distribution of benefits. In order to achieve effective conservation management (sustainable use) it is necessary that those who are the *de facto* managers of the resources have sufficient *authority* to do so within the management plan.

Collaborative and community-based resources management will be developed following an adaptive management approach and clearly recognised as a "pilot" approach to test the conservation effectiveness of sustainable use and community-based management. It is recognised that this is aligned with the national policy objectives

- Local communities with a legitimate claim (historical informal rights of access, living around the national park, etc.) will be recognised as partners and in some cases de facto managers in the conservation of certain critical resources.
- Local communities will be encouraged to register members with the District Council (DC) and Forestry Division (FD). These user groups will be recognised by the DC and FD and will be able to (subject to negotiation of conditions of use) enter into an agreement to sustainably use and manage specific resources within the national park according to any conditions laid down by the agreement.



- In *off-reserve* areas the authority and responsibility to manage biodiversity will be conditionally devolved to an entity that legitimately represents the local community of resource users.
- The DC and FD will undertake to support these user groups to protect the resources from any persons not recognised as belonging to the registered user groups.
- The DC, FD and the local user groups will work together to develop the management regime (community resource use plan), rules and regulations of use and the sanctions and penalties to be applied to transgressors.

The appropriate authority for communities to manage the wild resources within their communal area will be contractually transferred once the community has demonstrated that it has the capacity and structures in place to effectively and responsibly manage these resources. The conditions necessary to achieve this are set out below. Communities will have to demonstrate that they are organised and that membership is a reasonable representative of the entire community. This process will be assisted and facilitated by the DC and FD. The minimum requirements for the delegation of appropriate authority and responsibility should include:

- A recognisable community-level structure for accountability and decision-making registered with the DC.
- An agreed register of community user membership (demonstrated representation of all villagers through a structure that provides an executive and is democratically elected).
- A community constitution for internal governance amended for agreed natural resource management purposes and the equitable distribution of benefits.
- Associated rules and regulations for internal functioning and resource management.
- Defined areas within the national park where resource utilisation will take place and an agreed plan for resource management.
- An agreed management plan for *off-reserve* natural resources within the community's jurisdiction.

5.3. Objective 3: Sustainable socio-economic development

Sustainable economic and social development of the Loma Mountains National Park local communities through the sustainable utilisation of the natural and cultural resource base

Rationale: No single income generating opportunity will resolve the economic development challenges faced by the Loma Mountains local communities. The natural or biodiversity resources and physical and cultural characteristics of national park and surrounding lands make up the sum of their collective economic assets. Therefore the local communities' economic development must be by way of a comprehensive plan to sustainably develop these natural



production systems and their markets and trade upon the natural, cultural and aesthetic values of LMNP.

Alternative livelihoods may offer some form of support to these communities but on the whole such alternatives carry considerable risks of market and/or ecosystem failure or encouraging community or individual investment in new and untested markets. Furthermore, many of the apparent alternatives may not be sustainable at an economic level (e.g. the set up costs and labour/time costs of medicinal plant cultivation) or at an ecosystem level (e.g. alternatives such as improved crop varieties may increase forest and land clearance immediately surrounding the national park). While alternative livelihoods is an accepted approach to conservation and will be used wherever feasible it remains a separate and distinctive approach to sustainable use of natural resources in situ.

An example of this distinction between an alternative livelihoods approach and sustainable use might be the difference between the introduction of small-scale small animal husbandry to meet nutritional and economic needs of households and the management of hunting resources to meet these needs. The former does not require the maintenance of habitat; indeed it may result in habitat conversion and the loss of forest cover, whereas habitat conservation is critical to the latter.

A sustainable use approach outside the park would rely upon establishing a regime for key bushmeat species with a robust ecology and capable of withstanding significant hunting pressure – *Objective 2* - and developing enterprises and products based upon this (*e.g.* processing and improved access to markets, *etc.*) or processing of other NTFPs. Objective 2 would secure the resources and ensure that utilisation is sustainable and Objective 3 would develop the enterprises to generate the economic activity that provide the motivation for wise management.

Approach and guiding principles: The FD should not replace or duplicate the role of existing agencies in stimulating local economic and social development. The purpose of the protected area is to conserve the natural values (for scientific, economic, ecosystem services provision and cultural and aesthetic reasons). The Forestry Division, and in the near future the Protected Areas Authority, is therefore a resource management agency and not a social and economic development agency per se. Therefore, sustainable economic and social development will be achieved through a multi-agency approach to promote and market the natural values and products of LMNP at a local, national and international scale. The Ministry of Agriculture, Forestry and Food Security and DC together with local stakeholders and the CSMC will put in place policies and programmes to address the current management practices that are inefficient or inequitable and constrain economic development of the communities. These will, inter alia, address the issues of:

- Pricing mechanisms that make village enterprises unprofitable and risky (e.g. developing a legal mechanism for the trade in sustainably harvested wild products and allowing for commercial use of wild harvested products as well as making use of private entrepreneurs to enhance marketing of those products).
- Access to natural resources.



- Reasonable pricing of ecosystem provisioning services and sharing the benefits with local communities to compensate any reasonable loss of livelihood incurred.
- Providing mechanisms through the management plan, manifested in bylaws that will give local communities the long-term security of tenure to invest in natural resource (e.g. access to NTFPs, timber resources, game species, medicinal and aromatic plants, etc.) enterprises.
- Supporting local communities with marketing and promotional opportunities through multi-agency support and a national park website.

Management actions:

This objective will largely be achieved through the implementation of a package of support to local communities to develop enterprises based primarily upon forest products. This will include promoting the development of small to medium enterprises (SMEs) primarily through existing mechanisms at the DC level but focused on enterprises that are utilising forest resources.

The DC will seek to protect the interests of these community-level SMEs through bylaws and developing certification as well as establishing linkages with external consumers, the private sector and appropriate NGO's.

The Ministry Tourism will be encouraged to participate in the promotion of LMNP, training and sourcing funding.

The FD, and in the near future the Protected Areas Authority, will primarily concern itself with arranging access to the NP and the provision of simple visitor facilities within the NP (e.g. signs, trails, etc.).

5.4. Objective 4: An enabling implementation environment

An enabling environment supportive of biological diversity conservation through protection, sustainable utilisation, and the social and economic development of Loma Mountains communities creating a functionally efficient policy, legal and institutional framework and a broad public awareness and support for the national park's Vision

Rationale: A clear policy framework is required for national park management planning. Without a guiding policy planning becomes at best *ad hoc* and at worst meaningless and without authority. IUCN provides the following comment on the legislation and policy that should support management planning:

"It is important that management planning be carried out within a framework of approved policies within the protected areas agency. This framework should be sufficiently specific both to guide and set limits on different aspects of protected area management. Without a clear policy framework to guide the development and implementation of Management Plans, managers for different protected areas may struggle to define their own policies for the same issues – not only duplicating effort, but perhaps also leading to potentially conflicting or inconsistent interpretations and directions. Finally it should be said that planning is a lot like other "good things": it's not worth much in the absence of sound governance and/or competent administration." (Thomas and Middleton, 2003).



Approach and guiding principles: The institutional structure and management of the LMNP will reflect the three principals of:

- Good governance.
- Effective and equitable regulation.
- Local management.

Therefore the management plan will seek to create a governing body that includes local community concerns and allows local community participation in the decision-making process and implementation of the management plan. A cornerstone of the development of the governing body will be the participation of local civic agencies, namely the District Council.

Management actions:

- A training programme for the key line agencies (e.g. FD) will be developed to build the capacity of these agencies to operationalize the management plan and in particular the off-reserve natural resource management.
- A communications programme will be developed to promote the aims and ideals of the protected area amongst a broad and representative crosssection of society. Utilising a variety of local, national and international media, the purpose of the communications programme is to develop an awareness of, and support for LMNP.
- The LMNP Management Committee will be established. Its membership will be reviewed to provide true representation of the communities that live in and/or depend on the protected areas for their livelihoods and existence at the level of the District Council. Such a participatory approach in protected areas management at local level is indeed Government policy and includes communities as well as other stakeholders.
- Through an adaptive management process, perverse incentives, contradictions and barriers to sustainable natural resource management will be addressed within the policy and legislation framework.

5.5. Objective 5: Financial sustainability

Financial sustainability of Loma Mountains National Park in order to implement the management plan and achieve the long-term vision

Rationale: A functionally efficient national park will require adequate financing. If the state does not invest in protecting some naturally and/or culturally important areas then they often fail to meet their conservation and development objectives with a resultant loss of natural and economic values and opportunities. Loma Mountains National Park requires a major increase in financial investment. Under investment in protected areas means that they are often failing to meet their conservation and development objectives with a resultant loss of natural and economic values and a more "business-like" approach to the management of protected areas needs to be adopted.

Approach and guiding principles: Revenue generation and retention, private sector participation and community-based management offer important opportunities for sustainable management but national protected areas are a national asset and therefore their needs to be secure and sufficient core funding at both the site level and the national level. A minimum expectation would



require the FD to make sufficient provision for the core functions of law enforcement and providing a credible and authoritative presence within the NP.

In addition to secured core funding to the national park it is important that income earned from fees, concessions and other means should be retained by LMNP in order to finance conservation management, investment and development.

International funding mechanisms will also be utilised to develop key aspects such as capacity building and training, management planning and infrastructure, however an important principle of project funding will be to clearly demonstrate the sustainability of project outcomes and not to substitute core funding responsibilities.

Access to financial benefits and benefit sharing will be determined by the LMNP Management Committee.

Management actions:

- The Ministry of Agriculture, Forestry and Food Security will undertake the
 establishment of a sustainable financing system, with associated
 management structures, systems and capacities needed to ensure the
 effective use of generated revenues for priority biodiversity conservation
 needs. This will include, inter alia:
 - The Ministry of Agriculture, Forestry and Food Security will, through nationally agreed pilot approaches to protected areas financing, support LMNP by establishing legal, regulatory and institutional frameworks that facilitate revenue generation, revenue retention and other elements of sustainable protected areas financing and management.
 - Ensuring levels of financial resource mobilization are adequate to maintain effective conservation-oriented management of the protected area.
 - Developing business planning and cost-effective management systems at the site level.
 - Training of key protected areas staff in budgeting and financial planning, proposal writing and fund raising.
 - Undertake an environmental services study for LMNP.
 - Develop a five-year financial plan for LMNP.
 - Allocate sufficient capacity at the national headquarters for fund raising and monitoring of financial performance of the protected areas system.

5.6. Objective 6: Research and monitoring

Research and monitoring to increase understanding of social, economic and environmental processes and ensure that management is adaptive



Rationale: Research – Loma Mountains offers a unique opportunity for humanity to increase our understanding of the natural world and natural processes as well as the impact of social and economic changes upon the environment. Priority will be given to management-oriented research and the FD will develop specific research guidelines, priorities and regulations.

Monitoring - Conservation of the Loma Mountains is taking place where three principle drivers – the economic, socio-political and the ecological - collide. Therefore, management is working in multiple fields such as ecology, economics, natural resource management, politics, business and the social sciences. In these fields, there are a large and unquantifiable number of known and potential variables, all subject to continual change, all interacting with each other in ways that may be predictable or non-predictable.

Approach and guiding principles: Given the complexities of modern protected areas management it is important that an adaptive management approach is incorporated within the strategic planning and site management planning process. This important point requires planners and managers to adopt an institutional culture of adaptive management if it is to be successful. The management of LMNP will involve new and innovative (and largely untested) approaches to management. Successful outcomes will need to be measured against ecological, economic and social sustainability indicators.

Transparency, participation and accountability is critical to monitoring and adaptive management therefore the results of monitoring programmes should be readily available to the stakeholder community through a number of different forums and in particular through the LMNP Management Committee – raw data for alternative analysis, regular reviews of management progress and the outcomes and results of particular programmes will be periodically circulated as part of the Management Committee's annual duties.

Management action:

Implementation of the management plan monitoring programme will be carried out using the Management Effectiveness Tracking Tool (METT), the Threat Reduction Analysis Tool (TRA) and the Biodiversity Monitoring Programme and against the Annual Work Plans. The monitoring programme is designed to monitor the status of key aspects of Loma Mountain's biodiversity, to assess the impact of management interventions and to provide a transparent indicator of the quality of management. In addition to the annual monitoring programme the following will be carried out:

- Experimental management to develop cost effective measures to remove alien species.
- Experimental management to develop sustainable use systems for key resources (e.g. medicinal and aromatic plants, fungi and off-reserve game species).
- Experimental management of environmentally sound land use practices within and surrounding areas
- Identify and zone micro-habitats for key flora and fauna species.



5.7. Objective 7: Environmental education

Development of Loma Mountains National Park as an educational resource for present and future generations

Rationale: Loma Mountains represents a unique and considerable educational resource. The protected area is a living classroom that can enhance learning process through passive and planned activities. Education of Sierra Leone's children and adults, government agencies and policy-makers, visitors and resource users, all, will be touched by the natural beauty, diversity of life and landscapes providing the inspiration for lifelong learning.

Approach and guiding principles: Core funding for the protected area education programme will be a key funding objective recognising that the centre and the national park have an integral part to play in local, national and international education.

Management actions:

- Education is a core function of the national park. Access to the park's resources for people of all ages is a fundamental principle of protected areas management and will be ensured through the work of the FD.
- The FD train and equip two Community Liaison Officers to work in local schools and develop educational and informational material.
- Develop and maintain partnerships with national and local authorities, NGO's, sponsors and volunteers to optimise the educational experience of people visiting LMNP.

5.8. Objective 8: Effective and efficient management

Efficient and effective professional protected areas administration and management.

Rationale: The role of protected areas management is changing in recognition of the multiplicity of duties and the complexity of managing highly dynamic socio-ecological systems. The current FD capacities need to be strengthened to reflect these changes in management approaches from one designed to protect through exclusion and prohibition to one that is more inclusive and participatory in its approach and includes local people in the sustainable management of biodiversity resources.

Therefore, this progressive approach to protected areas management puts additional skill demands upon management agencies (e.g. conflict resolution, conservation education, financial administration, tourism development, communication, fund raising, project design, etc.).

Approach and guiding principles: Conservation very often relies on the hard work and commitment of dedicated and caring individuals. It is important to recognize these contributions and that the development of a cadre of technically qualified professionals with the relevant skills necessary to meet the challenges of developing the protected areas network is critical to the protected area's success. Furthermore, these dedicated individuals should expect a well thought



through career structure within government agencies, civil society and the private sector.

The qualifications and skills required by protected areas staff will need to be increased through targeted training. It is anticipated that the protected areas managers of the future will need a multiplicity of skills, in addition to sound ecological knowledge, in areas such as management planning, financial planning, communications, business and commercial planning, marketing, cultural heritage managementetc..

In order to adequately meet current and future demands the National Park staff will receive appropriate training by the FD and the BCP. This will be achieved through a mix of partnering with higher educational institutions to develop specific qualifications for conservation management to provide qualified professional managers and training schemes within the management institutions themselves.

Management actions:

- A training programme will be designed, based on a training needs assessment for national park staff, and implemented to develop the necessary skills identified in the management plan that will provide a framework for on-going human development.
- The protected area will establish a reference library for use by staff and visiting researchers.
- The FD will meet regularly with teams from other protected areas in Sierra Leone to provide a forum for the exchange of knowledge, experience and ideas.
- The FD will, whenever possible support and organise study tours for national park staff and local partners (e.g. the DC, LMNP Management Committee, etc.) staff to other protected areas.
- Visiting researchers will be required to hold a training workshop on the
 work they are doing for the national park staff and LMNP Management
 Committee and a minimum requirement of research in the protected area
 will be the presentation of a copy of any reports or other publications to
 the park library.
- The FD will prepare an annual budget and source and procure the appropriate equipment for the staff to carry out their duties.

5.9. Objective 9: Visitor management

Visitor management to enhance the visitor experience and protect the core values of Loma Mountains.

Rationale: The current volume of visitors to the national park is relatively small and very seasonal. However, the scenery and general environment is very favourable to nature-based tourism and could form the basis of a small volume, medium-value, nature-based tourism. Local communities, in common with those



throughout Sierra Leone, are extremely welcoming of visitors and would likely adapt easily to community-based tourism and the provision of visitor hospitality services.

Approach and guiding principles: It is important that an effective visitor management plan is put in place and that this plan remains grounded in the reality that tourism is likely to be a relatively low volume activity.

The development of higher value ecotourism will take time to become established and require significant investment in capacity building and marketing by, *inter alia*, the Ministry of Tourism, private sector, *etc*. However, given the location of the national park and the presence of high values species such as chimpanzees, listing as an IBA, the landscape attributes, *etc.*, the development of low volume higher value ecotourism offers an important and realistic economic opportunity. The development of this (and the local day visitor tourism) will be participatory and in line with Objectives 1, 2 and 3 and will utilise the zoning to protect vulnerable habitats, species and natural features and seek to maximise the economic benefits to the local communities.

