

Federal Republic of Nigeria
and
Cross River State



A Preliminary Assessment of the Context for REDD in Nigeria

comissioned by the Federal Ministry of Environment, the Cross River State's Forestry Comission and UNDP

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with support from Environmental Resources Management (ERM)



UN-REDD
PROGRAMME

The United Nations Collaborative Programme
on Reducing Emissions from Deforestation and
Forest Degradation in Developing Countries



This report aims at providing basic information and a comprehensive assessment to ground a REDD+ readiness process in Nigeria, which is meant to advance with the support of the UN-REDD Programme.

The report is not a policy document, but rather an informative and analytical tool for all stakeholders willing to sustain REDD+ readiness in the country.

The assessment places a special focus on Cross River State since this state is ready and willing to explore REDD+ readiness in a more intense fashion, in order to both inform the national REDD+ readiness with field-level actions and to provide best practice and lessons for the rest of the states in the country.

In addition, Cross River State holds a unique share of the forest and biodiversity resources of Nigeria; has two decades of active community forest management and community forest conservation experience to draw upon; and seeks to secure this legacy through innovative environmental finance schemes, such as REDD+.

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GLOSSARY

AAC	Allowable Cut
CAIT	Climate Analysis Indicators Tools
CAMM	Conservation Association of the Mbe Mountains
CARPE	Central African Regional Program for the Environment
CBO	Community Based Organizations
CCBA	Climate, Community and Biodiversity Alliance
CDM	Clean Development Mechanism
CERCOPAN	Centre for Education, Research and Conservation of Primates and Nature
CIDA	Canadian International Development Agency
CITES	Convention on International Trade in Endangered Species
CRNP	Cross River National Park
CRS	Cross River State
CRSCFP	Cross River State Community Forestry Project
CRSFC	Cross River State Forestry Commission
CSO	Civil Society Organizations
DFID	Department for International Development
DIN	Development in Nigeria
EMP	Environmental Management Programme
ERM	Environmental Resources Management
ERPA	Emissions Reduction Purchase Agreement
FAO	Food and Agriculture Organizations
FCPF	Forest Carbon Partnership Facility
FCT	Federal Capital Territory
FDF	Federal Department of Forestry
FDP	Forestry Development Programme
FFI	Fauna and Flora International
FIP	Forest Investment Programme
FMC	Forest Management Committees
FMENV	Federal Ministry of Environment
FORMECU	Forest Monitoring and Evaluation Coordinating Unit
FOSA	Forest Outlook Study for Africa
FR	Forest Reserve
FRIN	Forestry Research Institute of Nigeria
GCF	Governors Climate Change Forum
GHG	Green House Gas
GIS	Geographical Information System
ICEED	International Centre for Energy, Environment and Development
IMCCC	Inter-Ministerial Committee on Climate Change
ITTO	International Tropical Timber Organisation
IUCN	World Conservation Union
KWAI	Katoomba West Africa Incubator
LENF	Living Earth Nigeria Foundation
LG	Local Government
LULUCF	Land Use, Land Use Change and Forestry
MRV	Measurement, Reporting and Verification

NAMA	National Appropriate Mitigation Actions
NAPA	National Adaptation Programmes of Actions
NASDRA	National Space Research and Development Agency
NCF	Nigerian Conservation Foundation
NCRC	Nature Conservation Research Centre
NESREA	National Environmental Standards and Regulations Enforcement Agency
NFAP	Nigerian Forestry Action Programme
NFP	National Forest Programme
NFDC	National Forest Development Committee
NGOs	Non-governmental Organizations
NGOCE	NGO Coalition on Environment
NIMET	Nigerian Meteorological Agency
NNPC	Nigerian National Petroleum Corporation
NOSDRA	National Oil Spillage Detection and Response Agency
NPS	National Parks Service
NTDP	National Tree Nursery Development Programme
NTFP	Non Timber Forest Product
ODA	Overseas Development Agency (now DFID)
PES	Payments from Ecosystem Services
PIN	Project Idea Note
PNI	Pro-Natura International
REDD+	Reduced Emissions from Deforestation and forest Degradation Plus
REDD	Reduced Emissions from Deforestation and forest Degradation
SCCU	Special Climate Change Unit
SNR	Strict Nature Reserve
SPACE	Sustainable Practices in Agriculture for Critical Environments
TFAP	Tropical Forestry Action Programme
THF	Tropical High Forest
UBA	United Bank for Africa
UK FCO	Foreign Commonwealth Office
UN-REDD	UN REDD programme
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United National Framework Convention on Climate Change
USAID	United States Agency for International Development
VCS	Voluntary Carbon Standard
WB	World Bank
WCMC	World Conservation Monitoring Centre
WCS	Wildlife Conservation Society
WFN	Worldwide Fund for Nature
WRI	World Resources Institute
VLA	Village Liaison Assistant

EXECUTIVE SUMMARY

INTRODUCTION

Climate change is increasingly becoming the greatest global challenge of our time. In order to address climate change, a number of global and national efforts have been initiated. The Reduced Emissions from Deforestation and forest Degradation (REDD) mechanism is emerging as a tool for climate change mitigation and adaptation, and to generate a new financial stream for sustainable development and forest conservation as a whole. Forest play a vital role in climate mitigation as carbon sinks. Nigeria's unique endowment of rich forest resources and diverse ecosystems stretch from the coastal mangrove swamp and the tropical rain forest in the south, through savannah grasslands to the arid sahelian ecosystems in the north, including the montane vegetation of the Jos, Mambilla and Obudu Plateaux. In these vegetation zones reside abundant varieties of fauna and plant species.

Inventory of Forest Resources and Status

Nigeria's rate of deforestation is one of the highest in the world and less than 10% of Nigeria's original forests cover remains. More than 50% of what is left as Tropical High Forest is found in Cross River State (CRS). REDD+ is an incentive based mechanism for forest conservation and the enhancement of forest carbon stocks. The main objective of this study is to carry out a desk-based assessment of forest and REDD-related issues, policies, institutions, projects and stakeholders at both Federal and in Cross River State Government levels.

Monitoring of land use and vegetation at the national level depicts changes in the forest resources base of the nation. Some of the indices of change between 1976/78 and 1993/95 include: decrease in natural forest from 23,429,100 hectares to 15,097,900 hectares (25.7% to 16.0%); increase in agricultural land use from 50,293,500 hectares to 58,497,700 hectares (55.3% to 64.4%); and an increase in degraded forest from 284,500 ha to 2,650,900 ha (0.4% to 0.7%).

In Cross River state, the vegetation types are reflective of the main ecological zones as indicated by several Forest Resource Studies including that by Beak-FRS 1999: Lowland rainforest occupies approximately 40% of state land area (829, 412 ha), the mangrove forests (fresh water and salt water) jointly account for 5 % of the state land area (105, 339 ha), while montane forest covers 0.5% of the Cross River State land area (11, 376 ha). Farmland occupies the greater proportion of Cross River state land with 42% coverage (889,039 ha). Between 1978 and 1995, the area occupied by natural forests in Cross River State decreased from 52.7% to 44.8% (FORMECU 1998). Further Assessments carried out between 1991 to 2001 and 2000 to 2008, indicated additional losses.

The total forest cover of Cross River State in 1991 was 7, 920 Km², which accounted for 34.3% of the state land area; in 2001, the total forest cover declined to 6,406 Km² constituting about 30% of the total land area. The forest

loss between the two period (1991 – 2001) is -1514 Km² reflecting a 12% decline in forest cover. A further assessment of the forest cover change in CRS between 2000 – 2008 showed total forest cover in CRS in 2000 to occupy 7,409 Km², and accounting for 34.8% of the state's land area. In 2008 however, the total forest cover declined to 6102 Km² reducing its coverage of the state land to about 28.68% between the period (2000 – 2008). A total of 1307 Km² of forest land was therefore lost resulting in 17.64% decline in forest cover for the period. In Nigeria the rate of deforestation is put at 3.5% per annum, while in Cross River State, deforestation rate is 2.2% per annum. The loss and degradation of high forest in Cross River state is expected to have declined considerably (at least temporarily) due to the moratorium on logging put in place by Governor Liyel Imoke's administration two years ago, as well as the establishment of the anti-deforestation task force.

The main forest management regimes in CRS are: national parks (covering roughly 4,000 Km²) under the control of the federal government, forest reserves (covering about 2700 Km²) controlled by the state government and community forest estate (estimated to cover 1600 Km²) under the control of communities. Fourteen forest reserves exist in Cross River state. They are gazetted lands held by government for the conservation and sustainable management and production of forest resources. A fair level of data with respect to forest inventories and assessment exists in Cross River state. Existing data differ somewhat in type, time of collection, methodology, accuracy, scope, coverage and funding

Drivers of Deforestation

Overwhelmingly in Nigeria, the main driver of deforestation and forest degradation is agriculture. In the north of the country, over grazing, and clearance of trees for firewood are significant issues as well. In the south of the country, logging (mostly small scale) continues to drive the increasing fragmentation of remnant forest areas. General infrastructure development (roads, power lines, mining, built up areas, etc) are also contributing factors. These factors are compounded by obsolete forest laws and weak law enforcement, a lack of training and capacity in the forest sector and a general lack of resources for forest management at all levels (federal, state and local government). It is important to point out that Nigeria is a Federal Republic with a high degree of autonomy at the state level. While the Federal Ministry of Environment sets national policies, it has little implementation power. Implementation of forest management lies with each of the country's 36 states, each which has their own forestry laws guided by those at federal level. In most states, management capacity of the state forestry departments and local organizations is low, with poor funding, low staff morale, limited technical training and often high levels of government corruption.

In Cross River state, agricultural extensification and commercial logging respectively tops the list of deforestation drivers, while urbanization and domestic energy use follow. As with other states in the country, poor

conservation and poor enforcement of forest laws, policies and regulations exacerbate these deforestation drivers.

Forestry Policy and Instruments

The current National Forest Policy was approved by government in 2006. The forest policy reviews and formulation was carried out through an inclusive nationwide stakeholder's consultation process between 1999 and 2004. A draft National Forestry Act was produced in 2006. It was concurrently evolved by the same stakeholders engaged in the review of the National Forest Policy. National policy on environment also exists which aims to undertake a full inventory of the natural resources of Nigeria, assess the level of environmental damage, design and implement restoration and rejuvenation measures; and to evolve and implement additional measures to halt further degradation of the environment. The 36 states in Nigeria and the Federal Capital Territory (FCT) have their respective forest policies and Forest Acts which are used to regulate forestry practices in their domain. Although many are obsolete and need to be reviewed. NESREA has rolled out some regulations in year 2009 that have some relevance to REDD+ issues.

In Cross River State, however, the extant forest laws have been revised by the State House of Assembly and have just been passed into law. The new law seeks to give specific mandate to the forestry commission to undertake sustainable forestry management. The new law also recognizes community by-laws on forests that are implemented by community institutions such as forest management committees (FMCs) to aid community governance in forest management. Forest laws and policies are enforced and implemented in CRS to a fair level compared with most other states in Nigeria. The new draft law gives the state government the ability to award "carbon" concessions (as well as watershed protection concessions and eco-tourism concessions). The old law only recognized timber exploitation concessions. Even after the new law is passed, a significant amount of work will be required for it to be revised again to become REDD+ enabling. The state will require help with introducing new clauses to address a wide range of REDD+ issues including carbon tenure, benefit sharing, financial arrangements, private sector participation, etc.

Forestry Programmes

At the national level, a number of forestry initiatives and programmes to support sustainable forest management include: Nigerian Forestry Action Programme (NFAP), Forest Outlook Study for Africa (FOSA), National Forest Programme (NFP), the Forestry Development Programme (FDP), the Inter-Ministerial Committee on Desertification and Deforestation Programme, the programme of the National Council on Shelterbelt, Afforestation, Erosion and Coastal Zone Management, National Tree Nursery Development Programme (NTDP), Presidential National Afforestation Programme (2009), National Biodiversity Strategy and Action Plan, and National Appropriate Mitigation Actions (NAMAs) and the National Adaptation Programmes of Actions

(NAPAs). The effective development of these programmes and instruments will contribute towards putting Nigeria on the course of REDD+ readiness, however the country requires specific assistance with a country-wide and state level programme to build capacity and preparedness for REDD+

In Cross River state, the State Government, (largely through the Forestry Commission) has initiated the following: tree nursery establishment across the State, plantation establishment in degraded areas within the Forest Reserves, and establishment of the first mangrove forest protected area in Nigeria. Other initiatives have included the creation of the Afi Mountain Wildlife Sanctuary and the certification of 19 Forest Management Committees (FMCs) i.e. giving formal recognition to community forest management by Government, and the cancellation of all logging concessions in the State in order to evolve a more sustainable system.

However, in spite of these impressive lists of activities, it is recognized by several studies that the forest management sector in Nigeria suffers from severe and chronic under-investment. It is hoped that the potential benefits from REDD+ will persuade the government to increase investment in the sector as a whole at both federal and state level.

Institutional Framework for Forestry Development

Institutional framework for forestry development at national level includes: Federal Ministry of Environment and parastatals of the ministry, the National Forestry Development Committee (NFDC), National Council on Environment, The Federal Executive Council and The National Council of States. Besides government, there are several national level and international NGOs involved in natural resource management and climate change issues including the Nigerian Conservation Foundation (NCF), Pro-Natura International (PNI), Fauna and Flora International (FFI), the Wildlife Conservation Society (WCS), Birdlife International and the International Centre for Energy, Environment and Development (ICEED).

In Cross River State, institutions cutting across governments, communities, civil society organization and universities are critical to the forestry sector. Some of these include the Cross River State Forestry Commission (CRSFC), Cross River National Park (CRNP), community Forest Management Committees (FMCs), numerous NGOs and tertiary institutions. Representatives of government and civil society stakeholder groups are integrated into the organizational structure of the Forestry Commission Management Board.

Stakeholder Engagement

At present, general awareness of REDD+ is low in Nigeria. There is little awareness at all levels whether amongst government, environmental NGOs or among forest community groups. The institutional stakeholders mentioned above at the federal level and in Cross River State (government, NGOs and

community groups) are the same ones that will need to all be engaged in an initial REDD+ process. It is also important to engage with potential private sector buyers of REDD carbon credits. These include the airlines, the oil companies (e.g. Shell, Total, Chevron, ExxonMobil, Eni), cement manufactures (e.g. Lafarge, Dangote), and other heavy manufacturing companies in the country. Representatives from the banking sector should also be engaged with especially those that are already planning for carbon credit transactions in Nigeria such as Standard Bank and United Bank for Africa (UBA).

While engagement on REDD has been limited to date, there has been extensive engagement with forest communities on conservation and sustainable forest management over the last 20 years. This started with the WWF programme for Cross River National Park and the DFID Community Forestry Programme with the CRSFC that saw the creation of 45 Forest Management Committees (FMCS) in the forest communities across the state. Various environmental NGOs such as CERCOPAN, Pandrillus, NCOCE and others have worked intensively with their “host” forest communities on conservation programmes over the last 15 years and awareness on conservation issues is high in many villages.

There is however, clearly a need to engage specifically on REDD with forest communities, NGOs, schools, universities, various ministries and other stakeholders. It will be important though to manage expectations around what REDD can deliver and when.

Forest Carbon Measurement, Reporting and Verification (MRV)

Monitoring and verification for REDD readiness can be done reliably by remote-sensing technology with ground measurements for verification. At the national level, the National Space Research Development Agency (NASRDA) has capacity for forest assessment and monitoring. In Cross River state, the Department of Geography and Regional Planning in the University of Calabar is host to a moderately well equipped GIS/Ecological laboratory with personnel to undertake deforestation assessment and monitoring. The Cross River State Forestry Commission also has a cartography department that could be upgraded into a GIS unit. Lastly, through a nested approach, MRV activities can occur at the project level. In this case, measurement and reporting would normally occur by the project proponent and be verified by an independent third party auditor.

REDD Related Initiatives

At the national level, REDD related initiatives include: Establishment of a Special Climate Change Unit (SCCU) in the Federal Ministry of Environment, pending bills on Climate Change related issues, a policy shift in the disbursement of funds from the Ecological Fund Office in support of forestry development, admission of Nigeria with observer status to the UN-REDD programme, flagging off of the National Carbon Credit Train, undertaking

this study of Nigeria's preparedness for REDD+, and the inauguration of a National Technical Committee on REDD.

In Ogun and Ondo States, Pro-Natura International is establishing a new protected area in Omo and Oluwa Forest Reserves and hope to assess the potential of the area for REDD carbon credits. The current Cross River State government has driven the national and state agenda on REDD+. Practical steps taken towards this include: removal of revenue targets from forest exploitation; a two-year moratorium on logging, legal and forest policy reforms and related institutional reforms. The Governor of Cross River State, Senator Liyel Imoke has taken several concrete steps to drive forward the National REDD process as well as its application to CRS.

Steps taken so far include: the governor's presentation at the Katoomba meeting in Ghana in September, 2009 on the potential for REDD in the state, several visits to the Minister of Environment in Abuja to advocating for a REDD programme in Nigeria, the governors attendance of COP 15 in Copenhagen to meet with international donors to advocate for REDD in Nigeria, promotion of Nigeria's membership in the UN-REDD programme and the World Bank- FCPF. Other activities include achieving Cross River State's membership of the Governors Climate Change Forum (GCF), and identification of sites for 3 pilot REDD projects and preparation of two Project Idea Notes (PIN) for two of the pilot REDD project by the Nature Conservation Resource Centre of Ghana under the auspices of the Forest Trends/Katoomba Group West Africa PES Incubation Centre.

Pilot Sites For REDD.

As mentioned above, the Nature Conservation Resource Centre of Ghana under the auspices of the Forest Trends/Katoomba Group PES incubation centre for West Africa has worked with the Cross River State Forestry Commission to identify three pilot sites as the initial areas to kick start REDD+ projects in CRS. Two of these comprise of two clusters of contiguous community forest and contiguous forest reserve land. One of these is the Ekuri-Iko Esai-Okokori-Etara Eyeyeng-Owai-Ukpon River Forest Reserve cluster. The other consists of the Mbe Mountains - Afi River Forest Reserve cluster. A third area is proposed comprising of the new mangrove forest reserve recently created by the state government. Mangroves are CRS will push for Nigeria to lobby for the inclusion of mangroves as "forest" under REDD in forthcoming international negotiations on climate change. Draft Project Idea Notes (PIN) has been developed for the first two forest clusters mentioned above.

International Cooperation On REDD

With respect to general forest conservation, in the past, several donor organizations and international NGOs have focused implemented forest conservation and forest management programmes in Cross River State. There has been little international NGO or donor support for forest projects

elsewhere in Nigeria (apart from previous WWF support for the creation of Okomu National Park and Gashaka Gumpti National Park).

Previous internationally supported project in Cross River State include NCF-WWF creation and management of Cross River National Park, the ODA/DFID community forestry project, the Living Earth community forestry project, the One Sky Initiative to support environmental NGOs, the USAID SPACE project, etc have at one time or the other such as conservation, agro forestry development, community forestry management, environmental education, and sustainable agricultural practices. Current international NGO participation in forest programmes in Nigeria is limited. There are on-going forest conservation programmes being supported by the Wildlife Conservation Society (WCS), Fauna and Flora International (FFI) (both focused on the Afi Mountain and Okwangwo areas of Cross River State.

With respect to REDD specifically, engagement with international donors and NGOs has only just started compared to other countries in Africa. As a result of the Katoomba Group meeting in Ghana and then follow-up meetings in Abuja and Cop 15, dialogue has now commenced between Nigeria and the UN-REDD Programme and the World Bank FCPF. Nigeria now has observer status with both programmes. Talks are also ongoing between Nigeria and the Governors Climate and Forest (GCF) Task Force on joint actions for funding and capacity building for REDD. The CRS government is the first and only African member of this influential international grouping. The Katoomba Group/Forest Trends is already providing technical advice to the CRS government in support of REDD+. However this support is limited for now. They are preparing a draft proposal for a REDD capacity building programme for the state government, local environmental NGOs and forest community groups.

Issues to consider on REDD Readiness in Nigeria

While there are the basic frameworks in place and political will, Nigeria suffers from a deficit in capacity and awareness on REDD. There is a need for support in all the internationally agreed REDD readiness areas including:

- REDD implementation framework (policy and institutions);
- REDD pilots;
- National REDD Strategy development;
- Reference Scenario and the National Carbon MRV system;
- Stakeholder participation; and
- Management of Readiness.

There is a need to overhaul Nigeria's (and Cross River State's) laws with respect to REDD+. Policy reform should include reviewing Nigeria's forest policy, assessing carbon tenure, investigating benefit sharing and other financial mechanisms and the development of MRV systems. Support is required to progress the two REDD pilots identified in Cross River State. Developing REDD pilots for early learning can inform the development of

enabling policies and benefit sharing mechanisms for example. Efforts should be made to support pilots elsewhere in the country.

In order for REDD pilots and demonstration activities to be successfully launched as quickly as possible, the basic necessary regulatory and procedural guidelines must be formulated at the national and state level. These would need to include provisions outlining the permitted implementing actors, including: NGOs, private companies and bilateral government initiatives; the types of forest zones where REDD activities can take place, and the type of REDD markets and standards that can be used (voluntary, pre-compliant and or compliant). A basic regulatory framework is essential for giving a legal basis and confidence for investment in all REDD pilots and project-level demonstration activities. The full and complete national REDD Readiness framework can then be built around the framework over a longer period of time.

An assessment of capacity in Nigeria for spatial data analysis has found that this is weak. The main capacity found in NASDRA is disconnected from current REDD efforts. Expertise in the development of a carbon baseline and a methodology for a reference scenario is practically absent in Nigeria. WCMC-UNEP project and the NCRC-University of Oxford projects should be supported to develop an integrated approach to establishing an MRV system for Nigeria. This should work with NASDRA, FDF, and CRSFC to pilot an MRV system in Cross River State that can be scaled up to the national level.

Developing a National REDD Strategy will require extensive consultation across the country. This should not be underestimated given the size of the country and the wide number of stakeholders with highly divergent interests. Government should be supported to run a stakeholder engagement programme dedicated to REDD+. This should be on-going as Nigeria develops a REDD readiness strategy so that all stakeholders (including NGOs and forest communities) can participate in each stage of its development.

Capacity to manage readiness is a big challenge in Nigeria. At federal and state level, policy reform should be coupled with institutional reform and a training programme to effectively re-build the technical capacity of forestry staff in basic forest management as well as REDD. This is an issue for Cross River State where the Forestry Commission has lost most of its technically trained foresters. Capacity building is also required for forest communities and local environmental NGOs working with them.

International NGOs and organisations such as the NCRC-Katoomba PES Incubator and UNEP-WCMC Programme should be engaged to see how their efforts in Nigeria can be coordinated and supported further. Their work should be coordinated with a UN-REDD programme for Nigeria if the country becomes a 'Full Member'.

Climate change is increasingly becoming the greatest global challenge of our time. In order to address climate change, a number of global and national efforts have been initiated. The Reduced Emissions from Deforestation and forest Degradation (REDD) mechanism, being one of the efforts, has been envisaged to play a significant role in climate change mitigation and adaptation, and generate a new financial stream for sustainable development as a whole. Forest play a vital role in climate mitigation as they serve as carbon sinks. Nigeria's unique endowment of rich forest resources and diverse ecosystems stretch from the coastal mangrove swamp and the tropical rain forest in the south, through savannah grasslands to the arid sahelian ecosystems in the north, including the montane vegetation of the Jos, Mambilla and Obudu Plateaux. In these vegetation zones reside abundant varieties of fauna and plant species, including insects, birds, fishes, reptiles, and mammals of all description.

Nigeria's rate of deforestation is one of the highest in the world and less than 10% of Nigeria's original forest remains. More than 50% of what is left as Tropical High Forest in Nigeria is found in Cross River State. REDD+ is potentially an incentive based discouragement to deforestation in Nigeria and provides among other things an incentive for forest conservation and enhancement of forest carbon stocks.

The Federal Government of Nigeria has initiated steps to become a full member of the UN-REDD programme through the active request of the Cross River State government. As a result, the Federal Government supported by the UNDP's Country Office is in the process starting stakeholder dialogue, awareness raising and preliminary planning that will build towards a National REDD Readiness Plan for Nigeria with a focus on Cross River State as a pilot area.

The main objective of this study is to carry out a rapid assessment of forest and REDD-related issues, policies, institutions, projects and stakeholders at both Federal and Cross River State Government levels. The Terms of Reference (TOR) provided requires the principle information to support the preliminary REDD+ process in Nigeria including information on forest status, institutions, policy context, stakeholders and ongoing initiatives and issues to support the first UN-REDD mission in Nigeria

The TOR (see Annex XV - explicitly required to be informative rather than exhaustive) includes:

- **Enabling Conditions:** Information regarding climate change policies and strategies. Status of awareness on REDD issues and opportunities among relevant stakeholders;
- **Forestry data & policies:** Forest cover and typology. Existence and quality of forest inventories or forest assessments. Estimated rates of deforestation and forest degradation. Forecast studies (if any) on future degradation/deforestation trends. Status of forest law and policy, enforcement levels, and ongoing reforms;
- **Drivers of deforestation:** Identification of the drivers of deforestation, indicating sources of information and their reliability. Estimation of the weight of each of such drivers (in terms of proportion of deforestation);
- **Forest Carbon and Measurement, Reporting and Verification (MRV):** Estimations of national CO₂ emissions and the % from LULUCF and forest loss. Existence of any MRV system on Carbon flows. Institutions engaged in forest and/or in Carbon monitoring. Status of remote sensing capacities (material and human);
- **Institutional framework - identification of key institutions related to:** Forest conservation, sustainable use and monitoring; Carbon and climate monitoring; Payments for Ecosystem Services (PES); Development planning; Natural resources management and fiscal issues; Land use & tenure; Carbon Finance (e.g. CDM, Carbon markets); and UNFCCC negotiations;
- **Stakeholder engagement:** Overview of REDD-related and REDD-interested stakeholders (organisations, units, networks or individuals), at the levels of government, research institutions, civil society, forest-dwelling peoples' organisations, and the private sector. Suggest key stakeholders to engage in an initial REDD process (a limited yet heterogeneous selection). Identification of experts on REDD+, Carbon Finance and/or PES;

- **Mapping of REDD-related initiatives:** Annotated list of REDD-related initiatives, such as may be a forest carbon assessment, a so-called "REDD project" at local level by an NGO, a REDD options study, a community forestry project, a REDD or forest Carbon training programme, a land/forest use policy reform, a PES scheme, a forest livelihoods project, forest conservation programs, and the like;
- **International cooperation:** Identification of main donors, international NGOs and UN agencies in the domains of forest conservation, climate change, and community development. Reference to their main programmes, initiatives and past experiences;
- **Information sources:** List of REDD-relevant publications, reports, networks, initiatives, events and websites concerning Nigeria and Cross River State;
- **Issues:** Enumeration of the key issues to address in an eventual REDD readiness process.

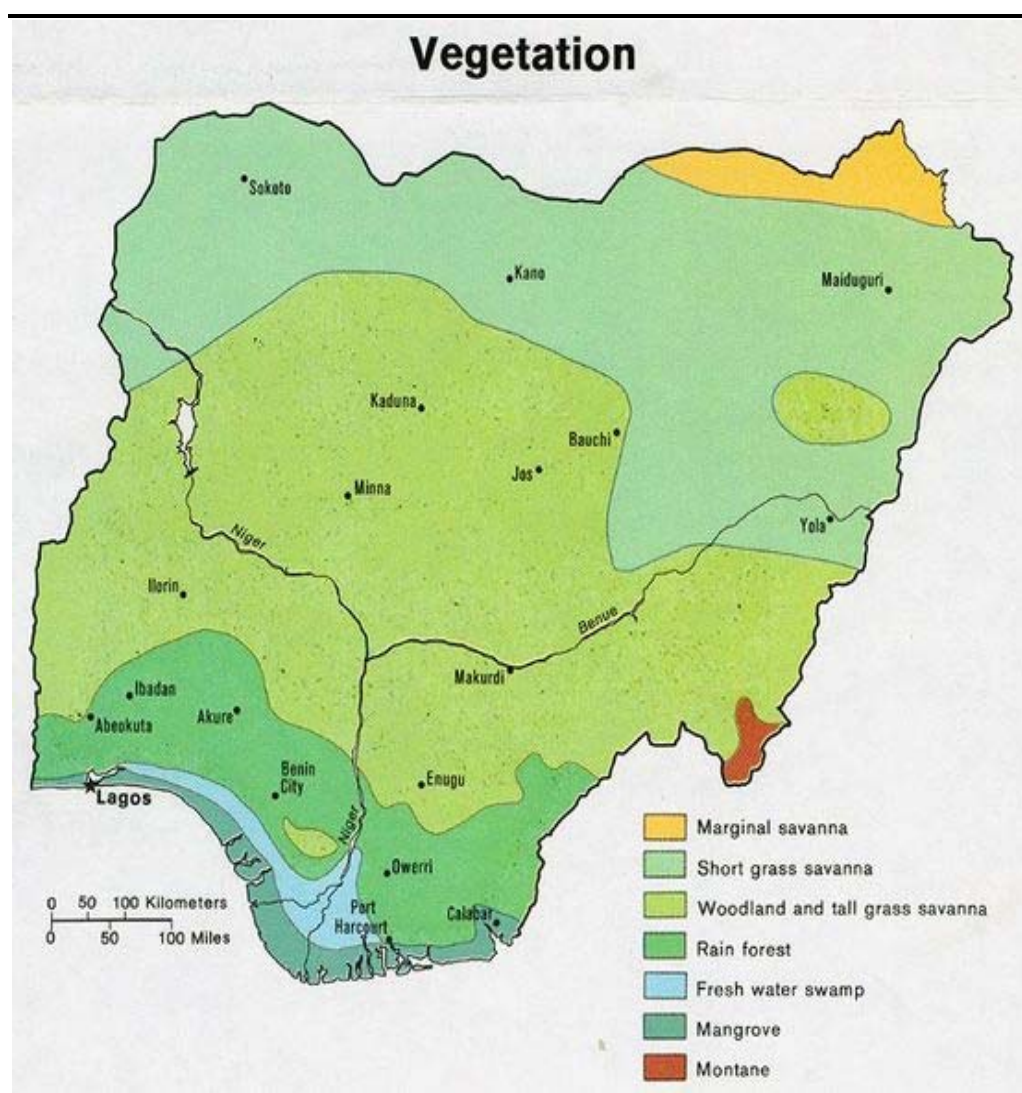
The assessment will be done simultaneously at Federal level (Abuja) and for Cross River State

2.1 THE STATUS OF THE FOREST RESOURCES AND ENVIRONMENT IN NIGERIA

2.1.1 Overview of Land use and Vegetation

Nigeria is Africa's most populous nation with over 140 million people. The country has a considerable diversity of habitats. A series of vegetation zones extends from west to east across the country, the result of a rainfall gradient from the wet coastal zone fringing the Gulf of Guinea to the arid Sahel in the north. Coastal mangrove swamp and the tropical rain forest in the south gives way to savannah grasslands further north until they reach the arid sahelian ecosystems bordering the Sahara desert. Montane vegetation is found on the Jos, Mambilla and Obudu Plateaux. The largest remaining areas of closed-canopy rain forest are in the south-east, in Cross River State, and are contiguous with the forests of south-west Cameroon. Figure 2.1 below illustrates these vegetation zones.

Figure 2.1 The Vegetation Zones of Nigeria



Lebrun (1967) lists 4,614 plant species in the country. There are 839 bird species recorded for Nigeria and 274 species of mammal of which 125 are found in the forests. Primates are especially diverse of which at least half are of conservation concern. Two species, the white throated guenon (*Cercopithecus erythrogaster*) and Sclater's guenon (*Cercopithecus sclateri*) are endemic. Overall, thirty mammals, ten birds, four reptiles, 13 amphibians and 172 plants are listed as critically endangered, endangered or vulnerable on the IUCN red list of threatened species; of these, 17 mammals, six birds, twelve amphibians and 69 plants are found in forests (IUCN 2004).

Gossweilerodendron balsamiferum, a tree species that is endemic to the region and harvested in Nigeria, is listed as endangered on the IUCN red list due to over-harvesting and habitat loss (ibid.). Two plant species are listed in CITES Appendix I and 44 in Appendix II (CITES 2005). The forests of the cross-border region between Cameroon and Nigeria are especially rich, with a high degree of endemism (Davis et al. 1994, (Conservation International 2007 and UNEP-WCMC, 1992).

Nigeria's rich natural endowment also supports the economic and socio-cultural base of millions, providing shelter, food, clothing, medicine, spiritual value and raw materials for industry. However, Nigeria's forest estate is shrinking due to long-term human exploitation for agricultural development, fuel wood demand, uncontrolled forest harvesting and urbanization amongst others. Between 1976/78 and 1993/95, the area occupied by natural forests (i.e. forest, excluding plantations) and shrub/grass land decreased from 23, 4,298,100 ha (25.7% of the country) to 15,097,900 ha (16.6%) according to FORMECU (1998a).

The country - wide change analysis for each land use and vegetation class is as illustrated in *Table 2.1*. Sub-classes of land use and vegetation have been aggregated for change detection and especially for more meaningful change analysis state by state. Through this approach, states mainly affected are highlighted and also indicated is the direction of change between 1976/78 and 1993/95 for each of the classes (table A.1) listed as Appendix 1.