An important aspect of this objective will be to manage stakeholders' expectations in respect to the benefits that tourism or ecotourism can bring to the area. Clearly it can generate economic activity in the local communities and it can generate revenues for the national park. However, it is, in the short to medium term, likely to be very modest. Therefore a guiding principle should be that there is a realistic cost recovery study on any tourism developments funded by the national park and that this facility, to calculate cost recovery on investment, is made available to the local communities.

Management actions:

- Display visitor information at the new headquarters, providing information on all aspects of Loma Mountains, its natural and cultural history as well as practical information on local products, accommodation and hospitality services and events. Organised events that promote conservation and the protected areas should take place from the visitors centre. These should be widely promoted.
- Install appropriate signage for visitors on rules and regulations, information about the protected area.
- Programme of capacity building with local communities members in hospitality services, tour guiding, etc., (linked with objective 3).
- Ministry of Tourism to promote the area with national and international tour operators.
- Provision of information on LMNP including maps of trails. Trails to be marked by signs and waypoints.
- Capacity building of enforcement staff to re-orientate their tasks with the role of assisting tourists (linked to objective 8).
- Develop a concession agreement for local community members to provide hospitality services at key sites used by visitors. This should involve training of the service providers and limits on the number and degree of developments that are allowed (linked to objective 3).
- Provision of garbage bins and adequate waste disposal.
- Provision of basic toilet blocks at key sites.
- Identify suitable communication channels for booking arrangements.



6. PROVISIONAL WORK PLAN

No	Activity	Primary responsibility	Contributing partners	Timing	Priority	Indicator	Baseline			
Objective 1:	Biodiversity conservation by protection					<u> </u>	<u> </u>			
Result 1.1	Vulnerable habitats, species, landscapes and ecosystem services identified and protected									
1.1.1	Classify and map habitats in the national park as well as in the off-reserve areas. [Joint Activity with 6.2.1]	FD (through consultant)	CSMT	Year 1	High	Habitat maps available for park and off-reserve	No maps available			
1.1.2	Carry out risk assessments on habitats, species and develop internal zoning	FD (through consultant)	CSMT	Year 2	Medium	Zoning map/concept available	No zoning concept available			
1.1.3	Develop and agree bylaws for off-reserve and rules for LMNP	FD	TA (at village and chiefdom levels)	Year 1-3	High	Bye laws and rules available	No bye laws available			
1.1.4	Update GIS database regularly	FD	CSMT	Year 1-5	Medium	GIS database updated	GIS system not available			
Result 1.2	Increased capacity of state agencies to n	nanage biodiver	sity	1	1					
1.2.1	Carry out biodiversity protection training for state and civic agencies (importance of biodiversity, biodiversity and the law, national park bylaws, etc.), Forestry Division, District Council, local judiciary, police force, forest guards, Traditional Authority, etc.	FD (through consultant)		Year 2	Medium	Minutes of meetings	No formal training conducted			



No	Activity	Primary responsibility	Contributing partners	Timing	Priority	Indicator	Baseline
1.2.2	Hold regular meetings with the above agencies	FD	DC, local judiciary, police force, CSMT, TA	Year 2-5	Medium	Minutes of meetings	No meetings conducted
Objective 2: Biodiversity conservation by sustainable use							
Result 2.1	Capacity of villagers for collective decision-making and internal conflict resolution increased. Improved ability to negotiate with external agencies, institutions and the private sector. Mechanism for equitable benefit distribution of profits from common pool resources in place.						
2.1.1	Encourage villages (30!) wishing to participate in natural resource management to apply for legal status using the existing Traditional Authority structure.	CSMT		Year 1	High	Minutes of meetings	Villages have no legal status and unsecure tenure over some natural resources
2.1.2	Determine appropriate village level structures, in participation with the local communities, DC and FD to represent resource users at the community level.	CSMT		Year 1	High	Minutes of meetings	Appropriate structures not identified
2.1.3	Provide training in governance, financial management and accounting to the community-based structures.	CSMT		Year 3-4	High	Minutes of meetings	No formal training conducted
2.1.4	Provide support to villages to establish a fully representative membership of the entire village (gender, age, social status, etc.)	CSMT		Year 2-3	High	Minutes of meetings, Membership registrar	No membership established
Result 2.2	Institutional capacity of state agencies to support village-level management increased						
2.2.1	Conduct training of trainers in FD and DC to train facilitators for village level natural	FD	DC	Year 1-3	High	Minutes of meetings	No trainers/facilitators



No	Activity	Primary responsibility	Contributing partners	Timing	Priority	Indicator	Baseline
	resource management facilitation						available
2.2.2	Build institutional capacity of state agencies to support village level management.	FD	DC	Year 1-5	High	Minutes of meetings	Little capacity available
2.2.3	Develop contractual agreements between relevant state agencies and community-based management institutions to transfer management authority and responsibility over renewable natural resources	FD	DC, TA (village and chiefdom levels)	Year 1-5	High	Agreements available	No agreements in place
Result 2.3	Village capacity to sustainably manage na	atural resources	strengthened		·		
2.3.1	Conduct initial communications programme with visits to all local communities to explain and raise awareness of the off-reserve programme, following guidelines established in the PF	FD	CSMT, DC, TA (village level)	Year 1	High	Minutes of meetings	No contact made with all villages
2.3.2	Carry out training in resource inventory and management techniques	FD	CSMT	Year 2-3	Medium	Minutes of meetings	No training undertaken
2.3.3	Facilitate the development of village natural resource management plans	FD	CSMT, TA (village level)	Year 3-5	Medium	Village NRM plans available	No plans available
2.3.4	Map village boundaries to determine units of management.	FD	CSMT, TA (village level and chiefdom level)	Year 2	High	Maps available	Village boundaries not mapped

Result 3.1 Capacity of local communities to develop and maintain small to medium enterprises (SMEs) using forest resources as well as agricultural products, handicrafts and cultural values is enhanced



No	Activity	Primary responsibility	Contributing partners	Timing	Priority	Indicator	Baseline
3.1.1	Review of existing credit access and provision to ensure that credit availability is not a barrier to developing SMEs	DC	FD	Year 3-5	Medium	Study available	Credit availability unknown
3.1.2	Workshops with local credit providers to determine how best to ensure financing is available through conventional sources	DC	FD	Year 3-6	Medium	Minutes of meeting	No workshops held
3.1.3	Identification of local and national NGO's capable of providing training	DC	FD	Year 3-7	Medium	List of NGO's and minutes of meetings	Suitable NGO's unknown
3.1.4	Training in "alternative livelihoods" such as beekeeping, handicraft production, etc.	DC	FD	Year 3-8	Medium	Minutes of meetings	No training conducted
Result 3.2	Development of tourism and visitor servi	ce provision wit	thin the local co	ommunities	6	l	I
3.2.1	Identification of local NGO's with capacity to provide training for local communities in tourism development	FD		Year 3-4	Medium	List of NGO's and minutes of meetings	Suitable NGO's unknown
3.2.2	Provide training in the provision of hospitality services and guiding	FD (through consultant)		Year 3-4	Medium	Minutes of meetings	No training conducted
3.2.3	FD and DC to develop a certification scheme for local guides approved for access into the national park	FD, DC		Year 5	Low	Concept paper available, membership list of certified producers	No certification scheme available
3.2.4	Provide fauna and flora identification guidebooks to approved community guides	FD		Year 3	Low	Minutes of meeting	No books distributed
3.2.5	DC to establish an eco-tourism resource centre for promoting local tourism business including communication system for	DC (GIZ!)	FD	Year 3-4	Low	Inventory of resource materials	No resource materials available



No	Activity	Primary responsibility	Contributing partners	Timing	Priority	Indicator	Baseline
	bookings, etc.						
Result 3.3	Entrepreneurial skills of villagers increa enterprises	 sed and investn	l nent in the dev	velopment	of small to	 o medium-sized nat	ural resource based
3.3.1	DC provides skills training in SME development	DC	FD	Year 3	Medium	Minutes of meetings	No training conducted
3.3.2	Market tourism products and natural products (including development of a label) in the region locally and nationally	DC	FD	Year 3-5	Low	Marketing concept paper, label available and used	No concept and label available
3.3.3	Credit made available to local communities for developing natural resource based enterprises (e.g. value added, processing, etc.)	DC	FD	Year 3-5	Medium	Minutes of meetings	Credit availability unknown
Objective 4 Result 4.1	4: An enabling implementation environment Loma Mountains National Park Managem	ent Committee	established				
4.1.1	Establishment of the Management Committee (CSMC).	FD	DC, TA (village and chiefdom levels)	Year 1	High	Minutes of meetings	CSMC not yet established
4.1.2	Determine the powers, financial arrangements and constitution of the Management Committee.	FD	CSMC	Year 1	High	Constitution available	No constitution available
4.1.3	Elect members from the local community based upon the entity established.	FD	TA (at village and chiefdom levels)	Year 1	High	Membership list and minutes of meeting	CSMC not yet established
	1	FD	CSMC	Year 1-5	High	Minutes of	No meetings



No	Activity	Primary responsibility	Contributing partners	Timing	Priority	Indicator	Baseline
	the Management Committee					meetings	conducted
Result 4.2	National and local-level legislation review	wed against the	aims and obje	ctives of th	e Loma Mo	ountains manageme	nt plan
4.2.1	Provide legal and constitutional expertise to the Management Committee.	FD	CSMT	Year 2-5	Low	Minutes of meetings	No expertise provided
4.2.2	Provide a report and recommendations on contradictions in the national law and bylaws to the effective conservation of biodiversity through protection and sustainable utilisation.	FD	CSMT	Year 2-5	Low	Report available	No assessment made
Objective 5:	Financial sustainability				<u> </u>	I	l
Result 5.1	Financing accountability developed						
5.1.1	Develop an operational, efficient and transparent accounting system for the National Park.	FD	CSMT	Year 3-5	Low	Accounting system available and minutes of meetings	Accounting system absent
Result 5.2	Legal and policy framework to support so	ustainable finan	cing				<u> </u>
5.2.1	Establish legal basis for revenue and revenue retention by national park.	FD	CSMC, DC,	Year 3	Medium	Concept paper available, if approved: LMNP bank account available	Legal basis absent
5.2.2	Establish legal basis for concessions (e.g. tourism concessions) in National Park	FD	CSMC, DC,	Year 3	Medium	Concept paper available and approved	Legal basis absent
Result 5.3	Payment for ecosystem services (PES) so	l chemes investig	ated				



No	Activity	Primary responsibility	Contributing partners	Timing	Priority	Indicator	Baseline
5.3.1	Conduct study on valuing the ecosystem goods and services provided by Loma Mountain National Park including REDD+	FD (through consultant)		Year 2	Medium	Study report available	Little knowledge on PES in LMNP
Result 5.4	Revenue streams identified		I		1		
5.4.1	Conduct study to identify potential revenue streams from government, donors, NGO's and LMNP generated revenues.	FD (through consultant)		Year 2	Medium	Study report available	Revenue streams unknown
Result 5.5	Funding streams and funding gaps identi	fied			_ I	L	L
5.5.1	Estimate financial requirements to effectively manage LMNP.	FD (through consultant)		Year 2	Medium	Study report available	Financial requirements unknown
5.5.2	Proposal writing capacity developed in state agencies and Community-based Organisations (CBOs).	FD	DC, TA (chiefdom level)	Year 3	Medium	Minutes of meetings	Capacity absent
Objective 6:	Research and monitoring		<u> </u>	l			l .
Result 6.1	Agreements with Researchers in place fo	r management (oriented resear	rch			
6.1.1	Identify and approve a list of research institutions	FD	CSMC	Year 2	Medium	List available	Suitable institutions unknown
6.1.2	Identify research priorities [Joint Activity 6.2.1]	FD	CSMC	Year 2	Medium	Study report available	Priorities unknown
Result 6.2	Management is accountable and adaptive	e	l	I	l	1	1
6.2.1	Develop and implement a biodiversity monitoring plan. [Joint Activity with 1.1.1]	FD (through consultant)		Year 2	Medium	Study report available	Monitoring plan absent



No	Activity	Primary responsibility	Contributing partners	Timing	Priority	Indicator	Baseline
6.2.2	Carry out METT annually through regular management meetings including the Management Committee.	FD	CSMC, TA	Year 1-5	Medium	METT report	METT available for 2011
6.2.3	Revise Management actions, operational plan, work plan and activities.	FD	CSMC, TA	Year 1-5	Medium	Annually updated work plans and budgets	Preliminary management plan available
Objective 7:	Environmental education	L					
Result 7.1	Loma Mountains provides a high quality of	educational exp	erience				
7.1.1	Provide adequate budget provisions for educational resources and activities, conducted by OEOs (see Activity 8.1.3).	FD	DC	Year 2-5	Medium	Budget available, activity reports available	Adequate budget absent
7.1.2	Identify partnerships with the DC and local and international NGO's.	FD	DC	Year 2-5	Medium	Activity Reports available	No partnerships established
7.1.3	Develop a communication strategy	FD	DC	Year 2	Medium	Strategy available	No strategy developed
Objective 8:	: Effective and Efficient Management					<u> </u>	
Result 8.1	Loma Mountains National Park staff and	local partners a	re highly traine	ed and prof	essional		
8.1.1	Conduct training needs assessment of LMNP staff.	FD	CSMT	Year 1	High	Report available	No training needs assessment conducted
8.1.2	Develop and implement a training programme for park staff.	FD	CSMT	Year 1	High	Minutes of meetings	No training programme implemented



No	Activity	Primary responsibility	Contributing partners	Timing	Priority	Indicator	Baseline
8.1.3	Identify and train from the existing LMNP staff two Outreach and Education Officers (CLO) and provide operational funds		CSMT	Year 1-5	High	Minutes of meetings; activity reports available	No CLOs identified and trained
8.1.4	Prepare annual work plan and budget plan (see Activity 6.2.3)	FD	CSMT	Year 1-5	High	Annual work plans and budgets available	

Objective 9: Visitor management

Result 9.1	Loma Mountains National Park is an inte the local community and contributing to				ically and	socially sustainable	e tourism benefiting
9.1.1	Conduct visitor survey and develop a Tourism Development Plan	FD (through consultant)		Year 2	Medium	Survey and plan available	No survey available, no plan available
9.1.2	Provide simple and appropriate tourism facilities such as camp sites	FD	TA (at village and chiefdom levels)	Year 2-3	Medium	Facilities established	No facilities available
9.1.3	Develop a website	FD		Year 2	High	Website online	No website available
9.1.4	Mark trails and signage of camp sites and viewing points	FD		Year 3	Medium	Trails established, signs mounted	No trails marked, signage absent
9.1.5	Develop modalities for sharing benefits accruing from tourism activities	FD	CSMC	Year 3	Medium	Signed agreements available	No benefit sharing arrangements in place
9.1.6	Collaborate with Ministry of Tourism and the National Tourism Board on promoting Loma Mountains and develop a marketing concept	FD	CSMC	Year 3	Medium	Minutes of meetings, marketing concept available	No collaboration established



7. MONITORING MANAGEMENT EFFECTIVENESS

Protected areas management is multi-disciplinary in nature, combining natural-, socio-political- and economic sciences. In this context many components are complex and a relationship between cause and effect of actions on biodiversity is not always given.

In this complex environment, monitoring and evaluation has to take into account that management will have to be constantly adapted to adjust to newly understood variables which results in revising management actions, operational and work plans and activities. In order to accommodate this into a monitoring system it is recommended to measure the effectiveness of management in its entirety.

7.1. Management Effectiveness Tracking Tool

The World Conservation Union (IUCN) defines management effectiveness as "the assessment of how well protected areas are being managed – primarily the extent to which management is protecting values and achieving goals and objectives". The term management effectiveness reflects three main 'themes' in protected area management:

- 1. Design issues relating to both individual sites and protected area systems;
- 2. Adequacy and appropriateness of management systems and processes and
- 3. Delivery of protected area objectives including conservation of values.

Evaluation of management effectiveness is recognised as a vital component of responsive, pro-active protected area management. In response, the World Wide Fund for Nature (WWF) and the World Bank (WB) through the "Alliance for Forest Conservation and sustainable Use" developed the Management Effectiveness Tracking Tool (METT), which was also taken up by IUCN's "Best Practice Protected Area Guidelines Series". The tool is specifically designed to:

- Provide a harmonised reporting system for protected area assessment;
- Supply consistent data to allow tracking of progress over time;
- Be relatively quickly completed by protected area staff, so as not to be reliant on high levels of funding or other resources;
- Provide a "score" if required;
- Provide for alternative text answers to each question, strengthening the scoring system;
- Be easily understood by non-specialists; and
- Be nested within existing reporting systems to avoid duplication of effort.

Management is usually influenced by contextual issues; in the case of a protected area by its significance and uniqueness and the threat and opportunities that it faces. Evaluation must therefore look at all aspects of the management cycle, including the context within which management takes place. The results of evaluation can be fed back into different parts of the Management Cycle (compare to Figure 14).





Figure 14: The Management Cycle

The Framework is based on the six elements of the Management Cycle:

- It begins with understanding the context of existing values and threats,
- progresses through planning, and
- allocation of resources (inputs), and
- as a result of management actions (processes),
- eventually produces products and services (outputs),
- that result in impacts or outcomes.

Table 9: The METT elements

Elements of evaluation	Explanation	Criteria that are assessed	Focus of evaluation
	Where are we now?	Significance	Status
Context	Assessment of	Threats	
	importance,	Vulnerability	
	threats and policy	National context	
	environment	• Partners	



Elements of evaluation	Explanation	Criteria that are assessed	Focus of evaluation
Planning	Where do we want to be? Assessment of protected area design and planning	 Protected area legislation and policy Protected area system design Reserve design Management planning 	Appropriateness
Inputs	What do we need? Assessment of resources needed to carry out management	Resourcing of agencyResourcing of site	Resources
Processes	How do we go about it? Assessment of the way in which management is conducted	Suitability of Management processes	Efficiency and appropriateness
Outputs	What were the results? Assessment of the implementation of management programmes and actions; delivery of products and services	Results of management actions services and products	Effectiveness
Outcomes	What did we achieve? Assessment of the outcomes and the extent to which they achieved objectives	Impacts: effects of management in relation to objectives	Effectiveness and appropriateness



At the heart of the tool are a series of 30 questions that can be answered by assigning a simple score ranging between 0 (poor) to 3 (excellent). A series of four alternative answers are provided against each question to help assessors to make judgments as to the level of score given. Questions that are not relevant to a particular protected area would be omitted, with a reason given in the comments section (for example questions about use and visitors will not be relevant to a protected area managed according to the IUCN protected area management Category I, a strict nature reserve). The toll allows calculating a score that refers to the following levels of management effectiveness.

Very Low - management effectiveness score of 0 – 30 % Low - management effectiveness score of 31 – 40 % Low Intermediate - management effectiveness score of 41 – 50 % Intermediate - management effectiveness score of 51 – 60 % High Intermediate - management effectiveness score of 61 – 70 % High - management effectiveness score of 71 – 80 % Very High - management effectiveness score of 81 – 100 %

The METT is already being used in Sierra Leone and has been applied and conducted in LMNP in 2011. The assessment scored a total of 19 points, which translates into a management effectiveness of 21.8%, which is considered very low.

7.2. Biodiversity Monitoring

The BCP will carry out surveys of key biodiversity resources within LMNP, which will establish a baseline. The surveys will be required to indentify key indicators for assessing the impact and effectiveness of conservation management.

These biodiversity studies will design a basic biodiversity monitoring programme taking into account the cost implications and institutional capacities to carry out the monitoring.

It should be noted that monitoring biodiversity is a long term undertaking and the indication of changes brought about by management do not provide the rapid feedback necessary to adapt management within the life of a management plan. Thus the biodiversity monitoring will provide the longer term data necessary to track change between the lifetime of management plans and management will largely rely upon the METT as an indicator of performance and impact.

7.3. Threat Reduction Assessment

In addition to METT it is proposed to monitor the reduction of threats to biodiversity over time. However, threat reduction will be achieved by the implementation of the management plan in longer time intervals and therefore monitored at the end of the implementation phase of the management plan.

The Threats Reduction Assessment (TRA) tool was developed by the GEF Biodiversity Support Group. It is a simple tool designed to identify threats and quantify them in terms of their extent (area affected), intensity (the impact on biodiversity) and the urgency (how immediate is the threat).



The exercise recognises that due to the constraints of time it is normally not possible to evaluate the impact of project or management interventions using biological indicators because such indicators may take considerable periods to demonstrate significant changes.

However, it is possible to approximate the effectiveness of any intervention by measuring the amount by which it reduces a causative factor. In protected areas management we often refer to causative factors, as "threats" and measuring how much a threat has been reduced will provide us with a robust approximation of whether any intervention is likely to have an impact.

Therefore this will provide us a reasonable assessment of management performance but it is important to bear in mind that reducing the threats is not an end in itself but more often a means to an end such as a reduction in grazing to allow vegetation to recover. This is not the same as assessing the overall impact of an intervention, which would be the recovery of vegetation as measured by species diversity, abundance and/or structure etc. Therefore the assumptions (that over-grazing is the root cause of loss of biodiversity) should be explicitly recognised and reducing grazing intensity is not the same as the recovery of biodiversity.

The TRA has been applied and LMNP scored a baseline of 31.7% in 2012.



8. SUSTAINABLE FINANCING

8.1. Costs of operation and maintenance

The estimated basic annual management cost for LMNP is around US\$138,000 (see Annex 1 for a breakdown of the costs, which are to be adjusted for inflation). The annual management cost includes salaries and allowances, personal equipment, transport, communication, office running costs as well as maintenance costs of available infrastructure and are broken down as follows:

Salaries, allowances and personal equipment	US\$ 53,000
Transport	US\$ 56,000
Administration and communication	US\$ 7,000
Maintenance of infrastructure and equipment	US\$ 22,000

This figure enables the Forestry Division to show a continuous presence in the area by funding core staff that has adequate infrastructure, transport and communication facilities at hand to perform the most basic functions such as law enforcement and regulation.

This figure represents the very minimum in order to sustain recently made investments (e.g.: deployment of 15 staff members, transport equipment, infrastructural equipment, road improvement and boundary demarcation) and should be seen as the core funding required for LMNP to be provided by government.

8.2. Cost of management plan implementation

The cost of implementation of the management plan from 2013 to 2017 is estimated to be around US\$ 1 million (excluding the Cost of operation and maintenance as stated in the section above, see Annex 1). The implementation costs are broken down by management objectives as follows:

Objective 1:	Biodiversity conservation by protection	US\$ 126,000
Objective 2:	Biodiversity conservation by sustainable use	US\$ 365,000
Objective 3:	Sustainable socio-economic development	US\$ 188,000
Objective 4:	An enabling implementation environment	US\$ 76,000
Objective 5:	Financial sustainability	US\$ 150,000
Objective 6:	Research and monitoring	US\$ 20,000
Objective 7:	Environmental education	US\$ 12,000
Objective 8:	Effective and efficient management	US\$ 33,000
Objective 9:	Visitor management	US\$ 45,500

It is foreseen that a mix of the following funding sources can cover the costs.

8.3. Current funding sources

8.3.1. Forestry Division

The Forestry Division currently funds 16 staff members assigned to LMNP.



8.3.2. Koinadugu District Council

The District Council for Koinadugu District Council, situated in Kabala, is currently underfunded to provide sustain a meaningful financial input into LMNP and its management plan. However, the DC is the catalyst for rural development in the district and can certainly attract increased attention to LMNP by government programmes as well as NGO funded projects. One such example is a GIZ project working on natural resource governance together with the DC. Therefore, it is emphasised that district level development plans and the LMNP management plan should be accorded on an annual basis.

8.3.3. Bumbuna Trust

The World Bank funded project has built Bumbuna Dam and identified LMNP as the project's environmental off-set. The project has provided funding for the initial set up of LMNP, including some transport infrastructure and basic equipment including facilities for the LMNP headquarters and outposts, boundary demarcation and improvements of access roads.

The project is in the process if registering the Bumbuna Trust, which will be funded by the proceeds of electricity produced by Bumbuna dam. The Trust has a long term funding allocation to possibly cover operational and maintenance costs of LMNP (amongst other funding mandates) over the next decades. However, at this point in time it is not clear whether and to what extend the Trust will finance LMNP.

Ideally the Bumbuna Trust would take up the annual basic costs of operation and management as stated above in order to secure the continuous presence of the Forestry Division in LMNP as well as to sustain the investments done the BHP.

8.3.4. Sierra Leone Biodiversity Conservation Project

The SL-BCP is funded by the Global Environment Facility and the Government of Sierra Leone and is administered by the World Bank. The project includes a component that supports LMNP from 2011 to mid-2015. The BCP can cover parts of the implantation costs of the management plan in the first two years of operation as many planned project activities are accorded with the activities foreseen in the management plan.

8.3.5. National Conservation Trust Fund

The MAFFS is in the process of creating a National Protected Areas Agency as a parastatal body mandated with the management of the national protected areas system. In parallel a National Conservation Trust Fund is being established to fund the newly created institution as well as the protected areas under its authority. The fund is being designed as a revolving sinking fund with the possibility of holding endowment capital as well. Whether the fund will be sufficiently capitalised to finance LMNP in the short term is not known at this point of time.



8.4. Funding sources to be investigated and/or developed

8.4.1. Payment for ecosystem services

One of the activities in the management plan will look into the feasibility of payment for ecosystem services. This could include looking into developing payment mechanism for downstream industries, utilising water derived from the LMNP watershed, developing payment mechanism fir forest carbon mitigation (e.g.: REDD+), marketing bio-prospecting licenses, amongst others. However, it has to be noted that the development of such mechanism involves considerable project development costs (transaction costs) as well as fairly high risks. In the onset of a EU funded project, embedded in MAFFS, strengthening governments capacities in forest carbon mitigation and REDD+, LMNP could serve as a pilot site for the project to develop a REDD+ for the voluntary carbon market (e.g.: under the VCS standard).

8.4.2. Public-Private-Community Partnerships

Costs of managing LMNP could be reduced (for central government) if they can be shifted to a private sector or civil society partner. This model has, for example, secured long-term financing for Gola Forests National Park and has been successfully implemented in other countries. Setting up such a long-term partnership arrangement involves however considerable transaction costs and should not be regarded as a short term financing vehicle.

This mechanism has the advantage that it strengthens the entire protected areas system by making more resources available to other areas (i.e.: Gola Forest National Park is effectively managed under the regulation of MAFFS but has very little cost implications on MAFFS, resulting in scarce ministerial budget to be available for other protected areas in the country).

Considering the high biodiversity value and uniqueness of ecosystems found in LMNP a long-term partnership with well reputed and financed institutions seems feasible.

8.4.3. Environmental off-set funds

Similarly to the BHP off-set component for the Bumbuna Dam, environmental off-set funds could accrue from industrial mining as well as large commercial agricultural operation in Sierra Leone. This could be either achieved by directly off-setting identified biodiversity impacts per project (e.g.: concession agreements for a newly established mining operations are obliged to invest parts of their proceeds in the national protected areas system) or by taxing exports (e.g.: per tonne of a particular exported non-renewable natural resource, a certain percentage flows in the conservation of biodiversity). Proceeds from such a mechanism could, for example, be collected by the National Conservation Trust Funds.

8.4.4. Direct revenues

Direct revenues from visitors through entrance fees and possibly tourism concessions will have to be developed but cannot be expected to cover



substantial parts of the management costs. Although LMNP can certainly be regarded as one of the tourism highlights, apart from coastal recreation, in Sierra Leone it has a fairly short tourism season and difficult accessibility.



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ANNEX 1: PROVISIONAL BUDGET

The following budget is developed on the basis of the Work Plan, presented in the main document. It is provisional, since at this point of time (August 2012) it is unclear how and if the remaining funds of the BHP will be used and how and if the Bumbuna Trust will provide funding to LMNP. Therefore, this budget is provision and will have to be aligned once a decision has been taken on the way forward.

LMNP Provi	sional Budget	Total MP Forecast Budget [US\$]	Forecast Budget by Year for Management Plan [US\$]					Potential Funding Source
		2013 - 2017	2013	2014	2015	2016	2017	
BASIC OPER	RATIONAL COST							
	Salaries, allowances, personal equipment							
	Salaries and allowances	255,000	51,000	51,000	51,000	51,000	51,000	FD
	Personal equipment	24,492	17,494	1,749	1,749	1,749	1,749	FD
	Transport							
	Vehicle running costs (fuel and maintenance)	90,000	18,000	18,000	18,000	18,000	18,000	FD
	Motorbikes running costs (fuel and maintenance)	54,000	10,800	10,800	10,800	10,800	10,800	FD
	Replacement vehicle	45,000				45,000		FD
	Replacement motorbikes	36,000		18,000		18,000		FD
	Administration and Communication							
	VHF communication initial set-up and replacement	24,720	20,600	1,030	1,030	1,030	1,030	FD
	IT equipment	18,000	15,000	750	750	750	750	FD
	Furniture, etc.	27,600	23,000	1,150	1,150	1,150	1,150	FD
	Office running costs	15,000	3,000	3,000	3,000	3,000	3,000	FD
	Maintenance of infrastructure and equipment							
	Maintenance of infrastructure	98,039	19,608	19,608	19,608	19,608	19,608	FD
	Maintenance of communication infrastructure	10,300	2,060	2,060	2,060	2,060	2,060	FD
	BASIC OPERATIONAL COST	698,150	180,562	127,147	109,147	172,147	109,147	
MANAGEME	NT PLAN IMPLEMENTATION COST							
OBJECTIVE	1: BIODIVERSITY CONSERVATION BY PROTECTION	1						
Result 1.1	Vulnerable habitats, species, landscapes and eco	system servic	es identifie	d and prot	ected			
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LMNP Provis	Total MP Forecast Budget [US\$]	Forecas	st Budget b	y Year for [US\$]	Manageme	nt Plan	Potential Funding Source		
		2013 - 2017	2013	2014	2015	2016	2017		
1.1.1	Classify and map habitats in the national park as well as in the off-reserve areas. [Joint Activity with 6.2.1]	50,000	50,000					ВСР	
1.1.2	Carry out risk assessments on habitats, species and develop internal zoning	40,000	40,000					FD	
1.1.3	Develop and agree bylaws for off-reserve and rules for LMNP	10,000	3,333	3,333	3,333			ВСР	
1.1.4	Update GIS database regularly	10,000	2,000	2,000	2,000	2,000	2,000	BCP, FD	
Result 1.2	Increased capacity of state agencies to manage b	iodiversity		<u>.</u>					
1.2.1	Carry out biodiversity protection training for state and civic agencies (importance of biodiversity, biodiversity and the law, national park bylaws, etc.), Forestry Division, District Council, local judiciary, police force, forest guards, Traditional Authority, etc.	10,000		10,000				ВСР	
1.2.2	Hold regular meetings with the above agencies	6,000		1,500	1,500	1,500	1,500	BCP, FD	
OBJECTIVE	2: BIODIVERSITY CONSERVATION BY SUSTAINABLE	USE					•		
Result 2.1	Capacity of villagers for collective decision-making external agencies, institutions and the private secresources in place.	tor. Mechanis	sm for equi					ommon pool	
2.1.1	Encourage villages (30!) wishing to participate in natural resource management to apply for legal status using the existing Traditional Authority structure.	30,000	30,000					ВСР	
2.1.2	Determine appropriate village level structures, in participation with the local communities, DC and FD to represent resource users at the community level.	10,000	10,000					ВСР	
2.1.3	Provide training in governance, financial management and accounting to the community-based structures.	60,000			30,000	30,000		BCP, FD	
2.1.4	Provide support to villages to establish a fully representative membership of the entire village (gender, age, social status, etc.)	60,000		30,000	30,000			ВСР	



LMNP Provis	Total MP Forecast Budget [US\$]	Forecas	t Budget b	y Year for I [US\$]	Managemei	nt Plan	Potential Funding Source		
		2013 - 2017	2013	2014	2015	2016	2017		
Result 2.2	2 Institutional capacity of state agencies to support village-level management increased								
2.2.1	Conduct training of trainers in FD and DC to train facilitators for village level natural resource management facilitation	15,000	5,000	5,000	5,000			ВСР	
2.2.2	Build institutional capacity of state agencies to support village level management.	30,000	6,000	6,000	6,000	6,000	6,000	BCP, FD	
2.2.3	Develop contractual agreements between relevant state agencies and community-based management institutions to transfer management authority and responsibility over renewable natural resources	40,000	8,000	8,000	8,000	8,000	8,000	BCP, FD	
Result 2.3	Village capacity to sustainably manage natural re	sources stren	gthened						
2.3.1	Conduct initial communications programme with visits to all local communities to explain and raise awareness of the off-reserve programme, following guidelines established in the PF	20,000	20,000					ВСР	
2.3.2	Carry out training in resource inventory and management techniques	10,000		5,000	5,000			ВСР	
2.3.3	Facilitate the development of village natural resource management plans	45,000			15,000	15,000	15,000	BCP, FD	
2.3.4	Map village boundaries to determine units of management.	45,000		45,000				FD	
OBJECTIVE	3: SUSTAINABLE SOCIO-ECONOMIC DEVELOPMENT								
Result 3.1	Capacity of local communities to develop and mai agricultural products, handicrafts and cultural val			nterprises	(SMEs) usi	ng forest r	esources a	s well as	
3.1.1	Review of existing credit access and provision to ensure that credit availability is not a barrier to developing SMEs	2,000			667	667	667	FD	
3.1.2	Workshops with local credit providers to determine how best to ensure financing is available through conventional sources	2,000			667	667	667	FD	