Table 2.1 *Summary of change in land use and vegetation classes in Nigeria between 1976/78 and 1993/95**

Vegetation class	1976/78		1993/95		Change (ha)
	Area (ha)	% of country	Area (ha)	% of country	
Agricultural land use	50,293,500	55.3	58,497,700	64.4	+8,204,200
Shrub/grass land	13,441,200	14.8	11,774,300	12.9	-1,666,900
Natural forest	23,429,100	25.7	15,097,900	16.6	-8,331,200
Built up area	208,300	0.2	544,400	0.6	+366,100
Degraded area	284,500	0.4	2,650,900	2.7	+2,346,400
Plantation	162,500	0.2	272,900	0.3	+110,400
Water Bodies	2,970,100	3.5	2,088,700	2.3	-881,400

*Source (1998a): The Assessment of vegetation and land use changes in Nigeria between 1976/78 and 1993/95

Agricultural Land

The area of land under agriculture land increased in all states except in Akwa Ibom, Imo Jigawa, Kano, Katsina, Ogun, Ondo/Ekiti and Osun state. In Adamawa, Benue, Cross River, Edo, and Oyo states, the increase ranged between 120,900 ha and 200,400 ha.

The range of increase was between 279,900 ha and 655,000 ha in Kaduna, Kebbi, Kwara, Sokoto/Zamfara and Yobe states and the greatest category of increase (858,100 ha - 1,709,300 ha) was observed in Bauchi/Gombe, Borno, Jigawa, Niger, Plateau/Nasarwa and Taraba states. This third group of states lies in the Savanna region. Though agricultural land decreased in some states, the extent was not enough to balance the increases in other states hence the overall increase at the national level. The implication of this is that more land was put into agricultural use. The crop land expansion has been at the expense of forest cover.

Shrub/Grass land

Much of this land is now being converted for agriculture and grazing. There were no data for this land use and vegetation class in some states (e.g. Akwa Ibom, Benue, Delta, Lagos and Rivers/Bayelsa and the Federal Capital Territory) which may mean that the extent of change was too small for detection. In some other states, this land class decreased considerably, for example Adamawa (104,700 ha), Niger (119,100), Katsina (139,500 ha), Kebbi (483,300 ha), Kaduna (845,800 ha), Sokoto/Zamfara (855,500 ha) and Borno (901,400 ha). However, increases were observed in some states mostly Oyo (109,500 ha) and Kogi (184,400 ha). For the entire country, there was an overall decrease in areas of shrub/grassland. This means that the situation of already degrading vegetation is being compounded.

Natural Forest (Forest Cover)

Except in Borno and Yobe states without data and Akwa Ibom, Katsina, Osun states with increases, natural forest decreased substantially in all the other states. Mostly affected in three sub-groups are (i) sub-group 1 (111,000 ha - 128,000 ha) which includes Adamawa and Delta states and the Federal Capital Territory; (ii) sub-group II (162,700 ha - 387,900 ha) which includes Cross River, Edo, Enugu, Oyo and Kwara states; and (iii) sub-group III, (988,600 ha - 1,597,900 ha) (which includes Bauchi/Gombe, Niger, Plateau/Nasarawa and Sokoto/Zamfara states. At the country level, natural forest decreased overall, thereby implying that this land class was encroached upon and some sub-classes were degraded.

Plantations

The area of land under plantation decreased appreciably only in Taraba State as against an increase in a few other states especially Adamawa (84,500 ha), Ogun 934,800 ha), Edo (25,300 ha), Niger (16,600 ha) and Rivers/Bayelsa (15,600 ha). Generally, plantation size increased over the 18 years, but the rate of increase has not enough to meet the country's current wood requirements.

Built-up (Urban) Area

The total size increased but was especially marked in the states of Delta (42,500 ha), Lagos (37,500 ha), Abia (10,300 ha) and Borno (8,300 ha).

Degraded Area (Bare surfaces)

Within the assessment period, the area of land classed as degraded expanded on the whole. By states, the expansion was more observable in the following categories and areas: category 1 (10,100 ha - 50,300 ha) includes Adamawa, Enugu, Jigawa, Ondo/Ekiti, Osun and Taraba states; category II (80,300 ha - 148,600 ha) category III (208,500 ha - 702,800 ha) which includes Kaduna, Sokoto/Zamfara and Yobe states. This fact reveals the extent to which the environment has been degraded, and thus calls for urgent attention.

Water bodies and Wetlands

Wetlands are environmentally important habitats for migratory and resident birds, for their rich fauna and flora, for fishery production and for maintaining water tables. Though important, they are yet to be designated for protection in the country. Some wetland areas in Nigeria include the Niger Delta, the Lake Chad Basin, and the Hadejia-Nguru wetland. Of these, only the latter receives some protection through an externally funded conservation project supported by DFID. Part of Lake Chad falls within the Lake Chad National Park. There are no protected areas at all in the Niger Delta.

Country-wide, water bodies as a whole decreased. The most affected area (states) include Akwa Ibom, Benue and Kaduna states (10,300 ha - 49,100 ha), Adamawa, Jigawa, Kebbi, Kogi, Kwara, Plateau/Nasarawa and Yobe state (53,500 ha - 93,400 ha) and Borno and Niger states (110,000 ha - 388,900 ha). The implication of this reduction is that flood plain agriculture, natural water supply sources and natural habitats for the aquatic fauna and flora have declined with adverse consequences.

Strict Nature Reserves

There are 8 Strict Nature Reserves in Nigeria. Six of the eight reserves were reported to have been either seriously degraded or destroyed and are not protected by any specific legislation beyond that applied to the surrounding forest reserve. These Strict Nature Reserves were designated for the purpose of preserving a sample of primary vegetation within existing forest reserves. The 8 designated Strict Nature Reserves are very small and are as follows: Akure (32 ha), Lekki (78 ha), Milliken Hill (19 ha) Omo (460 ha), Raiko (170 ha), Urhonigbe (64 ha), Bam Ngelzarma (142 ha) and Bonu (145 ha). Table A.7 (Appendix 7) lists the Strict Nature Reserve and the conditions of their habitats.

National Parks

Natural vegetation is the main repository of the genetic diversity which is crucial to improvements in agriculture and medicine, as well as the sustained supply of products and raw materials to industries. Undisturbed natural vegetation is often required to protect rare species that are endemic and are in danger of extinction. Despite the difficulties in quantifying and valuing biodiversity, its preservation is a national and global objective in the management of forestry resources.

These protected areas are generally much larger than the previously listed game reserves and sanctuaries. Nigeria's national parks have historically stemmed from the amalgamation of existing game reserves. They are protected for multiple objectives and are administered at the Federal level. They tend to be much better managed than the countries game reserves partly as a result of the fact that the Federal National Parks Service is better resourced than most state forestry departments.

There are seven National Parks in existence, as at the time of the study. However, five others have been proposed. Table A.6 (Appendix 6) lists the existing and the proposed National Parks with their locations and sizes. The existing and the proposed parks cover total areas of 2,403,140 ha and 791,770 ha respectively. Yankari National Park has been handed over to Bauchi State Government on request in June 2006 and changed from a National Park back into a Game Reserve. The number of National Park is therefore now seven.

Game Reserves and Wildlife Sanctuaries

These areas, which were former forest reserves have been specifically designated for the conservation, management and propagation of wild animals including the protection and management of the critical habitats on which they depend. However, in practice, almost all game reserves in the country (with the exception Yankari which was formerly a National Park) are barely managed and are so degraded that they cannot be accepted as

anything more than “paper” game reserves. Table A.5 in appendix 5 lists the game reserves/wildlife sanctuaries, area of each and their status.

Forest Reserves

These were the first recognized protected areas in Nigeria and were established to meet the country’s future wood demand. The Federal Department of Forestry (1996) established that Nigeria has a total of 1,160 constituted forest reserves covering a total area of 10,752,702 hectares representing about 11% of the total land area of the country. About 0.71% (75,874 ha) of the forest reserves fall within the swamp and mangrove forest zones. Similarly, 36.36% (4,017,722 ha) and 41.69% (4,482,302 ha) fall within the derived/guineas savanna and Sudan/Sahel ecological zones respectively. The montane regions cover about 0.15% (16,022 ha) of the forest reserve (table 2.2). The greatest number and extent of forest reserves are located within the middle belt and northern zones (savanna). However, the productive (timber) high forest reserves are confined to the southern zones (lowland rain and freshwater swamp forests). The forest reserves distribution by states and vegetation type are illustrated in tables A.2, A.3 and A.4 as shown in appendices 2, 3 and 4.

Forest Plantations

Within the forest reserves, plantations have been established for a number of purposes. Teak (*Tectona grandis*) and Afara (*Terminalia* spp) plantations provide timber for the sawmill industry and poles for power lines. The dominant pulpwood species is *Gmelina arborea*. Generally, the main plantation species are *Tectona grandis*, *Gmelina arborea*, *Eucalyptus* spp, *Pinus* spp, *Terminalia* spp, *Nauclea* spp, *Cedrela odorata*, *Khaya* spp, and *Triplochiton scleroxylon*. The more prevalent species in the main plantation areas of Ogun, Ondo, Kogi and Kaduna states (under the “Afforestation Project”) are *Gmelina arborea*, *Tectona grandis* and *Eucalyptus* spp.

The total plantation hectareage in Nigeria is estimated at 269,000 ha in 1998. They comprise of 109,377 ha of *Gmelina* and 159,623 ha of other species. Major forest plantation management objectives include watershed protection, erosion control, pulp wood and timber production. The extent of existing forest plantations in forest reserves and free areas is listed state by state in table A.9 (Appendix 9).

Free Areas

Free Areas are all areas of any land use type located outside forest and game reserves. Much of this might be termed “community owned” (even though the land use decree does not recognize community or customary title to land). The Free Areas is 9,136,726 ha and the major forest types are dominantly trees/woodlands/shrubs (5,611,392 ha), lowland rain forest (1,187,488 ha) and freshwater swamp forest (1,430,175 ha). The DFID community forestry project in Cross River State is the only project in the

country that has sought to give formal recognition and support to the community management of forests (or so called “free areas”).

There is no doubt that the tree resources in the agricultural landscape (and on free areas) in Nigeria constitute a significant proportion of the forest resources. There are vast areas outside forest reserve area over which state departments of forestry exercise only nominal control, although permits are issued for harvesting individual trees. The rate of degradation in areas outside the forest reserve is more than twice that being apportioned to the forest estate. Table A.10 (Appendix 10) shows the area occupied by Natural forest types within and outside Forest Reserve in the High Forest state.

2.4

FOREST RESOURCES SUPPLY AND DEMAND SITUATION

Timber and roundwood products: The estimated total roundwood production in 2003 was 69.9 million m³, of which 60.4 million m³ (86%) was for fuelwood. Nigeria’s total production of industrial roundwood was an estimated 7.10 million m³ in 2003. It produced 2.0 million m³ of sawnwood and 55,000 m³ of plywood and exported about 100,000 m³ of logs and 41,000 m³ of sawnwood (ITTO 2005). The wood-processing sector is run-down; most mills are fully depreciated, obsolete and not properly maintained. The sector runs at 30–40% of installed capacity and recovery rates are generally low.

There is also a critical shortage of raw material for the timber industry, which is unable to process small-dimension plantation materials. Once a significant exporter, Nigeria is now a net importer of primary forest products from other countries in Africa particularly Ghana and Cameroon : in 2002 imports of forest products were valued at an estimated US\$123 million, compared to exports of US\$18.5 million (of which US\$14 million was accounted for by sawnwood) (ITTO, 2005). The projected level of supply and demand indicates that from year 2005 to 2020, a likely annual wood deficit of about 80 million m³ to 1000 million m³.

Non-Timber Forest Products: Forests are a source of edible fruits, fodder, medicine and cash income for many rural people. In Nigeria, over 150 indigenous woody plants yield edible products for man. For many in Nigeria, the forests also provide medicinal plants for the treatment of ailments. Economic products such as cane/rattan used for the production of baskets, and furniture, raphia for the production of mats and ropes, wrapping leaves, fish poison; chewing sticks, and honey are obtained from the forest.

Studies by DFID in Cross River State found that forest communities derived as much as 70% of their household income from the sale of non-timber forest products and that poorer more vulnerable households had a greater reliance on these products for their survival. Recent, unpublished research by the World Bank illustrates the absolute dependence of the very poor in rural areas in Nigeria, on natural resources and their vulnerability to

environmental degradation. Preliminary survey data from Ekiti State indicates that 80% of households rely on firewood as their fuel for cooking. In addition, approximately 20% of households rely on wild food as their most important coping mechanism in times of need. In many areas NTFPs form one of the most significant sources of income for women (DFID, 2003).

2.5

OBSERVATION AND COMMENT ON THE STUDIES

These studies showed that forests occupy about 923,767km² or about 10 million hectares which is about 10 percent of Nigeria's forest land area. This is well below the Food and Agriculture Organization's (FAO) recommended national minimum of 25 percent. The current situation of land use shows that the forest resource base of the nation has dwindled significantly and what remains is being steadily being degraded.

Some of the indices of change between 1976/78 and 1993/95 are illustrated in *Table 2.2* below:

Table 2.2 Change in vegetation cover between 1976/78 and 1993/95

Vegetation type	Area (ha) 1976/78	Area (ha) 1993/95	Percentage % 1976/78	Percentage % 1993/95
Natural forest	23,429,100	15,097,900	25.7%	16.0%
Shrub/grassland	13,441,200	11,774,300	14.8%	12.9%
Water bodies	2,970,100	2,088,700	3.5%	2.3%
Agricultural land	50,293,500	58,497,700	55.3%	64.4%
Degraded land	284,500	2,650,900	0.4%	0.7%
Built-up area	208,300	544,400	0.2%	0.6%
Forest plantation	162,500	272,900	0.2%	0.3%

2.6

CROSS RIVER STATE: INVENTORY OF VEGETATION RESOURCES AND STATUS

As mentioned above, the forests of the cross-border region between Cameroon and Nigeria are especially rich, with a high degree of endemism (Davis et al. 1994). This area, where forest types are heavily influenced by drainage patterns and topographical features, is the last refuge for the Cross River gorilla (*Gorilla gorilla deihli*).

In addition to being home to the Cross River gorilla, the region straddling the Nigeria-Cameroon border is a biodiversity hotspot of global significance (Myers et al. 2000, Oates et al. 2004). The ecoregion is considered an important centre of plant diversity because of its probable isolation during the Pleistocene (Davis et al. 1994). High levels of species richness and endemism are exhibited across a wide range of taxa (Oates et al. 2004, Bergl et al. 2007).

For primates this region is one of the most species-rich in the world. Among other endemic and endangered primates with which the Cross River gorilla shares these forests are the Nigeria-Cameroon chimpanzee (*Pan troglodytes*

elliotti), the drill (*Mandrillus leucophaeus*), and Preuss's guenon (*Cercopithecus preussi*). Other important components of the mammal fauna include the forest elephant (*Loxodonta cyclotis*), forest buffalo (*Syncerus caffer nanus*), and many species of duiker.

The region also has a unique and diverse bird fauna (including 26 endemic species), and contains several of Birdlife International's Important Bird Areas (Fishpool et al., 2001). Other groups that exhibit high levels of diversity and endemism include amphibians, butterflies, fish, and small mammals. An estimated 120 endemic plant species and many rare tropical hardwoods (e.g., mahogany, ironwood, and ebony) also grow in these forests.

Though the region has been somewhat neglected by international conservation efforts, it is recognized as a landscape of High Conservation Priority by USAID's Central African Regional Program for the Environment (CARPE) and is included in two of the World Wildlife Fund's Critically Endangered Terrestrial Ecosystems, (Conservation International 2007 and UNEP-WCMC, 1992).

2.6.1 *Vegetation Type and Size*

Four main natural vegetation types reflective of the main ecological zones may be identified in Cross River State. These are:

1. Fresh water swamp and mangrove vegetation within the wet forest belt
2. The Lowland wet/moist forest region
3. The transitional semi deciduous forest (Southern guinea savannah vegetation)
4. Pre /lower montane forest and grasslands.

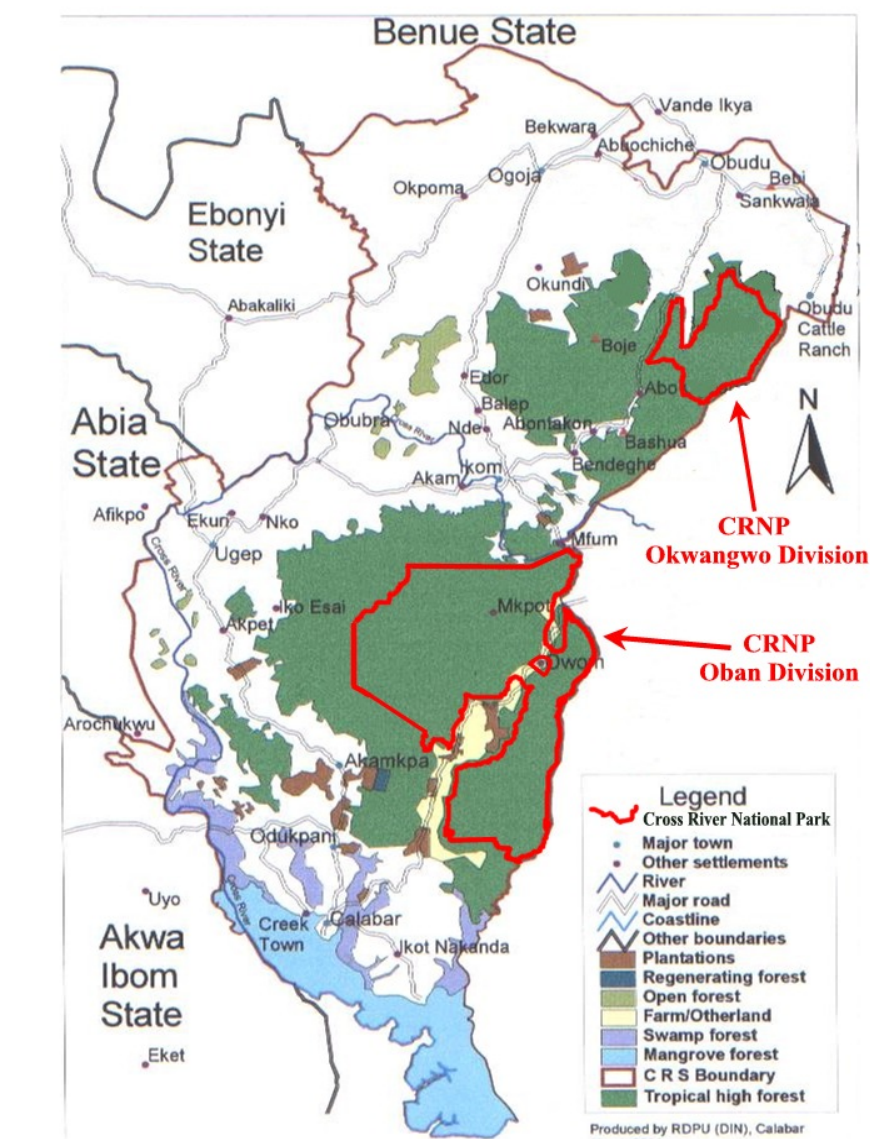
Table 2.3 and Figure 2.2 respectively show the major vegetation types and land use in Cross River State.

Table 2.3 *Major Vegetation and Land Use types in Cross River State*

S/N	Vegetation/Land Use	Portion of State (%)	Area (ha)
1	Intense (crop) Agriculture	42.4	889,039
2	Lowland Rain forest	39.6	829,412
3	Extensive (grazing) Agriculture	5.1	106,795
4	Fresh water swamp forest	3.2	62,755
5	Mangrove, without trees	1.8	38,114
6	Water bodies	1.6	33,476
7	Agriculture tree crop plantations	1.4	28,398
8	Trees/woodlands/shrubs	0.6	12,262
9	Urban (major + minor)	0.5	11,462
10	Montane Forest	0.5	11,376

Source: Beak-FRS, 1999

Figure 2.2 Vegetation Types / Land use in Cross River state.



Lowland Rainforest

The Lowland Rain Forest is the largest ecological zone in Cross River State and covers extensive areas in the centre, north and east of the state, and is contiguous with the forests of south west Cameroon. Although significant areas have been turned into agricultural fields and natural forests have been disturbed by indiscriminate felling and wood removal, the state contains the largest contiguous and well preserved stands of original forest in the country. Much of this forest (roughly 400, 000ha⁽¹⁾) is protected within Cross River National Park, in addition to sizeable tracts in Forest Reserves (270,000ha) and Community Forest (160,000ha). The high forest can be differentiated into moist and dry subtypes, depending on the annual precipitation (above or below approximately 2000 mm, respectively), soil

(1) Recent estimate provided by the Cross River State Forestry Commission

texture and its degree of permeability (Kio et al. undated). Structurally, the two forest types are almost indistinguishable, although there are a somewhat greater proportion of deciduous trees in the dry forest. The major differences are floristic.

Common species include *Khaya* spp, *Entandrophragma* spp, *Milicia excelsa*, *Triplochiton scleroxylon*, *Lovoa trichiloides* and *Guarea cadrata*. Other frequent trees include *Ricinodendron heudelotii*, *Lophira alata*, *Irovingia gabonensis* *Treculia africana*, *Ficus ottoniifolia*, *Anthostema aubreyanum*, *Macaranga staudtii*, *Xylopia rubescens*, *Alstonia boonei* and *Klaineanthus gaboniae* (a plant of conservation concern being a single species genus). Climbers such as *Strophanthus gratus* are very common. The shrub layer is characterized by *Diospyros conocarpa*, *Alchornea cordifolia*, *Erythrococca chevalieri*, *Sphenocentrum jollyanum*, *Myrianthus serratus*, *Ochna membranacea*, *Ouratea mannii*, *Massularia acuminata*, *Oxyanthus racemosus*, *Rothmannia talbotii*, *Glyphaea brevis* and the rare *Coffea eketensis*. Members of the Marantaceae and Zingiberaceae dominate the herb layer (Obot, etal, 2006; Beak-FRS, 1999).

Mangrove and Associated Coastal Vegetation

Mangroves form a narrow band, 10 to 15 km wide, along the coast and in the estuary of Cross River. Typical mangroves develop best on the muddy banks of rivers and creeks in places where the water is brackish. They are replaced by freshwater swamp forests where the water is consistently fresh.

Associated with the mangrove forests is strand vegetation, which grows at the edge of swamps near the seaboard. It is composed mainly of shrubs. The mangrove forest is dominated by *Rhizophora racemosa*, with *R. mangle*, *Avicennia africana* and *Laguncularia racemosa*. *R. racemosa* is the biggest of the *Rhizophora* spp, attains heights up to 40 meters and accounts for up to 95% of the species content of the mangrove forest.

However the occurrence of the exotic Nipa palm, *Nypa fruticans* (a palm introduced into Calabar and Oron between 1906 and 1912 from SE Asia) in this vegetation zone presents management and biodiversity conservation challenges. Available records suggest that Nipa palm was introduced into Nigeria to control coastal erosion. Presently the plant typically, tends to forms pure stands, “crowding out” other “native” mangrove trees.

Coastal vegetation occurs at the outer edges of the mangroves. Coastal vegetation consists of a mosaic of forest, thickets, mangrove and strand vegetation. Common species include *Chrysobalanus orbicularis*, *Conocarpus erectus*, *Hibiscus tiliaceus* and herbs such as *Ipomoea aquatica*, *Eulophia horsefalli* and *Paspalum virginatum*. The Cross River State Forestry Commission is establishing a protected area in the Calabar estuary to protect and manage the mangrove and coastal vegetation. This is the first Coastal and Marine Protected Area in Nigeria (Obot, etal, 2006; Beak-FRS 1999).

Freshwater Swamp Forest

Freshwater swamp forest forms a 10-25 km wide belt immediately north of the mangrove zone. Much of this vegetation type has been converted for agricultural and urban use, and the original swamp forest remains mostly on alluvial sites along the major rivers – Cross, Calabar and Great Kwa.

The freshwater swamp forest differs in structure from the lowland rain forest in that it usually has a more open canopy and dense tangled undergrowth. Tall trees are abundant but not evenly distributed, and areas of high forest with deep shade are mixed with tangled thickets of bushes and lianas in which tall trees are sparse or absent. The Freshwater Swamp Forest is flooded during the wet season but the flood recedes during the dry season leaving portions of dry forest floor interspersed with permanent pools.

It is thus a mix of seasonal freshwater swamp forest and permanent freshwater swamp forest. Along the fringes of creeks and lagoons, the palm *Raphia* spp. is abundant and exceeds 10 m in height. Behind this fringe, the freshwater swamp forest increases to 30 m in height, with such tree species as *Symphonia gabonensis*, *Alstonia congensis*, *Spondianthus preussii*, *Ficus* spp., *Cleistopholis patens*, *Sarcocephalus nervosus* and, on slightly higher and better drained ground, *Mitragyna ciliata*. The seasonal freshwater swamp forest is dominated by *Anthocleista vogelii*, *Carapa procera*, *Chrysobalanus orbicularis*, and *Raphia* spp. Other common species include *Albizia adianthifolia*, *Sacoglottis gabonensis*, *Hallea ledermannii*, *Klainedoxa gabonensis*, *Pycnanthus angolensis*, *Uapaca* spp, *Allanblackia* spp and *Elaeis guineensis*. Rattan palms (*Calamus*, *Ancistrophyllum*, *Oncocalamus* and *Eremospatha*) dominate the lower canopy of this vegetation type. Swamp tolerant members of the family Orchidaceae such as *Eulophia horsefalli* and *Eulophia dilecta* are also common. The rare swamp growing *Eulophia caricifolia* is worthy of notice.

Woody plants of the permanent freshwater swamp forests, with forest floors that are inundated year – round, include members of the *Alstonia*, *Mitragyna*, and *Rahphia* genera. The dominant vegetation is often graminoid emergent macrophytes and members of the family Cyperaceous. Riparian forests occur along watercourses that they fringe. Some have open canopy and others are much more expensive and have a well – developed closed canopy (Obot, et al, 2006; Beak-FRS).

Montane Vegetation

Montane vegetation is found in a small area in the northeastern corner of the state on the Oshie Ridge of the Obudu Plateau right on the border with Cameroon and Benue State. The highest peak rises to 1,819 m above sea level. The vegetation is broadly of two types; lowland rain forest in the low lying areas progressively enriched with montane elements on high ground giving way to grasslands on the higher peaks of Obudu Plateau, Sankwala Mountains and Ikwete hills. Common woody plant species include *Xylopia africana* *Rauvolfia vomitoria*, *Tabernaemontana ventricosa*, *Voacanga trouarsii*,

Kigelia africana, *Anthonotha macrophylla*, *Zenkerella citrina*, *Lindackeria dentata*, and *Polyscias fulva* (Obot, et al, 2006; Beak-FRS 1999). Although tree species diversity in montane forests is relatively low, overall floristic richness is enhanced by abundant shrubs, epiphytes and herbs, as well as by numerous non-vascular plants, such as lichens, mosses and fungi. Hall (1981) regards the Obudu plateau forest flora as a severely attenuated variant of the lowland forest of Oban enriched with species of Afromontane affinity.

Savannah Vegetation

Savanna like vegetation, probably attenuated variants of degraded rain forest occurs, in the central (Yakurr) and northern (Obudu) areas of the state. These formations are characterized by relic rain forest species such as *Celtis zarkari*, *Cola gigantea*, *Anthonotha macrophylla* and *Treculia africana*. The common grasses in this zone are species of *Andropogon* and *Loudetia arundinacea*. (Obot, et al, 2006; Beak-FRS 1999)

Wetlands

Extensive wetlands occur at the Cross River Estuary, the Cross River Flood Plains at Obubra as well as scattered back swamps or flood plains, made up of an assortment of seasonally flooded riparian lowland forests and tall grass swamps in the catchments of Cross River and its Enyong creek tributary. *Nymphaea lotus*, *Vossia cuspidata*, *Echinochloa pyramidalis*, *E. stagnina*, *ragmites sp*, *Leersia hexandra*, *Ipomoea asarifolia* and *Mimosa pigra* often characterize the flora of these wetlands with *Pterocarpus santalinoides* being the dominant woody plant (Obot, et al, 2006; Beak-FRS 1999).

2.6.2 *Forest Cover Change in Cross River State*

Flasse (2002) tabulates the different types of vegetation in Cross River State and the change in area between 1991 and 2001.

Table 2.4 *Forest Type & Change, 1991-2001*

Forest/Land Use Types	1991 Area (Km ²)	%	2001 Area (Km ²)	%	% (Loss or Gain)
Tropical high forest	7,290	34.27	6,406.35	30.37	-12.1
Open forest	194	0.91	1,206.91	5.72	522.1
Swamp forest	520	2.44	516.86	2.45	-0.6
Mangrove forest	480	2.26	476.75	2.26	-0.7
Regenerating forest	15	0.07	14.71	0.07	-2.0
Oil palm plantation	219	1.03	185.68	0.88	-15.2
Rubber plantation	146	0.69	134.02	0.64	-8.2
Gmelina plantation	95	0.45	101.64	0.48	7.0
Farm/other land	12,316	57.89	12,050.21	57.13	-2.2
CRS Total	21,275	100.00	21,093.11	100.00	0.9

Source: Flasse Consulting, October 2002

Between 1978 and 1995, the area occupied by natural forests in Cross River State decreased from 52.7% to 44.8% (FORMECU 1998). Further Assessments carried out between 1991 to 2001 and 2000 to 2008, indicated additional losses.

Table 2.5 and Table 2.6, adapted from both Flasse consulting, 2002 (for the Forestry Commission) and Bisong, 2010 (for Nigeria Strategic Investment Framework for strategic Land Management (NSIF-SLM) reveals the status of forest cover and change for 1991-2001 & 2000 to 2008 respectively.

Table 2.5 *Natural Forest Status 1991 - 2001*

Assessment Year	Total forest cover (Km ²)	% cover as Total land area.	Forest cover loss (Km ²)	% of Forest cover loss	Method / Quality of data	Assessor	Prepared for source
1991	7920	34.3%			LandSAT TM (188-50) ground survey	Flasse Consulting	Forestry Commission
2001	6406	30%	-1514	-12.1%	LandSAT ETM Imagery, 30m Res.		

Source: Flasse Consulting, 2002

From Table 2.5 above, the total forest cover of Cross River State in 1991 was 7,920 Km², which accounted for 34.3% of the state land area; by 2001, the total forest cover had declined to 6,406 Km² making up about 30% of the total land area. The forest loss between the two period is -1514 Km² reflecting a 12% decline in forest cover.

Table 2.6 *Natural Forest Status 2000-2008 ⁽¹⁾*

Assessment Year	Total forest cover (Km ²)	% cover as proportion of state land	Forest cover loss (Km ²)	% of Forest cover loss	Method / Quality of data	Assessor	Prepared for source
2000	7409	34.8%			Map produced from LandSAT ETM 32m	Bisong F. E	NSIF-SLM
2008	6102	28.68%	-1307	-17.64%	LandSAT 10m ETM orthorectified &		

Source: Bisong 2010 (NSIF-SLM)

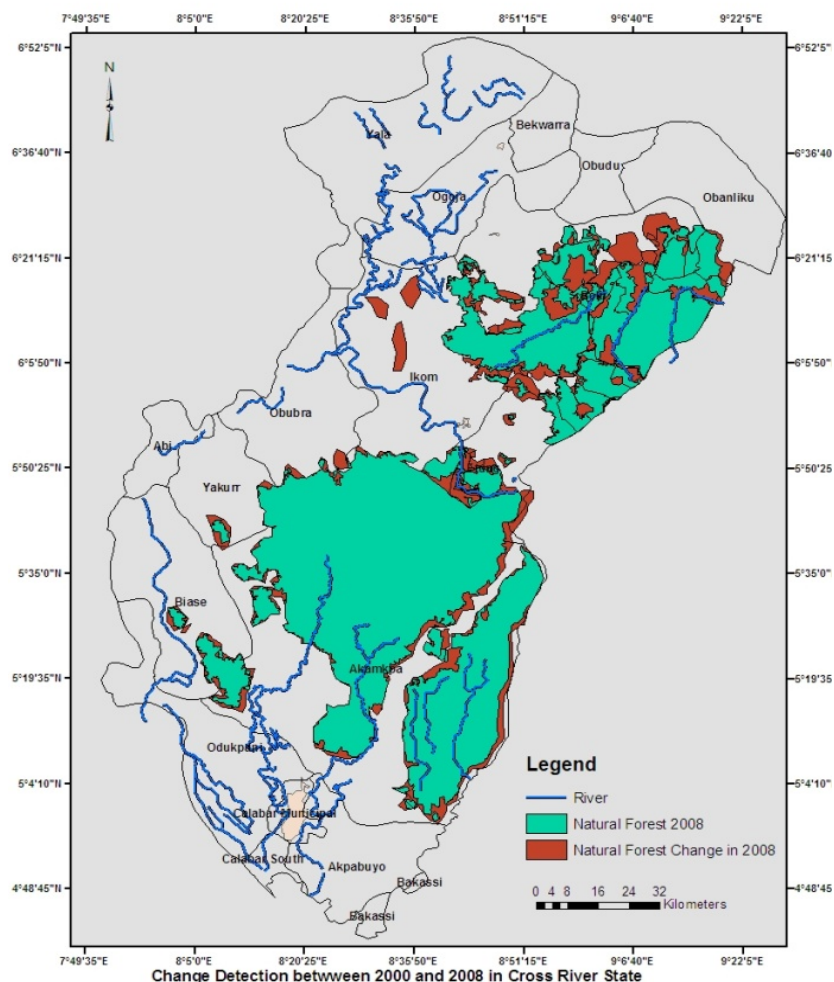
Table 2.6 above shows that the total forest cover of CRS in 2000 was 7,409 Km², and accounted for 34.8% of the state land area. By 2008 however, the total forest cover declined to 6,102 Km² leading to a further decline in coverage of the state to 28.68%. 1,307 Km² of forest was lost between 2000 and 2008 resulting in a 17.64% decline in forest cover for the period. Forest

(1) It should be noted that there is an overlapping year from this data set and the previous one (Table 2.4). During this period, the forest cover appears to drop by 1000 km² - a huge amount. This is likely to be due to either satellite image interpretation of differences in resolution (30m versus 10m).

cover data between 2000 and 2008 showed an annual loss of 163.42 Km² at a rate of 2.2% yearly.