LMNP Provi	sional Budget	Total MP Forecast Budget [US\$]	Forecas	ecast Budget by Year for Management Plan [US\$]				Potential Funding Source
		2013 - 2017	2013	2014	2015	2016	2017	
3.1.3	Identification of local and national NGO's capable of providing training	2,000			667	667	667	FD
3.1.4	Training in "alternative livelihoods" such as beekeeping, handicraft production, etc.	60,000			20,000	20,000	20,000	FD
Result 3.2	Development of tourism and visitor service provis	ion within the	e local com	munities				
3.2.1	Identification of local NGO's with capacity to provide training for local communities in tourism development	2,000			1,000	1,000		FD
3.2.2	Provide training in the provision of hospitality services and guiding	60,000			30,000	30,000		FD
3.2.3	FD and DC to develop a certification scheme for local guides approved for access into the national park	5,000					5,000	FD
3.2.4	Provide fauna and flora identification guidebooks to approved guides	3,000			3,000			ВСР
3.2.5	DC to establish an eco-tourism resource centre for promoting local tourism business including communication system for bookings, etc.	5,000			2,500	2,500		DC (GIZ?)
Result 3.3	Entrepreneurial skills of villagers increased and in enterprises	vestment in t	he develo	oment of s	mall to med	lium-sized	natural re	source based
3.3.1	DC provides skills training in SME development	30,000			30,000			DC
3.3.2	Market tourism products and natural products (including development of a label) in the region locally and nationally	15,000			5,000	5,000	5,000	FD, DC
3.3.3	Credit made available to local communities for developing natural resource based enterprises (<i>e.g.</i> value added, processing, <i>etc.</i>)	2,000			667	667	667	DC
OBJECTIVE	4: AN ENABLING IMPLEMENTATION ENVIRONMENT	<u>.</u>						
Result 4.1	Loma Mountains National Park Management Comm	nittee establi	shed					
4.1.1	Establishment of the Management Committee (CSMC).	2,000	2,000					ВСР



LMNP Provis	sional Budget	Total MP Forecast Budget [US\$]	Forecast Budget by Year for Management Plan [US\$]					Potential Funding Source
		2013 - 2017	2013	2014	2015	2015 2016		
4.1.2	Determine the powers, financial arrangements and constitution of the Management Committee.	4,000	4,000					ВСР
4.1.3	Elect members from the local community based upon the entity established.	15,000	15,000					ВСР
4.1.4	Hold regular (semi-annual) meetings with the Management Committee	25,000	5,000	5,000	5,000	5,000	5,000	BCP, FD
Result 4.2	National and local-level legislation reviewed again	nst the aims a	nd objectiv	ves of the L	oma Moun	tains mana	gement pl	an
4.2.1	Provide legal and constitutional expertise to the Management Committee.	15,000		3,750	3,750	3,750	3,750	FD
4.2.2	Provide a report and recommendations on contradictions in the national law and bylaws to the effective conservation of biodiversity through protection and sustainable utilisation.	15,000		3,750	3,750	3,750	3,750	FD
	5: FINANCIAL SUSTAINABILITY							
Result 5.1	Financing accountability developed	1 10 202						T
5.1.1	Develop an operational, efficient and transparent accounting system for the National Park.	40,000			13,333	13,333	13,333	FD
Result 5.2	Legal and policy framework to support sustainable	e financing						
5.2.1	Establish legal basis for revenue and revenue retention by national park.	15,000			15,000			FD
5.2.2	Establish legal basis for concessions (e.g. tourism concessions) in National Park	15,000			15,000			FD
Result 5.3	Payment for ecosystem services (PES) schemes in	nvestigated						
5.3.1	Conduct study on valuing the ecosystem goods and services provided by Loma Mountain National Park including REDD+	60,000		60,000				FD
Result 5.4	Revenue streams identified					<u>_</u>		
5.4.1	Conduct study to identify potential revenue streams from government, donors, NGO's and LMNP generated revenues.	5,000		5,000				ВСР



LMNP Provis	Total MP Forecast Budget [US\$]					nt Plan	Potential Funding Source	
		2013 - 2017	2013	2014	2015	2016	2017	
Result 5.5	Funding streams and funding gaps identified							
5.5.1	Estimate financial requirements to effectively manage LMNP.	5,000		5,000				ВСР
5.5.2	Proposal writing capacity developed in state agencies and Community-based Organisations (CBOs).	10,000			10,000			ВСР
OBJECTIVE	6: RESEARCH AND MONITORING							
Result 6.1	Agreements with Researchers in place for manage	ement oriente	d research					
6.1.1	Identify and approve a list of research institutions	3,000		3,000				ВСР
6.1.2	Identify research priorities	2,000		2,000				BCP
Result 6.2	Management is accountable and adaptive	,		,	J.			-
6.2.1	Develop and implement a biodiversity monitoring plan. [Joint Activity with 1.1.1]							ВСР
6.2.2	Carry out METT annually through regular management meetings including the Management Committee.	10,000	2,000	2,000	2,000	2,000	2,000	BCP, FD
6.2.3	Revise Management actions, operational plan, work plan and activities.	5,000	1,000	1,000	1,000	1,000	1,000	BCP, FD
OBJECTIVE	7: ENVIRONMENTAL EDUCATION							
Result 7.1	Loma Mountains provides a high quality education	nal experience	•					
7.1.1	Provide adequate budget provisions for educational resources and activities, conducted by OEOs (see Activity 8.1.3)	5,000		1,250	1,250	1,250	1,250	FD
7.1.2	Identify partnerships with the DC and local and international NGO's.	2,000		500	500	500	500	FD
7.1.3	Develop a communication strategy	5,000		5,000				FD
OBJECTIVE	8: EFFECTIVE AND EFFECTIVE MANAGEMENT	•						
Result 8.1	Loma Mountains National Park staff and local part	ners are high	ly trained	and profess	sional			
8.1.1	Conduct training needs assessment of LMNP staff.	3,000	3,000					ВСР
8.1.2	Develop and implement a training programme for park staff.	10,000	10,000					ВСР



LMNP Provi	LMNP Provisional Budget		Forecas	orecast Budget by Year for Management Plan [US\$]				Potential Funding Source
		2013 - 2017	2013	2014	2015	2016	2017	
8.1.3	Identify and train from the existing LMNP staff two Outreach and Education Officers (OEO) and provide operational funds	15,000	3,000	3,000	3,000	3,000	3,000	BCP, FD
8.1.4	Prepare annual work plan and budget plan	5,000	1,000	1,000	1,000	1,000	1,000	BCP, FD
OBJECTIVE	9: VISITOR MANAGEMENT	l l		· ·				
Result 9.1	Loma Mountains National Park is an international	tourist destir	nation with	ecological	ly and soci	ally sustair	able touri	sm benefiting
	the local community and contributing to the main	tenance of th	e national	park				
9.1.1	Conduct visitor survey and develop a Tourism Development Plan	10,000		10,000				ВСР
9.1.2	Provide simple and appropriate tourism facilities such as camp sites	10,000		5,000	5,000			ВСР
9.1.3	Develop a website	6,000		6,000				FD
9.1.4	Mark trails and signage of camp sites and viewing points	15,000			15,000			ВСР
9.1.5	Develop modalities for sharing benefits accruing from tourism activities	2,000			2,000			ВСР
9.1.6	Collaborate with Ministry of Tourism and the National Tourism Board on promoting Loma Mountains and develop a marketing concept	2,000			2,000			ВСР
·	MANAGEMENT PLAN IMPLEMENTATION COST	1,015,000	220,333	238,083	298,583	158,250	99,750	
	BASIC OPERATIONAL COST	698,150	180,562	127,147	109,147	172,147	109,147	
	TOTAL COST	1,713,150	400,895	365,230	407,730	330,397	208,897	



ANNEX 2: LANDSCAPE COMPONENTS AND FLORISTICS CHARACTERISTICS OF LOMA

The middle land savannahs located on a plateau around 670m altitude is a typical two strata Guinean savannah area (Plate 1) where the tree stratum is due mainly to *Bridelia ferruginea*, *Combretum molle*, *Hymenocardia acida*, *Lannea barteri*, *Lophira lanceolata*, *Margaritaria discoidea*, *Parkia biglobosa*, *Pterocarpus erinaceus*, *Syzygium guineense ssp. guineense*, *Terminalia schimperi* and *Vitex doniana*. At its edge, the common trees are *Allophylus africanus*, *Anthocleista djalonensis*, *Carapa procera*, *Dracaena arborea*, *Elaeis guineensis*, *Erythrophleum guineense*, *Ficus capensis*, *Harungana madagascariensis*, *Holarrhena floribunda*, *Lecaniodiscus cupanioides*, *Maesa lanceolata*, *Milicia regia*, *Parinari sp.*, *Stereospermum acuminatissimum*, *Uapaca togoensis* and *Xylopia quintasii*. The herbaceous stratum is comprised of *Amorphophalus abyssinicus*, *Annona senegalensis*, *Eriosema glomerata*, *Indigofera atriceps ssp. atriceps*, *Kotschya lutea*, *Melastomastrum capitatum*, *Phyllanthus alpestris* and *Vernonia smithiana*. Gasses are dominated by *Anadelphia leptocoma*, *Loudetia arundinacea* and *Monocymbium ceresiiforme*.

The hill slopes around 1,100m altitude and the summit of mountains are covered by a herbaceous stratum of upland savannah patches (Plate 2) where Syzygium guineense ssp. guineense becomes less tall and occurs with Syzygium guineense ssp. occidentale close to the ground. Grasses consist mainly of Afrotrilepis pilosa, Blumea crispata, Bulbostylis cochleatum, Loudetia arundinacea, Loudetiopis kerstingii and Mesanthemum prescottianum. Pink flowering plants like Cyanotis caespitosa, Dissotis fructicosa, Dissotis sessilis, Melastomastrum capitatum are very common with Emilia coccinea, Eriosema parviflorum ssp. collinum, Indigofera atriceps ssp. atriceps, Kotschya lutea, Phyllanthus alpestris and Vernonia smithiana. Exposed rock surfaces are colonized by cryptogamic vegetation comprised mainly of lichens forming slippery blackish brownish or whitish films. Occasionally, small patches of mosses can be found (Plate 3a-c) which enable the initial establishment of vascular plants (Plate 3c-e). In vertical rock crevices small trees like Dissotis fructicosa and Syzygium quineense ssp. guineense coexist with grasses (Plate 3d, 3f). Horizontal rock crevices are more suitable for short-lived plants (Plate 3e).

Grasses and *Pteridium aquilinum* are present on mountain slopes (Plate 3g). Wet flush vegetation is provided by *Mesanthemum prescottianum*, *Osmundia regalis* and *Utricularia pubescens*. The edges of upland savannahs are colonized frequently by *Clausena anisata*, *Ficus saussureana*, *Harungana madagascariensis*, *Maesa lanceolata*, *Martretia quadricornis*, *Oxythenanthera abyssinica*, *Parinari hypochrysea*, *Polyscias fulva*, *Schreffera barteri*, *Santiria trimera* and *Trichilia djalonis*.

Along rivers and streams, typical tree composition of riparian forests changes with altitude except for *Carapa procera*, *Parinari congensis*, *Parinari excelsa*, *Uapaca guineensis* and *Uapaca esculenta* which remain common. *Anthonotha macrophylla*, *Hallea ledermannii*, *Protomegabaria stapfiana* and *Pseudospondias micocarpa* are abundant at low altitudes (<500 m) while *Gilbertiodendron Imba*, *Gilbertiodendron spelndidum* and *Strephonema pseudocola* are distributed



between 600m - 800m altitudes. *Cyathea manniana* and *Marattia fraxinea* occur at high altitudes (>1,000m) with many Leguminosae (Plate 4). *Osmundia regalis* and *Eriocaulon latifolium* are the herbaceous aquatics collected in valleys up to 1,000 m altitudes whereas *Anubias gracilis* is the typical herbaceous aquatic species of middle and low land valleys.

Located at least 1,300 m altitudes, patches of dry forest can be found at the moist forest boundaries, on shallow soils underlain by a hardpan. Woody vegetation of this dry forest type is composed mostly of Belonophora hypoglauca, Campylospermum schoenleinianum, Campylospermum squamosum, Carapa procera, Clausena anisata, Gaertnera paniculata, Hannoa klaineana, madagascariensis, Hannoa undulata, Harungana Hugonia planchonii, Hymenostegia afzelii, Newtonia duparquetiana, Parinari excelsa, Parkia bicolor, Psydrax horizontalis, Rauvolfia vomitoria, Rothmannia withfieldii, Samanea dinklagei, Santiria trimera and particularly Tricalysia sp., where sometimes it appears to be the most dominant species (Plate 5b). The herbaceous stratum is rich of Bertiera racemosa, Pavetta Iasioclada, Rungia buettneri and Rungia quineensis.

A large part of Loma Mountain is covered in moist forest (Plate 5a), characterized by common species such as *Agelaea pentagyna*, *Asystasia vogeliana*, *Belonophora hypoglauca*, *Campylospermum schoenleinianum*, *Campylospermum squamosum*, *Carapa procera*, *Chrysophyllum pruniforme*, *Cola lateritia var. maclaudi*, *Cola sp.*, *Dicranolepis persei*, *Diospyros cooperi*, *Funtumia elastica*, *Gaertnera paniculata*, *Garcinia kola*, *Hannoa klaineana*, *Hymenostegia afzelii*, *Myrianthus arboreus*, *Myrianthus libericus*, *Napoleonaea heudelotii*, *Parinari excelsa*, *Parkia bicolor*, *Piptadeniastrum africanum*, *Rungia guineensis*, *Santiria trimera*, *Sorindeia juglandifolia*, *Synsepalum passageri*, *Trichoscypha smythei*, *Uapaca esculenta*, *Uapaca guineensis*, *Vepris suaveolens* and *Xylopia acutiflora*. In addition to these taxa there is a variation of plant composition along altitudes in the moist forest.



ANNEX 3: CONSULTATIONS FROM THE PROCESS FRAMEWORK

Chiefdom: Neya Chiefdom Section:
Communities: 1.Masofinaian 2.Ward 154 3.Buria 4. Bungokoro 5. Seria-1 6. Seria-2 7.Kamaya 8.Masonia
1. P.C. Jallof (P.C. of Neini Chiefdom) 2. Edward Lahai Marah-(Councilor Ward 154), 3. Karifa Kamara-(Town Chief of Buria), 4. Alie Marah-(Town Chiefof Bungokoro), 5. Manso Kamara-(Town Chief of Seria-1), 6. Foday Kamara-(Town Chief of Seria-2), 7. Hawa Mansaray Kamara (Mammy Queen of Seria-2), 8. Foday Fofonah-(Town Chief of Kamaya), 9. Musah Mara-(Town Chief of Koma Masere) 10. There were about 100 community members comprising of Community Elders, Farmers, Tribal Authorities, Women, Youth and Children.
Mr Mohammend Sylvanus Koroma (Dep. Northern Provincial Secretary), Mr. Kalie .I. Bangura(Senior Game Reserve Superintendent-MAFFS), Joseph A. Kaindaneh (Admin Officer-BHPIU-MoEWR), Bernada Perez (World Bank Social Development Specialist), John Conteh(Game Ranger-MAFFS), Michael Tommy (Game Ranger-MAFFS), Dyson Jumpah (ESMF & PF Consultant)
New boundary demarcation presentation by Mr. Bangura as part of Governments arrangement to the declare the Loma Mountains Non-Hunting Forest Reserve as a National Park and a Biodiversity Offset in fulfillment of the conditionality for the funding of the Bumbuna Hydroelectric Project. He stressed that the new boundary demarcation is to avoid involuntary resettlement of neighbouring communities. Efforts are also underway to address issues of environmental and social safeguard implications and restriction of access to natural resources by the ACs. In so doing all affected villages and communities have been taken out of the proposed demarcation for the establishment of the LMNP. The redemarcation however enables the ACs and villages to have adequate land to continue to farm but they cannot trespass into the new boundary.
The New boundary poses restriction to access to natural resources in the forest reserve. The communities are therefore expected to discuss their concerns resulting from this access to natural resources restriction with the ESMF and Process Framework Consultant.
The Rep for the Koinadugu District Chairman (Mr Mohamend Sylvanus Koromah) said the LMNPP is to help the District Council so the Communities must welcome it and that the new boundary benefits both the Neini and Neya Chiefdoms more than the old boundary. He said the project will also benefit the entire country.
The PF Consultant interacted with the community members on the following areas:
(i)The Socio-cultural background of various groups of persons living adjacent to the LMFR. (ii)The Customary and traditional rites related to natural resources in the LMFR. (iii) Equity and gender issues regarding access to natural resources, utilization and sharing of benefits from natural resources. (iv)Land acquisition issues and/or restriction of access to natural resources. (v)Sustainable alternative livelihood options and community based activities that the local people might be interested in to pursue. (vi) Social issues of concern to the affected communities. (vii)Environmental issues of concern to the affected communities.



(viii)Principal owners of natural resources and land in the area.

(ix)Mechanisms to be set up in the project to disseminate information to channel grievances of community members.

(x)Constraints and opportunities for participation in the LMNPP activities.

(xi)The short and longterm risks that different stakeholder groups are likely to face because of the LMNPP interventions.

(xii)The threats to the success of the proposed LMNPP.

Responses from the Communities

The Communities asked "what is the main difference between the Old and New Boundary?". **The P.C. Jalloh**, answered that "The main difference is that there are no more any community or village with the new boundary unlike the old boundary. However, the people still hunt, collect herbs, cola nuts, bitter cola etc from sites within the new boundary, which has to been addressed through the preparation of a Process Framework and recommendation of sustainable alternative means of livelihood through a participatory approach with the ACs.

Councilor Edward Lahai Marah-Ward 154 said he is very glad about the LMNPP and that the project is not one man's business. He said the Loma Mountains Forest Reserve is their treasure since they don't have diamond or any other mineral and that the project will offer them several benefits. He added that their Leaders residing in Freetown are aware that the LMNPP is a good one otherwise they would have alerted the community. He welcomed the further consultations to be undertaken by the ESMF/PF Consultant.

The Town Chief of Masonia said the LMNPP is a good project for all and not Masonaian alone and that they are happy with the new boundary demarcation. He added that they are glad, God should bless the Government and everybody must communicate freely with the Consultant. He concluded that the Paramount Chiefs and Councilors deserve the praise by the communities for the new arrangement and God should bless them.

Karifa Kamara (Town Chief of Buria) said he is happy and thankful to everybody. He said since their birth they are aware of the Loma reserve challenges. He said they used to be only 2ft from the old boundary. They are therefore happy for the new demarcation. He said they live right under the Loma Mountains and are very glad and accept the new boundary demarcation proposal.

Alie Marah (Town Chief of Bungokoro) said he is very thankful to all and that ever since he knew Loma is a site of significance. He is therefore happy with the project. He prayed that God should help the Chief, expressed his gladness and concluded that he therefore accepts the new boundary demarcation proposal

Manso Kamara (Town Chief of Seria-1) said he doesn't have much to say but he is very happy. He said the reduction of the boundary is welcomed and glad that the LMNPP is happening in his area.

Foday Kamara (Town chief of Seria-2) said he is in full support of the new boundary and the proposed LMNPP.

Hawa Mansaray Kamara (Queen of Seria-2) said she is very happy about the new boundary demarcation but has nothing else to say.

Foday Fofonah (Town Chief of Kamaya) said he is very happy about the new boundary. He said they get their herbs and food from the old boundary so they are now happy that they are no longer affected with the demarcation of the new boundary and that the old boundary is their source of livelihood. He requested that they need road improvement to enable vehicular movement instead of bicycles only.

Musah Marah (Town Chief of Koma Masere) said he is very happy. He said they harvest wood from the forest so does the new boundary demarcation only prohibits hunting? He was replied that no farming, wood cutting, hunting etc are allowed in the



reserve in order to ensure that the wildlife resources are protected and also to provide the anticipated tourism objectives such the viewing of rare wildlife species by visitors. It was further explained that some other benefits to the community from the project will be the payment of revenue and royalties at various percentages yet to be determined by Government. Such inflows on an annual basis could be used to provide social infrastructure for the area.

Some the key responses by the ACs to the interactions of the PF Consultant are:

- -Korankos are the main ethnic group in the Loma area.
- -Yes, there are sites within the LMFR for customary and traditional rites. However, clear demarcations needs to be done to ascertain these places.
- -Livestock rearing including poultry, construction or civil works, provision of clinics are some of the expected livelihood alternatives listed by the people.
- -Some of the important role the community people expect of their Chiefs is the organization of the communities for the creation of awareness and sensitization. Chiefs are also expected by the people to enforce the terms of agreements to be reached with all parties and stakeholders for the LMNPP.
- -Some other benefits communities are looking forward to are road infrastructure improvement, tools for community level road works, provision of gravity water supply system, deep wells, and schools to train their children particularly the girl-child. Opportunities the people are anticipating from the LMNPP are job opportunities for the youth such as tour guides.
- -Killing of animals that invade the communities and slash and burning of land for agricultural purposes were listed as some key environmental concerns.
- -To address grievances, the communities suggested the establishment of a position for a liaison officer, who will also sensitize people and create awareness.

Women Issues: The women expressed concerns about the following:

- -Proper understanding of what a National Park means,
- -What are the benefits?
- -Need for assistance to convey their vegetables to the market centres,
- -The LMFR is their main source of herbal medicine since there are no clinics in their communities so what happens?
- -Need for alternative sources of protein.
- -Lack of communication facilities in the area,
- -The need for micro-finance schemes.
- -Worries about the batter system of food for clothing in Kono.
- -What will they get in return for giving Loma to government?
- -Weaving used to be their traditional practice. They wish this is restored.

Date Chiefdom/Section/C ommunity

10/05/2011 Time: 17.00

Chiefdom: Neya

Section:

Community: Kurubonla, Chiefdom Headquaters for Neya

Key Persons Present

- 1. Demba Marah-(T A) 2. Bala Marah-(TA) 3. Lahai Marah-(TA), 4 Abu Kamara- (Town Crier) 5. Demba Marah-(Farmer)
- 6. Ibrahim Marah-(Farmer), 7. Feremanso Marah-(Family Head), 8. Mohamend Marah-(Farmer) 9. Manso Marah-(Head Teacher)



10. Saio Marah-(Town Chief) 11. Foday Kamarah-(Farmer), 12. Lamini Koromah-(Farmer), 13. Sheiku T. Marrah-(Councilor)

- 14.Konkoro T. Marah-(Teacher), 15. Ibrahim Mansaray-(Farmer), 16. Lamini Marah- Self Emp.) 17. Hassan K Marah-(Speaker)
- 18. Adulai Turay-(Regent P.C. for Neya Chiefdom), 19. Fakonde Marah-(Farmer) 20. Kalie Marah-(Youth Chairman)
- 21. Foday Marah-(Farmer), 22. Saio Marah-(Farmer), 23. Sidique Marah-(Farmer), 24. Yanku Kamarah-(Farmer)
- 25. Balah Kamarah-(Farmer), 26. Foday Marah-(Farmer), 27. Mamoud Marah-(Farmer), 28. Hassan Marrah-(Farmer)
- 29. Idrissa Kamara-(Cleaner), 30. Denkey Marah-(Farmer), 31. Sheiku Marah-(Carpenter), 32. Saio Marah-(Farmer)
- 33. Mohamend K.T. Marah-(Farmer Federation District Coordinator)

Other persons present at the community consultation meeting were:

John Conteh (Game Ranger-MAFFS), Michael Tommy (Game Ranger-MAFFS), Dyson Jumpah (ESMF & PF Consultant)

Issues Discussed

Mr. Michael Tommy led the team to exchange greetings with the community members assembled and told the gathering the reason for the meeting.

New boundary demarcation presentation was made by the Mr Dyson Jumpah-The Process Framework Consultant. He said the new boundary demarcation is part of Government's arrangement to the declare the Loma Mountains Non-Hunting Forest Reserve as a National Park and a Biodiversity Offset in fulfillment of the conditionality for the funding of the Bumbuna Hydroelectric Project. He stressed that the new boundary demarcation is to avoid involuntary resettlement of neighbouring communities. Efforts are also underway to address issues of environmental and social safeguard implications and restriction of access to natural resources by the ACs. In so doing all affected villages and communities have been taken out of the proposed demarcation for the establishment of the LMNP. The redemarcation however, among other things, enables the ACs and villages to have adequate land to continue to farm but they cannot trespass into the new boundary.

The New boundary poses restriction to access to natural resources in the forest reserve. The communities are therefore expected to discuss their concerns resulting from this access to natural resources restriction with the ESMF and Process Framework Consultant.

The ESMF/PF Consultant also interacted with the community members on the following areas:

- (i) The Socio-cultural background of various groups of persons living adjacent to the LMFR.
- (ii)The Customary and traditional rites related to natural resources in the LMFR.
- (iii) Equity and gender issues regarding access to natural resources, utilization and sharing of benefits from natural resources.
- (iv)Land acquisition issues and/or restriction of access to natural resources.
- (v)Sustainable alternative livelihood options and community based activities that the local people might be interested in to pursue.
- (vi) Social issues of concern to the affected communities.
- (vii)Environmental issues of concern to the affected communities.
- (viii)Principal owners of natural resources and land in the area.
- (ix)Mechanisms to be set up in the project to disseminate information to channel grievances of community members.
- (x)Constraints and opportunities for participation in the LMNPP activities.
- (xi)The short and longterm risks that different stakeholder groups are likely to face because of the LMNPP interventions.
- (xii)The threats to the success of the proposed LMNPP.

Responses from the Communities

The following questions were asked and the appropriate responses were given by the Process Framework Consultant supported by the Team of Field Officers.

1. Mr Balah Marah-(Tribal Authority) asked when with the LMNPP commence?

Response: The Process Framework Consultant said the LMNPP has actually started and this consultation exercise currently taking place is part of the commencement activities intended to involve the affected communities in the design and the



implementation activities for various components.

2.Lamini Koromah-From Bumukoro Community- Asked that now that the new boundary is being established purposefully for the National Park, if in future other people or companies want to enter the reserve to undertake activities such as mining how can it be prevented?

Response: The LMNP is being established under law so it will not be possible for the purpose of the establishment of the LMFR as a National Park to be changed for other purposes such as mining.

3.**Ibrahim Takie-(Kulia Community)-** He said the new boundary for the LMNP cannot be established with the consent of his community for the fear that wild animals from the reserve will come from the reserve to attack people in the community. What can be done to address his fear?

Response: The LMNP is being established under international standard practices so the appropriate measures will be put in place to address his fears and that the LMNP is not the only reserve in Sierra Leone so learning experiences from other safe operating reserves will be applied to address his fears.

4. Sheiku T. Marah-(Councilor)-It was alleged earlier that the project headquarters will be located in Konobaia in the Neini Chiefdom. Is it now going to be in Neva? Any explanation?

Response: The Process Framework Consultant explained that consultation processes for the design of project components are still in progress and the appropriate decision will be made involving all the relevant stakeholders.

Some Reaction by the Regent Paramount Chief Abdulai Turay.

The Regent said he is very thankful to God for this LMNP. He said his people must be particularly thankful to God for creating the Loma Mountains and the people working on the project. His prayer is that God will help the Government and the World Bank for more projects in the area.

He said was one of the 5 Paramount Chiefs invited at the initial stages of the LMNPP. He said the other Paramount Chiefs invited were for Neini, Bumbuna, Faduku and Diang Chiefdoms. He said he recollects that in the said meeting it was agreed the LMNPP will be done under the Bumbuna Hydroelectric Project and Neya Chiefdom will benefit from a Tourist Centre. The Regent wanted to know whether the Tourist Centre Project for Neya will take place or not? He said he do also recollect that it was agreed at that meeting that he should agree with his community people on their project of interest to be accordingly provided.

The Process Framework Consultant thanked the Regent for his intervention and assured him that all agreements and understandings reached under this project will be fulfilled with their full involvement and support.

At this point it was getting dark i.e. about 19.00 so the Regent requested that the Consultation meeting should be adjourned to the following day, 11th May 2011 at 08.30.

Second Day 2 Kurobonla Continuation of Questions and Responses at Kurubonla Date: 11/05/2011 Tmie: 08.30

The Regent of the Neya Chiefdom, Abdulai Turay, opened the Consultative meeting and directed that a document dated 14th March 2011 on needs assessment of the Neya Chiefdom in respect of the establishment of the LMNP which was prepared after the Neya Chiefdom Council meeting be read to the entire gathering. The major highlights of the needs assessment are:

- 1. That the Park Headquarters be located in the Neya Chiefdom because the access to the Loma Mountain is through the Neya Chiefdom.
- 2.The construction of feeder roads within the Neya Chiefdom, starting with the most strategic ones leading to the Loma Mountains namely: i. Kondeya Village through Bumbukoro, Seredu to Loma mountains; ii) Kumba Wullen Ballia to Yirandu, Kamaro Seredu to Loma; iii) Kumba Foraia to Fankoya, Sangbania, Sokrulla to Loma; iv) Fandala, Mansonya to Loma Mountain; v)Bonkokoro to Loma and vi) Dunamaro, Kamaya to Loma Mountains.
- 3.Improvement of Health Facilities
- 4. Mobile Communication
- 5. Employment (Job Creation) for citizens of the chiefdom, both skilled and unskilled.



- 6. Improvement in Education-More schools to give access to distant students; Trained and qualified teachers and scholarship scheme for students and teachers.
- 7. Improvement in Agriculture-Tractors for mechanical farming in low land areas; Fish ponds to provide alternative to dependence on consumption of bushmeat from the Loma Mountains.

Neya Chiefdom Structure, Composition and Ownership of the Loma Mountain

It was disclosed that the Neya chiefdom is an amalgamated chiefdom made up of 4 other chiefdoms, namely Nyedu, Kulor, Seredu and Neya, which is the headquarters. It was mentioned that Nyedu are the owners of the Loma Mountain. It was also disclosed that the proposal on the needs assessment for the Neya Chiefdom was made by the assembly of all these amalgamated chiefdoms and that it was a collective decision. This received a loud applause by the gathering as a proof of acceptance.

Responding to a question from the Process Framework Consultant as to whether they accept the new boundary demarcation, the answered in the affirmative.

It was mentioned that Seredu, Sokuralla, Brumakudor, Brokuma, Mansonia, Nyedu, Bonkokoro, Kombamansarayan, Seria-1, Seria-2, Kamaya and Perankoro are communities at the foot of the mountain and about only 2km away, so they should be fully informed and involved in the construction of the new boundary pegging for the LMNPP.

Saio Marah-(Town Chief)- Said that the Seradu Community are leaving under the foot of the mountain and their main economic activities are farming, hunting, trapping of animals and collection of herbs for medicinal purposes. Their main concern therefore is how to get their livelihood when the LMNP is established. They are also very much concerned about knowing the exact visible new boundary as soon as possible before the farming season begins.

The Traditional Head of the Town admitted that the mountain is owned by both the Neya and Neini Chiefdoms with Neya owning about two-thirds(2/3) whilst Neini owns one-third(1/3) and that the mountain is only accessible through Neya. He said that the Custodian/Stakeholders of the chiefdom are the owners of the natural resources. He disclosed that the traditional boundary dividing the Loma Mountains between the Neya and Neini chiefdoms is a Kankankoe stream that traverses the mountain through the following points:1) Serelenko Hill , 2)Loma Ferenba (Feremosu), 3)Loma Kalama and 4)Perakonko(Perankoro). He said the Bintimani mountain, which is the most distinguished and highest point of the Loma Mountain is located in the area that belongs to the Neya chiefdom. He added that the main access road to the mountain is through the Neya Chiefdom without any constraint. This road they said is called te road of the Loma Mountain. The said the road goes through Sokuralla, which is in the Neya Chiefdom.

Ethnicity

The main ethnic group is the Korankos. The people said there are 16 villages in Neya and II Villages in Neini. They said Neya Chiefdom's population is about 42,000 and the Nyedu section has a population of about 16,000. Hence, the Neya Chiefdom people basing their argument on their population figures, they want the administrative headquarters of the LMNPP to be built in the Neya Chiefdom. They further argue that Neya Chiefdom is the main access to the mountain. They also admitted that Neini also provides a shorter access to the mountain.

Potential Conflict Situation

Following from the arguments from the Neya Chiefdom people and their position, there is a likelihood of an underlying conflict situation regarding the location of facilities under the LMNPP. The implementers and key stakeholders need to recognize this potential conflict situation and ensure a participatory and transparent process of arriving at final decisions as to the location of LMNP Project facilities.