Figure 2.3 below shows change detection between 2000 and 2008, in the natural forest of Cross River State

Figure 2.3 *Change detection in Natural Forest of CRS (2000 – 2008)*



Source: Bisong, 2010

Trends in the loss and degradation of high forest in Cross River State are expected to have declined considerably due to the 2-year moratorium on logging put in place by Governor Liyel Imoke's administration nearly two years ago, as well as the establishment of the anti-deforestation task force. A current forest assessment adopting 2008 forest image data as baseline may confirm the above assertions.

2.6.3 *Forest Management Types in Cross River State*

Three major forest management regimes are recognised in Cross River State. These are National Park, Forest Reserve and Community Forest Estate. From the forestry commission's 2001 estimate of total of 736,170 ha (7,361.7

Km²) of Tropical High Forest (THF) in Cross River State, approximately 40% (2955.1 Km²) is managed by the Cross River National Park under the jurisdiction of the Federal Government. About 38% (2,773.85 Km²) is managed as forest reserve under the Cross River State government control, while 22% (1,632.75 Km²) is managed by communities. Table 2.6 reflects the above figures.

Table 2.7 *Forest management types and area covered in CRS*

	Forest management types	Area Km ²	Proportion of total THF%
1	Cross River National park	2,955.1	40
2	Forest Reserves	2,773.85	38
3	Community Forest	1,632.75	22
Total		7361.7	100

Source: compiled from data collected from Cartographic unit, CRS Forestry Commission, 2001

Deforestation in Forest Reserves in Cross River State

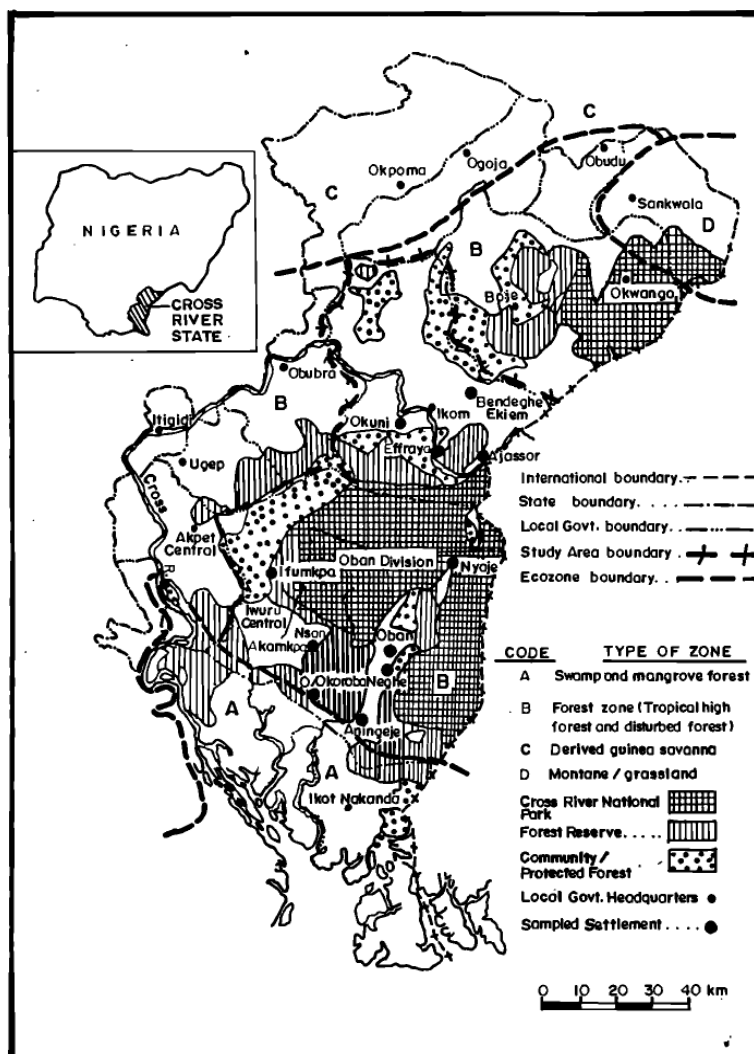
Fourteen forest reserves exist in Cross River State. They contain gazetted land held by government for the conservation and sustainable management and production of forest resources. Table 2.8 shows the different forest reserves in the state.

Table 2.8 *Forest Reserves in Cross River state*

S/No	Name	Location	Area Km ²	% Area
1	Afi FR	Boki	402.87	14.5
2	Agoi FR	Akamkpa/Biase/Yakurr	44.38	1.6
3	Cross River North FR	Etung	146.05	5.3
4	Cross River South FR	Etung/Ikom	526.3	19
5	Ekinta FR	Akamkpa/Akpabuyo	117.12	4
6	Gabu FR	Yala	4.75	0.17
7	Ikom Fuel Wood FR	Ikom	1.75	0.06
8	Ikrigon FR	Ikom	5.77	0.2
9	Lower Eyong FR	Odukpani	20.89	0.75
10	Oban Block FR	Akamkpa/Odukpani	736.63	26.6
11	Ukpon FR	Obubra/Yakurr	315.72	11.4
12	Umon Ndealichi FR	Biase/Odukpani	112.01	4
13	Uwet Odot FR	Akamkpa/Biase/Odukpa	302.8	11
14	Yache FR	Yala	36.79	1.3
Total			2,773.83	100

Adapted from data collected from Cross River state Forestry commission

Figure 2.4 Forest Management types in Cross River State



Source: Bisong 2007

The Forest Reserves are strictly under Government control and management. Weak and inefficient public institutions in the past had served to promote deforestation and forest degradation, for instance, between 1991 and 2001, satellite imagery showed evidence of significant deforestation in a number of forest reserves across the state. *Table 2.9* highlights this.

Table 2.9 *Deforestation in Cross River state forest reserves (1991 - 2001)*

S/No	Name	Location	Area Km ²	% Area	Perimeter Km	THF Area Km ²	Deforested Area Km ²	% Deforested
1	Afi FR	Boki	402.87	14.5	175.14	301.51	101.36	25.1
2	Agoi FR	Akamkpa/ Biase/Yakurr	44.38	1.6	26.91	16.99	27.39	61.7
3	Cross River North FR	Etung	146.05	5.3	57.51	56.41	89.64	61.3
4	Cross River South FR	Etung/Ikom	526.3	19.0	156.17	504.32	21.98	4.2
5	Ekinta FR	Akamkpa/ Akpabuyo	117.12	4.2	53.23	9.31	107.81	92.1
6	Gabu FR	Yala	4.75	0.2	9.68	0	4.75	100
7	Ikom Fuel Wood FR	Ikom	1.75	0.1	5.83	0	1.75	100
8	Ikrigon FR	Ikom	5.77	0.2	10.18	4.75	1.02	17.6
9	Lower Eyong FR	Odukpani	20.89	0.8	19.89	0	20.89	100
10	Oban Block FR	Akamkpa/Odukpani	736.63	26.6	230.58	369.98	366.65	49.8
11	Ukpon FR	Obubra/Yakurr	315.72	11.4	153.51	199.01	116.71	36.9
12	Umon Ndealichi FR	Biase/Odukpani	112.01	4.0	92.84	29.16	82.85	73.9
13	Uwet Odot FR	Akamkpa/ Biase/Odukpa	302.8	10.9	120.96	92.58	210.22	69.4
14	Yache FR	Yala	36.79	1.3	50.99	0	36.79	100
		Total	2773.83	100	1163.42	1584.02	1189.81	42.9

Source: Adapted from CRSFC, 2001

The table above show the disappearance (100% loss of forest cover) of Ikom fuel wood Forest Reserve, Gabu Yala Forest Reserve, Yache Yala Forest Reserve and lower Eyong Forest Reserve. The Ekinta Forest Reserve (Akampa/Akpabuyo) is deforested to about 92%/. These reserves were lost largely due to illegal logging, hunger for land and unsustainable agricultural practices all which were aided and abetted by corrupt government officials.

Community Forests in Cross River State

Comprehensive data on the size and distribution of community forests does not exist. Only the aggregate estimate on community forest size is available and was estimated by the Forestry Commission as 1,632.75 Km² in 2002. Data from land use planning carried out for selected communities in Cross River State between 2000 and 2002, enabled the estimation of the size of some of the community forests. *Table 2.10* reports the size of these below.

Table 2.10 Profile and Structure of Land Use Types in Some Community Forest Estates Cross River State

S/n	Community/Settlement	Vegetation/ Land Use Type	Size sq km
1	Okorshie	High Forest	11.49
		(Wood lands & Palm Bush)	4
		Forest Plantation	1.05
		Grassland	2.67
		Total Land Area	19.21
2	Etara/ Ekuri-Eyeyeng	High Forest	75.2
		Secondary Forest	2.19
		Total Land Area	77.39
3	Agoi-Ekpo (Tekowa)	High Forest	18.89
		Secondary Forest	18.73
		Swamp Land	1.71
		Total Land Area	39.33
4	Iko-Ekperem/ Owai	High Forest	89.25
		Secondary Forest	52.67
		Total Land Area	141.92
5	Nselle	High Forest	51.59
		Secondary Forest	31.12
		Derived Savanna/Grassland	20.61
		Swampland	18.6
		Total Land Area	121.92
6	Abo 1	High Forest	34.49
		Secondary Forest	13.33
		Swamp Land	1
		Total Land Area	48.82
7	Abo Inland	High Forest	44.81
		Secondary Forest	17.22
		Total Land Area	62.03
8	Bashu	High Forest	11.95
		Secondary Forest	5.16
		Total Land Area	17.11
9	Ekuri (Old and New)	High Forest	330.00
10	**Iku and Abung	High Forest	330.00

SOURCE: Bisong, F.E. 2007 ** CRSFC, 2010

It can be seen from the table above, that the Ekuri (Old and New) and the Iku Abung communities have the highest areas of community forest estate in CRS with about 330 sq km each of forest land. They are both arguably the largest remaining areas of community forest in West Africa.

Iko-Ekperem, Etara/Ekuri-Eyeyeng, Nelselle, Agoi-Ekpo and the Abu/Bashu communities also have appreciable areas of community forest estate.

Appreciable areas of community forest also belong to Danare and Bashua to the immediate south of the Okwangwo Division of Cross River National Park however the exact size of these is not known.

3.1 DRIVERS OF DEFORESTATION AND FOREST DEGRADATION IN NIGERIA

Expansion of agriculture is the number one cause of deforestation emissions globally and particularly in Nigeria where the rate of deforestation is put at 3.5% per annum as shown by the EMP study.

The assessment of vegetation and land use change between 1978/78 and 1993/95 commissioned by the Federal Department of Forestry noted that there was significant increase in the areas of agriculture as all types of agriculture identified grew by a total of 84,073km² within the 18 year period.

Similarly, grazing land appears to be expanding uncontrollably. Its area increased from 18.3 percent in 1976/78 to 20.06 percent in 1993/95. A rapidly increasing population using a finite resource without adjustments in land use patterns or improvements in technology intensifies the pressure on land with associated degradation.

3.1.1 *Direct Causes of Deforestation and Forest Degradation*

The main direct causes of deforestation and forest degradation are:

- (i) Agricultural expansion including pasture development;
- (ii) Unsustainable wood extraction for timber, fuel wood and charcoal;
- (iii) Infrastructure extension involving construction of roads, settlements, pipelines, open pit mines, hydroelectric dams, etc; and
- (iv) Forest fires through the annual bush burning.

3.1.2 *Underlying Causes of Deforestation and Forest Degradation*

The underlying causes of deforestation and forest degradation can be grouped under macro economic factors, governance factors and other factors (including demographic technological and cultural factors).

Macro Economic Factors

The higher profitability of agriculture is the main economic factor underlying the conversion of forests to other uses. Other macro economic factors include external debt; foreign exchange rate policy and trade policies governing the sector. For example, the ban on log and sawn timber export has contributed significantly to this inefficiency by keeping prices lower than their true competitive levels. This has continued to protect the inefficiency of the wood industry. According to a World Bank study's analysis, four states (for which complete data are available) subsidized the forest industry to the tune of US \$6.5 million in 2003 through a failure to adjust their fees to their real levels and a failure to capture revenues lost through illegal logging. This

study estimated that between 2001 and 2003, the four states lost US \$ 18.7 million from these sources.

Governance Factors

Deforestation and degradation can result from the combined impact of poor forest tenure arrangements and weak forestry institutions, which in turn determine the set of incentives that leads to overexploitation.

Outdated forest laws: The legislative structure for forest management in Nigeria has remained largely unchanged since colonial times. Forest resources fall under three main categories: Forest Reserves, State and private tree plantations, and 'free areas'. The colonial legislation set a number of precedents that are still evident today, including a policy thrust based upon the expansion of reserved areas and plantations, in which communities have very limited rights. The current National Forest Policy (1988)¹¹ continues this trend by focusing on achieving national self-sufficiency in wood production and a doubling of the reserved forest area. However, the status quo appears to have continued largely unchanged by this policy environment. The role of rural communities in forest management and the importance of forest resources to the rural poor have not been recognized so far.

No integration with other ministries: Government agricultural programmes, and the potential expansion of the solid minerals sector, have a significant impact on forestry in Nigeria, with this largely being overlooked in national planning processes. Forestry (and environment in general), is not effectively integrated across national planning, despite the presence of mainstreaming mechanisms (such as the inactive biodiversity inter-ministerial committee).

Land tenure: Land tenure laws fail to formally recognise community tenure of land removing an incentive for villages to manage their land resources more effectively. The rights of communities over the forest sector worsened following the Land Use Decree of 1978.

Weak capacity at Federal level: The management of forest resources and the right to generate revenue from the forest estate are both vested in the State Governments at present. The 1978 Land Use Decree, which vests all land in the hands of the State Governors, strengthened this mandate. The role of the Federal Government appears somewhat limited, although the Federal Department of Forestry (FDF) holds the remit to advance national forest policy. The FDF is in a weak position, having suffered from a lack of capacity development over last fifteen years. The National Forest Development Committee (NFDC) is the forum that brings together all the State Forestry Directors and is chaired by the Director of the FDF. It provides an important institutional link between the Federal authority and the States. In recent times it has been involved in guiding forest policy and legislation development.

Weak capacity at state level: This lack of capacity and funding situation is reflected at the state level, where the State Forestry Departments lack capacity to manage forests effectively. On the other hand, forestry plays a pivotal role in State finances for example, in Ekiti State, with 40 % of Internally Generated Revenue being raised from timber royalties and licence fees in 2002. Nevertheless, the funding of government agencies remains weak and there is very limited civil society capacity to compensate for this deficiency.

Absence of forest management planning: An important cause for deforestation within the forest reserves can be linked to state forestry departments who have abandoned any form of forest management for natural forest since the 1970s. As a result, reserve forests are being treated as an infinite resource with no effective policies in place to regulate their harvesting. An example of this is the practice of allocating short-term concession of 1 to 3 years that encourage annual re-entries thereby totally degrading the forests. In many reserves management amounts to salvage logging for the last remaining trees.

High revenue targets and low timber fees: The forest revenue system of the states has also contributed to the forests' demise. The allocation of concessions is by discretion and annual timber removal is driven by the states' revenue targets. These are set administratively without regard to what actually exists in the forest or what can be sustainably harvested. A World Bank Forestry Economic Study for Nigeria in year 2005 showed that low timber fees have had a direct impact on the efficiency of forest industry, costing the state significant losses in revenue as well as causing wastage of valuable timber resources. Other reasons for degradation in the forest reserves include inefficient wood-utilization by industry and, therefore, a higher demand for industrial grade timber, and illegal logging.

De-reservation by state governments: In addition, forest estates are being de-reserved by some state Governments and the State Forest Departments who have been resist the spate of requests from corporate and influential individuals for excisions from the forest estate for the establishment of agricultural cropland. The unfortunate impression has thus been created that the forest estate exists as a land bank as the demands for de-reservation continue nationwide.

Ban on wood export: In addition, the ban on log and sawn timber export has contributed significantly to this inefficiency by keeping prices lower than their true competitive levels. This has continued to protect the inefficiency of the wood industry. According to this World Bank study's analysis, four states (for which complete data are available) subsidized the forest industry to the tune of US \$6.5 million in 2003 through a failure to adjust their fees to their real levels and a failure to capture revenues lost through illegal logging. This study estimated that between 2001 and 2003, the four states lost US \$ 18.7 million from these sources.

Demographic Factors

A growing rural population and migration to the agricultural frontier increases the pressure on forests. An increasing population in urban and rural areas also raises the demand for food and other land-based commodities, thus, requiring more land to produce them.

Technological Factors

Technological improvements can affect deforestation rates. The adoption of land extensive technologies inevitably results in the expansion of agriculture at the expense of forests.

Cultural Factors

Sacred groves and forest areas are often protected from land conversion and degradation. However, other cultural factors exert pressure on forests. The majority of forest communities with a few exceptions are unaware of any alternatives to unsustainable exploitation and are often divided amongst themselves as to how to best exploit the forests for their development. In a typical village individuals supported by logging interests are often pitted against hunters and NTFP collectors. Chiefs are often compromised by loggers and are unable to protect the forests for the good of the majority in the village who may depend on NTFPs and bushmeat and other forest products to supplement farming income. Divided communities are often far more vulnerable to predatory logging interests and so within a few generations, their forests is cleared while the villages remain poor.

Table 3.1 below shows the drivers of deforestation and forest degradation in Nigeria.

Table 3.1 *Some of the drivers of deforestation and forest degradation in Nigeria*

Drivers	Deforestation	Forest Degradation
Shifting cultivation	√	
Commercial farming for biofuels	√	
Forest fires	√	√
Over exploitation of forests	√	√
Over grazing	√	√
Mining	√	√
Infrastructure development e.g. road, power lines	√	
Energy for domestic use	√	√
Weak law enforcement and weak forest management capacity	√	√
Obsolete forest laws in the states	√	√

The main drivers of deforestation include:

- Unsustainable agricultural practices;
- Commercial logging;
- High growing rate of urbanization;
- Domestic energy use;
- Inefficient use of forest resources; and
- Poor enforcement of forest laws, policies and regulations.

Even though all the above mentioned drivers of deforestation have a significant impact on forests, unsustainable agricultural intensification and commercial logging respectively practices tops the lists of deforestation drivers, while urbanization and domestic energy uses follow. Poor conservation and poor enforcement of forest laws, policies and regulations exacerbate deforestation drivers.

4.1 *POLICY AND INSTRUMENTS FOR FORESTRY DEVELOPMENTS AT NATIONAL LEVEL*

4.1.1 *The National Forest Policy*

The current National Forest Policy was approved by government in 2006. The forest policy reviews and formulation was carried out through an inclusive stakeholder's consultation nationwide between 1999 and 2004. The guiding principles for the policy were based on the government reform agenda of poverty reduction and good governance.

The overall objectives is to achieve sustainable forest management that would ensure sustainable increase in the economic, social and environmental benefits from forests and trees for the present and future generation including the poor and the vulnerable groups.

Specifically, some of the objectives include:

- Increase, maintain and enhance the national forest estate through sound forest management practices;
- Address the underlying causes of deforestation, forest degradation and desertification;
- Promote and regulate private sector involvement in forestry development, and create a positive investment climate in the sector;
- Support schemes that would facilitate access to carbon markets; and
- Encourage forest dependent people, farmers and local communities to improve their livelihood through new approaches to forestry.

Some of the strategies for the implementation of the policy elements include:

- Promotion of partnership with all stakeholders including the Private sector, Communities, Civil Society Organizations (CSOs), NGOs and Community Based Organizations (CBOs);
- Decentralization;
- Promotion of community participation in forest resources management; and
- Encouraging the active participation of women, youth and the vulnerable group in forest resources development.

4.1.2 *The National Forest Legislation*

A draft National Forestry Act was produced in 2006 but is yet to be passed into law. It was concurrently evolved by the same stakeholders engaged in the review of the National Forest Policy. The evolution of the Act took into consideration.

- The various provisions of the policy;
- The constitutional arrangements for forest management in Nigeria; and
- The responsibilities of Federal Government in the implementation of treaties and global forest imperatives. The draft National Forest Act is under active consideration in the Federal Ministry of Justice before presentation to the Federal Executive Council and National Assembly.

4.1.3 *The National Policy on Environment*

The primary mandate of the Ministry is to achieve environmental objectives as enunciated in section 20 of the constitution of the Federal Republic of Nigeria. The primary objectives are to take full inventory of the natural resources of Nigeria, assess the level of environmental damage, design and implement restoration and rejuvenation measures; and to evolve and implement additional measures to halt further degradation of the environment.

4.1.4 *State Forest Policies and Legislation*

The 36 states in Nigeria and the Federal Capital Territory (FCT) have their respective forest policies and Forest Acts which are used to regulate forestry practices in their domain. Most of these policies and legislations were adopted from the old regional governments in Nigeria before the creation of states (i.e. from the 1970s or even older). Virtually all are obsolete and need to be reviewed.

4.1.5 *Regulations by the National Environmental Standards and Regulations Enforcement Agency (NESREA)*

NESREA has rolled out some Regulations in year 2009 in the course of carrying out its mandate. The Regulations that have some relevance to REDD+ issues include the National Environmental (Access to Genetic Resources and Benefit Sharing) Regulations 2009; and the Regulation on land degradation and watershed management. The agency is at present developing a Regulation on sustainable wood export.

4.2 *CROSS RIVER STATE FORESTRY LAWS & POLICIES*

The Eastern Nigeria Forest Law and Regulations of 1956 as revised in 1960 are still the operative laws in force in Cross River State. These laws mainly established Forest Reserves, fixed the boundaries to the reserves and provided rights of access to communities and the general public. These

include the right to hunt and fish, collect the produce of the wild oil palm, tap and collect the products of the wild wine palm, collect the fruits of specified species, collect canes and bush ropes, collect snails and tortoises, and take water from the streams. Though this law gives the right of access to communities and individuals, it does not deal with community – based sustainable forest management and use.

In 1999, the Cross River State House of Assembly passed the Forestry Commission Bill into law. The law established the State Forestry Commission and provided for its organizational structure but does not make provisions for sustainable forest management.

Also in 1999, the Cross River State Commissioner for Agriculture and Natural Resources, then responsible for forestry matters, approved and signed two regulations i.e. the Marketing and Transportation of Forest Products Regulations and the Tariff and other Forestry Prescribed Fees Regulations. These are regulations not laws attempting to establish a regime for the trade in timber and Non Timber Forest Products. It is important to notice here that it is the Ministry of environment that is now responsible for forestry matters and the supervision of the Forestry Commission. However, there is no law to back up this new arrangement.

In 2000, a series of consultancies sponsored by the DFID Cross River State Community Forestry Project (CRSCFP) examined the state’s legal and regulatory framework in the forestry sector. Reports generated from these consultations identified a number of problems, primarily the failure of the 1999 Forestry Commission law to provide rules to ensure sustainable forest management.

These dialogues led to the drafting of a proposed new Law on Management and Sustainable Use of the Forest Resources of Cross River State in 2002. The provisions of the draft law covered all of the different types of forests within the state, including state Forest Reserves, Community Forests, Private Forests and Wildlife Sanctuaries. The law also covered the roles and responsibilities of all of the potential stakeholders and beneficiaries of forest resources in the state, including the Forestry Commission, Local Governments, communities, the private sector and NGOs.

It provides for the procedures, processes and checks and balances necessary to ensure that the all of the existing and potential benefits from the state’s forest resources contribute directly to the well – being of the people of Cross River State. The new law has just been passed (9th September 2010). It is pertinent to note that these state laws and regulations do not affect the National Park.

The new forestry law seeks to give specific mandate and task to the Commission to undertake sustainable forestry management, however it was not revised with a comprehensive knowledge of REDD+. Nevertheless, it does give the state government the ability to award “carbon” concessions (as

well as watershed protection concessions and eco-tourism concessions) whereas the old law only recognized timber exploitation concessions.

It is clear that a significant amount of work will be required in terms of drawing up an addendum to the new law for it to become REDD+ enabling. The state will require help with introducing clauses to address a wide range of REDD+ issues including carbon tenure, benefit sharing, financial arrangements, private sector participation, etc.

4.3

COMMUNITY BYLAWS

Some communities have their own forest management bylaws. These bylaws generally define the boundaries of the community land, the role of the FMC and its composition and duties as well as responsibilities in terms of community governance. General rules are set to protect forest including rules for timber exploitation, NTFP collection/registration fees, forest management and use zones complete with fine and penalties for breaking the rules. Rules are also set for hunting complete with a list of animals of which hunting is prohibited.

5.1 FORESTRY PROGRAMMES AT THE FEDERAL LEVEL

A number of forestry initiatives and programmes were put in place in the past and some are presently on going to support sustainable forest management. These are discussed in the section.

5.1.1 Nigerian Forestry Action Programme (NFAP)

The (NFAP) started in 1990 following the expression of the Federal Government of Nigeria interest to launch the Tropical Forestry Action Programme for the country in 1988. The FAO, World Bank, UNDP and World Resources Institute (WRI) initiated an independent review of the TFAP. The programme development of the NFAP was carried out in four phases between 1989 and 1996 through a participatory and country driven approach. Implementation did not commence because of the unfortunate political climate; then, inability to secure funding (counterpart and donor funds).

5.1.2 Forest Outlook Study for Africa (FOSA)

Nigeria Forest Outlook Study was commissioned in 1995 under the aegis of the Forestry Outlook Study for Africa. The main objectives of FOSA are:

- To indicate what is likely to happen to forestry in the next two decades; then (up to year 2020) if current trends persist.
- To set priorities and strategies that may be pursued to enhance forestry's contribution to sustainable development.

The main driving forces which were identified as impacting forestry in the Nigeria Forest Outlook study are:

- The socio-political and institutional arrangement which had inadequately addressed the continued loss of forest resulting from intense pressure due to uncontrolled (legal and illegal) conversion of forest lands to agriculture and other alternative uses;
- The increased demand for fuel wood as a major source of domestic energy;
- The steady demand for industrial round wood and wood products due to rapid urbanization and level of poverty and
- The unsustainable forest management practices.

The broad outlook presented in the Nigerian version of FOSA, gives a direction to some pertinent issues to be addressed in the national forest policy including National Forest Programme (NFP).

Table A.11 listed as Appendix 11 gives a summarized version of possible trends, if the current driving forces persist, the suggested areas of intervention and public sector to be adopted.

5.1.3 *National Forest Programme (NFP)*

The NFP is a generic expression for wide range of approaches to sustainable forest management with different countries to be applied at national and sub-national level. The NAFP was reviewed in line with the Intergovernmental Panel on Forests/Intergovernmental Forum on Forests (IPF/IFF) proposals for actions that are relevant to Nigeria. The review of the NFP commenced in 1999 and was completed in 2004. Some of the programmes that came out of the NFP include;

The Forestry Development Programme (FDP)

The programme was developed through stakeholder's consultations and adopted by the National Forestry Development Committee (NFDC) in Minna Niger State and approved by the Federal Executive Council in December 1999. It was conceived as a comprehensive scheme for massive afforestation of Nigeria over a four year period (2000-2003). Community participation was emphasized and adequate consideration was given to related cross-sectional issues and activities. The FDP has not been fully implemented due to amongst others:

- Budgetary constraints experienced by forestry and other related sectors;
- Inadequate understanding of roles and responsibilities by other stakeholders; and
- Insufficient commitment to forest governance and advocacy by the many stakeholders.

The Inter-Ministerial Committee on Desertification and Deforestation Programme

The programme was prepared by an Inter-Ministerial Committee with multi-stakeholders representation. The ministries involved are Federal Ministry of Environment, Federal Ministry of Agriculture and Rural Development, Federal Ministry of Solid Minerals Development, Federal Ministry of Science and Technology, Nigerian National Petroleum Corporation (NNPC) and Office of the Special Adviser on Food Security.

- The report addressed the deplorable state of the nation's forest resources;

- Evaluated the need for an effective, holistic and cross-sectional approach to address the situation;
- Identified roles and responsibilities of various stakeholders;
- Developed funding mechanisms and strategies for monitoring and evaluation as well as for addressing cross-cutting issues;
- The programme adopted the FDP and expanded its scope with respect to energy, biotechnology, land use management, monitoring and evaluation as well as public education, extension and awareness creator;
- Projects and activities were designed to be implemented between 2001 and 2003; and
- The level of implementation was low to factors similar to these experienced in the implementation of the FDP.

The programme of the National Council on Shelterbelt, Afforestation, Erosion and Coastal Zone Management

The Council, under the chairmanship of the Vice President was inaugurated in February 2004. It was charged with the broad mandate of curbing the menace of desertification in the north by developing a green wall project, and addressing deforestation nationwide. It was also charged with the responsibility of attacking flood and gully erosion. The implementation of the programme was impaired by fund paucity and political bickering.

National Tree Nursery Development Programme (NTDP)

The programme was established by the President in August, 2001 under the chairmanship of the special adviser on food security to the President. The principal objectives of the programme were to:

- Raise seedlings of selected tree crops for the use of farmers and other interested clients including state governments at 50% subsidy;
- Develop alternatives to firewood as cooking and heating fuel;
- Develop and promote the economic potentials of the products on special plant species; and
- Facilitate skills training where necessary and feasible in these technologies.

Presidential National Afforestation Programme (2009)

This programme was approved by the President in 2009 and is being funded by the Ecological Fund Office. The programme is on-going and is to address

the problem of desertification in the front line semi arid states of Nigeria, and massive afforestation schemes nationwide. The programme's formulation is anchored on two principles of community participation and building into the projects, elements of employment generation. The massive afforestation programme is to be integrated with other rural development schemes that would increase vegetation cover, enhance agricultural productivity, improve livelihood and provide employment opportunities for the youths and women. The project is presently at take-off stage.

5.1.4 *National Biodiversity Strategy and Action Plan*

Nigeria has put in place a National Biodiversity Strategy and Action Plan in 2004. The strategy envisions a Nigeria that integrates biodiversity conservation in a truly national programme of sustainable development aimed at designing a secure future that facilitates the growth of the Nigeria biodiversity industry for the benefit of Nigerian community and the economy in line with principles of ecological sustainability and social equity.

5.1.5 *National Appropriate Mitigation Actions (NAMAs) and the National Adaptation Programmes of Actions (NAPAs)*

These two documents have been developed by the Climate Change Unit of the Federal Ministry of Environment.

5.2 *FORESTRY ACTIVITIES CROSS RIVER STATE*

The State Government, (through the Forestry Commission), initiated some of the following activities. Many of these were implemented as a result of collaboration with international donor programmes such as the DFID CRS Community Forestry Project, the USAID SPACE project or with on-going interaction with the environmental NGOs in the state.

They include:

- Tree nurseries establishment across the State.
- Plantation establishment and maintenance in the degraded areas within the Forest Reserves.
- The ongoing roadside and open space tree planting/urban renewal programme in urban centers across the State.
- An on – going process of establishing a Forest Reserve in the Cross River Estuary. This will be the first Marine and Coastal Protected Area in Nigeria.
- The upgrading the Afi Mountain Forest Reserve to a Wildlife Sanctuary and setting up of a management programme for the sanctuary.

- The ongoing boundary re – cleaning of the Ekinta Forest Reserve.
- Establishment of an anti – logging gate near the Afi Mountain Wildlife Sanctuary to protect eco – tourism sites.
- The certification of 18 FMCs (i.e. given formal recognition) by Government.
- Banning of the Cross River Agro Forestry Company (CRAFICO) a subsidiary of WEMPCO, from logging and related activities.
- Cancellation of all logging concessions in the State in order to evolve a more sustainable system.
- Employment of professional, technical and forest protection staff to enhance forestry activities and management in the State.
- Regular forest patrols at zonal levels.
- Move towards more gender equity in employment within the FC.
- An on going process of environmental NGO registration
- A revised tariff system and improved royalty in favor of the communities.
- Moves towards greater involvement of the communities in forest exploitation, control and monitoring through community involvement in signing of owners consent, as outlined in the Single Tree Permit guidelines.
- The establishment of joint patrols of the forest by the communities (FMCs) and the FC.
- The establishment of women groups to regulate and manage the use of NTFPs. (In some communities, women groups now register resource buyers).

5.2.1 *Forestry activities in CRS Initiated by the Federal Government*

The Federal Government has funded the following forestry activities in CRS:

- Forest Reserve boundary cleaning of the Cross River South Forest Reserve (Ekukunela axis) in December 2004.
- The establishment of 7 ha of plantations in Alok, Ikrigon forest reserve in December 2004.

- Capacity building for communities in forest management (Nov/Dec 2004), in Abo Ebam, Nselle, Etara and Okuni.
- Conducted a National Forest Inventory Survey and development of a draft National Forest Policy.
- Assessment of permanent sample plots in 2000.
- Development of an ongoing Biogas Project.

These all tended to be “stand alone” activities with no plans for continuation and or follow up. The biogas initiative also seems to be a plan “on paper” only, as no evidence of installation of the required facilities exists.

5.3 *SOME PREVIOUS DONOR FUNDED INITIATIVES IN CROSS RIVER STATE*

Some donors, international NGOs and UN agencies in the domain of forest conservation, climate change and community development includes:

5.3.1 *NCF - WWF creation of Cross River National Park (CRNP)*

Between 1990 and 2000, the Nigerian Conservation Foundation (NCF) and Worldwide Fund for Nature (WWF - UK) with funding from the Overseas Development Administration of the UK Government (ODA) and the European Union, supported conservation, Agroforestry and community development within the support zones of the two sectors (Oban Hills and Okwangwo) of the CRNP. The feasibility studies of this initiative were concluded in 1990 with a seven - year implementation plan and planned area coverage of all villages in the support zone of the CRNP. This plan “promised” significant support for the socio economic development of the support zone villages of CRNP.

Implementation, however, started in 1994 with a significantly scaled down budget that translated to a significant reduction in the number of villages that could be covered. In the Okwangwo Division of the park, for example, only 36 (of 66 villages of the feasibility plan) were included in the implementation plan. The programme to support for the development of the park and its support zone ran for seven years. WWF and NCF worked closely with the Federal National Parks Service in the development of the park. It initially focused on the whole park (both Oban and Okwangwo Divisions) in the first two years. After this, support was restricted to the management and development of the Okwangwo Division.

The park worked closely with the DFIF funded community forestry programme (see below) to support the start if the Ekuri Initiative community forestry project covering two villages in the support zone of the Oban Division. The project is credited with raising general awareness across the state about the importance of its forests. The project certainly helped to

catalyse the initiation of many of the environmental NGOs and CBOs now found across the state. This is a phenomenon (i.e. several relatively active local environmental NGOs) that is unique to Cross River State.

5.3.2 *ODA/DFID Community Forestry Project:*

In 1999, the Department for International Development (DFID), formerly the ODA, of the UK Government began funding of a 3 - year Cross River State Community Forestry Project (CRSCFP). It was conceived essentially to support the need for increased productivity of the states remaining forests outside the national park (i.e. in the forest reserves and community forests) following the creation of the Cross River National Park projects. The major objectives of the programme were:

- To build the capacity of communities to manage their forests and derive livelihood benefits,
- To build the capacity of the Cross River State Forestry Commission to support communities

Over 33 communities interested in forest management were identified out of an estimated 75 forest - owning villages in Cross River State. The project facilitated formation and registration of 33 Forest Management Committees (FMCs).

The three year programme carried out numerous studies. These included:

- a rapid inventory of the state's forest resources;
- a study on the non-timber forest products from the states forest and opportunities for sustainable management;
- a study to assess opportunities for communities with respect to sustainable timber harvesting and conversion from their community forests, the capacity of the Cross River State Forestry Commission to give sustained support to community forestry initiatives, the level of training needed by community-based institutions and the Cross River State Forestry Commission to support small scale portable sawmills and forest management planning;
- specific activities relating to the support for community forestry in communities included;
- facilitating the development of community forest management plans for 8 villages using community mapping techniques and participatory livelihoods analysis;

- development of joint Declarations of Intent (DOI) between the communities and the Forestry Commission committing both sides to implementation of the plans; and
- development of community byelaws in support of these plans committing the State judiciary to upholding community implementation of their plans.
- capacity building of the Forestry Commission: Strategic planning and training of the Community Forestry Support Unit.

In addition, the CRSCFP worked on a complete revision of the State's forestry laws. Some of these changes have given a legal basis and recognition to community forestry in Nigeria for the first time.

While the programme initiated many new activities, it did not receive further funding even though it was clear that many of the changes initiated would require long term support to be completed and to become sustainable. So as a result, many of the FMCs created, are not active (though almost all are still in existence and some are active). The revised forest law stall awaits the governor's assent. None of the community forest management plans were implemented because writing them had just been completed when funding ceased.

5.3.3 *Living Earth Nigeria Foundation Community Forestry Programme:*

In 1998, Living Earth Nigeria Foundation initiated a 3 year programme with five rural communities in Cross River State focusing on environmental education and community forestry. A sixth community, which claimed joint ownership of the forest with one of the original five project communities, joined the programme in 2000 after a series of conflict management negotiations. The project aimed to encourage communities to take long - term approach to natural resource management that included community forestry as well as sustainable agriculture practices. The project had three specific objectives to:

- Develop the capacity of communities in the State to implement community forest initiatives.
- Strengthen the capacity of NGOs and Local Government Authorities (LGAs) to support village organizations implementing community forestry initiatives.
- Influence national and international forestry policy and practice as a result of working papers published, discussing issues from the project.

The project emphasized the importance of building the capacity of communities to manage their own initiatives. The approaches used by Living Earth Nigeria Foundation were to build partnerships with communities, to use environmental education to stimulate discussion and debate on issues

relevant to communities and to provide and share learning experiences for both community members and staff of the Foundation.

The project was complementary to the DFID Community Forestry Project in that it also facilitated the development of community forest management plans for another 5 communities (on top of the 8 from the DFID programme). However, similarly to the DFID programme, support was not sustained after the funding of the programme ceased and none of the forest management plans are operational.

5.3.4 *One Sky - Cross River Environmental Capacity Development Project (CRE):*

With support from CIDA, as the Canadian NGO executing the CRE project, One Sky was focused on Environmental NGO (ENGO) capacity building, participatory planning, policy dialogue training, gender mainstreaming, participatory monitoring and evaluation. The One Sky Cross River Environmental Capacity Development Project (CRE) worked with 5 environmental NGOs throughout the state to strengthen the management and policy - dialogue capacity of ENGOs. Its purpose was to build a network of long - term partnerships among Canadian and Nigerian environmental organizations that could work together to strengthen organizational capacity and environmental management.

The CIDA - One Sky initiative brought together a coalition of four Nigerian Environmental NGOs (ENGOs) namely CERCOPAN, Development in Nigeria (DIN), Living Earth Nigeria Foundation (LENF) and the Nigerian Conservation Foundation (NCF) as well as one local environmental NGO network, the NGO Coalition on Environment (NGOCE) as primary stakeholders.

Six Canadian organizations were twinned with the Nigerian NGOs contributing expertise in Ecotourism; Micro-enterprise development, Eco-villages, Ecosystem- based planning and management, as well as Community forest and Participatory land-use planning to strengthen their capacity. The idea was that the ENGOs that were in turn instruments to support communities and Community Based Organizations (CBOs) in Cross River State. The programme finished two years ago and has been moderately successful in some areas of capacity building of the NGOs in the state.

5.3.5 *USAID Sustainable Practices in Agriculture for Critical Environments (SPACE) project:*

Launched 30th March 2004, the goal of the Sustainable Practices in Agriculture for Critical Environments (SPACE) Project was to conserve the ecological values and processes of Cross River State's forests and slow agricultural expansion into these forests through support for sustainable agriculture that would also enhance the welfare of communities that border these forests. The project selected four locations for its work. These were:

- A block of contiguous forest that included Afi River Forest Reserve (together with Afi Mountain Wildlife Sanctuary, Mbe Mountains and the Okwangwo Division of Cross River National Park (CRNP)).
- Cross River South Forest Reserve, a tenuous link between the forests of northern Cross River State and the CRNP Oban Hills Division.
- The Northwest Flank of the CRNP Oban Hills Division, which is contiguous with the Ukpon River Forest Reserve.
- The “Oban Road Corridor,” which effectively divides the CRNP Oban Hills Division into two.

The programme only carried out work in the first three locations before its funding was terminated (after three years). Its main achievements were to:

- Support the creation of a community based organization bringing together the 9 communities of the Mbe Mountains to manage the forests for gorilla based eco-tourism.
- Supporting the continued development of forest management plans in 5 communities.
- Re-drafting of the DFID drafted Forest law for Cross River State.
- Support for the sustainable management of cocoa (in collaboration with the International Institute for Tropical Agriculture) by giving training to farmers in better tree management techniques.

The programme closed in 2007.

5.3.6 *World Bank Community Based Poverty Reduction Project*

The World Bank, since 2000 has implemented the Community Based Poverty Reduction Project (Project Number 237 - 603 - 04). Working through the Cross River State Poverty Alleviation Agency, the project objectives are to reduce poverty by empowering communities to take charge of their own development agenda through:

- Multi-sectoral Community Driven Investment;
- Local capacity building;
- Protected areas and biodiversity management; and
- Strengthening Environmental Regulatory and Legislative Framework.

The initiative focuses on infrastructure (Schools, Health, Water, Roads) development and is open to any community that can formulate an implementation plan. Some of the project's achievements included:

- Road rehabilitation for the Danare community; and
- Water (two boreholes) development for the Abontakon.

6.1 *THE NATIONAL CONTEXT*

There are 36 states and the Federal Capital Territory (FCT). Each state has constitutional responsibilities over the ownership and management of the forest resources within her boundaries. The Federal Government has a general responsibility to ensure environmental protection and natural resources conservation, including forestry by setting national policy but not for implementation (this being the preserve of the states).

The local governments are enjoined to participate in forestry development to participate in forestry development activities but almost never have the resources to do this. Participation of other stakeholders, including the communities depends on the level of devolution and decentralization by authority as enshrined in the forest policies of each state forestry service. As discussed earlier, the participation of communities in forest management is minimal outside of Cross River State. The new national forest policy aims to increase:

- Participatory management;
- Effective stakeholders collaboration;
- Decentralization/ democratization of forest governance; and
- Greater cross-sectoral approach in forest planning process.

However, this remains to be implemented by any state other than Cross River State.

6.1.1 *Federal Ministry of Environment*

The ministry was established in 1999 and is the apex institution that regulates the Nigerian Environment. The mission of the ministry is to ensure the environmental protection and natural resources conservation and management for sustainable development. It is also the focal point and coordinating agency for UNFCCC in Nigeria including REDD+.

The Federal Department of Forestry was transferred from the Federal Ministry of Agriculture and Natural Resources in 1999 to be one of the Departments in the newly created Ministry of Environment. The three tiers of government (federal, states and local) in Nigeria participate in forestry development.

6.1.2 *National Technical Committee on REDD*

A National Technical Committee to oversee efforts on Reducing Emission from Deforestation and Forest Degradation (REDD+) has been inaugurated by the Federal Government. The committee is led by the Head of Special Climate Change Unit of the Federal Ministry of Environment, Dr. Victor

Fodeke with Mr. Salisu Dahiru as secretary /co-ordinator. The committee consists of technocrats from financial institutions and specialists on forestry and climate change. It is to:

- make recommendations for the effective planning and implementation of REDD+ programmes and activities in Nigeria;
- develop a roadmap for Nigeria REDD+ Framework and Strategy;
- identify and advise on institutional roles and mandates of relevant stakeholders for the implementation of REDD+ processes in Nigeria;
- coordinate national REDD+ activities with other National Development Programmes like Vision 20-20;
- examine and recommend measures and programmes, which would ensure awareness creation, education, training and institutional capacity building on REDD+ issues in Nigeria; and
- serve as liaison between respective REDD+ institutions, stakeholder groups, UN-REDD Agencies and Development Partners for effective planning and implementation of REDD+ activities in Nigeria.

The committee has its Secretariat at the Forestry Department of the Environment Ministry, and has the following as members:

- Dr. Victor Fodeke (Head, Special Climate Change Unit (SCCU) in the Federal Ministry of Environment as chairman);
- Dr. Bukar Hassan (Acting Director, DDA in the FME);
- Mr. Odigha Odigha (Chairman, Cross River State Forestry Commission);
- Mr. O. S. Adedoyin (DD Forestry in the FME);
- Mr. Lawrence G. Ogundare (AD Forestry in FME);
- Mr. Thomas F. Fameso (AD Forestry);
- Mrs. A. Shoetan (Legal Adviser);
- Mr. Richard Okibe (SCCU);
- Dr. Victor Nkom (Consultant to the SCCU); and
- Mr. Seyi Adefisan (Specialist to the SCCU on Carbon Finance).

Others include:

- Dr. Mohammadu Balarabe (Researcher, Ahmadu Bello University, Zaria);
- Chief Peter Ikwen (Community Forest Management, Cross River State);
- Mr. Tunde Morakinyo (Consultant to the CRSFC);
- Dr. Shola Adepoju (CRO-FRIN);
- Surveyor Efik (Climate Change Network Nigeria);
- Mrs. Priscila Achapa (Women Environmental Programme);
- Mr. Rotimi Ajayi (Media & Communications Specialist); and
- Mr. Salisu Dahiru (Coordinator, REDD+; Committee Secretary).

6.1.3 *State Departments of Forestry (SDF)*

The forestry departments in the 36 states of the federation and FCT own and manage the forest resources at the state level, and supervise revenue collection from the forestry sector in various states. The institutional base of forestry at the state level is not necessarily identical across the states or with the federal base. It was on record that in 19 states the state department of forestry is in the Ministry of Environment while in 17 others, it is domiciled in the Ministry of Agriculture or in a separate ministry of their own. It is only in Cross River State that a forestry commission, a semi autonomous body has been established.

6.1.4 *The Local Government (LG)*

The role of LG in the forestry sector differs across the country. In the southern part of Nigeria (which is rich in forest resources) the LGs have virtually no responsibility for managing forest resources, while the contrary is the case in many states in the north (where the forest cover is low). The Nigerian constitution enjoins LGs to participate in the development of forest resources. The success of REDD+ implementation will require an improved and increased dialogue between each of the three tiers of government as well as with other stakeholders at each of these levels.

6.1.5 *The National House of Representatives and Senate*

They will be key to passing of REDD legislation at the national level. They have several committees including a Committee on Climate Change that will be critical to the passing revised national REDD legislation in Abuja.

6.1.6 *The National Forestry Development Committee (NFDC)*

The NFDC is the highest advisory body to government on all forest issues. The membership includes the Director of Forestry, State Directors of Forestry, the Executive Director of the Forestry Research Institute of Nigeria (FRCN) and Heads of University Departments of Forestry, and representatives of some Non-governmental Organizations such as the Association of Nigeria and Nigerian Conservation Foundation. The Director, Federal Development is the chairman of the NFDC. The committee should ideally meet twice a year to discuss issues on forestry in order to offer useful advice to government or forestry development. The NFDC will be an important organ to support for successful implementation of REDD+ in Nigeria.

6.1.7 *National Council on Environment*

The National Council on Environment is chaired by Honourable Minister of Environment. The council has responsibility to facilitate coordination and cooperation between federal and state government authorities on environment matters including forestry. The Council meets at least once a year.

6.1.8 *The Federal Executive Council*

Some decisions of the National Council of states on policy and legislative issues may be endorsed and approved by the Federal Cabinet under the chairmanship of Mr. President. Such issues are then forwarded to the National Council of States and National Assembly if they relate to legislation.

6.1.9 *The National Council of States*

This is chaired by the Vice President of the Federal Republic with State Executive Governors as members. All decisions of the Federal Executive Council that have direct bearing on the states e.g. the approval of the national forest policy or REDD+ policy has to be communicated to the states in view of the constitutional arrangement which recognizes issues that are on the concurrent lists (to be undertaken both by federal and states) and those on exclusive list (to be undertaken solely by the federal). Forestry issues are on the concurrent list.

6.1.10 *Parastatals in the Ministry of Environment*

Some of the parastatals in the ministry that has mandate relating to forest resources, conservation, management and utilization include the following:

6.1.11 *Forestry Research Institute of Nigeria (FRIN)*

First established in 1954 on the Federal Department of Forestry Research but became an Institute, the Forestry Research Institute of Nigeria in 1977 by government reform agenda then. The main function is to carry out research and development and training in forestry sector in Nigeria. It has a major role to play in REDD+ issues especially on key technological and methodological issues; like establishment of reference level and baselines, monitoring, reporting and verification of forest carbon and others.

6.1.12 *National Parks Service*

The National Parks Services was established in 1992 to coordinate the administration of the seven national parks in Nigeria. National parks are protected areas for multiple objectives and are administered at the federal level. Some details on national parks are provided in section 2.1.12

6.1.13 *National Environmental Standards and Regulations Enforcement Agency (NESREA)*

NESREA was established by an Act of the National Assembly in 2007. The agency has responsibility for the protection and development of Nigeria's natural resources in general and environmental technology, including coordination and liaison with relevant stakeholders within and outside Nigeria on matters of enforcement of environmental standards, regulation rules, laws, policies and guidelines. NESREA has rolled out some

regulations, the ones that have some relevance to REDD+ issues include; the National Environmental (Access to Genetic Resources and Benefit Sharing) Regulations 2008, and the regulation on land degradation. The agency is in the process of developing a Regulation on sustainable wood export.

6.1.14 *National Oil Spill Detection and Response Agency (NOSDRA)*

NOSDRA was established by an Act of the National Assembly in 2006. The agency is vested with the responsibility to coordinate the implementation of the National Oil Spill Contingency Plan (NOSCP) for Nigeria accordance with the international convention on oil pollution preparedness, response and cooperation (1990) to which Nigeria is a signatory. NOSDRA is to play a lead role in ensuring timely, effective and appropriate response to oil spills, as well as ensuring clean up and remediation of all impacted sites to all best practical extent. The work of NOSDRA will be appreciated especially within the forest ecosystems in the Niger Delta region.

6.1.15 *Other Federal Institutions that have relevance to REDD+ Issues*

There are a number of ministries and parastatals at the federal level whose activities impinge on forestry development. Some of these ministries are discussed below.

6.1.16 *The Federal Ministry of Agriculture and Water Resources*

The vision of the ministry is to run the agricultural sector with reduced drudgery, ensuring national food security and meeting the industrial raw materials and export needs of the nation. The agencies/parastatals under the ministry include:

- The Nigerian Agricultural cooperative and Rural Development Bank (NACRDB);
- Nigerian Agricultural Insurance Corporation (NAIC);
- Agricultural and Rural Management Training Institute (ARMTI) Ilorin;
- National Centre for Agricultural Mechanization (NCAM), Ilorin;
- Fifteen Agricultural Research Institutes; and
- Thirteen Federal Colleges of Agriculture.

The Fifteen Agricultural Research Institutes are being coordinated by the National Agricultural Research Council. Three notable research institutions that deal with tree crops include:

- The Cocoa Research Institute of Nigeria (CRIN);
- The Rubber Research Institute of Nigeria (RRIN); and
- Nigerian Institute for Oil Palm Research (NIFOR).

6.1.17 *Federal Ministry of Finance*

Has the overall consideration of the fiscal policy of government and is assisted by the Central Bank of Nigeria as the Regulatory Authority. Liaison with them will be important since they will take decisions regarding the funding of forestry in the country as well as being involved in the development of the fiscal regime for REDD in Nigeria.

6.1.18 *Federal Ministry of Science and Technology*

The ministry has a strong role to play in carbon monitoring through the National Space Development and Research Agency (NASDRA). The National Space Development and Research Agency has the strongest GIS capability in the country and will be critical to REDD. It is important that they become part of the National Technical Committee on REDD.

6.1.19 *Federal Ministry of Petroleum Resources*

The ministry is to ensure the effective and efficient exploitation and utilization of the nation oil and gas resources for the transformation of the economy. They should be included in discussions regarding carbon credits and the oil industry.

6.1.20 *Federal Ministry of Solid Mineral Development*

Nigeria is richly endowed with a variety of solid minerals ranging from precious metals, various stones to industrial minerals such as barites, gypsum kaolin, and marble. The exploitation of these mineral resources has promoted deforestation and forest degradation.

6.1.21 *National Planning Commission*

Has a role to play to ensure that REDD+ issues are mainstreamed into the development agenda of Nigeria.

6.1.22 *The Private Sector*

Since forest carbon is regarded as a commodity under REDD+, the role of the private sector can not be overemphasized. Private sector involvement in both the business of carbon project origination and development as well as the trading and purchase of credits is essential. Producing regulations and guidelines for participation in REDD+ activities through transparent public hearings and stakeholder meetings involving the private sector will help ensure that national and state regulations include critical aspects important for private sector involvement. Private sector project developers are equally interested in starting REDD projects as NGOs. They are often able to focus on forest areas that many conservation NGOs do not. They are also able to provide direct investment into projects. It is critical for these project developers to be able to meet certain market-based legal requirements, such as carbon rights, tenure term and project approval requirements. It will be

well worth understanding what those requirements are in order to create a well rounded national regulation.

At the same time, it is worth engaging with potential private sector buyers of REDD carbon credits. These include the airlines, the oil companies (e.g. Shell, Total, Chevron, ExxonMobil, Eni), cement manufactures (e.g. Lafarge, Dangote), and other heavy manufacturing companies in the country. Representatives from the banking sector should also be engaged with especially those that are already planning for carbon credit transactions in Nigeria such as Standard Bank and United Bank for Africa (UBA).

6.1.23 *The Rock and Partners*

The Rock and Partners is a full service legal practice based in Nigeria with offices in Lagos and other states in Nigeria and consists of barristers and solicitors who specialize in climate change and environmental law. They are members of the International Emissions Trading. The Rock and Partners has developed expertise to advise project developers and sponsors on the framework of CDM and Renewable Energy Projects in Nigeria, advising and representing companies interested in purchasing carbon credits on the regulatory framework in Nigeria, negotiating and drafting Emissions Reduction Purchase Agreements (ERPAs) amongst others. They also have in-house verifiers who can advise on baseline methodologies and greenhouse gas accounting. They have a strong relationship with various government ministries in Abuja and are well positioned to advise the government on legislation and policy formulation required to create a secure investment climate for investors interested in carbon projects including REDD.

6.1.24 *Non-Governmental Organizations (NGOs) at Federal level*

The engine that is to drive the voice and the change from business-as-usual scenario in accountability is the NGO community. NGOs, CBOs and other Civil Society Organizations are forces to be reckoned with and more importantly to be worked with. At the national level, key NGO actors include several national level and international NGOs involved in natural resource management and climate change issues including the Nigerian Conservation Foundation (NCF), Pro-Natura International (PNI) and the International Centre for Energy, Environment and Development (ICEED).

6.1.25 *Nigerian Conservation Foundation (NCF)*

This organization is one of Nigeria's oldest environmental NGOs with a genuinely national reach. NCF works with international partners including *the World Wide Fund for Nature, Birdlife International, the World Conservation Union (IUCN), Flora and Fauna International, the Wildlife Conservation Society, and the Royal Society for the Protection of Birds (RSPB)*. NCF has played a key role in the establishment of many of the protected areas in Nigeria, including Okomu, Cross River and Gashaka-Gumpti National Parks, and the Afi Mountain and Lekki Wildlife Sanctuaries. They are highly respected in

government circles and could play a key role in the engagement of various agencies on REDD.

6.1.26 *Pro-Natura International (PNI)*

Pro-Natura International (Nigeria) is a Nigerian NGO closely affiliated to PNI (Paris). PNI focuses on promoting community-led development through supporting institutions in participatory planning and implementation of development programmes. PNI also facilitates Community Development Foundations for the purpose of promoting community-led development ideas and participatory governance thereby improving their ability to access funds from local governments. PNI has considerable experience in implementing successful projects that relate sustainable community development with environmental protection particularly in various locations in the Niger Delta. They have recently moved their head office to Lagos and are developing a REDD pilot project for a new protected area in Ogun, Ondo and Osun States (see *Box 6.1* below).

Box 6.1 The Omo-Oluwa Forest Elephant (REDD pilot) Project

The project is located in the Omo, Shasha, Oluwa forest reserves in Ogun, Osun and Ondo States. The forests in these reserves are heavily degraded; however they still protect significant populations of forest elephants (estimated to be about 30 individuals), chimpanzees, and Nigeria's endemic white-throated guenon monkey.

A year ago, Pro-Natura International Nigeria (PNI) and the Nigerian Conservation Foundation (NCF) began working with the state governments on a project to establish a new protected area consisting of the remaining 40% of natural forest (about 100,000 ha) found in the reserves. The project hopes to establish a REDD pilot to market the carbon credits from the regenerating forests in order to provide sustainable finance for the protection of these forests and the livelihoods of the people that depend on them in perpetuity.

Key activities being carried out as part of the project include:

- Definition and demarcation of the protected area boundaries and re-gazetting of the area
- Protection of the forest through patrols and collaborative management with local communities
- Community education, capacity building and development projects
- Assessments of carbon stocks and development of a Project Idea Note (PIN)
- Review of gaps in state legislation with respect to REDD

The project has held several training sessions with the forestry departments of the three states on REDD. The Governor of Ogun State in particular is very supportive on the project. Both Ogun and Ondo States have taken a particular interest in REDD.

6.1.27 *International Centre for Energy, Environment & Development (ICEED):*

ICEED is Nigeria's leading provider of expertise in energy access policy reform, renewable energy technical assistance and climate change and clean energy financing. ICEED works with a network of specialists that includes: economists, lawyers, engineers, political scientists, gender and social development experts. A key part of this programme will be influencing and

engaging government and civil society stakeholders in Abuja and other parts of the country.

ICEED and NigeriaCAN (Climate Action Network) have already been very effective at galvanising broad based support from key government and civil society institutions in Abuja such as the Committee on Climate change in the House of Representatives and other government and civil society institutions across the country for a climate change strategy and position before the COP 15 talks in Copenhagen.

The NigeriaCAN coalition's activities are organised around three focus groups: a) Climate Change Policy and Institutional Change Group, b) Climate Change Information Access Group and c) Climate Change International Participation Group. Through the legislative process, NigeriaCAN seeks to create arenas where stakeholders in civil society can engage meaningfully with the private sector and decision-makers at both National Assembly and the Executive around the process of climate change institution-building.

6.1.28 *Friends of the Earth Nigeria (FOEN)/Environmental Rights Action*

This is Nigeria's leading environmental activist organisation. They are widely respected and have been extremely effective in leading the campaign against the oil companies and the government with respect to pollution of the Niger Delta and the violation of the human rights of its inhabitants. They recently held a meeting with several environmental NGOs in Calabar to denounce the lack of local stakeholder participation in the development of REDD in Nigeria (see Appendix XV1).

6.2 *CROSS RIVER STATE INSTITUTIONAL FRAMEWORK*

6.2.1 *The State House of Representatives and Senate*

They will be key to passing of REDD legislation at the state level.

6.2.2 *CRS Governor's Office*

The CRS Governor – Liyel Imoke, has given his personal support to REDD in the state. He has backed the Head of the CRSFC, Odigha Odigha, in his drive to develop a REDD programme for the state and has funded numerous trips abroad for CRS government staff to various international for a on REDD. The Governor's office also oversees the activities of the anti-logging task force and the two-year logging moratorium. He has also been key to influencing the agenda of the Federal Ministry of Environment in Abuja.

6.2.3 *The Cross River National Park*

While this is a Federal institution, it is domiciled in Cross River State and contains 50% of the state's forest cover. The Cross River National Park

contains some of the last remaining moist tropical forests in Nigeria. It consists of two separate areas: Oban Division in the south and Okwangwo Division in the north. Lowland rain forests cover 300,000 ha, whereas montane forests occupy 7,527 ha. The CRNP authorities judge park relationship with the communities to have improved. However, community involvement in park management decision – making is limited and needs improvement.

The training of most of the senior National Park staff (who was drafted from wildlife units of forestry departments at the creation of the National Park Service in 1991) did not emphasize participatory methods rather it was the basic forestry training centred on inventory and direct management and control. Assisting the park authorities to incorporate participatory methods in their future management strategies may be a productive addition to protected areas management options for the State. The Park Advisory Committee concept presently being experimented by the NCF – WWF Gashaka–Gumti National Park Project may be studied and modified for Cross River National Park.

A REDD+ programme is possible for the national park since it is practically protected only in name and is losing forest cover as fast as any other forest type in the state (and therefore additionality applies). The Cross River State government should begin a dialogue with the Federal National Parks Service (NPS) on the possibility of being able to share the carbon rights from the forests of the park between the state and the federal government.

6.2.4 *Cross River State Forestry Commission (CRSFC)*

The CRSFC is the main government agency in the state responsible for the management of its forests. Odigha Odigha, the Head of the Board of the Commission has been instrumental in driving forward the REDD agenda in the state and indeed in Nigeria. He plays a key role in influencing actors in Abuja as well as in CRS.

The CRSFC is firmly operating under a participatory, community – oriented strategy that seeks to demonstrate the value of the forest to the communities through increased community revenue from forest products as an incentive to forest conservation and best management practice. The commitment of the forestry commission to genuinely devolve certain rights and responsibilities to communities is demonstrated by the adaptation of a new forest product royalty scheduled (table 6.1).

The organizational structure of the forestry Commission (CRSFC) makes for the representation of major stakeholders in government and civil society groups in the board of the Commission. These include:

- The Cross River State ministry of Environment
- The Cross River State Ministry of Finance
- Cross River State Ministry of Justice

- Cross River State Department of International Donor Support (IDS)
- Representatives from environmental NGOs.

Table 6.1 *Ratio of Fees to Royalties from Forest Tariffs*

Forest management type	Pre 1993 government: community	Post 1993 government: community
Forest Reserves	80: 20	50: 50
Forest Plantation	80: 20	80: 20
Community Forest	50: 50	30: 70

Source: CRSFC 1994

6.2.5 *Political Institutions*

The Executive, legislative and judicial arms of government in Cross River state have duly responded to the general consensus on a common vision of a future grounded in sustainable forest management with tangible benefits to community groups. The inception of the current CRS government brought a radical shift in the approach to forest management from forest exploitation to forest conservation. The political support in CRS to conservation and sustainable management of natural resources is at its peak.

6.2.6 *Academic Institutions*

The University of Calabar has only recently established a Department of Forestry and Wildlife Resources Management. The Department is still grappling with issues of staffing. It, however, presents an opportunity to strengthen the delivery of research results (for management decisions) and technical training. The Department of Geography and Regional Planning has a strong service provision and delivery in forest mapping, assessment and analysis of change through GIS / Remote Sensing application. The model GIS / Ecological Laboratory in the Department and an array of ecologically literate and GIS professionals among their academic staff will be a vital asset to a REDD programme. The Department of Oceanography offers training and research in fisheries.

The other institution that offers courses in forestry, wildlife and fisheries management is the Ibrahim Babangida Collage of Agriculture. Recently (2003), however, this institution with the Calabar Polytechnic and the College of Education, Akamkpa has been brought under one management as the Cross River University of Science and Technology. This is another opportunity to deliver technical training in forestry and forestry related issues.

6.3 *INTERNATIONAL NGOS WORKING IN CRS*

6.3.1 *Wildlife Conservation Society (WCS)*

WCS has worked to protect Africa's wildlife since 1920 and is active in 20 countries across the continent. WCS is currently involved with the development of potential carbon-financed forest protection projects worldwide and notably in Madagascar and Congo in Africa. Their expertise includes an active and experienced remote sensing team, the in-house capability to conduct field based carbon-stock surveys to internationally recognised standards. WCS globally has experience of successfully developing project documentation for both VCS and CCBA standards. WCS also employs a team of highly experienced lawyers specialising in environmental law and policy.

This team has previously conducted in-depth legal analysis of a range of issues and is currently involved in a review of legal issues related to the development of carbon-financed forest protection by government and non-government proponents. In Nigeria, WCS has focused on carrying of ecological research in the Afi Mountain/Okwangwo Division part of Cross River State and is writing a management plan for Cross River National Park. WCS is keen to explore the possibility of a REDD project that will span the entire Cross River Gorilla habitat that stretches from South West Cameroon into northern Cross River State. WCS has an office in Calabar and personnel posted in the project area.

6.3.2 *Fauna and Flora International (FFI)*

FFI has been present in Cross River State for nearly 20 years chiefly through their long-term support for the conservation activities of Pandrillus at the Afi Mountain Wildlife Sanctuary and nearby forest areas. FFI recently received funding from the Foreign and Commonwealth Office (FCO) in Nigeria for a three year study to investigate the feasibility of a REDD project for the Afi area.

6.3.3 *Nature Conservation Research Centre (NCRC)*

NCRC is the leading conservation NGO in Ghana. NCRC has worked closely for many years supporting rural communities, traditional leadership and farmers in building local institutions to access payments for ecosystem services in Ghana. In particular, NCRC has led the process in Ghana to highlight the opportunities that carbon finance represents. As NCRC's work has continued to evolve in Ghana, it is collaborating on projects in Nigeria, Mali, Cote d'Ivoire, Liberia and Sierra Leone.

NCRC's current focus includes climate change and biodiversity conservation, as well as capacity-building. NCRC has entered into an agreement with the Katoomba Group to explore and promote innovative ecosystem services payments mechanisms in the region through the establishment of the Katoomba West Africa Incubator (KWAI). Initiated by

Forest Trends, the Katoomba Group is a leading organization promoting the development and capacity building for ecosystem markets. The Katoomba Incubator supports projects in East Africa, Latin America and Southeast Asia. This is an informal network of over 200 PES specialists from all over the world drawn from NGOs, academia, international donors and the private sector who support the development of projects around the world.