The following list of persons put forward by the Neya Chiefdom should be involved in future discussions and dialogue regarding location of project facilities and resolution of potential associated conflicts or grievances:

1.Rugie Marah- (Councilor of Neini Chiefdom and Deputy Chair Lady of Koinadugu District Council), 2. Augustine K. Koroma (Councilor Neini Chiefdom) 3.Foday Umaru Jalloh-(Neini Chiefdom), 4. Abdulai Turay: 077452106-(Regent P.C. Neya Chiefdom),



5. Sheiku T. Marah:078357424-(Councilor, Neya Chiefdom Ward 153), 6. Edward Lahai Marah-(Councilor Neya Chiefdom Ward 154), 7 Bunduka Mansaray-(Councilor Neya Chiefdom Ward 155), 8.Demba Mara-(Tribal Authority and Spokesman, Neya Chiefdom Bunmukoro), 9.Fasowa Marah-(Nyedu Section Chief), 10. Hassan Kalie Marah-(Neya Chiefdom Speaker), 11. Balah N. Marah: 077350257 -(Liaison Project Officer), 12. Sirah T. Marah-(Chair Lady Neya Chiefdom), 13. Yirah Turay-(Neya 1 Section Chief), 14. Yirah Marah-(Town Chief Kurubonla)

Traditional and Customary Rites relating to the LMFR

The people of Neya Chiefdom disclosed that there are traditional and customary rites they perform in the Loma Mountains. Some of these are Traditional Secret Society activities for both male and female (the Bondo Society for women and Gbangbanie for men). There are ceremonial ancestral centres where oracles are consulted. The spirits of the dead are also invoked. The Chiefs and Elders stressed that before the erection of the new boundary is done the necessary rites have to be performed to pave the way for entry of foreigners. It was also disclosed that it is a taboo for foreigners to enter the forest without necessary rites being performed. All these rites are to be done to apiece or satisfy the gods in order that the LMNPP will succeed.

The LMFR is also considered a mystic place so the consultation of performance of the necessary rites prior to the entry of the site for the real take-off of the LMNPP is vital.

Equity and Gender Issues Regarding Access to Natural Resources in the Loma Mountains

The Neya Community people said both men and women have equal access to the natural resources in the Loma Mountains. They believed that the Loma Mountains is possessed by both Men and Women Devils. Most of the rites performed there are done by both men and women.

Additionally, women and men all equally enjoy resources from the forest without any discrimination nor restriction by gender.

Sustainable Alternative Livelihood Options

Prior to thinking of any sustainable alternative livelihood options, the people would want to see clear boundary demarcations on land but not only paper in order to be sure that their farms are not affected.

Some alternative livelihood options the people proposed are acquisition of vocational skills, setting up of cottage industries, mechanized agriculture, provision of loans to undertake trading and compensation for potential lost of access to cash crops such as cola nut, bitter cola, coffee, oranges and cocoa.

Important Roles for the Traditional Authorities

i) After the erection of the new boundary pegs, the traditional authorities should announce categorically and establish bye-laws to prevent people from encroaching on the LMNP.

ii)The LMNP protection should be included should be included in the bye-laws of the Chiefdoms since every chiefdom has bye-laws.

iii) The Traditional Authorities could provide accommodation and security to the LMNP Project Staffs to ensure the success of the project.

iv)The Regent Paramount Chief has already began taking the necessary steps to prevent farming, wood cutting, hunting etc in the forest.

v) The Traditional authorities will organize the youth to improve the road access to the mountain in the interim until actual road improvement activities begin. However, some financial support is needed as soon as possible in respect of this initiative by the people.

Mechanisms to Address Grievances

The Neya Chiefdom community people think that they do not anticipate grievances because the LMNP is the only project coming to their area, which is considered the most deprived. They will therefore rather expect that communication infrastructure and facilities are provided to enable them disseminate information about the project. They were emphatic that there are no



grievances here and that there is already good cooperation and collaboration among the stakeholder communities.

Constraints and Opportunities to the Community for participating in the LMNP Activities

The Neya Chiefdom said their constraints are all that they have put in their needs assessment document and that should be addressed under the project. The key ones which are feeder roads construction and transportation facilities, communication, schools and hospitals and water supply. Some of the opportunities the re-echoed are: Improvement of feeder roads, access to Chiefdom Headquarters, health post, reduction in child mortality rate, communications improvement, water supply, awarding of scholarships to the vulnerable, better and improved education and housing facilities for the accommodation of visitors.

Threats to the Success of the Proposed LMNP

According to the people of the Neya Chiefdom, the main threats to the LMNP are the following:

- i) The location of the Administrative headquarters of the LMNP. They claim that if the headquarters is not located in the Neya Chiefdom there will great conflict.
- ii) Failure to compensate people who will no longer have access to the forest reserve may be compelled to encroach the park, which will be detrimental and a big threat to the project.
- iii)Limitation of access to future agricultural land. Though the new boundary demarcation allows the farmers to continue their farming activities outside the new boundary they cannot expand such farms in the future.

Date Chiefdom/Section/Community Key Persons Present

11/05/2011 Time: 17.20

Chiefdom: Neini Section:..... Community: Gbenekoro

1. Mohamend Koroma-(Town Chief), 2. Bankali Mara-(Youth Leader), 3. Musa Mara-(Tribal Authority), 4.Kulako Koroma-(TA) 5.Fasali Koroma-(TA), 6. Siniba Koroma-(TA-Women), 7. Jakuba Koroma-(T.A), 8. Saio Koroma-(Chair Lady), 9.Persi Koroma-(TA), 10. Yeri Koroma-(TA-Women), 11. Sheiku Koroma-(Youth Chairman), 12. Bala Mansaray-(TA), 13.Dauda Koroma-(Teacher), 14. Ibrahim K. Mara-(Teacher), 15.Mohamend Mara-(Imam), 16.Musah Mara-(Farmer), 17.Suruku Koroma-(3rd Imam), 18.David Koroma-(Dep Headmaster), 19. Sheiku Sessay-(Farmer), 20. Bala K. Koroma-(Pastor), 21. Kalie Koroma-(Farmer), 22.Bala Tronka-(Farmer), 23.Kumba Koroma-(TA), 24. Mohamend Sessay-(Farmer), 25. Sheiku Faro-(Trader), 26.Kuya Koroma-(Secrtion Chief Woman), 27. Maa Sali Koroma-(Speaker-Women Side), 28. Jomba Mara-(2nd Speaker), 29. Feren Findaboh-(Imam's Wife), 30. Konkofa Koroma-(Farmer), 31. Bangali Mara-(Blacksmith), 33.Yayah Koroma-(Farmer), 34 Bala Musa Tronka-(Farmer), 35.Bambeh Mara, 36. Ferenkeh Koroma-(Farmer), 37 Lansana Mara- (Farmer). 38. There were over 100 other community members present.

Other persons present at the community consultation meeting were:

John Conteh(Game Ranger-MAFFS), Michael Tommy (Game Ranger-MAFFS), Dyson Jumpah (ESMF & PF Consultant)

Issues Discussed

Mr. Michael Tommy led the team to exchange greetings with the community members assembled and told the gathering the reason for the meeting.

New boundary demarcation presentation was made by the Mr Dyson Jumpah-The Process Framework Consultant. He said the new boundary demarcation is part of Government's arrangement to upgrade the Loma Mountains Non-Hunting Forest Reserve as a National Park and a Biodiversity Offset in fulfillment of the conditionality for the funding of the Bumbuna Hydroelectric Project. He stressed that the new boundary demarcation is to avoid involuntary resettlement of neighbouring communities. Efforts are also underway to address issues of environmental and social safeguard implications and restriction of access to natural resources by the ACs. In so doing all affected villages and communities have been taken out of the proposed demarcation for the establishment of the LMNP. The re-demarcation however, among other things, enables the ACs and villages



to have adequate land to continue to farm but they cannot trespass into the new boundary.

The New boundary poses restriction to access to natural resources in the forest reserve. The communities are therefore expected to discuss their concerns resulting from this access to natural resources restriction with the ESMF and Process Framework Consultant. collaborate with the project implemters to design various project components and also fashion out sustainable alternative livelihoods the affected communities would like to engage in.

The PF Consultant also interacted with the community members on the following areas:

- (i)The Socio-cultural background of various groups of persons living adjacent to the LMFR.
- (ii) The Customary and traditional rites related to natural resources in the LMFR.
- (iii) Equity and gender issues regarding access to natural resources, utilization and sharing of benefits from natural resources.
- (iv)Land acquisition issues and/or restriction of access to natural resources.
- (v)Sustainable alternative livelihood options and community based activities that the local people might be interested in to pursue.
- (vi) Social issues of concern to the affected communities.
- (vii)Environmental issues of concern to the affected communities.
- (viii)Principal owners of natural resources and land in the area.
- (ix)Mechanisms to be set up in the project to disseminate information to channel grievances of community members.
- (x)Constraints and opportunities for participation in the LMNPP activities.
- (xi)The short and longterm risks that different stakeholder groups are likely to face because of the LMNPP interventions.
- (xii) The threats to the success of the proposed LMNPP.

The People said their population is about 850 including both men and women. Their main ethnic group is Korankos.

The Gbenekoro people said they have no traditional nor customary rites that they perform in the forest reserve.

Land is owned by their ancestors namely Kangbe Koroma, Farah Koroma, Jonkor Monso which has been passed on to the present grand children such as Poreh Koroma, Paa Faseli Koroma, Foray Mara, Musa Mara, Kulako Koroma, Joseh Mara, Keli Koroma, Suruko Koroma, Mohamend Mara, Sheiku Koroma, Mohamend Koroma, Faseli Koroma etc.

The Gbenkoro community Chiefs , Tribal Authorities, Elders etc admitted that they are aware of the proposed LMNPP and the new boundary demarcation . They pointed out that though the Gbenekoro Village is outside the new boundary they are confronted with the issue of restriction to access to natural resources. The community people said they farm, hunt, collect medicinal herbs, cola nuts from the forest. They however do not know the exact boundary yet to enable them have a complete idea of the extent of the actual impact the new boundary might have on them. The community people mentioned that Gbenekoro is about 1 mile from the old boundary.

The main social issues of concern are the following:

- The Loma Mountains Forest is their source of livelihood so restricting access to the forest will deprive them of their livelihood.
- Lack of water supply, health centre, community school, shelter etc.

Notwithstanding the above social concerns the community expressed their desire to have the project go on with the expectation that the project will provide them with job opportunities. They expressed their preparedness to offer any support they can to the project.

The main threat to the project from their perspective will be the lack of opportunity to feed themselves if they are not able to farm in the forest. They said they are not aware of any conflict among any group of people about the resources in the Loma

Responses from the Community



mountains.

The women said they depend on their husbands who farm in the forest so if their husbands have agreed to move from the forest they have no objection.

The community said alternative land will be available for farming but these lands could only be cultivated with the help of tractors and other farming equipments.

Date Chiefdom/Section/C ommunity Key Persons Present

11/05/2011 Time: 20.25

Chiefdom: Neini Section:...... Community: Konobaia

1. Sheiku Marah-(Town Chief),2.Shenbureh Marah-(Mami Queen), 3.Kelfa Marah-(Famer), 4.Kelly Koroma-(Youth Leader), 5.Musa Jawara-(Farmer), 6.Saio Koroma-(Farmer), 7.Mohamend Marah-(Farmer), 8.Fasalie Kamara-(Farmer), 9.Daniel Marah-(Head Master), 10.Sundu Marah-(Community Based Officer), 11.Konkofa Koroma-(Community Based Officer), 12. Foray Sesay-(Farmer), 13.Ferengbe Koroma-(Farmer), 14. Maforay Marah-(Farmer), 15.Fallah Marah-(Farmer), 16.Mantenneh Koroma-(Farmer), 17.Finnah H. Koroma-(Farmer), 18 Other communities members present counted were over 143.

Issues Discussed Responses from the Community

Same as above

The Town Chief expressed his happiness about the project and appreciation to the Government. He said this project calls for the involvement of all and that though a new boundary has been established they need to know the exact location of the boundary on the ground. He said they have been living in extremely deprived conditions and the lack of development around the Loma Mountain for so many years and that the takeoff of the LMNPP is what they have been waiting for.

The estimated population of the community provided by the people is about 960, including women and children. The people said th Konobaia community is about 2miles from the mountain.

The Chief stressed that the Loma Mountain is very important to the community and listed the following as some of the benefits they derive from the LMFR:

- -Main source of livelihood
- -Place of religious significance
- -Source of water

The Chief enumerated the following as their **main concerns**:

- -Lack of good community schools, educational facilities and teachers. Children have to walk several miles to attend school.
- -Lack of health centres with the necessary health facilities to provide good health services to the people. The community therefore depends solely on herbs from the LMFR. The predominant diseases in the area affecting the people are hernia, pneumonia and malaria. Other health related problems pregnancy and malnutrition.
- -A very poor road network as one the major problem to the community,
- -Lack of communication network in the whole area.

The Women Leader lamented that they are really struggling to survive, particularly with reference to maternity health facilities for pregnant women. She said several pregnant women have lost their lives as result of child birth complications due to the lack of maternity health facilities and the need to walk several miles for health assistance on very poor roads.

The benefits the community are anticipating from the LMNPP are:

- -Road infrastructure improvement,
- -Provision of alternative means of livelihood and alternative sources of protein in place of bush meat,
- -Provision of community schools with good facilities for the children,
- -Provision of health care centers with equipped facilities and man power
- -Provision of equipments and implements for the cultivation of grassland areas
- -A community meeting place



Potential threat to the LMNPP

A failure to comply with agreements that will be reached under the LMNPP by all stakeholders will be the main threat to the project.

Date
Chiefdom/Section/Community
Key Persons Present
Issues Discussed
Responses from the
Community

12/05/2011 Time: 07.30

Chiefdom: Neini Section:...... Community: Krutor

1.Dagbala Koroma-(Town Chief), 2. Daboh K. Poreh -(Teacher) 3. About 80 Community members were present

Same as above

The Chief expressed his deep satisfaction about the project. He said the ownership of the Loma Mountain belongs to all in Sierra Leone but the immediate communities are the directly affected people and for that matter they must receive the immediate benefits. His main concern is what will be the alternative to the natural resources that they derive from the forest. He mentioned that two rivers, namely River Gbagbeh and River Say have been a major constraint to the village.

The traditional leaders are the land owners. They said portions of the Loma forest is owned by the community. The main areas of the Loma Forest they own are Henekuma, Kintibaha, Nyafaraya, Laiah, Yirah, Namaya, Kulburoh, Gberikelia and Tinfay. They disclosed that the community is about 7miles from the mountain. They said the community does not have enough forest farm lands. The land areas available for farming are mainly grassland where tractors will be needed for cultivation.

The estimated population figure provided by the community is 3,500 (male-1700 and female-1800). The main ethnic group is Korankos. Their main food crops are rice, cassava, millet, maize, potatoes, yam and beans. Coffee, Cocoa, Cola nut and Palm are their main cash crops. Market gardening crop is pepper. Pineapples, pear and oranges are some of their fruit crops.

Local Forest Reserve Regulating Laws

- -No cutting of spices trees, bitter cola trees and trees in high forest areas are allowed. A culprit will pay a fine of one cow;
- -Farming is allow only in the low lying areas but not the upland areas,
- -Outsiders are not allowed to hunt in the forest,
- -Frequency of entry into the forest by any person is at least once or at most twice in the year as a measure to protect the wildlife.

Traditional customary rites are performed in the month of April every year in the forest.

Main Diseases and health related problems

Hernia, appendicitis, malaria, diarrhea, Cough, epilepsy, measles, cholera, convulsion, pneumonia, chicken pox, TB, asthma, typhoid and pregnancy problems.

Education Facilities available:

There is one Government assisted Primary school called the MCA Primary School of Krutor. The school has a pupil population of 853 made up of 401 boys and 452girls. There are 10 teachers (1 female and 9 males) in the school. Seven of these teachers are on government payroll whilst the remaining three(3) are paid by the community.

Potential Benefits the Community anticipate from the LMNPP and alternatives due to restriction to natural resources

- -Assistance to undertake livestock rearing such as cattle as an alternative to bushmeat from the forest;
- -Fish ponds to promote aquaculture to complement protein needs of the community;
- -Incomes from cola nut, bitter cola, spices, herbs enables the people to among other things to construct their buildings. Support to provide shelters will be expected if these income sources will dry-up as a result of restriction of access to natural resources in the LMFR.



- -Provision and improvement of roads. According to the people, Krutor has never benefitted from any infrastructure from the Government and that they have been totally cut-off.
- -Better structures and facilities for the Krutor community school and provision of training centers for vocational skills training.
- -Provision of healthcare centers.
- -Support for mechanized farming
- -Community centre and community food storage facility.
- -Creation of job opportunities for the youth whose lives are much dependent on the LMFR in order to avoid any social menance and migration to the cities.
- -The community depends on unwholesome water from streams. The only available hand pump well is not functioning properly. There is therefore the need for a good source of drinking water for the community.
- -A community member suggested that there is the need to ensure that employment conditions in the management of the park are done in a manner to avoid teachers leaving the classroom for lack of good teaching conditions as it is happening now in the mining areas at Ferengbeya in the Diang Chiefdom.

Threat to the LMNPP

The community people thinks that the major threat to the project will be the failure to fulfill their concerns and requests that are being put forward. If their concerns and requests are met, they themselves will provide the needed security for the project.

Date Chiefdom/Section/C

18/05/2011

Time: 13.30

Chiefdom: Sandor Section:..... Community: Kayima

Note: The Sandor Chiefdom and the Kayima community were selected for the Chiefdom level interview because of the strategic location of the chiefdom with reference to the Neya and Neini Chiefdoms. The Sandor Chiefdom and Kayima are like the anchor chiefdom and community to the Neini and Neya Chiefdoms. The Sandor chiefdom also share boundaries with the Neini and Neya Chiefdoms and 7 other Chiefdoms.

Key Persons Present Issues Discussed

1.Paramount Chief Sheiku Amadu.Tejan. Fasuluku Sonsiama III, Sandor Chiefdom

- Community level rapid socio-economic assessment covering community demographic information-population, ethnicity, and basic community infrastructure facilities available such as schools, health centres, electricity, water, road, communication etc.
- Understanding the main economic activities of the community, main food crops, main cash crops and gardening/vegetable crops;
- Land Ownership status, adequacy of land available and information on other non-agricultural activities;
- Importance of wildlife to the community, investigation about local laws for regulating natural resources, main sources of energy for cooking and lighting and the extent of the community involvement in natural resources management;
- Significance of the Loma Mountains Non-Hunting Forest Reserve to the community; and
- Suggestions from the community for the improvement of the management of the Loma Mountains Non-Hunting Forest Reserve.



Responses from the Paramount Chief

Kayima is the Headquarters of the Sandor Chiefdom. There are 9 sections in the Sandor Chiefdom. The Sandor Chiefdom shares boundaries with Neya, Neini, Lei, Faima, Gbanse, Kamara, Nimikoro, Nimiyama (Kono District), Neini and Neya (Koinadugu), Konikesanda (Tonkolili Dist).

Sandor has a population of about 49973. The main ethnic group is Konos. The Korankos and Mandigos are small ethnic groups present in the Chiefdom.

Education Facilities

Nursery Schools-7, Primary-72 and Secondary-4 For 47 schools there are 8925 Pupils with 47 teachers.

Health Facilities

1 Health care centre and 8 PHU under the management of Community Health Officers.

Economic Activities

Main food crops are cassava, rice and potatoes. Coffee, Cocoa are the main cash crops. Sandor is the leading Chiefdom in cash crop production. Pepper is the main vegetable grown in the Tama Forest as well as some okro and spring onions.

Land Ownership is entrusted in the hands of the Paramount Chiefs and Town Chiefs. Adequate land is available for farming. There is however the need for a proper land use planning.

Importance of the LMNP

The LMNPP is very important to the Sandor Chiefdom. Sandor is like the hub of the LMNPP and could benefit significantly from the LMNPP and is prepared to collaborate with the project stakeholders in many ways.

Involvement in LMNP Management

Areas that the Paramount Chief think Chiefs can be involved in the management of the LMNP are:

- -Community sensitization and training, particularly in wildlife ecology;
- -Development of alternative livelihood for the communities
- -Provision of community development projects such as roads, guest houses, schools, conservation education, fuel-wood collection, bee keeping etc
- -Controlling of wild fire

Suggestions for involving traditional authorities in the LMNP management:

The P.C. suggested that traditional authorities should be involved as PRO's between their subjects and the project management teams.

Suggestions for improving the LMNP Management

- -NGO's must not be involved in the management. NGOs bring alien priorities to the communities. The communitities should be given adequate participation in the project planning and prioritization.
- -There should be transparency in the administration of the project:
- -Community development projects should concentrate on road projects considering the deplorable state of roads in the area.

Date
Chiefdom/Section/C
ommunity
Key Persons
interviewed
Issues Discussed
Responses from the
Paramount Chief

20/05/2011 Time: 1600

Chiefdom: Neini Section:...... Community: Krutor

1. Paramount Chief Almamy Umaru Foday Jalloh III

Same as above

The P.C. said there are 5 sections in the Neini Chiefdom. These are Yiffin, Kallian, Siradu, Wollay and Barawah sections. There about 150 villages. He said the population of the Chiefdom ranges between 46-50,000 comprising of female 52% and male about 48%. The main ethnic group Korankos. There are some minorities Temnes.

Education and Health Facilities

There about 40 primary schools and 6 secondary schools. There are about 500 teachers in the schools in the area.



The Chiefdom has Seven(7) Health Care Centers with only one (1) Community Health Officer and seven (7) Supervising Nurses The sources of water for the communities are from Bore Holes (30), Streams (120) and Gravity Water Supply for 4 communities.

Road conditions are very poor and accessibility in many of the communities is only seasonal.

The main food crops are rice, groundnut, cassava, cocoyam, potatoes and beans. Coffee and cocoa are the main cash crops. Vegetable crops are pepper, garden eggs and tomatoes. Gold and Blackstones (iron ore) mining are some other non-agriculture activities in the chiefdom.

Land ownership status is communal. Enough land is available for farming in the chiefdom.

Importance of the LMFR

The LMFR is their main source of bushmeat-hunting (60%) and fish (30%). Domestic sheep/goats provides about 10% of their protein needs. The supply trend of bushmeat in the communities is declining due to the enforcement of laws prohibiting hunting in the Loma mountain forest reserve.

The main source of energy for cooking and lighting is wood collected from the bush.

The chief disclosed that there are local laws regulating the LMFR but it has not been codified.

Involvement in the LMNP Management

The P.C said there is no formal involvement of the chiefs in the management of the LMFR though the resources in the reserve are in the custody of the P.Cs.

Suggestions for Involving Traditional Authorities in the LMNP Management

The P.C. said it is very important to get the traditional authorities involve in the management of the LMNP by putting the relevant structures in place for decision making and participation in the management of the park.

Significance of the LMNP

It is the main source of income for the development in the communities within the chiefdom and if properly managed it will give rise to a boom in the ecotourism sector.

Suggestions for Improving the LMNP Management

- i). Government should put a premium on the Loma Mountain due to its economic viability to the chiefdom and the entire country. (ii) The project should provide employment opportunities to the youth and other skilled people.
- (if) the project should provide employment opportunities to the youth and other skilled
- (iii). Maintain the cultural heritage (history and traditional dance) of the people.
- (iv)Opening up of the chiefdom to foreigners and investors to bring in the needed developments and trade for business boom.

Date
Chiefdom/Section/Community
Key Person
Interviewed
Issues Discussed
Responses from the
Community Liaison
Officer

23/05/2011 Time: 07.00am

Chiefdom: Neya Section: Community: Konobaia

1.Daniel N. Marah-(Head Master, Konobaia Primary School)

Same as above

The population of the Konobaia community is 966. The main ethnic group is Korankos. The Fulas and Temnes are minority ethnic groups in the community.

Facilities

There is only 1 Primary school in the community with a total enrollment of 666 comprising 294 boys and 372 girls and 9 teachers. The school receives pupils from other neighbouring communities.

The community has no health facilities. Streams are the main sources of water for the people. Road condition in the area is very bad and only seasonal.

Rice, maize, soghum, cassava and potatoe are the main food crops. The main cash crops are cola nut, palm oil, cocoa and coffee. Pepper and tomatoes are the main vegetable crops. Other non-agricultural activity in the community is hunting with



traps. The LMFR is their main source of bushmeat-hunting (80%) and fish (20%). The availability trend of bushmeat is declining due to the enforcement of restrictions.

The main source of energy for cooking and lighting is wood collected from the bush.

Land ownership is Communal. The community has adequate land for farming.

There are local laws regulating the LMFR.

The community is involved in the management of the LMFR through the making and enforcement of local bye-laws

Significance of the LMFR to the Community

i)Source of wood ii) Collection of cola nut and medicinal herbs iii) Source of fishing iv) Planting of bamboo and v) Source of water for the community.

The main suggestion made for the improvement of the management of the LMFR is the improvement and control of the access to the LMFR.

Suggested alternative livelihood activities

i)Keeping of livestock and poultry. (ii) Fishing ponds for aquaculture (iii) Provision of equipments to undertake mechanize farming. (iv) Vocational training centre to offer skills training to the youth (v) Provision of health facilities, water, schools etc.

Date
Chiefdom/Section/Community
Key Person
Interviewed
Issues Discussed
Responses from the
Principal of Yiffin
Secondary

23/05/2011 Time: 11.00am

Chiefdom: Neini Section:...... Community: Yifin

1. Mr Mamorie G.P. Mara-(Principal, Yiffin Secondary School)

Same as Above

There are 5 sections and 119 vilages in the Neini Chiefdom. Some of the Key Communities are Yiffin, Alikalia, Kumala, Sumbaria, Firawa, Krutor, Konobaia and Bandakarfaia. The Neini Chiefdom has about 40,000 population. The main ethnic group is Korankos. The Limbas, Temne, Mendes and Konos are other minority ethnic groups in the Neini Chiefdom.

There are about 60 Primary schools with about 5000 pupils population and 7 secondary schools, each at Yiffin, Alikalia 1,Sumbaria, Kumala, Firawa,Kaya and Alikalia MCA with the following students and teacher populations respectively-(560;15), (300;8), (150;6), (200;5), (200;5), (120;7) and (130;7).

There are 6 clinics with CHOs (2) at Yiffin and Fariwa.

The main food crops are rice, maize, cassava, potatoes, millet, yams. Coffee, cola nut and palm oil are the main cash crops. The main vegetable crop is pepper.

Land ownership is communal. Adequate land is available for farming.

Importance of LMNP

Primary souces of protein are fish (60%) and bushmeat (40%). Bush meat is mainly obtained from around farms in the forest. Hunting of animals is declining but fish availability is normal.

There are no local laws in the regulating of the LMFR. The community only interprets and enforces government laws against hunting.

Involvement in LMNP management

Ensuring the compliance of laws regarding the LMNP. Local authorities adopt their own conservation practices such as prohibition of slashing and burning.

Suggestions for Involving traditional Authorities in LMNP management

i)Sensitization of the traditional authorities and empowerment to manage and enforce laws protecting the LMNP.

ii)Create incentives for those complying with laws in order to inspire and motivate others.

iii) Changing the methods of farming which are not favourable to the protection of the forest eg Mechanized farming in the lowland areas.

Significance of LMNP to the Chiefdom



i)The LM is very significant to the chiefdom because the people know that the Bitimani is the highest mountain in Sierra Leone and a pride to the people.

ii)The LM has huge tourism potential (iii) Income from tourism to the people in the community (iv) Protection of the Forest Reserve will contribute to the global warming reduction efforts. (v) The LM is a source large volumes of water feeding the Bumbuna Hydroelectric Project.

Suggestions for improving the LMNP management

i) Create a system for the people to work on the LMNP fully employed so that they will fully concentrate on the management. (ii) Sensitization to protect what is in the forest. There should be forest guards to protect both plant and animal species. (iii) There should be a proper monitoring system in place to ensure that special biodiversity species are not taken away. (iv)People leaving in the neighbouring affected communities should be provided with sustainable alternative means of livelihoods such as introduction of mechanized farming, domestication of livestock. etc

Date Chiefdom/District Key Person Interviewed Issues Discussed

23/05/11 Time: 16.00

Kabala Koinadugu District Council

1.Umaro Jalloh-Deputy Chief Administrator for Koinadugu District Council

- District level rapid socio-economic assessment covering the Neini and Neya Chiefdoms demographic informationpopulation, ethnicity, and basic community infrastructure facilities available such as schools, health centres, electricity, water, road, communication etc.
- Understanding the main economic activities of the community, main food crops, main cash crops and gardening/vegetable crops;
- Land Ownership status, adequacy of land available and information on other non-agricultural activities;
- Importance of wildlife to the community, investigation about local laws for regulating natural resources, main sources of energy for cooking and lighting and the extent of the community involvement in natural resources management;
- Significance of the Loma Mountains Non-Hunting Forest Reserve to the community; and
- Suggestions from the community for the improvement of the management of the Loma Mountains Non-Hunting Forest Reserve.

Responses from the Deputy District Administrator

The populations of the Neini and Neya chiefdoms are 39,107 and 33,426 respectively as per the 2004 population and housing census.

The main ethnic group of the two chiefdoms is Korankos.

Facilities

There are very few secondary schools in the two chiefdoms. Neya has only 1 secondary school whilst Neini has 3. Another new secondary school is under construction for Neini due to be completed in September 2011.

The Loma Mountain National Park project is the "baby" of the Koinadugu District. However, on several occasions interactions and discussions with the communities have been held by various stakeholders without the prior consent of the District Office. The Dep Chief Administrator said the District Office initiated the LMNP project as far back as 1975 but new demarcations are



being done today without the full involvement of the Koinadugu District Council. He said this has led a conflict between two Councilors which the District is not happy about. A complaint letter on this situation has been sent to the Forestry Ministry copied to the Ministry of Tourism and Culture. He expressed the dissatisfaction of the Council on the situation whereby institutions neglect them when they are visiting the communities around the Loma Mountains and only revert to the District when they are confronted with problems.

He said the country is aware of the ongoing proposal to elevate the LMFR into a Park status but the role of the District Council as the overall development agent has not been defined. They however appreciate the project and would want to be fully involved.

The Dep Administrator expressed their concern about the new locations for project facilities identified by Mr Bangura of the Forestry Division as against that of the Council which was done in 1975. He said there was a previous document pertaining to the previously identified project locations. He Mr. Bangura's action has led to a serious conflict between the affected sections. The council expects that the stakeholders will work together as a team. Another major concern of the council as expressed by the Deputy Administrator is that the main activity of the affected communities is farming and hunting so their dilemma is as ACs are likely to be restricted what will be the sustainable alternative means of livelihood.

Involvement of the District in Natural Resources Management

The Koinadugu District Council is involved in the management of natural resources. The Forestry Unit at the District is within the District Council. He said nurseries for both private and district forests establishment are being encouraged. He the funding for Forestry comes to the District Council.

Significance of the LMFR to the District

If the LMNP is well developed, the District will benefit significantly and it will help improve the economic status of the people of the District through the patronage of goods and services by foreigners and visitors. It will also change the social life of the people. It will also bring more revenue to the District as well as the Government.

Suggestion for improving the LMNP Management

Involvement of the Koinadugu District Council as a member of the management committee and the implementation of the project is vital for the improvement of the LMNP project management.

An understanding was reached between the Process Framework Consultant and the Deputy Administrator that a stakeholder meeting among The District Council, the Forestry Division, the Bumbuna Project Implementation Unit, the Process Framework consultant and other relevant parties will be held at a convenient date to further discuss relevant issues about the LMNP project that will ensure a collaborative effort for a successful project.

Date
Chiefdom/District
Key Person
Interviewed
Issues Discussed

23/05/2011 Time: 16.55

Kabala Koinadugu District Council Statistics Office

1.Mr M. S. Koroma-District Director for Statistics

A brief background on the Loma Mountains National Park Project, the new boundary demarcation consultation exercise and the ongoing affected communities' consultations in connection with the preparation of the ESMF/PF including socio-economic survey was presented by the Consultant. The consultant requested population data on affected communities in the Neini and Neya Chiefdoms, which are in the Koinadugu District.

Responses from the Director for the District Statistics Office The District Statistics Director presented chiefdom level maps showing the affected communities and an abridge 2004 Statistics document to the Consultant. The Director has promised to compile section level population figures to the consultant.