The Katoomba Group believes that pilot projects are essential for developing market based solutions to biodiversity conservation and are in the process of establishing a series of regional “incubators” worldwide to support the development of pilot PES projects. The KIWA recently authorised supporting projects in Cross River State under the guidance of NCRC. The KIWA was established in NCRC Accra office in mid-2009. The Incubator team is supported by local consultants and an international support team with deep experience of the technical and business issues associated with carbon finance. They are working with the Cross River State Forestry Commission to develop a proposal for capacity building programme for REDD+ for forest communities, local NGOs and the government of Cross River State.

6.3.4 *Tropical Forest Group (TFG)*

The Tropical Forest Group catalyzes policy, science and advocacy to conserve and restore the planet’s remaining tropical forests. TFG provides direct support to community forestry projects, many in conflict and post-conflict areas. TFG staff have been engaged in REDD and forest carbon since 2000 consulting to institutions on tropical forest policy, scientific methodologies, sustainable finance, project development and evaluation. TFG’s director John Niles was previously the manager of the Climate, Community and Biodiversity Alliance (CCBA) and he was the lead author of the CCB Standards. TFG have been instrumental in networking the CRS government with international institutions such as the World Bank FCPF. They are helping to coordinate Cross River State’s inputs into the Governors Climate Change and Forests (GCF) process. They have also carried out some preliminary carbon stock sampling of forests in the state.

6.4 *LOCAL NGOS WORKING IN CRS*

6.4.1 *Development in Nigeria (DIN):*

DIN is the rural based community action arm of the African Research Association. DIN has been engaged in tackling forest degradation in the tropical forests of Cross River State, Nigeria since 1996. DIN works together with community partners to reduce poverty and improve livelihoods by promoting the conservation and sustainable use of forest resources.

6.4.2 *NGO Coalition for Environment (NGOCE):*

NGOCE is a grand coalition of NGOs and CBOs with significant presence in Cross River State. It had played a critical and needed advocacy role in sensitizing and raising the awareness of communities, government and the general public in CRS towards responsible environmental attitudes and conduct, particularly in the sustainable management of the biodiversity and renewable natural resources in Cross River state. About sixteen (16) NGOs and CBOs are members of this coalition.

6.4.3 *Pandrillus*

Pandrillus has worked in Nigeria & Cameroon since 1988 to prevent the extinction of the highly endangered drill monkey *Mandrillus leucophaeus*. The mission of Pandrillus has expanded to include chimpanzees and other wildlife that share the drill's habitat in southeast Nigeria and western Cameroon with exceptionally high biodiversity. Pandrillus was the key organisation that worked closely with the CRS government to create the Afi Mountain Wildlife Sanctuary and has been instrumental in creating protected areas in CRS and leading enforcement efforts. Pandrillus's co-director, Peter Jenkins, is a member of the Governors' Illegal Logging Task Force. Pandrillus also runs a programme for the rehabilitation of captive drills confiscated from the bushmeat trade.

6.4.4 *Centre for Education, Research and Conservation of Primates and Nature (CERCOPAN)*

This NGO has worked with Iko Esai for over 7 years to help protect approximately 20,000 hectares of Iko Esai's community forest. These forests are contiguous with the Ekuri forests and form the largest block of community forest in the state. CERCOPAN's conservation programme in Iko Esai is holistic and includes environmental education, forest patrols, support for village based cottage industries and eco-tourism. The NGO also rehabilitates primates confiscated from hunters as by-products of the bush meat trade. Some of these animals are kept in an open-topped enclosure on the edge of the "core area" in Iko Esai's forests close to the Rhoko camp where CERCOPAN has its field base.

6.5 *COMMUNITY BASED ORGANIZATIONS (CBOs) IN CRS*

6.5.1 *Forest Management Committees (FMCs)*

The FMC is an excellent mechanism for bringing communities to share in forest management decisions as well as resource exploitation benefits. FMC's are set up by community government through the support of the Forestry Commission. They are responsible to the Village government and people. Presently the FMCs concentrate most of their efforts in timber related matters with issues around Non Timber Forest Products (NTFPs) being secondary. A total of about forty-five (45) FMCs are operational in the state.

Eighteen (18) out of these have been certified and were given due recognition by the CRS government in 2004.

6.5.2 *Conservation Association of the Mbe Mountains (CAMM)*

In 2005 the nine communities living around the Mbe Mountains established an association to protect and manage the area on a sustainable basis. The association was formed through a long participatory stakeholder process and is in the process of being registered. The recently established Conservation Association of Mbe Mountains (CAMM) requires support with capacity building and the development of strategies for sustainable funding to manage the new protected area. CAMM is one of Nigeria's first multi-community organizations established to negotiate boundaries, set aside commonly-shared core zone and manage the area for gorilla and broader conservation goals.

6.5.3 *Ekuri Initiative*

In 1992, the villages of Old Ekuri and New Ekuri jointly established the Ekuri Initiative to conserve and manage their community forest sustainably for purpose of community development. Since its establishment, the Initiative has made several notable achievements. These include mobilization of community resources and liaison with the local government to construct a 40km road and bridges to the communities; a DFID funded inventory of two 50 ha forest plots where timber is harvested sustainably; and development a land use plan that zoned the Ekuri forests into various land uses. The Ekuri Initiative was one of 20 finalists for the UNDP 2004 Equator Award in recognition of the Initiative's outstanding efforts and commitment in reducing poverty through conservation.

7.1 NATIONAL LEVEL

At present, general awareness of REDD+ is low in Nigeria. There is little awareness at all levels whether amongst government, environmental NGOs or among forest community groups.

The Special Climate Change Unit (SCCU) is planning to embark on public awareness campaigns among all levels of government and across other agencies with a role to play on Climate Change action. The involvement of women, the young, academics, the private sector, and society will be critical. A public awareness program on climate change is therefore being planned by the SCCU. This is to be carried out in each of the Nigeria six geo-political zones. The target participants will include federal and state Agencies in environment, zonal environmental NGOs, the media, tertiary level institutions, legislators, Industries, the business community and community Based Organizations and Civil society. The planned public awareness programme discussed above should give special focus on REDD+ issues.

Over and above this, there is a clear need for support to the government to run a wide ranging stakeholder engagement programme dedicated to REDD+. The institutional stakeholders mentioned above at the federal level and in Cross River State (government, NGOs and community groups) are the same ones that will need to all be engaged in an initial REDD+ process. This will need to be on-going as Nigeria develops a REDD readiness plan so that stakeholders can be involved at each step of its development.

In addition to Government and public agencies (such as the CRSFC), civil society organisations and forest communities are critical stakeholders for crafting a REDD+ regime in the state and in the country. Without their active engagement, no REDD+ will be possible. There continues to be a fundamental lack of trust between NGOs and government, which may result in civil society resistance to REDD. Already, some civil society groups in the country have started to protest against the perceived lack of stakeholder engagement in the development of REDD in Nigeria - even though the process is only just starting (see Annex XIV). It will be critical to address these concerns since civil society will play a key role in the mobilisation of forest communities nationwide.

A key stakeholder that has not been involved to date but which should also be included is the National Space Research and Development Agency (NASDRA). They have significant GIS capacity which the forest management sector in the country would benefit from.

It will be important to engage the potential private sector buyers of REDD carbon credits. These include the airlines, the oil companies (e.g. Shell, Total,

Chevron, ExxonMobil, Eni), cement manufactures (e.g. Lafarge, Dangote), and other heavy manufacturing companies in the country. Representatives from the banking sector should also be engaged with especially those that are already planning for carbon credit transactions in Nigeria such as Standard Bank and the United Bank for Africa (UBA).

7.2 *CROSS RIVER STATE LEVEL*

In Cross River State, while specific engagement of REDD has been limited to date (largely to avoid raising expectations) it should be apparent from section 5.3 above that there has been a long history of forest conservation and forest management experience in Cross River State over the last 20 years, starting from 1991 when Cross River National Park was created.

7.2.1 *Cross River National Park's Engagement of Forest Communities*

When Cross River National Park was created by the Federal Government in 1991, WWF (who was instrumental in the park's creation) established an engagement programme for the 100+ villages in the park's support zone. Over 60 Village Liaison Assistants (VLAs) were employed from the local area to work with every single village living within 5 km of the park's boundary. Most of the VLAs were selected by the villages themselves. These VLAs were responsible for informing all the communities about the activities of the park and for keeping the park abreast of key community issues it needed to know about (such as community discontent with park policies). The park also had an environmental education team that visited every single village in the support zone over the course of three years. The VLA system worked very well since it provided local employment and raised local awareness about the park and why it had been created. However the programme backfired on the park though when WWF closed its programme and laid off almost all the VLAs. Laying off local people from all the support zone villages created animosity towards the park which it has never really recovered from in some senses.

7.2.2 *The Forest Management Committees (FMCs) supported by CRSFC/DFID*

At the same time that the park was created, a parallel programme by DFID to support the Cross River State Forestry Commission also commenced. A central plank of this support was the establishment of a framework for community forestry (as well as systems and strategies to combat illegal logging). As part of this programme, the project facilitated the establishment of 45 Forest Management Committees (FMCs) covering nearly 75 forest communities across the state. 18 of these are formally registered with the CRSFC. These FMCs sometimes covered 1 or 2 villages but there was an FMC that contained 20 villages. The FMCs were created over a period of three years (1998 - 2001).

The FMCs were responsible for ensuring that any loggers doing business with the community were in possession of a logging permit, for verifying the numbers of tree cut (according to the permit obtained from the CRSFC) and for collecting timber royalties due to them from the CRSFC. They were also responsible for the sustainable management of NTFPs. The CRSFC worked intensively with 8 of the most active FMCs to facilitate the development of community land use plans. These included the community development of zoned land use maps and development plans (using participatory mapping techniques) and community bylaws.

While some FMCs were more effective than others, they are still in operation today and served to raise the awareness of the importance of forest management and community forestry further.

Box 7.1 *Forest Dependent or Indigenous Peoples?*

In Nigeria (as in the rest of Africa) the term “indigenous” is very contentious. The World Bank defines indigenous people as “distinct, vulnerable, social and cultural groups possessing the following characteristics in varying degrees:

- self-identification as members of a distinct indigenous cultural group and recognition of this identity by others;
- collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories
- customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and
- an indigenous language, often different from the official language of the country or region.”

In Nigeria, while arguably, there might be many people who could identify themselves as such, it is only the Ogoni (who acquired the term after visiting many international conferences) that called themselves “indigenous”.

In Cross River State, this term has never been used in any discourse; rather the term “forest dependent people” or “forest communities” is commonly used. This report adopts this terminology and refers throughout to forest communities.

The National Park (supported by WWF) and the Cross River State Forestry Commission (supported by DFID) also partnered to support the development of the Ekuri Initiative in Old and New Ekuri. A community forester (Tunde Morakinyo) lived in the two villages for a year to help them establish the Ekuri Initiative. This is a CBO established by the village to manage their community forests sustainably for the development of the two communities. The Ekuri Initiative successfully carried out an inventory of a 50 ha plot and has harvested a small number of trees from the plot which were converted into planks and sold in the market in Calabar.

Income from this as well as from levies from buyers of NTFPs was used to construct 4 bridges across rivers that have previously made the village

inaccessible to vehicles. They have also raised funds (by writing proposals to donors) for the grading of their village road, the building of a health centre and scholarships for students from the communities.

The Ekuri villages remain deeply committed to the conservation of their 33,000 ha community forest.

7.2.3 *Community forest mapping by Living Earth and the USAID SPACE Programme*

From 1998 to 2001, at the same time as the DFID/CRSFC community forestry programme, an NGO called Living Earth Nigeria Foundation also implemented a similar programme to support the development community forestry activities in 9 forest communities across the state. The main activities of the programme were capacity building of the FMCs, participatory mapping to produce land use plans (zoning the community land into areas for agriculture, village expansion, conservation, NTFP collection, etc), and development of sustainable timber harvesting plans and the use of portable sawmills to convert trees into planks according to a sustainable yield plan.

Living Earth worked very intensively over three years with these forest communities that included Ifumkpa, Owai, Etara/Ekuri Eyeying, Danare, Bashua, Iso-Bendeghe, Bendeghe Afi and Abontakon.

After the DFID programme, the WWF CRNP programme and the Living Earth programmes had closed, USAID supported the SPACE programme from 2004 to 2007. This programme already described in section 5.3.5 above worked intensively with a number of villages in the Afi area and the northern section of the Oban Division area to further develop participatory community land use plans (facilitated by an NGO called Development In Nigeria (DIN)).

They also worked with WCS to support the development of the Conservation Association of Mbe Mountains (Camm) involving the 9 forest communities around the Mbe Mountains. This is now a legally registered CBO established to support the conservation of the Mbe Mountains and their population of Cross River gorillas.

7.2.4 *Stakeholder Engagement by NGOs (Pandrillus, CERCOPAN, DIN, NGOCE)*

There are a number of Cross River State based environmental NGOs that have worked intensively with their “host” communities for over 15 years.

CERCOPAN is an NGO that has a forest site in Iko Esai. They rent 400 ha from the community and have established a wildlife sanctuary for the rehabilitation of primates seized from the bushmeat trade. They have worked closely with Iko Esai and the 5 surrounding villages for over 10 years to establish a Community Conservation Development Committee, to

support the Iko Esai FMC, and to establish a protection plan that covers nearly 12,000 ha of forest surrounding the wildlife sanctuary. CERCOPAN also runs an environmental education programme that reaches over 50,000 primary and secondary school children across the state every year. Pandrillus has a “Drill Ranch”. This consists of a forest area adjacent to Buanchor village in the Afi River Forest Reserve. Pandrillus has worked closely with Buanchor and surrounding villages for over 15 years to raise awareness of forest conservation and to collaborate on the protection of the Afi Mountain Wildlife Sanctuary immediately to the north of Buanchor.

Development In Nigeria (DIN) and NGOCE are two other NGOs that also work with forest communities in the state. DIN and NGOCE are more focussed on supporting sustainable agriculture, beekeeping and food processing in forest communities and have worked with about 12 different villages between them. In addition, NGOCE has a library in the middle of Calabar that is open to the public that has a wide selection of environmental literature. The library is heavily used by other NGOs and by students from the University of Calabar.

Concern Universal is currently carrying out an environmental education programme for 30 communities living in the coastal mangroves. Greenconcern (formerly Agbremo) is also working with communities in the mangroves to promote their conservation and sustainable management.

7.2.5 *REDD consultation in Ekuri, Iko Esai, Mbe villages, Buanchor and some NGOs*

In recent months, the CRSFC in collaboration with specialists from the Katoomba West Africa Incubator (including people from NCRC and the Oxford University Environmental Change Institute) have carried out meetings with several forest communities (Old Ekuri, New Ekuri, Buanchor, and the 9 Mbe Villages) to discuss REDD and the opportunities it offers. They have also met with a wide range of environmental NGOs (CERCOPAN, Pandrillus, WCS, NCF, DIN, etc) to discuss REDD.

7.2.6 *Engagement on REDD Going Forward*

While the list of activities to engage forest stakeholders is impressive, it is clear that an extensive process to engage all these stakeholders on REDD is required across the state. It will however, be very important to also ensure that stakeholders are aware of the length of time these processes will take *and to manage expectations accordingly.*

7.3 *ANNOTATED STAKEHOLDERS' LIST FOR REDD AT BOTH FEDERAL AND CRS LEVELS*

A list of stakeholders at the national and state level (in CRS) (including community based organisations) is presented in the tables below along with an assessment of their interest/stake in REDD.

7.3.1 Federal Ministries and Agencies

Ministry/Agency	Interest in REDD
National House of Representatives and Senate	They will be key to passing of REDD legislation at the national level. They have several committees including a Committee on Climate Change that will be critical to the passing revised national REDD legislation in Abuja.
Federal Ministry of Environment and Federal Department of Forestry	The ministry responsible for the environmental protection and natural resources conservation and management for sustainable development. It is the coordinating agency for UNFCCC in Nigeria including REDD+. The Federal Department of Forestry (FDF) is one of the Departments in the Ministry of Environment.
National Technical Committee on REDD	A National Technical Committee to oversee efforts on Reducing Emission from Deforestation and Forest Degradation (REDD+) has been inaugurated by the Federal Government. The committee is led by the Head of Special Climate Change Unit of the Federal Ministry of Environment, Dr. Victor Fodeke with Mr. Salisu Dahiru as secretary /co-ordinator. The committee consists of technocrats from financial institutions and specialists on forestry and climate change.
National Parks Service	The National Parks Services manages the seven national parks in Nigeria. There is a discussion going on in Cross River State over the possibility of the state negotiating for the carbon rights from the Cross River National Park with contains 50% of the state's forest cover. The park is poorly protected and a REDD scheme could help to secure the future of the protected area.
Forestry Research Institute of Nigeria (FRIN)	Their main function is to carryout research and development and training in forestry sector in Nigeria. It has a major role to play in REDD+ issues especially on key technological and methodological issues like establishment of reference level and baselines, monitoring, reporting and verification of forest carbon and others.
National Environmental Standards and Regulations Enforcement Agency (NESREA)	NESREA is responsible for the protection and development of Nigeria's natural resources in general and environmental technology, including coordination and liaison with relevant stakeholders within and outside Nigeria on matters of enforcement of environmental standards, regulation rules, laws, policies and guidelines. NESREA has rolled out some regulations, the ones that have some relevance to REDD+ issues include; the National Environmental (Access to Genetic Resources and Benefit Sharing) Regulations 2008, and the regulation on land degradation. The agency is in the process of developing a Regulation on sustainable wood export.
The Federal Ministry of Agriculture and Water Resources	The agencies/parastatals under the ministry include: <ul style="list-style-type: none"> • The Nigerian Agricultural cooperative and Rural Development Bank (NACRDB); • Nigerian Agricultural Insurance Corporation (NAIC); • Agricultural and Rural Management Training Institute (ARMTI) Ilorin; • National Centre for Agricultural Mechanization (NCAM), Ilorin; • Thirteen Federal Colleges of Agriculture; • Fifteen Agricultural Research Institutes including three notable research institutions that deal with tree crops: <ul style="list-style-type: none"> ○ The Cocoa Research Institute of Nigeria (CRCN); ○ The Rubber Research Institute of Nigeria (RRIN); and ○ Nigerian Institute for Oil Palm Research (NIFOR).
Federal Ministry of Finance	Liaison with them will be important since they will take decisions regarding the funding of forestry in the country as well as being involved in the development of the fiscal regime for REDD in Nigeria.
Federal Ministry of Science and Technology	The ministry has a strong role to play in carbon monitoring through the National Space Development and Research Agency (NASDRA). The National Space Development and Research Agency has the strongest GIS capability in the country and will be critical to REDD. It is important that they become part of the National Technical Committee on REDD.

Ministry/Agency	Interest in REDD
Federal Ministry of Petroleum Resources	They should be included in discussions regarding carbon credits and the oil industry.
Federal Ministry of Solid Mineral Development	The exploitation of these mineral resources has promoted deforestation and forest degradation.
National Planning Commission	Has a role to play to ensure that REDD+ issues are mainstreamed into the development agenda of Nigeria.
The National Forestry Development Committee (NFDC)	The NFDC is the highest advisory body to government on all forest issues. The membership includes the Director of Forestry, State Directors of Forestry, the Executive Director of the Forestry Research Institute of Nigeria (FRCN) and Heads of University Departments of Forestry, and representatives of some Non-governmental Organizations such as the Association of Nigeria and Nigerian Conservation Foundation.
National Council on Environment	The National Council on Environment is chaired by Honourable Minister of Environment and is responsible for the coordination and cooperation between federal and state government authorities on environment matters including forestry.
The Federal Executive Council	Some decisions of the National Council of states on policy and legislative issues may be endorsed and approved by the Federal Cabinet under the chairmanship of Mr. President. Such issues are then forwarded to the National Council of States and National Assembly if they relate to legislation.
The National Council of States	This is chaired by the Vice President of the Federal Republic with State Executive Governors as members. All decisions of the Federal Executive Council that have direct bearing on the states e.g. the approval of the national forest policy or REDD+ policy has to be communicated to the states in view of the constitutional arrangement which recognizes issues that are on the concurrent lists (to be undertaken both by federal and states) and those on exclusive list (to be undertaken solely by the federal). Forestry issues are on the concurrent list.
State Departments of Forestry	The forestry departments in the 36 states of the federation and FCT own and manage the forest resources at the state level, and supervise revenue collection form the forestry sector in various states. Particular states that have shown an interest in REDD and who should be involved in key discussions include Cross River, Ogun, Ondo, Delta, and Lagos States.

7.3.2 *The Private Sector*

Private sector	Interest in REDD
The airlines	Such as Arik Air and others. These are emitters on carbon dioxide and may be interested in offsetting their emissions.
The oil companies	Such as Shell, Total, Chevron, ExxonMobil, and Eni. These are emitters on carbon dioxide and may be interested in offsetting their emissions.
Cement other heavy manufacturing companies	Such as Lafarge and Dangote. These are emitters on carbon dioxide and may be interested in offsetting their emissions.
The banking sector	Such as Standard Bank and United Bank for Africa (UBA) and the rest of Nigeria's 25 banks should also be engaged with especially those that are already preparing to broker carbon credit transactions in Nigeria.
The Rock and Partners law firm	The Rock and Partners is a legal practice based in Nigeria <i>that</i> specializes in climate change and environmental law. They advise project developers and sponsors on CDM and Renewable Energy Projects in Nigeria. They have in - house verifiers who can advise on baseline methodologies and greenhouse gas accounting. They have a strong relationship with various government ministries in Abuja and are well positioned to advise the government on legislation and policy formulation required to create a secure investment climate for investors interested in carbon projects including REDD.

7.3.3 *Non-Governmental Organizations (NGOs) at Federal Level*

NGO	Interest in REDD
Ecological Society of Nigeria	This society is chaired by NCF and brings together a wide range of technical individuals concerned with biodiversity conservation from across the country from government, NGOs and academia. It holds two meetings a year.
Pro-Natura International (PNI)	Pro-Natura International (Nigeria) is a Nigerian NGO closely affiliated to PNI (Paris). PNI focuses on promoting community-led development through supporting institutions in participatory planning and implementation of development programmes. They are developing a REDD pilot project for a new protected area in Ogun, Ondo and Osun States.
International Centre for Energy, Environment and Development (ICEED)	ICEED and NigeriaCAN (Climate Action Network) have already been very effective at galvanising broad based support from key government and civil society institutions in Abuja such as the Committee on Climate change in the House of Representatives and other government and civil society institutions across the country for a climate change strategy and position before the COP 15 talks in Copenhagen.
Friends of the Earth Nigeria (FOEN)/Environmental Rights Action	This is Nigeria's leading environmental activist organisation. They are widely respected and have been extremely effective in leading the campaign against the oil companies and the government with respect to pollution of the Niger Delta and violation of the human rights. They recently held a meeting with environmental NGOs in Calabar to denounce the lack of stakeholder participation in the development of REDD in Nigeria.

7.3.4 *Cross River State Government ministries and Agencies*

Ministry/Agency	Interest in REDD
Cross River State Forestry Commission (CRSFC)	The CRSFC is the main government agency in the state responsible for the management of its forests. Odigha Odigha, the Head of the Board of the Commission has been instrumental in driving forward the REDD agenda in the state and indeed in Nigeria. He plays a key role in influencing actors in Abuja as well as in CRS. He works closely with Tunde Morakinyo, a consultant to the CRSFC who is also a member of the National Technical Committee on REDD – and who has a wide network of contacts internationally (being based in London).
Cross River National Park	The Cross River National Park contains 50% of the forests in CRS but is poorly protected. A REDD+ programme is possible for the national park since it is practically protected only in name and is losing forest cover as fast as any other forest type in the state (and therefore additionality applies). The Cross River State government intends to begin a dialogue with the Federal National Parks Service (NPS) on the possibility of being able to share the carbon rights from the forests of the park between the state and the federal government.
Other state ministries	The CRS Governor is keen for other ministries to be involved in the development of REDD in the state including: <ul style="list-style-type: none"> • The Cross River State ministry of Environment • The Cross River State Ministry of Finance • Cross River State Ministry of Justice
State House of Reps and Senate	They will be key to passing of REDD legislation in the state.
University of Calabar	<ul style="list-style-type: none"> • The Department of Forestry and Wildlife Resources Management presents an opportunity to strengthen forest related research and technical training. • The Department of Geography and Regional Planning has a forest mapping, assessment and analysis (through GIS / Remote Sensing) capability.
Cross River University of Science and Technology	This includes the Ibrahim Babangida Collage of Agriculture and the Calabar Polytechnic and the College of Education, Akamkpa. They offer courses in forestry, wildlife and fisheries management. This is another opportunity to deliver technical training in forestry and forestry related issues.

7.3.5

NGOs AND CBOs IN CRS

NGO/CBO	Interest in REDD
Fauna and Flora International (FFI)	FFI has been present in Cross River State for nearly 20 years chiefly through their long-term support for the conservation activities of Pandrillus at the Afi Mountain Wildlife Sanctuary and nearby forest areas. FFI recently received funding from the Foreign and Commonwealth Office (FCO) in Nigeria for a three year study to investigate the feasibility of a REDD project for the Afi area.
Nature Conservation Research Centre (NCRC)	NCRC is a conservation NGO in Ghana, with a focus on climate change and biodiversity conservation through community initiatives. NCRC hosts the Katoomba West Africa Incubator (KWAI) that promoting the development and capacity building for REDD in the sub-region. The KWAI recently is working with the Cross River State Forestry Commission to develop a proposal for capacity building programme for REDD+ for forest communities, local NGOs and the government of Cross River State.
Development in Nigeria (DIN):	DIN is the rural based community action arm of the African Research Association. DIN has been engaged in tackling forest degradation in the tropical forests of Cross River State, Nigeria since 1996. DIN works together with community partners to reduce poverty and improve livelihoods by promoting the conservation and sustainable use of forest resources.
NGO Coalition for Environment (NGOCE)	NGOCE is a coalition of environmental NGOs and CBOs in Cross River State. About sixteen (16) NGOs and CBOs are members of this coalition.
Pandrillus	Pandrillus has worked in Nigeria & Cameroon since 1988 to prevent the extinction of the highly endangered drill monkey <i>Mandrillus leucophaeus</i> . Pandrillus worked closely with the CRS government to create the Afi Mountain Wildlife Sanctuary. Pandrillus's co-director, Peter Jenkins, is a member of the Governors' Illegal Logging Task Force. They are a member of the Afi Mountain Partnership along with FFI, WCS, NCF and the CRSFC.
Centre for Education, Research and Conservation of Primates and Nature (CERCOPAN)	This NGO has worked with Iko Esai for over 7 years to help protect approximately 20,000 hectares of Iko Esai's community forest. These forests are contiguous with the Ekuri forests and form the largest block of community forest in the state. CERCOPAN's conservation programme in Iko Esai is holistic and includes environmental education, forest patrols, support for village based cottage industries and eco-tourism. The NGO also rehabilitates primates confiscated from hunters as by-products of the bush meat trade. The CRSFC and NCRC have held several meetings on REDD in Iko Esai.
Forest Management Committees (FMCs)	FMC's were set up by communities with support from the Forestry Commission. They are responsible to the communities. Presently the FMCs concentrate most of their efforts in timber related matters with issues around Non Timber Forest Products (NTFPs) being secondary. A total of about forty-five (45) FMCs are operational in the state. Eighteen (18) out of these have been certified and were given official recognition by the CRS government in 2004. These FMS represent nearly all the forest communities (about 75) in Cross River State and will be key to the development of REDD across the entire state.
Conservation Association of the Mbe Mountains (CAMM)	In 2005 the nine communities living around the Mbe Mountains established an association to protect and manage the area on a sustainable basis. CAMM is one of Nigeria's first multi-community organizations established to negotiate boundaries, set aside commonly-shared core zone and manage the area for gorilla and broader conservation goals. The CRSFC and NCRC have held several meetings on REDD in the CAMM villages.
Ekuri Initiative	In 1992, the villages of Old Ekuri and New Ekuri jointly established the Ekuri Initiative to conserve and manage their community forest (33,000 ha) sustainably for purpose of community development. The CRSFC and NCRC have held several meetings on REDD in the Ekuri villages.

8.1 NIGERIA'S NATIONAL LAND USE EMISSIONS

Nigeria is rated number 7 among the world's top carbon dioxide emitters accounting for 2.6% of the global LUCF emissions in year 2000. However, the structure of Nigeria's GHG emissions is slightly different from those of developed nations, whose GHG emissions are mainly from combustion of fossil fuels.

Table 8.1 provides an idea of what the structure of Nigeria's national GHG emissions look like when land use and forestry emissions are included. The land use emissions constituted the highest (44%) with the energy section a distant sector at 29%. There are however, large uncertainties in the estimates of emissions from land use and forestry. Land use change and forestry seems therefore to be a very significant portion of Nigeria's GHG emissions.

Table 8.1 *The structure of the national GHG emissions CO₂, CH₄, N₂O, PFC⁵, HFC⁵, SF₆⁶ (includes land use change and international bunkers)*

Sector	Mt CO ₂	%
Energy	126.7	28.6
Electricity	12.5	2.8
Manufacturing & Construction	4.1	0.9
Transportation	20.5	4.6
Other fuel combustion	17.5	4.0
Fugitive Emissions	72.1	16.3
Industrial processes	1.5	0.3
Agriculture	101.5	22.9
Land use change & forestry	194.8	44.0
Waste	15.4	3.5
International bunkers		
TOTAL	442.6	

Source: Dayo B.A, Gilau and M. Sawes (Sept 2009) "Nigeria perspective on climate change mitigation" ICEED Working Paper, page 49 Abuja, Nigeria.

Table A.11 (Appendix 11) on the other hand, shows the land use change emissions by country. The table contains a summary of the top 30 countries for deforestation emissions in 2000 from the Climate Analysis Indicators Tools (CAIT) database; with deforestation area estimates from the FAO Forest Resources Assessment (FRA) 2005.

8.2 NATIONAL LEVEL ASSESSMENTS AND CAPACITY FOR MRV

Remote sensing was first used in the early seventies by the Federal Department of Forestry in the first indicative high forest inventory in 1973-76. A critical mass of staff was trained in remote sensing. In 1996, the World Bank supported the Environmental Management Programme (EMP) and the Forest Resources Study. As a part of this project, a modest GIS Laboratory was

established in the Forest Monitoring and Evaluation Coordinating Unit (FORMECU), a unit in the Federal Department of Forestry. This project was supported by the Geomatics Group, an international remote sensing consultancy with an office based in Ibadan and Beak Consultants (from Canada) who produced the Forest Resource Situation Assessment of Nigeria in 1998. Since then, it would appear that there has not been a further assessment of Nigeria's forest cover at a national level up to today.

The FORMECU unit has since wound up following discontinuation of the World Bank support for this project and the GIS unit was absorbed into the FDF. Today, the former FORMECU GIS unit is in disrepair, though it is understood that a contract for the refurbishment of the GIS laboratory in the Federal Department of Forestry is about to be awarded.

Another national level institution with some GIS capacity is the Forest Research Institute of Nigeria (FRIN) based in Ibadan. However, again, this unit suffers from a lack of funding, equipment and adequately trained staff to be able to assist with the development of a carbon baseline and MRV system for Nigeria.

8.3

CROSS RIVER STATE LEVEL ASSESSMENTS AND CAPACITY FOR MRV

In Cross River State, there have been several assessments of forest cover. The DFID-CRSFC Community Forestry Project carried out an assessment of the state's forest cover using satellite imagery analysis coupled with ground truthing in 2001. This assessed the change in forest cover between 1991 and 2001. This was followed by the Nigeria Strategic Investment Framework for strategic Land Management (NSIF-SLM) that looked at forest cover change between 2001 and 2008. This last exercise drew upon the staff at the Department of Geography at the University of Calabar.

In the state, however, capacity for spatial data analysis is fairly limited. The above mentioned Department of Geography and Regional Planning in the University of Calabar is host to a small moderately equipped GIS/Ecological laboratory with personnel to undertake deforestation assessment and monitoring. The Cross River State Forestry Commission also has a cartography department that could be upgraded into a GIS unit but this would require funding, training of staff and equipment.

8.4

UNEP-WCMC MISSION TO NIGERIA TO ASSESS CAPACITY

In early 2010, the Cross River State Forestry Commission contacted the UNEP-WCMC programme titled: *Carbon, Biodiversity & Ecosystem Services: Exploring Co-benefits*. This is a programme that aims to build the capacity of developing countries in spatial data analysis for REDD (See *Box 8.1* below). As a result of discussions on this programme, Dr. Julian Bayliss came to Nigeria in August

2010 to assess Nigeria's capacity for spatial data analysis. His trip confirmed the fact that FORMECU in Abuja no longer has any significant GIS capacity.

Box 8.1

UNEP-WCMC Programme - Carbon, Biodiversity and Ecosystem Services: Exploring Co-Benefits

Emissions from land use change, mainly tropical forest loss, contribute an estimated 17.4% of total anthropogenic greenhouse gas emissions. The maintenance and enhancement of natural carbon stocks, e.g. through Reducing Emissions from Deforestation and forest Degradation (REDD), is now considered a key climate change mitigation measure.