Date District Stakeholders Makeni City Council 1/06/2011 Time: 10.30

1. M.S.Koroma-(Deputy Provincial Secretary), 2.P.C. Foday Jalloh-(P.C. Neini), 3.P.C. Abdulai Turay-(Acting P.C. Neya), 4.Mr



Sheku Lahai Marah-(Council of Elders-Wolley Section), 5. Ismail M. Bangura-(Councilor), 6.Kalil Kanu-(Chairman-Drivers Union), 7. Amara Sillah-(Section Chief), 8. Foray M. Marah-(Youth Rep), 9. Alice S. Kamala-(Agriculture Coop), 10. Augustine K. Koroma (Councilor 157), 11. Shieku Marah 12.Balla Marah 13. Lansana Conteh-(Stakeholder), 14 Foday Marah-(Journalist), 15 Mohamend Marah-(Stakeholder), 16. Adama F. Conteh-(Councilor), 17. Isatu B. Tarawali 18.Raymond I.B.Sharkah-(PS Coord North DNS), 19. Blima T. Koroma-(Councilor), 20. Alhaji M.L Koroma-(Chief Imam), 21. Haja Sento Conteh-(Councilor), 22. Joe Pfeh-(Coalition Chairman), 23. Rugie Marah-(Ag Chairman), 24. Davis S. Koroma-(LUC SLP) 25. Ben Bella Koroma-9Chiefdom Councilor), 26. Alex Kapotho Koroma-(Councilor), 27. Dyson Jumpah-(ESMF/PF Consultant), 28. Kate M.B. Garnett-(Asst Dir Cons and Wildlife), 29. Sheku T. Marah-(Councilor), 30.Hon Danda M. Kruleh-(M.P), 31. Abdul Jalloh (Director-MoEWR), 32. Hon Momorie M. Koroma-(M.P), 33. Abdul M. Kamara-(Councilor-MCC), 34, Moses Turay (Councilor-MCC), 35 Joseph A. Kaindaneh-(AO,MoEWR-PMU) 36.Alimamy B. Koroma-(CA-Koinadugu Distric Council

Responses from Key Stakeholders

Welcome Address by The Deputy Mayor of Makeni City Council

The Deputy Mayor welcomed all the participants present and expressed her wish for a successful stakeholders meeting. She tasked every stakeholder to actively participate in the meeting.

Purpose of the Meeting

Mr. K.I. Bangura said the Forestry Division of the Ministry of Agriculture, Forestry and Food Security (MAFFS) in partnership with the Bumbuna Project Management Unit are endeavoring to effect a Cabinet Conclusion to establish the Loma Mountains Non-Hunting Forest Reserve as a National Park with the objective to:

-elevate the current status of Loma Mountains Non- Hunting Forest Reserve to National Park to develop ecotourism and -estab: ish te Loma Conservation area as an offset to the Bumbuna Hydroelectric Dam Project.

He said the above intention has been met with stiff resistance from only one out of the four (4) communities assembled for the consultation meetings held on various dates in May 2011 in order to seek community opinions and support for the changed boundary. This is considered the first step to constitution of the Loma Mountains to National Park status. But the uncompromising attitude of the some of the stakeholders has been an obstacle to the process of constitution. He said the project is time bound, two years of which one year is almost wasted, and it is very likely that the World Bank, which is funding the project through the Bumbuna Hydroelectric Project will withdraw its funding should this problem continue.

Mr. Bangura concluded that it is on the basis of the above that the stakeholders' meeting was being held to find a solution the impasse.

Address by Hon Northern Residence Minister

The Hon Minister welcomed all the stakeholders. He said the caliber of stakeholders present at the meeting is a demonstration of the seriousness of the stakeholders meeting. He extended the greetings from the President and said the President and the Government of Sierra Leone has approved the Loma Mountains National Park Project so everybody must do what they can to support the project. He said government is desirous to work with the affected communities on the way forward. He said the main issue is for the affected communities to engage in dialogue for their benefits otherwise posterity will judge them. The following were other key points in his address:

- -There is the need to ensure that there is clarity on every aspect of the project;
- -Lessons must be learnt from how the affected communities near the Bumbuna Hydroelectric Project collaborated with Government and all stakeholders to make the project successful,
- -The LMNP project is mainly intended to bring development to the people but nothing else. The affected communities may need various assistance such as equipments to undertake mechanized farming etc.
- -He noted that the underlying grievance of the concerned communities has to do with internal Chieftaincy agreements, He welcomed their initiative to express their grievances but requested of them to adopt a give and take approach taking cognizance that the project is a development project.
- -The division of sections is not the duty of MAFFS. Sections division emanates from the action of Paramount Chiefs brought to the attention of Government.



In his conclusion, he said the following should be well noted:

- (i) The Government of President E.B Koroma has approved the LMNP Project
- (ii) Affected communities should put their concerns forward but must not stand against the project,
- (iii) Chiefdom Internal Agreement is the underlying problem of the grievances by some of the affected communities but not that they are against the project.
- (iv) It is the sections and Chiefdoms who has power for sections division but nobody else.

He finally stressed that in countries like Kenya and other Eastern African countries significantly depends on tourism and they have good democratic systems of governance. He urged the affected communities to take the project as their own and their "diamond" and that the LMNP project is the only project that is likely to give the area an international road in the future.

MP-Neya Chiefdom

The MP said the Neya Chiefdom and he himself as the MP for the area completely dissociate themselves from the so called complaint letter. He said the writers of the said letter have not been nominated to represent the Neya Chiefdom and communities. The MP however, expressed his concern about the number of Neya representatives present at the meeting considering that the Loma Mountain is in the Neya Chiefdom according to Sierra Leone Geography. He said it is not true that 75% of the Loma Mountain is in the Neini Chiefdom.

The MP appealed to all the affected communities to cooperate with the Forestry Division and other stakeholder institutions to make the LMNPP succeed since the area does not have mineral resources such as diamond. He said if the project is developed it will bring revenue to the people. He cautioned that nobody can intimidate anybody to get any appointment on the project. Anyone who need job must goe through the appropriate procurement processes.

-MP-Neini Chiefdom

He urged the affected communities to support the LMNPP. His concern is the lack of transparency and accountability and that the truth is not being told. He encouraged the affected communities to be concerned about the benefits that they could get under the project rather opposing the project. He said the issues of ownership are factual and are already documented.

The Deputy Permanent Secretary mentioned that there are no other documents on the LMNP and that the New Boundary demarcation report is the only report available now. The other documents which are being prepared which requires the consultation with the affected communities and all relevant stakeholders is the Process Framework.

Dr Abdul Jalloh-Director of BHPIU-MoEWR

He said the World Bank is supporting the LMNPP with all funds but within a period. He said any delay will cause the project funds to be repatriated at the close date of the project in 2012.

He said Neya Chiefdom has been giving their full cooperation and support for the project. It is only the Wolley Section that is not cooperating. He asked the people to consider the long-term benefits of the project to the affected communities and the entire Sierra Leone. He made reference to Cape Verde, which has 10 water bodies, which have been developed into attractive tourist sites. He said similarly, the LMNPP will create opportunities for tour guides.

The project would not give rise to the relocation of neighboring affected communities. The main issue is the restriction of access to natural resources and loss of livelihoods.

Addressing the concerns of the lack of accountability and transparency, Dr Jalloh said the World Bank Project funds cannot be spent without accountability and transparency and that he is eager to ensure that the people and all interested parties are involved in the processes and given access to all project documents.

Mr. Sheku Mansarav-Director, Forestry Division of MAFFS

H e expressed his satisfaction of how other speakers have spoken and that the manner of the discussions is helping clear doubts



and ambiguities some people are harboring.

He said Forestry Reserves are mainly in the hands of Government for management for the people of Sierra Leone. The Forest Reserves serve several benefits to the entire country; He said there are about 48 Forest Reserves in the East, South and Northern Provinces of Sierra Leone. He said the Governments concern is how the affected people and communities will benefit as developments move to these Forest Reserves.. He said tourism is governments' major development priority and that the World Bank is supporting the Kangari Hills, OTNK and LMNPP with a \$5million facility. He the Loma Mountains proximity to the Bumbuna Hydroelectric Project provides more advantage hence its use as an offset to the BHEP with a \$2million funding.

The Director of the Forestry Division explained the need to prepare the required World Bank Environmental and Social Safeguards Document as a requirement for the funding of these Forest Reserve projects. He said for the LMNPP there are no resettlement issues as result of the revision of the old boundary. However, there issues of restriction of access to natural resources and potential environmental issues for which an ESMF and a Process Framework are being prepared.

He said there will be categories of beneficiaries' depending on the proximity of the affected communities to the new boundary. There is therefore the need for the affected communities to nominate liaison persons to coordinate between the communities and MAFFS. He said the Government stands for transparency, awareness, fairness and respect. He pointed out that the Process Framework document being prepared will become working document for the project. He disclosed that under the LMNPP exceptions will be granted to certain activities such as bee keeping, collection of NTFPS that could take place in the reserve but this will be agreed upon with the communities through management plans. Additionally, job opportunities to be created under the project will be distributed through proper procurement processes and procedures.

He said the issue of the location for the park headquarters for the project officers is being informed by vehicular access and that other two sites in the south east and north east will be provided with tourist centers. The development of these facilities will be uniform and beneficial to all the communities without any bias or marginalization. Due consideration of all the 27 communities around the Loma Mountains will be factored into the strategy for the siting of LMNP facilities to avoid any impression of dividing any Chiefdom. The Deputy Permanent Secretary made the communities understand that the selection of the venues even for the consultation meetings within the communities are being informed by the proximity of the communities and convenience for the MAFFS project officers.

Ruggie Marah-Deputy Chairlady, Koinadugu District Council

Expressed her resolve not to allow the LMNPP to elude the District. She said she expects that 2 MPs to take active role in the project and that she is very happy of their presence and participation in the stakeholders meeting. She added that once the MPs are present, her main role is to observe proceedings and report to the District Council.

Paramount Chief Foday Jalloh III

The PC said the stakeholders meeting is the greatest opportunity so far to discuss issues pertaining to the LMNPP, which is a national project. He said the Loma Mountains is the only asset in the area, which has been totally cut-off.

He expressed his gross dissatisfaction about the people who wrote the letter to the Ministry of Forestry complaining about the project. He said the complainants need to learn from the community elders and that the issue of transparency and accountability are already being addressed through the processes being followed. He said there was a new boundary sensitization workshop, which has been followed by affected community and affected persons consultations by the Process Framework Consultant.

P.C. Jalloh said the time frame for the project is very critical. He therefore asked that all stakeholders join hands to make te project work according to schedule. He said as a leader, he does not have to be selfish but to be accountable to his people and ensure their well being. His main expection is unity among the his people and other affected communities.

Paramount Chief Abdulai Turay

He said the people of Neya are so happy about the LMNPP. He said he was part of the first meeting on the LMNPP where pledge his full support. He recollects that there are three (3) components of the project out of which Neya was to benefit from a tourist site. He however expressed his worries that some things are being done without involving the Neya Chiefdom which owns about



70% of the Loma Mountains. He blamed Mr. K.I. Bangura for the previous meeting but he is now happy about the stakeholders meeting, which is intended to smoothen the rough edges. He said Neya Chiefdom has no hesitation against the project but would like transparency and fair share of benefits to be observed.

The MP of Neini has pledge the full support for the project and that his people has no grievance any longer and are in 100% support of the LMNPP.

Ruggie Mara said she has no biases on the project but the promises made to Bandarkarfaia to provide them a bridge must be carefully addressed because the announcement of this promise was done in her presence by Mr. K.I. Bangura. Otherwise, she will have problem with her people. The MP for Neya interjected that the emphasis must be on affected communities and not sections. He requested that the PF Consultant must visit the affected Sukralla Community.

Update on Preparation of Process Framework including Socio-economic Survey by the PF Consultant

Process framework

The PF document for LMNP will describe methods and procedures by which communities in the area will identify and choose potential mitigating or compensating measures to be provided to those adversely affected, and procedures by which adversely affected community members will decide among the options available to them.

The PF document will describe the process for resolving potential disputes relating to resource use restrictions that may arise between or among affected communities, especially those in the immediate vicinity of the LMNP boundaries, and grievances that may arise from members of communities who are dissatisfied with the eligibility criteria, community planning measures, or actual implementation.

In addition, the PF will specify how affected communities can be provided with health care, schools, and other services, particularly for pregnant women, infants, and the elderly, or those vulnerable populations identified.

Socio-economic Survey

The objective of the socio-economic baseline survey is to enhance the understanding of the LMNP project designers, managers, implementers and other relevant key stakeholders of the directly affected communities and persons so as to develop or modify activities with the participation of the ACs according to the context in which the ACs and APs live.

Sheiku Lahai Mara-(Wolley Section)

He requested that there should be more sensitization about the project and that the project must ensure that there is peace in the communities. Their main concern is the roads in the Loma Mountain areas and would want the World Bank to assist them. The remaining affected communities (17 in number) which have not been consulted yet or refused to participate in the earlier consultations demanded that they are consulted as part of the Process Framework preparation and the socio-economic survey.

Bala Marah-(Kurubonla)

He said they are very happy and glad about the project which will benefit their children's children.

Mohamend Mara-(Complainant 1)

He thanked the Hon Resident Minister, whom he said acted like a father. He thanked the MPs too as well as the organizers of the stakeholders meeting. He said they are not against the project but here is the issue of internal Chiefdom agreements. He added that their desire is for a stakeholders meeting like this to be held ato involve the affected communities fand the



monitoring of contractors to be engaged under the project.

Lansana Conteh-(Complainant-2)

He expressed concern for the lack of adequate communication. He said the section chiefs will testify that they didn't prepare the complaint letter in search of job. He concluded that they have no objective to oppose the implementation of the LMNPP.

WAY FORWARD

It was agreed that a nominee each will be selected to represent the two chiefdoms in matters relating to the LMNPP. Additionally each affected community will nominate a representative who will liaise with the nominees at the chiefdom level and provide feedback to their respective affected communities.

The Process Framework consultant and field team are to visit the remaining affected communities and those who refused to participate in the earlier consultative meetings and socio-economic survey.

Date
SLEPA
Key Person
Interviewed
Issues Discussed

Responses from the SLEPA Director

02/06/2011 Time: 10.00

Freetown Youyi Building

1.Mr Momodu A. Bah-Director for Inter Sectoral Division

The proposed Loma Mountains National Park Project and the preparation of ESMF/PF including socio-economic survey, Expectation of the EPA from the managers of the LMNP and the role of EPA under the project.

Expectations of SLEPA

- -SLEPA expects the LMNP to be registered with the EPA
- -The SLEPA expects the preparation of Environmental and Social safeguard documents and submission to the EPA. An EMP containing Community Development Action Plan including monitoring indicators should be prepared.
- -There should be disclosure workshops on the Environmental and Social Safeguard documents being prepared to the affected communities so that they will know the contents of the reports and associated benefits to the communities. The Consult should really visit the project communities to collect baseline information and involve the people in the preparation of the safeguard documents.
- -Approved safeguard documents will be the basis for the monitoring the LMNPP.
- -SLEPA expects that the following stakeholders are contacted and involved in the processes:
 - Ministry of Tourism and Culture
 - Environmental Forum for Action (ENFORAC)-An umbrella for all Environmental NGOs
 - Ministry of Works and Infrastructure-Improvement of Feeder Roads
 - Ministry of Lands, Country Planning and Environment

Suggestions from SLEPA

- -The affected communities should not be entirely prevented from having access to Natural Resources. Agro-forestry and establishment of woodlots should be created.
- -Energy saving stoves to reduce energy consumption should be provided
- -Micro-credit schemes should be established for the people to help improve their livelihoods. This must be developed in a sustainable manner.
- -Co-management schemes should be developed as part of the Park Management strategies

Role of SLEPA



SLEPA should be involved in the monitoring of implementation programmes. Some **Environmental Monitoring Indicators** to consider are rate of deforestation are people still cutting wood, logging, poaching, occurrence of bushfire, water quality, air quality etc. Social Indicators-Interview people to find out if benefits have been received and are actually improving their lifestyle and total income, the level of participation of the affected people and communities in the co-management practices. involvement of the people in tourism programs and the promotion of the use of local materials to make attractive products that can be sold to tourist to generate income. Education and sentization for the people to understand the LMNPP Time:11.00 Date 2/06/2011 **Ministry of Tourism and Culture** Freetown **Key Person** Mr. Ensah Kamara-Tourism Officer Interviewed **Issues Discussed** -Awareness of the LMNPP by the Ministry of Tourism and Culture -The Role of the Ministry of Tourism and Culture -How the affected communities will benefit from the project -Visit to the Loma Mountain areas by the Ministry -Intentions of the Ministry of Tourism the establish a Special Development Fund under the LMNPP • The Ministry of Tourism is responsible mainly for the policy formulation. The implementation of the policies is done by Responses the Tourism Board. There is the 1990 Act of Tourism which is under review as well as the National Policy on Tourism. The Ministry is only aware of the LMNPP on paper but not aware of any actual activity on the ground in connection with the project by the Forestry Division. The Ministry attempted to visit the Loma Mountains but the nature of the roads and accessibility constraints could not enable them to do so. The trip for the visit ended at Kabala and had a meeting with the Chief of Kabala. This was in MAY 2011. The Ministry is making efforts to revive the Ecotourism sector under the new Minister, Hon Victoria Saidu Kamara.

• To promote ecotourism in the Loma Mountains area, the Ministry could conduct a needs assessment so as to integrate it in their planning.