Maintaining natural carbon stocks can generate co-benefits, benefits that are additional to climate change mitigation effects. Ecosystem co-benefits, which include biodiversity conservation and ecosystem services, derive directly from maintaining natural ecosystems. Other co-benefits derive from the mechanisms used and the social and political changes needed to implement them, such as clarification of land tenure and enhanced participation in decision making. These are sometimes termed 'social' co-benefits. The types, mixture and scale of co-benefits vary between approaches and locations.

The UNEP World Conservation Monitoring Centre (UNEP-WCMC) has established a programme called *Carbon, Biodiversity & ecosystem services: Exploring Co-benefits*. This aims to support countries to address co-benefits in planning and implementing climate change mitigation measures, including REDD+. The programme is adapted to the countries' needs and priorities, and includes developing maps on the distribution of carbon in relation to protected areas, biodiversity, and other ecosystem services, as well as other guidance and tools. Some of this work also supports national efforts to prepare for REDD under the UN-REDD Programme.

However, while he was in Abuja, he also visited the National Space Research and Development Agency (NASDRA) a parastatal of the Federal Ministry of Science and Technology. Dr. Bayliss found that NASRDA has accurate land cover data for the whole of the country at 32 m resolution based on 2008/2009 remotely sensed imagery. NASRDA also have well educated and trained personnel in spatial analysis (remote sensing and GIS), as well as excellent processing resources.

He recommended that NASDRA's data be employed in planning for REDD and REDD+ initiatives within Nigeria. He also recommended that an agreement should be made between NASRDA and the FDF / CRSFC towards greater collaboration between institutions and that NASRDA become part of the National REDD Technical Committee.

A UNEP-WCMC capacity building programme could also come through this NASDRA towards increasing the technical ability of the FDF and CRSFC. As mentioned above, a significant amount of money has been pledged to establish a GIS unit within the FDF in Abuja. A UNEP-WCMC capacity building programme could link this venture and the CRSFC with NASRDA. UNEP-WCMC is preparing a report on their key findings and is seeking further funds for a follow-up training programme.

In the short-term, UNEP-WCMC have offered to assist in the production of a series of outputs (maps) depicting the total carbon density overlaid with the main co-benefits (biodiversity conservation, watershed protection, etc) once

identified in support of Nigeria's application for 'Full Member' Status of the UN-REDD programme and/or the World Bank FCPF Programme.

8.5 *NCRC/KATOOMBA-UNIVERSITY OF OXFORD CARBON BASELINE STUDY IN CRS*

As discussed in the institutional framework section above, NCRC hosts the Katoomba West Africa PES Incubator based out of Ghana. As a result of the Governor's visit to a Katoomba conference in Accra in September 2009, the Incubator decided to support REDD activities in CRS. NCRC in collaboration with the Environmental Change Institute of the University of Oxford sent a specialist to Cross River State in October 2010 to conduct biomass sampling (tree and/or soil) at 2 targeted sites in Cross River State in the Ekuri area and Mbe/Afi area – the sites of the two proposed REDD pilots. These measurements will be important to the development of a carbon baseline for the state. The Incubator has started to give support to Cross River State's REDD efforts but this will remain limited while their funds for Nigeria remain small. They have prepared a draft proposal for a much larger programme to build capacity for REDD at the national level as well as in Cross River State.

8.6 *SUGGESTED ACTIONS TO DEVELOP A CARBON BASELINE/MRV SYSTEM*

There exist three possible levels of MRV activities. These are at the national, state and project levels. Several steps will be required to setup a successful and credible MRV system in Nigeria at the national and state level. These include:

- national policies and regulations on MRV standards and procedures;
- comprehensive national and state level satellite imagery analyses of forest cover change. Ideally this should start from the year 1990 onwards if possible;
- generation of a national and state-level forest carbon map, including any areas of significant belowground biomass; and
- selection of a methodology and parameters for a national reference scenario.

At the project level, project proponents and implementers must be guided by valid methodologies meeting international voluntary carbon standards, such as the Voluntary Carbon Standard (VCS). The VCS provides guidelines for forestry projects and provides rigorous double validation of methodologies. Existing methodologies (pending and approved) include steps for:

- carbon baseline calculation in business as usual scenarios;
- calculation of emissions in the project scenario;
- methods for assessing leakage; and

- methods for monitoring changes in carbon emissions from project areas.

Verification and reporting of emissions reductions must be undertaken by a VCS approved independent third party verifier (auditor). Using a nested approach, results of project level MRV activities must be reported upwards to the State. The state is then responsible for upward reporting for national carbon accounting purposes. In doing so, project level emission reductions are accounted for transparently and methodically within State reference emission levels.

The sections above have examined Nigeria's capacity for spatial data analysis, however besides this, Nigeria and Cross River State requires assistance with training and support to establish a carbon baseline and the methodology and parameters for a reference scenario.

At the national level (and state level), forest cover change analysis and carbon maps will need to be combined with a carbon book-keeping model to estimate the historical and spatial pattern of GHG emissions. This is normally also done at the project level, but with higher resolution data that has been combined with field biomass-based carbon measurements from the project area. This method will be complemented with an independent estimate of fire-based emissions from deforestation based on satellite-based detection of fires. At the project level, fire-based emissions must be ground-truthed to provide additional support to national fire-data.

The historical forest emissions data will then be combined with project and state-level data on known drivers of deforestation and socio-economic factors such as population, economic activity, investments into agriculture, rates of in-migration/out-migration, to model potential future rates of forest cover loss under varying governance and economic scenarios. Various guidelines (IPCC Good Practice Guidelines and the VCS which do not include these variables) prescribe clear baseline methods for project level activities. It will be important for Nigeria to decide on national guidelines/standards that all states can the follow. At present, the capacity to carry out any modelling is completely absent in Nigeria.

It is suggested that both the UNEP-WCMC project and the NCRC-University of Oxford projects are linked up and supported to develop an integrated approach to helping Nigeria establish an MRV system. This will need to work with NASDRA, FDF, CRSFC and perhaps FRIN. It will be important to ensure that any work done on the ground is in accordance with a VCS REDD double-validated methodology.

It is suggested that a participatory MRV system is first of all designed and then piloted in Cross River State (before being scaled up to the national level). Such a participatory system will involve several key actors including the Cross River State Forestry Commission and the University of Calabar in the analysis of remote sensing data. It will also involve CRSFC staff, forest community members and NGOs in the collection and reporting of ground based data on

carbon stocks and changes in forest cover (looking at both deforestation as well as degradation). As discussed above, there are a number of NGOs and forest communities who are interested in REDD and could be involved in a state level MRV system and project level MRV activities.

The roles and responsibilities of each institution in the MRV system (e.g. types of data to be collected by each and how) and the role of the project level MRV activities would need to be clearly defined. This would also require a significant amount of training to ensure that all project proponents and stakeholders can understand how their carbon baseline and their emissions reduction levels are calculated.

The lessons learned from piloting an MRV system in Cross River State will be useful for the development of a national MRV system. It can be used as a transitional mechanism by which the country can more efficiently start with a sub-national MRV system with an eye to eventually move towards a national system.

9.1 INITIATIVES AT THE FEDERAL LEVEL

The initiatives at the federal level include the following:

9.1.1 *Establishment of a Special Climate Change Unit (SCCU)*

Nigeria has created a Special Climate Change Unit (SCCU) within the Federal Ministry of Environment with the secretariat in Abuja, Nigeria. The Unit was created to implement the convention and protocol activities. The SCCU also has responsibility of coordinating the activities of the Inter-Ministerial Committee on Climate Change (IMCCC) with representation from the following ministries and agencies:-

- Federal Ministry of Finance;
- National Planning Commission;
- Federal Ministry of Agriculture and Water Resources;
- Energy Commission of Nigeria;
- Nigeria National Petroleum corporation (NNPC);
- Federal Ministry of Foreign Affairs;
- Nigeria Meteorological Agency (NIMET);
- Non-Governmental Organizations (NGOs) namely Nigeria Environmental Study Action Team (NEST); and
- Academia (the Centre for Climate Change and Fresh Water Resources, the Federal University of Technology, Minna, the Centre for Energy Research and Development, Obafemi Awolowo University Ile-Ife and Abubakar Tafawa Balewa University, Bauchi.

9.1.2 *Pending Bills on Climate Change related issues*

The following bills are to be enacted soon by the National Assembly:-

- Climate Change Commission Bill (Which aims to establish a National Climate Change Commission as a statutory body with the responsibility to regulate, coordinate policies and action plans on climate change in addition to setting up a national Carbon Market Scheme; and
- Bill on Special Ecological Agency

9.1.3 *Policy Shift in Disbursement of Funds in the Ecological Fund Office in Support of Forestry Development*

Nigeria's resolve to provide positive incentives on issues relating to reducing emissions from deforestation and forest degradation in Nigeria in April 2009 received a boost by Presidential directive which provides up to 60% of the National Ecological funds for reforestation and afforestation programme.

9.1.4 *Flagging off of the National Carbon Credit Train*

The official flag off of the national carbon credit train by the Honourable Minister of Environment Mr. John Odey took place on Saturday June 5, 2010 in the Federal Ministry of Environment (Green House), Maitama District, Abuja as part of the activity marking the World Environmental Day. The Honourable Minister reiterated the commitment of the Federal Government in embarking on Climate Change mitigation actions that would enable Nigeria to benefit immensely in the International Carbon Market.

9.1.5 *Nigeria's CDM projects and Carbon Fund Mechanism*

Dr. Victor Fodeke, Head, Special Climate Change at the Federal Ministry of Environment, has recently released a booklet on the National Guidelines for Clean Development Mechanism (NGCDM). In addition, Nigeria has recently registered its first two CDM (Clean Development Mechanism) projects both related to the reduction of gas flaring.

Nigeria has one of the world's largest reserves of associated and non-associated gas, estimated in excess of 160 trillion cubic feet and is ranked amongst the 10th largest in terms of proven natural gas reserves in the world. Nigeria however, is also one of the world's biggest gas flarers, accounting for over 13 percent of the gas flared worldwide.

Two gas utilisation schemes – the Kwale Gas Project and the Pan Ocean Gas Utilisation Project in Kwale and Ovade-Ogharafe in Delta State respectively – are registered under the United Nations Clean Development Mechanism (CDM) of the Kyoto Protocol. The Pan Ocean scheme is estimated to cut emission by more than two million tons of carbon dioxide (CO₂) annually. This project will be one of the largest CDM projects in Africa and when at full capacity would provide 135 million standard cubic feet per day for electricity. The CDM registration for this was led by Carbon Limits of Norway. The credits will be sold to NUON, the Dutch state utility; so that the carbon emissions reductions that occur in Nigeria will help the Netherlands meet its obligation under the Kyoto Protocol.

Besides this project and the Kwale Gas CDM project (being run by Eni S.p.A. an Italian based multinational petroleum company), a third Nigerian CDM project – the Safe 80 Fuel Efficient Wood Stoves is in the process of being registered. This aims to ensure that less fuel wood is used for cooking hence reducing the rate of deforestation, particularly in the dry, desertification-threatened north.

It is believed that these three CDM projects will place Nigeria ahead of every other African nation in terms of the number of Certified Emission Reductions (CERs). As a result, Nigerian CDM projects will account for 40 percent of the CERs in Africa as a whole.

9.1.6 *Admission of Nigeria in observer status to UN-REDD and WB FCPF programmes*

Nigeria was admitted as observer to UN-REDD programme in March 2010. This was confirmed during the country's attendance of the UN-REDD policy board meeting held in Nairobi, Kenya in March 2010 and marked the beginning of collaboration efforts between the Federal Government of Nigeria and the UNDP on REDD scheme. Nigeria is also in similar discussions with the World Bank FCPF programme and also attended meetings in Gabon (also in March 2009) to discuss the possibilities for achieving full membership.

9.1.7 *Engagement of consultants to carry out a situation analysis of Nigeria's preparedness for REDD+ Scheme*

Consultants were engaged by UNDP jointly with the Federal Ministry of Environment on 25th June to carry out a rapid assessment of Nigeria's preparedness at national level and at sub regional level (pilot projects in Cross River State) for REDD+ scheme (i.e. this study).

9.1.8 *Inauguration of a National Technical Committee on REDD*

The Honourable Minister of Environment, Mr. John Odey inaugurated a National Technical Committee on REDD+ Scheme on 6th July 2010. The membership comprises of stakeholders in the Forestry Department, the Special Climate Change Unit, and Legal Unit of the Federal Ministry of Environment as well as relevant Federal Ministries and Agencies, State Agencies, Non-Governmental Organizations, Community Based Organization and Civil Society Organization. The Head of the Special Climate Change Unit is the Chairman of the Committee while the National Focal Point Officer on REDD scheme serves as the secretary.

9.1.9 *Visit of Dr. Julian Bayliss of University of Cambridge to assess REDD readiness in Nigeria*

UNEP World Conservation Monitoring Centre (UNEP-WCMC) has a programme called Carbon, Biodiversity & ecosystem services: Exploring Co-benefits (see *Box 8.1* above). This aims to support countries to address co-benefits in planning and implementing climate change mitigation measures, including REDD+. The programme is adapted to the countries' needs and priorities, and includes developing maps on the distribution of carbon in relation to protected areas, biodiversity, and other ecosystem services, as well as other guidance and tools.

Since March 2010, following a visit by the Chairman of the Board of The Cross River Forestry Commission to the UNEP centre in Cambridge in the UK, the UNEP-WCMC programme has been in discussion with Nigeria (and Cross River State) on ways it can build Nigeria's capacity to analyse spatial data to support its bid for REDD+ readiness. A programme of support has now been agreed for Nigeria (and Cross River State) that includes two components:

- An assessment of capacity for GIS analysis as the federal level and in Cross River State. This was to examine the capacity of relevant institutions (government and NGO) with respect to their hardware, software and, staffing; and
- A follow-up training of selected Nigerians to be carried out at the WCMC-UNEP headquarters in the UK.

UNEP-WCMC sent Dr. Bayliss to Nigeria in July 2010 where he made presentations on REDD issues to Federal Agencies in Abuja in July 2010. He visited various agencies in Abuja including the Federal Department of Forestry to access the GIS laboratory and the GIS laboratory in National Space Research and Development Agency (NASDRA) Abuja. He also visited Cross River State and met with various NGOs, the government and the University of Calabar. He is due to submit a report on his findings and recommendations shortly.

9.2 *CURRENT CROSS RIVER STATE GOVERNMENT INITIATIVES*

The current Cross River State government has shown considerable commitment and exhibited good faith towards managing forest for carbon concessions. Practical steps taken towards this include:

- Removal of revenue target from forest exploitation: Revenue target
- Moratorium on logging
- Legal and forest policy reforms
- Planned Institutional reforms

9.2.1 *Removal of Revenue from Forest Exploitation*

Revenue targets are usually set for the Forestry Commission as a means of raising additional revenue to the government for development or a justification of the worth of the Commission. These targets have been fingered as a key driver of deforestation. Abolishing it despite its short term economic gains to government is a sign of commitment to manage forest for carbon concessions to secure a longer term more sustainable socio-economic benefit to people and ecosystem conservation (including climate change mitigation).

9.2.2 *Moratorium on Logging/Establishment of Anti-Deforestation Task Force*

The Cross River state Governor, Senator Liyel Imoke held a forest summit in June, 2008 to which various national and international forestry experts were invited. One positive output of the summit was a decision by the state government to ban all logging in the state for a period of two years with the stated intention of obtaining “carbon concessions” for its forests. This ban has been backed up with the establishment of an anti-deforestation task force that is vigorously working to control illegal timber harvesting in the state. The government has already committed significant human and financial resources

in support of the task force. The two-year logging moratorium is due to expire in December 2010.

9.2.3 *Legal and Forest Policy Reforms*

The old forest law from 1956 (promulgated by the Eastern Region House of Assembly) was amended and reviewed through extensive stakeholder participation and was passed in September 2010. The new law makes a paradigm shift from forest exploitation to forest conservation by the state Forestry Commission. This new policy in the forestry sector is a first step towards managing the Cross River state forest for carbon concessions. However significant work remains to develop REDD+ enabling legislation for the state. This is an areas requiring support from external donors such as the UN-REDD programme.

9.2.4 *Recent Institutional Reforms*

Far reaching institutional reforms have been introduced in the recently approved new forestry law for the state (see newspaper article in *Appendix XVI*). The new law provides for the creation of the position of the 'Conservator General' as the Chief Executive Officer (CEO) of the state forestry commission. This will make forest conservation and protection the main focus of the Forestry Commission's mandate. Presently, a REDD (+) committee to coordinate and drive the REDD (+) process is being established in the commission. A desk officer on climate change is proposed to facilitate the activities of the REDD Committee. According to the new forest law, the structure and organogramme of the new forestry commission will include divisions for:

- Protection and compliance
- Wildlife and ecotourism
- Community Forestry
- Business Development
- Afforestation, NTFP/Medicinal Plants

This new arrangement will enable the development of conservation oriented forestry that also enables sustainable development for forest dependent communities. The new law also allows the Forestry Commission to award "carbon concessions" in the state forest reserves. In addition, it recognises water protection, eco-tourism, watershed protection and biodiversity offset concessions. This is the only state in Nigeria that has such a provision in its forest laws. The old forestry law of the state only recognised timber concessions.

9.3 *CROSS RIVER STATE REDD RELATED INITIATIVES*

9.3.1 *REDD Steps Taken So Far*

The government of Cross River State and the states environmental NGOs have been the driving force behind the REDD agenda in Nigeria. This is due in no small part to the importance of forests for the economy of the state (CRS contains over 50% of the country's remaining forests). To date, the Governor of Cross River state, Senator Liyel Imoke has undertaken several activities to push forward the National REDD process as well as its application to CRS. These include:

9.3.2 *The Nature Conservation Research Centre scoping visit to Cross River State*

In August 2009, the Cross River State Forestry Commission invited the Nature Conservation Resource Centre of Ghana (NCRC) to visit the state to assess potential for Payments from Ecosystem Services (PES) in its forests. The visit was facilitated by Odigha Odigha from CRSFC/NGOCE and Tunde Morakinyo (ERM). John Mason (NCRC) and Tunde Morakinyo met with Governor Imoke and commissioners from all state ministries including finance, justice, agriculture, tourism and the forestry commission and made a presentation on REDD. Further meetings were held in Calabar with the Cross River State Forestry Commission, the Wildlife Conservation Society (WCS) and CERCOPAN. John and Tunde and the Chairman of the Cross River State Forestry Commission also visited three forest communities, Iko Esai, Old and New Ekuri and the chiefs of the 9 Mbe Mountains communities. Further discussions with the Governor and his Executive Committee resulted in the formulation of a low carbon vision for Cross River State.

Within 10 years, Cross River State will have 1 million hectares of forest lands managed for climate change friendly activities that will include carbon, non-timber forest products, sustainable tree crops and ecotourism. The aim is to create a new low carbon economy for the state based on the sustainable management of its forests.

9.3.3 *Forest Trends West Africa PES Incubator involvement in Cross River State*

In September 2009, the Governor of Cross River State attended a Katoomba Conference in Ghana with a team of 13 representatives from the CRSFC, ministries of environment, finance, justice and agriculture as well as NGO representatives and community representatives. At the conference, the Governor gave a presentation on Cross River State, the potential for REDD, and challenges the state faces. The presentation was given to a wide range of donor representatives as well as a host of technical specialists and NGOs who knew little about the state. The presentation was well received and as a result, the World Bank Forest Carbon Partnership Facility (FCPF) and the UN-REDD programme indicated that would be receptive to an application by Nigeria for membership in their programmes. A representative of the Governor's Climate

and Forests Taskforce (GCF) also expressed an interest in having Cross River State apply for membership.

Forest Trends, the US based NGO that hosts the Katoomba Group also recently established a West Africa Incubator for PES (Payments for Ecosystem services) projects, including those REDD+ projects. This incubator is essentially a pool of technical experts that can be drawn upon to assist with the development of REDD projects, training, etc. NCRC hosts the West Africa Incubator. Following the conference, the incubator authorised work in Cross River State. In February 2009, John Mason (NCRC) and Yadvinder Malhi (Oxford University) visited Cross River State under the auspices of the Katoomba PES West Africa Incubator for an initial feasibility study for two REDD pilot projects:

- Ekuri-Iko Esai-Okokori-Etara Eyeyeng-Owai-Ukpon River Forest Reserve REDD+ pilot;
- Mbe mountains - Afi River Forest Reserve REDD+ pilot; and

See the following Chapter 10 for further details on these.

9.3.4

Galvanizing buy-in from the Federal Government of Nigeria on REDD

In the last few months, several federal climate change government structures are emerging, including the Presidential Implementation Committee on Clean Development Mechanism (PIC-CDM) located in the Office of the Secretary to the Federal Government, the regulatory agency Nigerian Environmental Standards, Enforcement and Regulatory Agency (NESREA) and the proposed National Climate Change Commission under the Presidency. The National Assembly is increasingly providing climate change decision-making.

The Senate recently established a National Climate Change Commission (NCCC) to consolidate the administration of climate change activities in the country by bringing together units in several environmental institutions into one organisation. These include the Nigerian Meteorological Agency (NIMET), the newly established NESREA, the Federal Ministry of Agriculture and Water Resources, the Forestry Department of the Federal Ministry of Environment, National Food Reserve Agency, Energy Commission of Nigeria, NEPAD Environment Initiative, National Oil Spillage Detection and Response Agency (NOSDRA) and several research and academic institutions.

Up until late 2009, Nigeria's UNFCCC strategy focused almost exclusively on gas flaring and adaptation. In September 2009, after the Katoomba Conference, the Governor of CRS went to Abuja to meet with Nigeria's Environment Minister, John Odey, requesting that REDD be made a part of Nigeria's formal climate change strategy. The CRSFC helped organize draft text for REDD for Nigeria's climate change strategy with NigeriaCAN. This was incorporated into Nigeria's national strategy on climate change and Nigeria's position paper as one of 5 key strands in preparation for the COP 15

talks. Following this, CRS delegates including Governor Imoke, Odigha Odigha and Tunde Morakinyo and many of his key staff were included in Nigeria's delegation for COP 15.

The Tropical Forest Group helped facilitate a press conference with CRS representatives and provided networking with donors, the Governors' Climate and Forests Taskforce and other groups. The CRS delegation to COP15 spent the two weeks working closely with Nigeria's federal climate change team on REDD. As a direct result of CRS engagement of the federal government, REDD is now a core part of Nigeria's climate change activities. FMENV and FDF currently work closely with CRSFC on coordinating Nigeria's response to the World Bank, UN-REDD and other initiatives (see below).

9.3.5 *World Bank Forest Carbon Partnership Facility (FCPF) discussions with Nigeria*

The World Bank FCPF aims to build national capacity and put in place a national architecture for REDD in developing countries. The FCPF has 37 countries as members but these do not (yet) include Nigeria. Following the Accra Katoomba conference and the Governor's visit to Abuja, the FMENV Nigeria submitted an application to the FCPF for Nigeria's membership. This application was acknowledged. Then at the COP 15 talks, the FCPF met with the Nigerian delegation including CRSFC and Governor Imoke to discuss collaboration. At this meeting, Nigeria was informed that it had been granted formal Observer status. At this meeting, Nigeria was also asked to draft a Readiness Preparation Proposal for submission to the FCPF. This was followed by a WB mission to Abuja in February 2009 where potential WB support to Nigeria for REDD was discussed. Nigeria is awaiting the results of a review of the FCPF's activities after which new country members might be invited to join the programme.

9.3.6 *UN-REDD Programme discussions with Nigeria*

This programme also aims to build national capacity and to put in place a national architecture for REDD. The programme has 9 member countries but does not include Nigeria. Again, following the Accra Katoomba conference, the FMENV submitted an application for Nigeria's membership of the programme. The Nigerian delegation met representatives of the UN-REDD programme at COP 15 to discuss collaboration. Following this meeting, Nigeria was granted official observer status. In February 2009, UNDP carried out a mission to Nigeria to discuss its strategy with respect to assisting Nigeria's climate change efforts. The mission held extensive discussions with FMENV, FDF as well as with Odigha Odigha and Tunde Morakinyo regarding potential assistance on REDD. UN-REDD are planning a mission to Nigeria in June 2010 to plan how the programme can support Nigeria's activities towards REDD readiness.

9.3.7 *World Bank Forest Investment Programme (FIP)*

At the meeting between the Nigerian delegation and the WB FCPF team at COP 15, the WB advised Nigeria to submit an application to the Forest Investment Programme (FIP). This application has now been submitted by the FMENV and the country is awaiting a response.

9.3.8 *CRS membership of the Governor's Forum on Climate Change and Forests (GCF)*

The Governors' Climate and Forests Task Force (GCF) is an international grouping of fourteen governors from Indonesia, Brazil, Mexico, and the United States who have demonstrated REDD leadership in their states. The GCF was initially headed by the Governor of California, Arnold Schwarzenegger to advocate for international action on REDD at the sub-national level. The GCF network has shown that states and provinces in developing countries (e.g., Indonesia and Brazil) can often move more rapidly on REDD initiatives than federal governments. The GCF has played an influential role in pushing federal countries to be more pro-active on climate change and forests. This GCF is developing a regulatory framework for REDD compliance grade credits that has been closely tracking the emerging regulations under California's cap and trade program, the most ambitious stateside program in the United States to abate climate change. California's Global Warming Solution Act (AB 32) is anticipated to eventually become a template for a regulatory framework at the US federal level if and when a federal climate change program develops.

Following the Katoomba conference in Ghana, CRS submitted an application to the GCF. This membership was accepted at COP 15 and Cross River State became the first Africa state with membership on the GCF. CRS is part of two GCF working groups. One will examine the needs of the forested states in terms of REDD capacity. Another will examine key issues around REDD such as the challenges of developing and implementing benefit sharing mechanisms. The findings of these groups will feed into the development of California's regulatory framework. It is anticipated that Cross River State's membership of this group will enable Nigeria and Cross River State to develop a REDD framework and pilot projects that are compliant with this important regulatory framework and position Nigeria as a ready market for carbon credits that could be accepted into the California cap and trade program. This is a very important step as there are a number of large US-based companies with significant emissions exposure in California and with operations in Nigeria.

Appendix 12 highlights sequentially, the journey so far by the CRS government in making REDD a reality.

Three REDD pilot sites have been identified. Two of these are a cluster of community owned forests that are contiguous with adjoining forest reserves (see below). A third proposed site is the mangrove forest area in the south of the state. NCRC in collaboration with the Cross River State Forestry Commission has prepared two draft Project Idea Notes (PIN) described below.

10.1 *EKURI--IKO ESAI-OKOKORI-ETARA EYAYENG-OWAI-UKPON RIVER FR*

The PIN was drafted John Mason of NCRC and Yadvinder Malhi from University of Oxford under the auspices of Katoomba West Africa PES Incubator support to the state.

Box 10.1 *Summary of REDD+ Project Idea Note for Ekuri-Iko Esai-Okokori-Etara Eyeyeng-Owai-Ukpon River Forest Reserve*

- The project will take place in the community forests belonging to Ekuri, Iko Esai, Okokori, Etara-Eyeyeng and Owai and the contiguous Ukpon River FR (with its neighboring communities).
- The project aims to avoid deforestation and forest degradation plus promoting carbon stocks conservation and enhancement (REDD+), through the strengthening of the three community organizations managing 94,000 ha in the traditional lands belonging to 12 communities in the Akamkpa and Obubra and Etung Local Government Area, Cross River State, Nigeria.
- The reference scenario (baseline) for the area is the rapid deforestation of natural vegetation due: (i) the expansion of farming activities by local communities (living inside the proposed project area); and (ii) the creation of new farms and settlements by outside populations and (iii) rapid growth in cocoa, banana, plantain, oil palm and yam production in the project area.
- The project activities relate to the establishment and capacity building of these communities to promote sustainable alternative land uses for the local communities, as sustainable farming, forest management, sustainable harvesting of the NTFPs, sustainable farming, environmental education, etc.
- The project will also consider a strong component of research on biodiversity, REDD+ and community development, for capacity building and further expansion/replication in other areas in Cross River State.
- Preliminary estimations indicate that the project could avoid deforestation of approximately 18,800 hectares over a 20-year project period, which would have released about 21,341,760 tCO₂ under the baseline scenario.
- The Ekuri - Iko Esai - Okokori - Etara-Eyeyeng - Owai - Ukpon River REDD+ project will generate approximately 11,951,386 tCO₂ of REDD credits (discounting project emissions, non-permanence and leakage buffers).
- The project is viable and attractive to carbon finance only if the project area includes the multiple community forests and forest reserves. A project considering only one of these areas would not be viable on its own.

Source: Mason J & Malhi, Y, 2010

The core idea of Mbe mountain-Afi River Project Idea Note is captured in Box 10.2 below.

Box 10.2***Summary of the Mbe Mountain-Afi River FR REDD Project Idea Note***

- The project area includes the Mbe Mountains communities as well as those around the Afi River Forest Reserve, Afi Mountain Wildlife Sanctuary. It could be expanded to also include Abo Ogbagante (and the other 8 Abo villages), Iso Bendeghe-Bendeghe Afi, Danare, Bashua and Bashu areas.
- The project aims to avoid deforestation and forest degradation plus promoting carbon stocks conservation and enhancement (REDD+), through the strengthening of the Conservation Association for the Mbe Mountains (CAMM) and other organizations managing approximately 50,000 ha in the traditional lands belonging to 18 communities in the Boki Local Government Area, Cross River State, Nigeria.
- The reference scenario (baseline) for the area is the rapid deforestation of natural vegetation due: (i) the expansion of farming activities by local communities (living inside the proposed project area); and (ii) the creation of new farms and settlements by outside populations and (iii) rapid growth in cocoa and plantain production.
- The project activities related to the strengthening of the CAMM and other organizations, aim to promote sustainable alternative land uses for the local communities, as sustainable farming, forest management, sustainable harvesting of the NTFPs, sustainable farming, social and health programs, ecotourism, etc.
- The project will also consider a strong component of research on biodiversity, REDD and community development, for capacity building and further expansion/replication in other areas in Mbe and Afi area and Cross River State;
- Preliminary estimations indicate that the project could avoid deforestation of approx. 50,000 hectares releasing about 11,352,000 tCO₂ under the baseline scenario.

Source: Mason J & Malhi, Y, 2010

It is important to highlight that WCS are already commencing a study to assess the feasibility of REDD in this project area. This is to compliment a REDD project in Takamanda/Mone across the border in Cameroon.

10.3***THE MANGROVE FOREST AREA***

A Project Idea Note (PIN) is yet to be developed for a new mangrove forest reserve in Cross River State. The mangroves in the state cover an area of 58,000 ha (580 Km²). The reserve was gazetted by the Cross River State government in 2007 and is considered richer in biodiversity than mangroves elsewhere in West Africa. Currently, mangroves are not classified as “forest” under REDD. Since Nigeria has the largest expanse of mangrove forest in Africa (and the 3rd largest in the world), CRS will push for Nigeria to lobby for the inclusion of mangroves as “forest” under REDD in forthcoming international negotiations on climate change.

With respect to general forest conservation, in the past, several donor organizations and international NGOs have focused implemented forest conservation and forest management programmes in Cross River State. There has been little international NGO or donor support for forest projects elsewhere in Nigeria (apart from previous WWF support for the creation of Okomu National Park and Gashaka Gumpti National Park).

Previous internationally supported project in Cross River State include NCF-WWF creation and management of Cross River National Park, the ODA/DFID community forestry project, the Living Earth community forestry project, the One Sky Initiative to support environmental NGOs, the USAID SPACE project, etc have at one time or the other such as conservation, agro forestry development, community forestry management, environmental education, and sustainable agricultural practices. Current international NGO participation in forest programmes in Nigeria is limited, though there are on-going forest conservation programmes being supported by the Wildlife Conservation Society (WCS), Fauna and Flora International (FFI) (both focused on the Afi Mountain and Okwangwo areas of Cross River State.

Even though the REDD+ mechanism is conceived globally through the UNFCCC negotiation processes, its implementation is at national and sub-national levels in developing countries. The issues involved in successful implementation of a REDD+ scheme are basically of institutional, strategic/policy, methodological and technical nature, and these are usually beyond the capabilities of most developing countries, including Nigeria. Various donor organizations at multilateral and bilateral partners, including the United Nations, have risen to the challenge to provide financial and technical assistance to developing countries in the various phases of REDD+ preparedness and implementation. Compared to other African countries, engagement with international donors and NGOs on REDD has just started.

As a result of the Katoomba Group meeting in Ghana and then follow-up meetings in Abuja and COP 15, dialogue has now commenced between Nigeria and the UN-REDD Programme and the World Bank FCPF. Nigeria now has observer status with the UN-REDD Programme.

The UN-REDD programme is a partnership initiative between the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and the Food and Agriculture Organization of the United Nations (FAO) (see *Annex XVII*). It was launched in 2008 and it is financed by the governments of Norway, Denmark and Spain, while more donors are expected to join in. It works closely with the World Bank's Forest Carbon Partnership Facility (FCPF) and many stakeholders internationally, as well as the UNFCCC's instances for REDD. The programme's main objectives are:

- Assisting developing countries on readiness for participation in future REDD mechanism; and
- Supporting the developing of guidance and standardized approaches to REDD based on sound science.

It is worth noting that UNDP has been instrumental in developing the relationship between UN-REDD and Nigeria. They have provided technical expertise and the seed funding (\$300,000) for activities related to building Nigeria's capacity to engage with the international community and with internal stakeholders on REDD. The first activities supported include the establishment of Nigeria's Technical Committee on REDD and the development of this report which will inform the first UN-REDD mission to Nigeria.

Nigeria has also held discussions with the World Bank FCPF programme which has similar objectives to the UN-REDD programme but progress with this institution has been slower. During the meeting with the World Bank at COP 15, Nigeria was also advised to officially request for membership of the bank's Forest Investment Programme (FIP) which could then help to fund some of the REDD readiness measures required. It is unclear whether this formal request to the FIP by the government has yet been made.

As mentioned above, the Katoomba Group working with Forest Trends is already providing technical advice to the CRS government in support of REDD+. However this support remains limited for now until they are able to access further funding to be able to ramp up their capacity building for the state government, NGOs and forest community groups. They have prepared a draft proposal to support capacity building of stakeholders in Cross River State and at the national level for REDD and are due to begin circulating this to international donors in the near future.

Cross River State is also a member of the Governor's Climate and Forests (GCF) Task Force. It is anticipated that Cross River State's membership of this group will enable Nigeria and Cross River State to develop a REDD framework and pilot projects that are compliant with this important regulatory framework and will position Nigeria as a ready market for carbon credits that could be accepted into the California cap and trade program. This is an important step as there are a number of large US-based companies with significant emissions exposure in California and with operations in Nigeria.

There is the possibility of potential support for REDD from a number of other donors in Abuja including the European Commission, the Norwegians, CIDA, DFID and the UK Foreign Commonwealth Office (FCO). Many of these donors were met with during the COP 15 talks to discuss potential support for REDD in Nigeria but these discussions yet been taken further.

Nigeria has some of the fastest rates of deforestation in Africa. Serious market failures leading to low returns and unmanageable risk have resulted in few or non-existent incentives for sustainable forest, and land, management. The existence of oil wealth has resulted in an over-reliance on this sector for economic growth, and led to chronic under-investment in agriculture and forestry. Nigeria is a federation, and the weak central forestry authority with no implementation power sets general policies for state-level departments who have implementation power but access to even fewer resources.

At the community level, the lack of legally recognised customary tenure over land is one of the reasons why communities have little incentive to practice sustainable land management, including for forests. There is no formal individual tenure outside urban areas so there is little incentive for individuals to plant, manage, or conserve trees. At all levels there is almost no understanding of the opportunities that REDD+ might offer or the strategy and mechanisms needed at the national and state level to achieve carbon credits from activities that reduce deforestation, prevent forest degradation or result in improved land management.

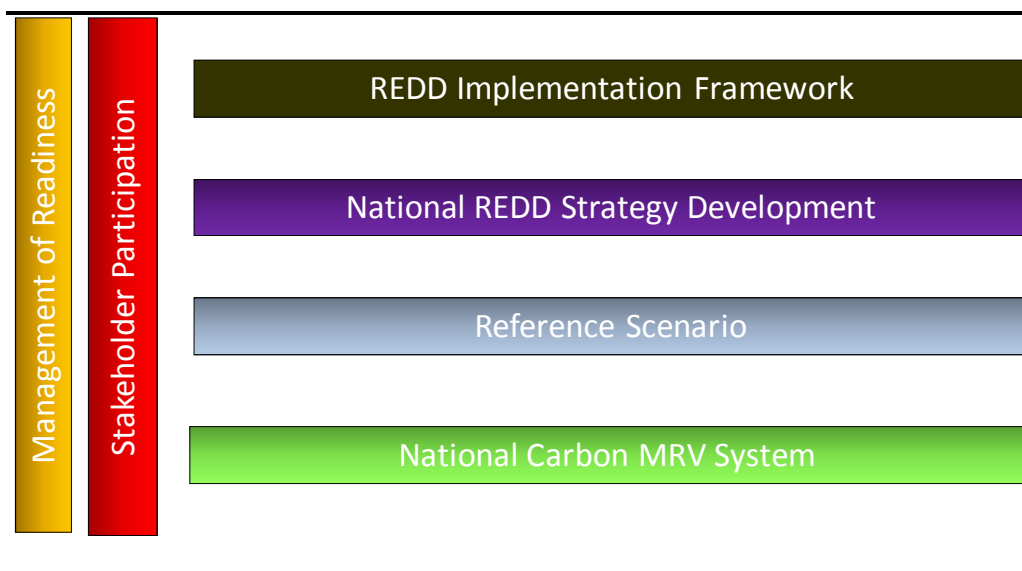
Nevertheless, there is much potential. Cross River State (home to over 50% of Nigeria's remaining tropical forests) is implementing and enforcing a two year moratorium on logging across the state with the intention of obtaining carbon credits. There is also growing interest from other states and projects in the country in carbon credits as a means to catalyse improved land management. Cross River State has successfully engaged the Federal government in REDD+. This has culminated in the establishment of a National Technical Committee on REDD+ and the start of talks between the Federal Government and the UN-REDD and World Bank FCPF programmes on support for REDD readiness.

While the report above, sets out information on the state of the country's forests. It outlines the institutional and policy framework for forest management and REDD and the national and Cross River State level and has highlights the extent of stakeholder engagement that will be required. It also highlights capacity for forest cover assessment and the needs in this regard as well as a history of previous forestry projects at the national and state level. This so far is a catalogue of what is in place rather than being explicit in what is lacking for REDD readiness.

It should be clear from the report that while there are the basic frameworks in place and political will, Nigeria suffers from a serious deficit in capacity and awareness on REDD. For the country to develop a National REDD Strategy; support is needed in all the internationally agreed REDD readiness areas including:

- REDD implementation framework (policy and institutions)
- REDD pilots
- National REDD Strategy development
- Reference Scenario and the National Carbon MRV system
- Stakeholder participation
- Management of Readiness

Figure 12.1 *Internationally-agreed REDD Readiness Components*



12.1.1 *REDD implementation framework (policy and institutions)*

There is a need to overhaul Nigeria’s (and Cross River State’s) laws with respect to REDD+. Cross River State’s forestry and wildlife laws have recently been reviewed and are about to be signed into law. However, the state is aware that much work remains to be done to put in place additional legislation specifically to create an enabling environment for REDD. Federal forestry policy and law also needs to be revised to enable REDD investment and development.

At the federal level, policy reform should consider:

- *Reviewing Nigeria’s forest policy:* and it’s Biodiversity Strategy/ Action Plan.
- *Reviewing the 1978 Land Use Act:* Reform of land tenure is critical to ensuring the participation of communities and the private sector in REDD. As outlined below, it may be possible to progress issues with respect to carbon tenure even if land tenure law reform proves to be intractable.
- *Assessing carbon ownership opportunities:* There should be an investigation of the possibilities for communities to secure tenure of the *carbon* resources in their community forests. It may be possible for the government to grant communities secure carbon rights even if their land continues to be legally owned by the state.

- Investigating benefit sharing and other financial mechanisms: Examining innovative but practical mechanisms for the equitable sharing of benefits between stakeholders. What mechanisms are required for communities to access carbon payments? What measures/financial legislation will need to be put in place to allow private sector investment in REDD? How will this investment be insured against risk? Fiscal mechanisms or removal of barriers to optimise continuous payments linked to compliance of carbon contracts. Judicial reforms required to impose conditionality and determine what is to be done when/if compliance is breached.
- MRV data needs: What monitoring, research and verification (MRV) data is required for REDD in Nigeria? Who will collect this and how will it be stored, used and managed?

In addition to the above, Cross River State specific forest laws and policy will also have to be revised to take into account the above but also including:

- State-level benefit sharing mechanisms that to ensure adequate returns to rural communities, state government and other stakeholders that have site specific claims and that acknowledges de-facto rights.
- Forest Law Enforcement and Governance (FLEGT) to enable the authorities and communities to effectively monitor and control the on-going protection of these forests so they remain intact.
- Incentives for private sector investment in afforestation.
- Recognition of community mapping as a legal means to identify area based rights and forest management plans.

Strong forest governance mechanisms and structures will be critical for the authorities to effectively monitor and control the on-going protection of these forests so they remain intact, and so the protection of forests does not push deforestation to other areas of West Africa (e.g. leakage). Finally it will also need to dovetail with other bills dealing with climate change legislation that are being discussed in the National assembly.

These reforms will need to take place against a wider back drop of basic forest management reform to promote sustainable forestry. See *Box 12.1* below:

- Fiscal policy reform to ensure that revenue system in the states is based on a Annual Allowable Cut (AAC) (e.g. what volume can be sustainably harvested) and not administrative led decisions dictating the amount of revenue required from the forest;
- Low timber tariffs have to be reviewed upwards to increase the efficiency of forest industries as low stumpage price encourages wastage of timber
- Improved forest governance by ensuring that concessions are done through competitive bidding as opposed to the present system of non-transparent administrative allocations;
- Long term concessions should be encouraged as opposed to short-term concessions;
- Forest management re-established based on an Annual Allowable Cut (AAC). This needs to decrease from the current level by about 50% and in some cases by about 75% according to World Bank reports;

Given that Cross River State is a member of the Governors' Climate and Forests Taskforce (GCF), policy formulation in Nigeria should be coordinated with the GCF to ensure the country's REDD framework is compliant with the emerging Californian carbon market (if this includes international forestry credits when it becomes operational) and other international states that are frontrunners in developing a market for REDD carbon credits.

It is important to note that these policy reforms will need to take place against a backdrop of wider policy and governance issues as discussed in *Section 3.1.2* above. It can be said that there is a relatively low commitment to forest management and conservation at the national (Federal level) and in many of the states. It will not be easy to persuade the Ministry of Finance to allocate a greater level of funds year on year to a sector that is seen as marginal and unproductive (compared to petroleum for example).

As discussed in *Section 3.1.2*, there is a need to reform the country's policies with respect to basic forest management in order to address the country's massive needs for timber and forest based fuel wood – which could undermine any REDD processes put in place in the medium term. Policy reform will require extensive engagement and influencing of political processes in Abuja and Calabar. This is discussed in more detail in below under stakeholder engagement.

12.1.2

REDD Pilots

Developing REDD pilots for early learning will be an essential component of Nigeria's REDD Readiness programme. These pilot projects will generate practical experience on a wide range of issues such as mechanisms for revenue sharing, means of avoiding elite capture of funds and the identification of early incentives for forest stakeholders. This learning will inform the development of enabling policies and laws at the state and federal levels. Taking the projects "to market" will also inform policy makers on the necessary financial mechanisms that need to be put in place to manage the business risk of investors (buyers of carbon credits) and to generate general investor confidence all round.

Support is required to progress the two REDD pilots identified in Cross River State by the state government in collaboration with NCRC/Katoomba West Africa Incubator. There are significant challenges to be overcome in bringing together the communities in each area (12 villages and 18 villages respectively), building their implementation capacity and managing their expectations around REDD and development. Efforts should also be made to support pilots elsewhere in the country such as the potential REDD pilot earmarked by Pro-Natura International (PNI) for the Omo and Oluwa Forests in Ogun and Ondo State.

12.1.3 *Reference Scenario and the National Carbon MRV system*

There has already been an assessment of capacity for spatial data analysis in Nigeria. This has been found to be weak. The main capacity found in NASDRA is disconnected from current REDD efforts. There is an initiative by NCRC/Oxford University to collect and analyse carbon samples from two potential REDD pilot areas in Cross River State. Expertise in the development of a carbon baseline and the methodology for a reference scenario based on IPCC Good Practice Guidelines or Voluntary Carbon Standard is practically absent in Nigeria.

It is suggested that the UNEP-WCMC project and the NCRC-University of Oxford projects are supported to develop an integrated approach to helping Nigeria establish an MRV system. This will need to work with NASDRA, FDF, CRSFC and perhaps FRIN. A participatory MRV system should first of all be piloted in Cross River State (before being scaled up to the national level).

Over and above this, there is a dearth of recent research information on Nigeria's forests. A REDD strategy will need to also address the weakness of Nigeria's forest research institutions.

12.1.4 *National REDD Strategy development and Stakeholder Participation*

The outputs of the above activities – policy and institutional reform, REDD pilots, development of a reference scenario and MRV system will all need to be fed into the development of a National REDD Strategy.

Development of such a strategy will require extensive consultation across the country, placing initial priority in the high-risk forested states. This should not be underestimated given the size of the country and the wide number of stakeholders with highly divergent interests. At present, general awareness of REDD+ is low in Nigeria. There is a clear need for support to the government to run a wide ranging stakeholder engagement programme dedicated to REDD+. This will need to be on-going as Nigeria develops a REDD Readiness Strategy so that stakeholders can participate in each stage of its development.

For government agencies, stakeholder engagement will need to include an element of advocacy and lobbying of the National Assembly firstly to the Climate Change Committee and then to the wider House of Representatives

and the Senate. A key obstacle to be overcome will be getting the Federal Ministry of Finance to increase the national financial allocation to the forest sector. This will be a tough barrier to overcome, particularly if REDD has a long gestation period without any short-term financial returns for the treasury.

Carrying civil society along across the country will also be critical. There continues to be a fundamental lack of trust between NGOs and government, which may result in civil society resistance to REDD. Already, some civil society groups in the country have started to protest against the perceived lack of stakeholder engagement in the development of REDD in Nigeria – even though the process is only just starting (see Annex XIV). It will be critical to address these concerns since civil society will play a key role in the mobilisation of forest communities nationwide.

12.1.5 *Management of Readiness – capacity building*

Capacity to manage readiness is THE big challenge in Nigeria and is an issue at federal and state levels in government, civil society and communities.

At federal and state level, any policy reform should be coupled with institutional reform and a training programme to effectively re-build the technical capacity of staff at the federal and state level in REDD, basic forest management. This will enable staff to professionally manage and monitor the forests by drawing forest management plans and manuals for regulating cut. Training in forest inventory and remote sensing is also necessary. This is especially an issue for Cross River State where the Forestry Commission has lost majority of its technically trained foresters.

Capacity building is required for forest communities to enable them to come together to develop a common vision for their forests and to implement forest management measures. As mentioned above, there are 12 villages involved in one of the Cross River State REDD pilots for example. A great deal of work is required to set up an umbrella structure that brings all these villages together for the governance of the REDD project area and the development of a coherent forest management plan. Training is also required for national and local NGOs that are working with communities on forest conservation programmes. NGO capacity in the country (including in Cross River State) remains weak in terms of their ability to support community based organisations effectively.

International NGOs and organisations such as the NCRC-Katoomba PES Incubator and the UNEP-WCMC Programme should be engaged so their efforts in Nigeria can be coordinated and supported further. Their work should be coordinated with a UN-REDD programme for Nigeria if the country becomes a 'Full Member'.

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APPENDIX I

Table A.13.1 *Extent of Changes in the Vegetation and Land Use by States*

State/year	Agriculture land (ha)	Woodland/shrub/grassland (ha)	Natural forest (ha)	Built-up area (ha)	Degraded area (ha)	Plantation	Water bodies (ha)
Abia	+16,800	+27,200	-49,300	+10,300	N/A	N/A	N/A
Adamawa	+200,400	-104,700	-111,000	N/A	+16,400	+84,500	-55,00
Akwa Ibom	-21,000	N/A	-20,600	N/A	N/A	N/A	-10,300
Anambra	+3,900	+11,900	-24,100	N/A	+9,500	N/A	N/A
Bauchi/ Gombe	+870,500	+150,300	-20,300	N/A	+140,300	N/A	2,700
Benue	+126,000	N/A	-89,000	N/A	N/A	N/A	-49,100
Borno	+858,100	-901,400	N/A	+8,300	+148,600	N/A	- 388,900
Cross River	+135,800	-400	-166,300	N/A	N/A	+3,800	+2,500
Delta	+57,000	N/A	-118,000	+42,500	N/A	+5,100	+20,300
Edo	+120,900	+16,900	-174,000	N/A	N/A	+25,300	N/A
Enugu	+53,500	+63,500	-162,700	N/A	+37,100	N/A	N/A
FCT	+13,500	N/A	-128,000	+128,000	+9,200	N/A	N/A
Imo	-12,400	+18,400	-15,000	N/A	+8,900	+1,100	-4,200
Jigawa	-862,800	+20,500	-25,700	N/A	+10,100	N/A	-53,500
Kaduna	+654,000	-845,800	N/A	N/A	+257,400	+6,600	-16,800
Kano	-96,500	+44,900	-64,600	N/A	+80,300	N/A	+25,600
Katsina	-157,100	-139,500	+285,700	N/A	N/A	N/A	-8,400
Kebbi	+446,900	-483,300	N/A	N/A	+105,100	N/A	-72,900
Kogi	+83,100	+184,400	-51,600	N/A	N/A	N/A	-93,400
Kwara	+279,900	+41,400	-387,900	N/A	+93,700	N/A	-64,500
Lagos	+29,700	N/A	86,500	37,500	N/A	N/A	+10,500
Niger	+1,180,600	-119,100	1,134,000	N/A	+109,900	+16,600	- 110,000
Ogun	-84,200	+74,100	-54,600	N/A	N/A	+34,800	+3,700
ONdo/Ekiti	-52,300	41,700	-32,900	N/A	29,000	+7,700	+15,900
Osun	-118,400	+13,400	+59,400	N/A	+13,700	+7,300	+1,400
OYo	+217,800	+109,500	-378,600	N/A	+9,600	N/A	+6,200
Plateau/ Nasarawa	889,900	+52,800	-988,600	N/A	7,300	+4,300	79,200
River/ Bayelsa	+4,600	N/A	-20,900	N/A	N/A	+15,600	+2,900
Sokoto/ Zamfara	351,700	-855,500	-293,500	N/A	+702,800	N/A	+3,100
Taraba	1,709,300	+101,400	1,597,900	N/A	+50,300	-294,100	N/A
Yobe	+380,000	-5,235	N/A	N/A	+208,500	N/A	-56,200

Note:

1. + indicate that the class increased between 1976/78 and 1993/95
2. - indicate that the class decreased between the same period
3. N/A means data was not available

APPENDIX II

Table A.13.2 Forest Reserve and their Distribution within the Forest Types

S/N	Forest type	Area in forest reserves (ha)	Portion of total forest area in reserves (%)	Area in free forest areas (ha)	Portion of total forested area in reserves (%)	Total area of forest types (ha)	Portion of total forested area (%)
1	Dominantly trees/wood lands/shrubs	1,106,541	50.8	5,611,392	61.6	8,005,836	60.3
2	Lowland rain forest	782,608	35.9	1,187,488	13.0	2,397,521	18.1
3	Freshwater swamp forest	226,477	10.4	1,430,175	15.7	,656,652	12.5
4	Mangrove with trees	0	0.0	5,314	0.1	5,314	0.1
5	Montane forest	18,180	0.8	470,749	0.1	692,578	5.2
6	Riparian forest	46,390	2.1	431,608	4.7	509,282	3.8
	Total	2,180,196	100	9,136,728	100	13,267,183	100

Source: Federal Department of Forestry, 1998

APPENDIX III

Table A.13.3 Forest Reserves According to Vegetation type

State/year	Swamp/ mangrove	High forest (ha)	Plateau montane (ha)	Derived savanna (ha)	Guinea savanna (ha)	Sudan/ sahel (ha)	Total (ha)
Abia	2,870.00	4,949.60		1,302.50			9,122.10
Adamawa				32,883.00	118,804.00		151,687.00
Akwa Ibom	31,080.00	777.00					31,857.00
Anambra		32,309.00		559.00			32,868.00
Bauchi						817,580.00	817,580.00
Benue		4,387.00			55,938.00		60,325.00
Borno					134,637.00	179,517.00	314,154.00
Cross River		625,815.00		13,684.00			639,199.00
Delta	29,345.42	6,608.00					35,953.42
Edo		565,035.00					565,035.00
Enugu		7,440.10		1,565.97			9,006.07
Imo		1,345.30		211.81			1,557.11
Jigawa						97,732.20	97,732.20
Kaduna				86,417.03	574,390.68		660,807.71
Kano						72,366.79	72,366.79
Katsina						321,666.66	321,666.66
Kebbi						307,676.00	307,676.00
Kogi		141,299.87		133,666.00	206,521.00		481,486.87
Kwara		1,249.00		574,438.40			575,687.40
Lagos	12,579.00						12,579.00
Niger					756,037.00		756,037.00
Ogun		185,256.00		95,727.00			280,983.00
Ondo		342,712.00					342,712.00
Osun		79,360.00		6,773.76			86,133.76
Oyo		41,296.00		299,934.00			341,230.00
Plateau					203,397.10	167,380.51	370,777.61
River		121,440.00					121,440.00
Sokoto						1,694,371.00	1,694,371.00
Taraba			16,022.67		709,422.00	437,302.33	1,162,747.00
Yobe						386,710.00	386,710.00
FCT					10,914.65		10,914.65
Total forest type	75,874.42 0.71%	2,161,278.87 20.10%	16,022.67 0.15%	1,247,162.47 11.60%	2,770,061.43 25.76%	4,482,302.49 41.69%	10,752,702.35 100.00%

Source: Federal Department of Forestry, 1998

APPENDIX IV

Table A.13.4 Summary of Distribution of Forest Reserve in Nigeria

S/N	STATE	No. of Reserves (No)	Area of Forest Reserves (ha)	Area of State (ha)	% of FR to Land Area	No. of LGA with FRs. (No)
1	Abia	27	9,122.10	632,000	1.44	10
2	Adamawa	27	151,687.00	3,691,700	4.11	12
3	Akwa Ibom	3	31,857.00	708,100	4.50	2
4	Anambra	10	32,868.00	484,400	6.70	6
5	Bauchi	74	817,580.00	6,460,500	12.66	19
6	Benue	50	60,325.00	3,405,900	1.77	16
7	Borno	81	314,154.00	7,089,800	4.43	21
8	Cross River	18	639,499.00	2,015,600	31.73	12
9	Delta	11	35,953.00	1,769,800	2.03	6
10	Edo	45	656,0335.00	1,780,200	31.74	9
11	Enugu	19	9,006.07	1,283,100	0.70	9
12	Imo	10	1,557.11	553,000	0.28	4
13	Jigawa	82	97,732.20	2,411,001	4.05	18
14	Kaduna	64	660,807.71	4,605,300	14.35	15
15	Kano	63	72,366.79	2,013,100	3.59	20
16	Katsina	97	321,666.66	2,419,200	13.30	26
17	Kebbi	24	307, 676.00	3,680,000	8.36	12
18	Kogi	37	481,486.87	2,983,300	16.14	21
19	Kwara	30	575,687.40	3,682,500	15.63	10
20	Lagos	5	12,579.00	334,500	3.76	5
21	Niger	109	756,037.00	7,636,300	9.90	15
22	Ogun	9	280,983.00	1,676,200	16.76	6
23	Ondo	27	342,712.00	2,095,900	16.35	9
24	Osun	7	86,133.76	925,100	9.31	6
25	Oyo	9	341,230.00	2,845,400	11.99	8
26	Plateau	63	370,777.61	5,803,000	6.30	19
27	Rivers	10	121,440.00	2,185,000	5.56	5
28	Sokoto	41	1,694,371.00	8,573,500	19.76	21
29	Taraba	48	1,162,747.00	5,447,300	21.35	10
30	Yobe	42	386,710.00	4,550,200	8.50	8
31	FCT	18	10,914.65	731,500	1.49	2
	Total	1,160	10,752,702.35	94,472,401	113.8	362

APPENDIX V

Table A.13.5 Existing and Proposed Game Reserve/Wildlife Sanctuaries

S/N	Name	Habitat	Area (ha)
A	Existing		
1	Alawa	Northern Guinea	29,620
2	Dagida	Northern Guinea	29,422
3	Falgore	Northern Guinea	92,300
4	Gashaka-Gumti	Mixed	224,400
5	Gili-Gili	(degraded)	36,200
6	Kambari	Northern Guinea	41,400
7	Kwale	(degraded)	340
8	Kwaiambana	Northern Guinea	261,400
9	Lame-Burra	Northern Guinea	205,967
10	Okomu	Moist forest	11,200
11	Ologbo	(degraded)	19440
12	Opara	(converted)	110,000
13	Orle	(converted)	5,440
14	Pai River	Northern Guinea	70,000
15	Pandam	Southern Guinea	22,400
16	Sambisa	Northern Guinea	51,800
17	Udi-Nusukka	(converted)	5,600
18	Wase Rock	Northern Guinea	92
19	Yankari	Northern Guinea/Sudan	224,400
20	Afc River		
1	Alfi River	Moist River	10,000
2	Ifon	Moist River	28270
3	Akpaka	(degraded)	19,400
4	Ebba Kambe	Southern Guinea	121,730
5	Kamuku	Northern Guinea	112,700
6	Kashinbila	Southern Guinea	139,600
7	Meko	Southern Guinea	96,610
8	Stubbs Creeks	Swamp forest	21,000
9	Taylor Greek	Swamp forest	30,000
10	Ohosu	(degraded)	47,100
11	Okeluse	(degraded)	11,440
12	Opanda	(degraded)	10,520
13	River Benue	Southern Guinea	154,000

Source: Federal Department of Forestry 1998

APPENDIX V1

Table A.13.6 Existing and proposed Nigeria National Parks

S/N	Name	Location	Size (ha)
A	Existing		
1	Chad Basin National Park	Borno/Yobe State	230,000
2	Cross River National Park	Cross River State	400,200
3	Gashaka Gumti National Park	Adamawa/Taraba States	640,000
4	Kainji Lake National Park	Niger/Kwara State	534,000
5	Old Oyo National Park	Oyo State	251,200
6	Yankari National Park	Bauchi State	224,400
7	Kamuku National Park	Kaduna	112,130
8	Okomu National Park	Edo	11,200
B	Proposed		
1	Gujba Forest Reserve	Yobe State	44,800
2	Ifon Forest Reserve	Ondo State	28,270
3	Kogo Forest Reserve	Katsina State	405,500
4	Kuyambana Game Reserve	Zamfara State	261,400
5	Sambisa Forest Reserve	Borno State	51,800

Source: Federal Department of Forestry 1998

APPENDIX VII

Table A.13.7 Strict Nature Reserve of Nigeria

S/N	Name	Habitat	Area (ha)
1	Akure	(fragmented)	32
2	Bam Ngelzarma	(degraded)	142
3	Bonu	(degraded)	145
4	Lekki	Moist forest	78
5	Milliken Hill	(urbanized)	49
6	Omo	Moist forest	460
7	Ribako	(degraded)	170
8	Urhonigbe	(degraded)	64

APPENDIX VIII

Table A.13.8 Forest Plantation Area by States within the FRS Area

S/N	State	Plantation area in forest reserve (ha)	Plantation area in free areas (ha)
1	Abia	4,505	0
2	Adamawa	1,273	0
3	Akwa Ibom	2,282	0
4	Anambra	3,828	0
5	Benue	2,432	0
6	Cross river	14,508	1 plantation, size unknown
7	Delta	4,015	0
8	Edo	21,527	0
9	Enugu	13,752	0
10	Imo	1,253	0
11	Kaduna	5,867	0
12	Kano	1,825	0
13	Kebbi	904	0
14	Kogi	5,275	404
15	Kwara	9,852	0
16	Lagos	,049	0
17	Niger	5,588	115
18	Ogun	39,882	185
19	Ondo	32,086	0
20	Osun	9,264	0
21	Oyo	6,745	2 plantation, size unknown
22	Plateau	6,957	0
23	Taraba	1,439	1
	Total	196,008	705

*FORMECU (1999B): Forest Resources Study of Nigeria, Vols. II & IV

APPENDIX IX

Table A.13.9 *Area Occupied by Natural Forest Types within and Outside Forest Reserves in the High Forest States*

S/N	State	Within forest reserve (ha)	Outside forest reserves (i.e in free areas) (ha)	Total forested areas in the state (ha)
1	Abia	2,673	21,520	24,193
2	Akwa Ibom	21,801	75,984	97m785
3	Anambra	14,189	50,529	64,718
4	Cross river	197,500	381,731	579,231
5	Delta	30,242	350,505	380m747
6	Edo	287,746	141,227	428,973
7	Enugu/Ebonyi	2,288	52,190	54,478
8	Imo	184	36m671	36,855
9	Lagos	1,155	61,730	62,885
10	Ogun	86,322	231,634	317,956
11	Ondo/Ekiti	20,072	344,579	564,651
12	Osun	61,625	106,274	167,899
13	Oyo	94,228	284,038	378,266
14	River/Bayelsa	44,456	594,251	638,707
	Total	1,064m481	2,732,863	3,797,344

Source: Forest Resources Study, FDF, Abuja 1999

APPENDIX X

Table A.13.10 Existing Inventories/ Assessment & Quality of Forest Data in Cross River State and Some Other Locations

S/ No	Data Type	Methods/ Quality	Time of collection	Source	Coverage Scope	Funding
1	Pre-exploitation forest enumeration data in Nigeria.	Inventory data across 27 reserves in southern Nigeria	1930	John B. Hall, J Ecol, (1977) 65,187-199	Southern Nigeria, an area coverage 180,000 Km ² in forest reserve totalling 19,000 Km ²	?
2	Reconnaissance inventory of High Forest and swamp forest areas in Cross River state, Nigeria	Inventory of tree > 10cm dbh & selected NTFPs, Aerial photo of CRS in 1991	Inventory data 1993, Airphoto 1991	Dunn, et al Cross River state Forestry Commission (ODA assisted forestry project)	Cross River state wide	ODA (Now DFID) and Cross River state Government
3	Forestry Resource Study (FRS), Nigeria	Forestry inventory (Field survey method)	1995/1998	FORMECU (Beak Consultants & GEOMATICS International	Country wide, Data on forest resources and status	African Development Bank (ADB)
4	The Non-Timber Forest Product (NTFP) Report: A Preliminary survey of Cross River state Forest goods and services for sustainable management of our natural resources	Community participatory survey of NTFP resources	1993	Alexander, et al CRS Forestry Commission (ODA Assisted forestry project)	Cross River state wide	ODA (Now DFID) Of CRS Government
5	Normalized vegetation Index, Nigeria	Series of maps collected through ground survey & satellite derived data Scale:1:2,000,000 & 1:250,000 (1976 /1978 & 1993/1995)	1978, 1982, 1986, 1990 and 1995	FORMECU	Nigeria	International funding & Federal Government

S/ No	Data Type	Methods / Quality	Time of collection	Source	Coverage Scope	Funding
6	Orthophoto map of Cross River State	Orthophoto survey	2002	Cross River State Ministry of Lands, Survey & Town Planning	Cross River State	CRS Government
7	Rapid Appraisal of forest Resources from Remotely Sensed Data in CRS, Nigeria	Landsat TM 188-56 For 1991, Landsat 7ETM+ images 2000/2001	1991 & 2001	Flasse Consulting 2002 & CRSFC	CRS	CRS Government & DFID
8	Biodiversity threat status of commercially exploited trees in CRS	Tree felled analysis record of major trees exploited by number, volume, species & location in CRS 1990 - 2004; Community level assessment of biodiversity threats of exploited trees	2004	Francis E. Bisong	State wide 23 forestry changes	Individual research
9	Biogeographic adequacy of protected areas in Nigeria	Map overlays via GIS application of major ecosystems & protected areas in Nigeria	2008	Bisong, et al	National	Group research
10	Forestry loss & watershed degradation map of CRS 200-2008	Landsat 10m ETM	2002-2008	Nigeria Strategic Investment Framework (NSIF) for Sustainable Land Management (SLM), Draft Report National Fadama Development Office	CRS	World Bank / National Fadama development Office

APPENDIX XI

Table A.13.11 FOSA-Possible Trends and Outcome for Nigerian Forests in 2020 if the Current Driving Forces Persist; Key Interventions and Public Sector Changes

S/No	Key Indicators	Likely Situation in 2020	Key Interventions	Public Sector Changes
i.	Forest and forest cover	Continued deforestation at more or less the same rate.	Water-shed protection and prevention of land degradation: expansion in afforestation and reforestation measures.	Improve local/public participation in forest management and wood processing.
ii.	Area under sustainable forestry management.	Slow progress in expanding the area under the SFM (if any)	Informal participation in forest resources management at community level. Redefine structure and functions of public agencies.	Widen the legal and institutional framework to improve informal operations.
iii.	Woodfuel	Still the main source of energy leading to depleted woodlands and forests especially centers and no major enable energy switching.	Improvement in the management of natural forests and expansion of plantation through the application of criteria and indicators for SFM.	Provide effective policies and framework that will empower actors outside the public sector to supply the goods and services required by society.
iv.	Non-wood forest products (e.g. medicinal and plants, gums, bee-wax, tanning materials, fruits, nuts, bush-meat, etc.)	Rapid depletion of several products especially on account of increasing.	Improve access to information; improve capacity in science and technology.	Strengthen indigenous knowledge development; improve and augment traditional expertise by applying modern science.
v.	Environmental services	Poor progress in watershed managements persisting and degradation and desertification as well as continued loss of biodiversity.	Strengthened efforts to curb the role of criminalized informal sector. Watershed protection; prevention of land degradation including arresting of desertification.	Improve the ability of public sector institutions, civil society organizations and local community or action against the more organized and criminalized informal sector especially involved in illegal logging, poaching and trade on forest products.
vi.	Poverty alleviation	Forests will continue to play a key role and provide and meet basic needs of the larger poor in Nigeria populace through the informal sector	Build up local institutional capacity to support the many small-scale forest based informal enterprises. Enhance access to technology and credit.	Recognition of the role of less organized informal sector.

S/No	Key Indicators	Likely Situation in 2020	Key Interventions	Public Sector Changes
vii.	Wildlife-Based tourism	Expansion depends to a large development of infrastructure safety and security.	Improvements in institutional arrangements to increase benefits to local communities.	Sharing of benefits among stakeholders in the local communities to be improved upon.

APPENDIX XII

Table A.13.12 Land Use Change Emissions by Country

Position	Country	Mt CO ₂ in 2000*	% of global LUCF emissions in 2000*	Forest Area in 2000 (x1000 ha)	Annual change rate 2000-2005	
					(x1000 ha)	(%)
		CAIT	CAIT	FAO	FAO	FAO
1	Indonesia	2,563.1	33.6	97.85	-1,871	-2.0
2	Brazil	1,372.1	18.0	493.21	-3,103	-0.6
3	Malaysia	698.9	9.2	21.59	-140	-0.7
4	Myanmar	425.4	5.6	34.55	-466	-1.4
5	DR Congo	317.3	4.2	135.21	-319	-0.2
6	Zambia	235.5	3.1	44.68	-445	-1.0
7	Nigeria	194.8	2.6	13.14	-410	-3.3
8	Peru	187.2	2.5	69.21	-94	-0.1
9	Papua New Guinea	146.0	1.9	30.13	-139	-0.5
10	Venezuela	144.1	1.9	49.15	-288	-0.6
11	Nepal	123.5	1.6	3.90	-53	-1.4
12	Colombia	106.1	1.4	60.96	-47	-0.1
13	Mexico	96.8	1.3	65.54	-260	-0.4
14	Philippines	94.9	1.3	7.95	-157	-2.1
15	Cote d'Ivoire	91.1	1.2	10.33	15	0.1
16	Bolivia	83.8	1.1	60.09	-270	-0.5
17	Cameroon	77.1	1.0	22.35	-220	-1.0
18	Canada	64.5	0.9	310.13	0	0
19	Madagascar	60.2	0.8	13.02	-37	-0.3
20	Ecuador	58.9	0.8	11.84	-198	-1.7
21	Guatemala	56.6	0.7	4.21	-54	-1.3
22	Cambodia	56.1	0.7	11.54	-219	-2.0
23	Argentina	55.1	0.7	33.7	-150	-0.4
24	Russian Federation	54.2	0.7	809.27	-96	0.0
25	Nicaragua	53.7	0.7	5.54	-70	-1.3
26	Thailand	47.6	0.6	14.81	-59	-0.4
27	Panama	47.5	0.6	4.31	-3	-0.1
28	Zimbabwe	47.4	0.6	19.11	-3.13	-1.7
29	Liberia	39.4	0.5	3.46	-60	-1.8
30	Uganda	39.3	0.5	4.06	-86	-2.2
Total		7,638.2				

Source: Houghton, R.A. 2003: "Revised estimates of the annual net flux of carbon to the atmosphere from changes in land use and land management 1850-2000". *Tellus B55B*: 378-390.

APPENDIX XIII

Table A.13.13 CROSS RIVER STATE REDD + CHRONICLE

DATE	EVENT	OUTCOME	REMARKS
June, 2008	Environment Summit	<ul style="list-style-type: none"> Resolution to manage Cross River State for Carbon Concession Remove revenue targets from forest exploitation. 2 year ban on logging. 	Resolutions ratified by the State EXCO
November 2008	Anti-Deforestation Task Force set up	Control of Timber business activities shifted to Task-Force	
February, 2009	Enlarged Anti-Deforestation Task Force	<ul style="list-style-type: none"> Many arrests of violators of the ban on logging Seizure of illegally harvested wood and power chain saws. 	
February, 2009	International campaign for support for CRS anti-Deforestation efforts	<ul style="list-style-type: none"> International Task Force set up for Carbon Credit for Cross River State. 	
July, 2009	Presentation on REDD to His Excellency, Senator Liyel Imoke, Gov. of CRS.	His Excellency requested for a REDD reconnaissance visit to the State by experts - Mr. Tunde Morakinyo and John Mason	
September, 2009	Visit by REDD experts – John Mason of NCRC and Tunde Morakinyo of ERM	<p>Visit to Ekuri and Iko Esai forest and Mbe Mountain Communities by experts.</p> <ul style="list-style-type: none"> Presentation of a vision on REDD to EXCO by experts. Experts invited State team to Katoomba meeting in Ghana 	
October, 2009	His Excellency Senator Liyel Imoke, Gov. of CRS led a Cross River State delegation to the 1 st West Africa Katoomba meeting on Payment for Ecosystem Services (PES)	<ul style="list-style-type: none"> Strategic members of CRS EXCO attended the meeting and became sensitized about PES & REDD. HE, Senator Liyel Imoke made a presentation requesting help/ collaboration from experts. Received contact for UN-REDD, WB-FCPF and GCF. 	
October, 2009	HE, the Governor led a State delegation to FME in Abuja to meet the Minister for collaboration.	<ul style="list-style-type: none"> REDD and Cross River State is captured in Nigeria's position, paper to COP15 talks. Good understanding/relationship established between the FME and Cross River State Government. 	

DATE	EVENT	OUTCOME	REMARKS
October, 2009	Hon. Minister for Federal Ministry of Environment, Mr. John A. Odey applies for Nigeria's membership of UN-REDD and World Bank - FCPE/Forest Carbon	<ul style="list-style-type: none"> Nigeria's application acknowledged by UN-REDD secretariat and the WB-FCPF Secretariat. 	Cross River State designated as Nigeria's pilot State for REDD in the application.
November, 2009	HE, Governor Liyel Imoke applies for membership of the Governors' Climate and Forest (GCF) Task Force.	<ul style="list-style-type: none"> Application acknowledged and Governor invited to GCF meeting in Copenhagen in December, 2009 	
December, 2009	His Excellency, Governor Liyel Imoke attends the COP15 in Copenhagen	<p>His Excellency, Governor Liyel Imoke</p> <ol style="list-style-type: none"> Granted a world press conference to inform the world about his anti-deforestation activities and efforts to protect the last Tropical High Forest (THF) in Nigeria. Met with the officials of WB FCPF secretariat requesting for assistance to Nigeria in the REDD programme. Met with the officials of the UN-REDD secretariat requesting for assistance to Nigeria in the REDD programme. Attended the GCF meeting. Attended the high profile meeting of world leaders including the PM of Norway etc. who are committed to the Avoided Deforestation (REDD). 	
January, 2010	Experts from the Katoomba Group (Prof. Yadvinder Malhi of Oxford University and John Mason of Nature Conservancy and Research Centre (NCRC) visited the State on a REDD mission.	<ul style="list-style-type: none"> Spent 11 days of study tour of two of the identified pilot sites for REDD (Mbe Mountain/ Afi River Forest Reserve and Ekuri/Iko Esai Community Forest. 	1 st draft of PIN (Project Idea Note) out.
February, 2010	State coordinator of REDD meets with WB mission to Nigeria on Climate Change	<ul style="list-style-type: none"> Made presentation on the CRS REDD programme for inclusion in the WB's CAS for Nigeria. 	

DATE	EVENT	OUTCOME	REMARKS
March, 2010	Nigeria admitted as observer to UN-REDD and invited to the Un-REDD meeting in Nairobi - Kenya.	<ul style="list-style-type: none"> The National Focal point on REDD present at meeting. Coordinator of REDD in Cross River State present at meeting. The UNDP - Abuja officer for Climate Change and Energy present at meeting. 	<p>-Collaboration of efforts between national, UNDP and CRS on REDD began.</p> <p>Road map for REDD in Nigeria agreed with UN-REDD officers present at meeting.</p>
March, 2010	Nigeria admitted as observer to WB-FCPF and invited to Gabon	<ul style="list-style-type: none"> The National focal point on REDD attended the Gabon meeting. 	Sponsorship by the Cross River State Government.
April, 2010	REDD structure established in CRS Forestry Commission	<ul style="list-style-type: none"> Sub-Committees <ul style="list-style-type: none"> - Legal - Technical - Stakeholders 	Committee to facilitate formation of State committee on REDD.
April, 2010	UNEP-WCMC (World Conservation Monitoring Centre) of United Nations Environment programme indicates interest in assisting CRS and Nigeria in the building of capacity to support REDD.	<ul style="list-style-type: none"> Plans for UNEP-WCMC official to visit Cross River State and Abuja for assessment of capacity by July, 2010. 	
May, 2010	National technical meeting in Calabar.	<ul style="list-style-type: none"> Consultants identified to do the preliminary national forest assessment ahead of the REDD mission to Nigeria, July. 	Target is to submit REDD readiness preparation proposal (RPP) by September.
May, 2010	State Coordinator of REDD and Mr. Arikpo Arikpo attended the GCF meeting in Banda Aceh - Indonesia.	<ul style="list-style-type: none"> State coordinator involved in the building of GCF structures to support REDD in GCF member States. 	

DATE	EVENT	OUTCOME	REMARKS
July, 2010	Visit of Julian Bayliss (University of Cambridge) c/o UNEP-WCMC to assess REDD readiness in Nigeria.	<ul style="list-style-type: none"> • Assessed and appreciated the data available for REDD monitoring & verification in Nigeria and Cross River state. • Presentations on REDD issues • Stakeholders consultation on REDD <ol style="list-style-type: none"> 1. Assessed and appreciated Capability of the GIS Lab of the Dept. of Geography and Regional Planning, University of Calabar. Cross River state. For the technical (hardware, Software and Human resources) needs for REDD project in Cross River state. 	

APPENDIX XIV

DON'T SALE FORESTS, GROUPS URGE NIGERIAN GOVTS - AKANIMO SAMPSON

A round table strategic meeting in Calabar, the Cross River State capital, on Reducing Emissions from Deforestation and Degradation (REDD), has kicked against continued selling of forests by communities and governments in Nigeria.

The meeting which was organised by Environmental Rights Action/Friends of the Earth Nigeria (ERA/FoEN) in collaboration with Rainforest Research Development Centre and GREENCODE, on August 18, 2010, said forests are human eco-systems.

In a communique e-mailed to AkanimoReports on Thursday by Mr. Philip Jakpor, Spokesperson for ERA, the thrust of the meeting was to build the capacity of critical stakeholders to understand, analyze, criticize and resist the REDD scheme prior to its adoption in Nigeria. Participants were drawn from non-governmental organizations, representatives of civil society groups, forests communities and students from Calabar.

In his opening remarks, the Executive Director of ERA and Chair, Friends of the Earth International (FoEI), Nnimmo Bassey said that forests in Cross River State have been targeted for the REDD in Nigeria hence the need for participants to uncover any cover-ups by government which is detrimental to community forests and the environment.

Presentations and positions articulated by the resource persons, actions and reactions from the representatives of CSOs, forest communities and individuals, during the incisive brainstorming session, formed the basis for observations which were made and articulated thus:

Participants at the Calabar meeting observed that:

- Forests in Cross Rivers State-some of the few remaining tracks of mangrove and rainforest reserve in the world targeted for REDD are in grave danger due to the scheme.
- Carbon trading/market mechanism promoted by the REDD are false solutions to climate change.
- REDD promotes deforestation, more plantation and corporate land grabs.
- Nigeria's forest dependent poor may be forcefully evicted from their land and denied access to the forests that form basis of their culture and livelihoods by the REDD.
- Forest-dependent communities that have been the original custodian of native forests have not been engaged or incorporated by government in the REDD negotiation process.

- Awareness on REDD is very low at all levels of engagement in Nigeria as there are obvious capacity gaps among government negotiators on the REDD debate.
- REDD attraction for the Nigerian government is the huge fund involved not the devastating environmental and socio-cultural implications.
- There are no plans to conduct Environmental Impact Assessment (EIA) on all REDD targeted forest communities in Nigeria.
- The World Bank and other financial institutions that have invested disproportionately by acting as climate bank to the detriment of our forests and environment should not be the instrument through which funds mobilized for addressing climate change should be channelled.
- African, particularly Nigerian forests and environment are in crises and require urgent action to rescue them from the path of grave degradation and consequences.

Recognising that forests play key roles in human lives, they resolved that protection of forests and environment in Nigeria is a duty citizens owe the earth and humanity.

According to them, "forests must be out of Carbon markets if there should be REDD. Forest is not for sale! It is our life and source of livelihoods for millions of forest-dependent peoples in forest-bearing communities in Africa. World Bank, IMF, UNEP and other multilateral institutions should hands off our forests".

Continuing, they said government at all levels in Nigeria should take honest and practical steps in reducing deforestation and climate change instead of gambling and trading with our forests, adding, "plantations are not Forests. REDD should reward community people who protect the forests and not drivers of deforestation and degradation like plantation merchants and unsustainable logging contractors".

- **"The Nigerian Government", they went on, "should actively engage forest community dwellers; civil society groups in the ongoing REDD negotiation process and adopt Community forest management practices as one of the concrete solutions to climate change.**
- "All civil society groups on environment in Nigeria and Africa must deepen their struggles against environmental and climate injustices by building alliances, solidarity and sharing experiences on REDD and its versions.
- "Government should conduct Environmental Impact Assessment (EIA) on REDD in targeted forest communities.
- **"Governments should engage civil society groups and forest community people in the entire REDD process.**
- "Allowing rich countries to keep polluting in the North otherwise known as annex 1 countries and coming to the south addressed as third world countries to cultivate plantations for rubber, palm oil, agro fuels, and palm oil is not the answer to climate change. This is

unacceptable. They owe us an ecological debt as a result of colonialism and inequitable use of global commons and disproportionate contribution to emissions that have resulted in climate change.

- **"Awareness should be raised at all levels on the implications of REDD".**

APPENDIX XV

FEDERAL REPUBLIC OF NIGERIA

UN-REDD Programme / UNDP

**Preliminary assessment of the REDD context in Nigeria,
at both Federal level and Cross River State**
TERMS OF REFERENCE FOR A CONSULTANT ASSIGNMENT - **draft**

May-June 2010

1. Background

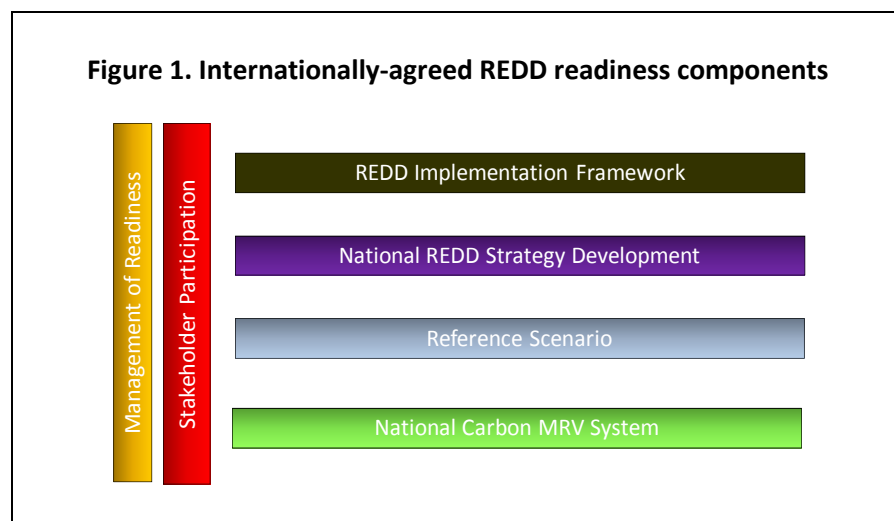
Tropical forests are disappearing at an alarming rate globally, mostly due to farming, land use changes and logging. Forest loss and degradation are closely connected to economic activities and to poverty conditions. At the same time, deforestation and forest degradation contribute to global emissions of greenhouse gases and thus to climate change: **the forestry sector, mainly through deforestation, accounts for about 17% of global greenhouse emissions**, making it the second largest source after the energy sector. Therefore, addressing deforestation and forest degradation in tropical areas is relevant to various domains of the development agenda, notably the forest sector (conservation and sustainable use of forests), poverty alleviation (enhancing forest-related livelihoods) and climate change (mitigation).

REDD (Reducing Emissions from Deforestation and Forest Degradation in Developing Countries) is a proposed **environmental finance mechanism** to simultaneously address forest conservation and climate change mitigation within the framework of sustainable development. Its concept has entered the UN climate change negotiations and is rapidly being developed as a new financial instrument to be part of the post-Kyoto climate agreement. The need to support efforts to reduce emissions from deforestation and forest degradation has been expressed at the highest political levels, such as the UN and the G8, and has been included in the UNFCCC's Bali Action Plan (2007). This Plan launched a process to negotiate a post-2012 regime, including possible financial incentives for forest-based climate change mitigation actions. In particular, efforts towards REDD have strongly emerged as a new approach that links two key environmental domains, the forest sector and climate change, within the development agenda. It refers to policy approaches and positive incentives to reducing emissions from deforestation and forest degradation in developing countries. More recently, REDD+ is the acronym used to also recognise conservation efforts, sustainable management of forests and enhancement of forest carbon stocks.

A mechanism to catalyse REDD will involve complex institutional, financial, technical and development efforts, all in synergy. A UN collaborative programme towards REDD, namely the **UN-REDD Programme**, was launched in 2008 between FAO, UNDP and UNEP to support countries in the REDD process and to enhance a global approach towards REDD. The aim of the UN-REDD Programme is to support countries get ready for an eventual REDD+ mechanism, generating the requisite transfer flow of resources to significantly reduce global emissions from deforestation and forest degradation. It intends to enhance capacities, including policies and structured Carbon payment mechanisms, to create incentives that ensure actual, lasting, achievable, reliable and measurable emission reductions, while maintaining and

improving the other ecosystem services that forests provide. In supporting national readiness, the UN-REDD Programme has three objectives: (i) to assist developing countries "get ready" to participate in a future REDD mechanism; (ii) to apply the Paris and Accra principles of country ownership and leadership in order to build confidence in the establishment of a REDD mechanism; and (iii) to be at the forefront of UN Agency joint programming, in terms of delivering coordinated and harmonized support.

A REDD+ readiness process entails not just forestry issues, but equally requires a wide range of considerations and reforms in sectors such as governance, human rights, fiscal administration, productive sectors and the overall development framework of the country. In particular, the six **REDD readiness components** to address are: Management of REDD readiness, Stakeholder participation, REDD implementation framework, National REDD Strategy development, Reference Scenario, and the National Carbon MRV system (see Figure 1 below).



2. Towards a REDD process in Nigeria

In November 2009, after active petition from Cross River State, the Federal Government of Nigeria requested to join the UN-REDD Programme. This request, which basically entailed observer status and access to UN-REDD knowledge, was approved and Nigeria was invited to the Policy Board meeting, held in Nairobi in March 2010. Meanwhile, UNDP's country office in Nigeria agreed to provide catalytic finance to jump start awareness raising, stakeholder dialogue and initial planning around a REDD process in Nigeria, with a focus on Cross River State, as part of its ongoing strategic support to Nigeria on the issue of Climate Change.

After discussions between the UN-REDD Programme, UNDP, the Federal Government of Nigeria and authorities from Cross River State, the initial REDD approach in Nigeria would be conducted at two inter-related levels:

- a national REDD+ process that addresses the core REDD+ readiness elements;
- a specific, more exhaustive REDD+ process in Cross River State, which will equally serve to inform the national process and, perhaps later, other interested states.

This initial work would consist in three major tasks:

1. A rapid assessment of forest and REDD-related issues, institutions, projects and stakeholders, looking at both at the federal level and Cross River State (i.e. these ToR).
2. The establishment of two informal REDD task forces, at federal level (Abuja) and in Cross-River State (Calabar).
3. A first UN-REDD mission, to take place around June 2010. It could serve to establish a multi-stakeholder coordination mechanism for REDD (suited to the needs at federal and Cross River State levels), to identify opportunities to adapt existing/planned projects and policy initiatives to contribute to REDD readiness, and to draft a REDD roadmap for 2010-2011.

3. Objective of the assignment

The consultants will provide key baseline information necessary to support the initiation of the REDD process in Nigeria, notably in terms forest status, institutions, policy context, stakeholders, ongoing initiatives and issues. It will serve to prepare the first UN-REDD forecasting mission.

4. Scope of work

The consultants will consider the internationally-recognised REDD readiness components (see Figure 1 above) and provide basic information and analysis on the following issues (no need to be exhaustive, but informative):

- **Enabling Conditions:** Information regarding climate change policies and strategies. Status of awareness on REDD issues and opportunities among relevant stakeholders.
- **Forestry data & policies:** Forest cover and typology. Existence and quality of forest inventories or forest assessments. Estimated rates of deforestation and forest degradation. Forecast studies (if any) on future degradation/deforestation trends. Status of forest law and policy, enforcement levels, and ongoing reforms.
- **Drivers of deforestation:** Identification of the drivers of deforestation, indicating sources of information and their reliability. Estimation of the weight of each of such drivers (in terms of proportion of deforestation).
- **Forest Carbon and Measurement, Reporting and Verification (MRV):** Estimations of national CO₂ emissions and the % from LULUCF and forest loss. Existence of any MRV system on Carbon flows. Institutions engaged in forest and/or in Carbon monitoring. Status of remote sensing capacities (material and human).
- **Institutional framework - *identification of key institutions related to:*** Forest conservation, sustainable use and monitoring; Carbon and climate monitoring; Payments for ecosystem services (PES); Development planning; Natural resources management and fiscal issues; Land use & tenure; Carbon Finance (e.g. CDM, Carbon markets); and UNFCCC negotiations.
- **Stakeholder engagement:** Overview of REDD-related and REDD-interested stakeholders (organisations, units, networks or individuals), at the levels of government, research institutions, civil society, forest-dwelling peoples' organisations, and the private sector. Suggest key stakeholders to engage in

an initial REDD process (a limited yet heterogeneous selection). Identification of experts on REDD+, Carbon Finance and/or PES.

- **Mapping of REDD-related initiatives.** Annotated list of REDD-related initiatives, such as may be a forest carbon assessment, a so-called "REDD project" at local level by an NGO, a REDD options study, a community forestry project, a REDD or forest Carbon training programme, a land/forest use policy reform, a PES scheme, a forest livelihoods project, forest conservation programs, and the like.
- **International cooperation:** Identification of main donors, international NGOs and UN agencies in the domains of forest conservation, climate change, and community development. Reference to their main programmes, initiatives and past experiences.
- **Information sources:** List of REDD-relevant publications, reports, networks, initiatives, events and websites concerning Nigeria and Cross River State.
- **Issues:** Enumeration of the key issues to address in an eventual REDD readiness process.

The assessment will be done simultaneously at Federal level (Abuja) and for Cross River State.

5. Organisation, methodology, supervision and output

The consultancy is a 2-week assignment to be conducted by 2 consultants with complementary expertise, working together. It is scheduled for late May and/or early June, 2010. The expertise may be composed of a technical specialist (forest, natural resource management or PES specialist) and a policy expert (institutional, planning and stakeholder engagement skills).

The consultancy will employ a wide range of **methods**, according to the time available: search and review literature (publications, reports, leaflets), conduct interviews (in person or by phone), meet with selected stakeholders, explore the Internet (cautiously) and seek information via e-mail, among others. As **REDD+ task forces** are being established in both Abuja and Calabar, the consultants will meet and discuss widely with them. **No fieldwork is required as this is a stock-taking assignment.** Travel between Abuja and Calabar will be financed by UNDP/Nigeria.

Some basic and framework information sources are the UN-REDD Programme (www.un-redd.org), FCPF (www.forestcarbonpartnership.org) and the Forum for Readiness on REDD (www.whrc.org/policy/REDD).

The consultant/s will be **recruited by UNDP/Nigeria** and will work under the **technical supervision** of Mr. Muyiwa Odele (Environment Officer at UNDP/Nigeria), Mr. Victor Fodeke (Head, Special Climate Change Unit), Mr. Salisu Dahiru (National REDD+ Focal Point, Federal Ministry of the Environment) and Mr. Odigha Odigha (Chairman, Forestry Commission, Cross Rivers State). As needed, the UN-REDD coordinator for Africa and UNDP's regional advisor, Mr. Josep Garí, may be consulted.

The **output** of the consultancy will be a well-edited report, clearly structured and reflecting as much as possible the elements outlined in section 4 (Scope of Work) above and others the consultants may consider relevant or informative. Parts of the

report can consist in annotated information elements or commented issues. This is a stock-taking and baseline information assessment.

6. Expertise and experience required

The 2 consultants should possess complementary expertise: one on the technical side (such as forest conservation and monitoring, or payments for ecosystem services) and the other rather on the policy dimensions (institutional, planning, strategy and/or stakeholder engagement).

They should possess the following qualifications and experience:

- a Master degree or above, in natural resources, rural development, environmental economics, development planning or similar field;
- at least 7 years experience in development analysis, policy work or project implementation;
- one of them shall have solid experience in the domains of PES, Carbon finance, REDD or specialised environmental economics topics; and
- extensive knowledge of Nigeria's institutions, policies and development efforts; at least one of the consultants should have first-level knowledge on environment and development issues in Cross River State.

Cross River gets commission to regulate its forest resources

MONDAY, 13 SEPTEMBER 2010 FROM ANIETIE AKPAN, CALABAR - GUARDIAN NEWS



The Cross River State Government has signed into law its Forestry Commission bill, which is a major step towards the sustenance and strategic management of the state's vast forest reserves.

The documents will provide the legal framework for the sustenance of the forest and its eco-system, which holds about 50 per cent of the total forest resources in the country.

The law empowers the Forestry Commission to regulate the activities of ministries, parastatals, local governments, departments, organizations, statutory bodies, as they relate to forest and forest resources and wildlife conservation issues in the State. It will also establish links with relevant national and international regulatory policy making and funding bodies for the benefit of bio-diversity conservation and sustainable forestry in the state.

Governor Liyel Imoke who signed the document into law recently said: "Indeed, we are putting in place a forest strategy that can make an effective contribution to poverty reduction, job creation, environmental conservation that is central to attainment of the Millennium Development Goals. The law will ensure that the communities that have over the years partnered with us in conservation, enjoy the benefits that accrue."

According to him, the Commission is also to ensure a sound wildlife and forest management within state, and to ensure strict compliance with international conventions and treaties on natural resources management.

Chairman, state's Forestry Commission, Mr. Odigha Odigha, said: "This is a wonderful development. It is a moment that says clearly that we are giving legal expression to the vision of Cross River State towards sustainable environmental protection. We are hopeful that the law will enhance participatory forestry management in the state and will open the door for a lot of aid giving agencies to support Cross River State."

In an opening speech, the Secretary to the State Government Mr. Fidelis Ugbo, noted that the management of the forest and its resources needed to be guided by law and the occasion was a moment the whole world had been waiting for to see how the state backs up its intention.

Ugbo explained that the law would enhance forest management as well as address issues on rural poverty reduction and open the door for donor

agencies to assist the state manage its forests, describing the occasion as “an expression of political will and commitment for the state to undertake its programmes.”

It would be recalled that Cross River State is at the forefront of the fight for the protection of our environment, and it is a biodiversity sanctuary. The state has been very active in the global climate change debate, which necessitated the nomination of the Governor Imoke, into the governor’s Global Task force on Climate Change, chaired by the Governor of California, Arnold Schwarzenegger.

APPENDIX XVII

UN REDD Programme

UN-REDD

P R O G R A M M E

The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries

Supporting countries to get ready for REDD

Reducing Emissions from Deforestation and Forest Degradation (REDD) is increasingly likely to be included in a post-2012 climate agreement, yet many questions remain unanswered. How will the REDD mechanism link to existing national development strategies? How can forest communities and indigenous peoples participate in the design, monitoring and evaluation of national REDD programmes? How will REDD be funded, and how will countries ensure that benefits are distributed equitably among all those who manage the forests? Finally, how will the amount of carbon stored and sequestered as a result of REDD be monitored?

The UN-REDD Programme was created to assist developing countries to answer just these kinds of questions and help them get ready to participate in a future REDD mechanism. Through its nine initial country programme activities in Africa, Asia and Latin America, the UN-REDD Programme supports the capacity of national governments to prepare and implement national REDD strategies with the active involvement of all stakeholders, including indigenous peoples and other forest-dependent communities.



Reducing Emissions from Deforestation and Forest Degradation (REDD)

is an endeavour to create an incentive for developing forested countries to protect, better manage and wisely use their forest resources, thus contributing to the global fight against climate change. It rests on the effort to create a financial value for the carbon stored in standing forests. In the long term, payments for verified emission reductions and removals, either market or fund based, provide an incentive for REDD countries to further invest in low-carbon development and a healthier, greener tomorrow.

In-country and global support for REDD readiness

The UN-REDD Programme works both at the national and at the international level.

Within countries, the UN-REDD Programme supports processes for REDD readiness and contributes to the development of national REDD strategies. Guided by principles of country ownership and leadership, the Programme provides technical advice on ways to address deforestation and forest degradation, methods and tools for measuring and monitoring greenhouse gas emissions and forest carbon flows. It promotes REDD financing as an opportunity to develop low-carbon growth and helps countries access financial and technical support. The Programme promotes and facilitates broad-ranging consultations among stakeholders, including indigenous peoples and other forest-dependent communities, and helps establish linkages with existing national programmes in the areas of governance, development, poverty reduction, food security and natural resource management.

So far, the formulation process of UN-REDD national programmes has proved quick and efficient, allowing for the approval of most of the initial nine national programmes.

At the international level, the UN-REDD Programme seeks to build consensus and knowledge about



REDD and raise awareness about the importance of including a REDD mechanism in a post-2012 climate change agreement. It also provides opportunities for dialogue between governments, civil society organizations and technical experts, to ensure that REDD efforts are based on science and take into account the views and needs of all stakeholders.

The UN-REDD Programme brings together technical teams from around the world to develop common



face-to-face opportunities for learning and sharing of experience.

Working together

The UN-REDD Programme builds on the convening power and expertise of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP).

The UN-REDD Programme works in close coordination with the Forest Carbon Partnership Facility (FCPF) and the Forest Investment Program (FIP) both at the international level -- harmonizing normative frameworks and organizing joint events -- and at the national level, where joint missions and sharing of information result in coordinated support interventions. The Programme also works with the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) and the Global Environment Facility (GEF), as well as the United Nations Forum on

Healthy, well managed forests

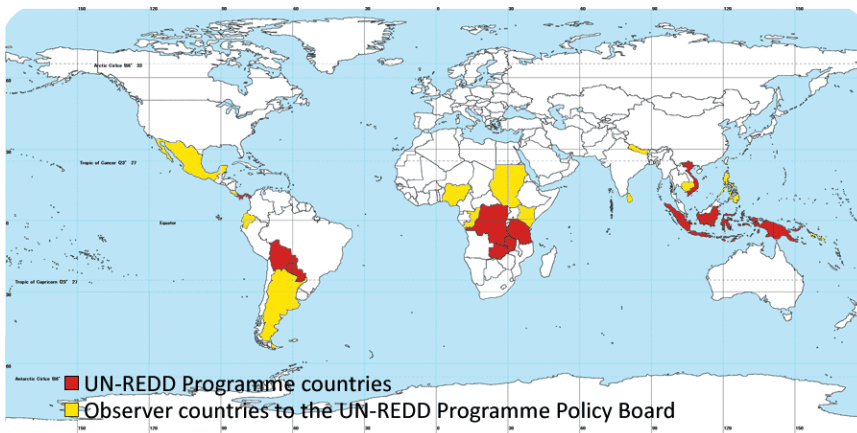
are essential to the survival of our societies: they are home to millions of species of plants, animals and insects, and protect soils and watersheds from erosion. They act as carbon stores, absorbing greenhouse gases and preventing their release into the atmosphere. Maintaining forest ecosystems can help to increase our resilience to climate change.

Forests (UNFF), members of the Collaborative Partnership on Forests (CPF), donors, civil society, non-governmental organizations, and academia.

The UN-REDD Programme is governed by a Policy Board composed of representatives from partner countries, donors to the multi-donor trust fund, civil society, indigenous peoples and FAO, UNDP and UNEP. All members have an equal voice in decisions on overall leadership, strategic directions and financial allocations. Current funding amounts to US\$75 million contributed by the governments of Norway, Spain and Denmark.

approaches, analyses and guidelines on issues such as measurement, reporting and verification (MRV) of carbon emissions and flows, remote sensing, and greenhouse gas inventories. It provides guidance on how best to design and implement REDD, to ensure that forests continue to provide multiple benefits for livelihoods and biodiversity to societies while storing carbon at the same time. Other areas of work include national forest assessments and monitoring of in-country policy and institutional change.

The UN-REDD Programme also documents, analyzes and disseminates successes and key challenges emerging from its activities, and provides numerous



The UN-REDD Programme initially works with nine member countries

across Africa, Asia and Latin America: Bolivia, Democratic Republic of the Congo, Indonesia, Panama, Papua New Guinea, Paraguay, United Republic of Tanzania, Viet Nam and Zambia. Argentina, Ecuador, Cambodia, Nepal, Sri Lanka, Costa Rica, Kenya, Mexico, Nigeria, the Philippines, Republic of Congo, Solomon Islands, and Sudan were granted observer status to the UN-REDD Programme Policy Board.

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