Report of the national inception meeting of the PARCC Project "Protected Areas Resilient to Climate Change"

Freetown, Sierra Leone 15-16 December 2011

The PARCC national workshop in Sierra Leone was called to order by Dr Kolleh Bangura who served as the Chairman of the occasion. In his opening statements, he welcomed every one present for leaving their busy schedule to attend the national inception workshop. He then went further to state the importance of the project as a timely intervention in the right place. He said that, the Government of Sierra Leone will be working collaboratively in leading a regional project that is addressing the links between climate change and protected areas and that the whole project will build the capacity for understanding and managing Protected Areas (PAs) for the threat of climate change by the national consultants from each country.

Dr Kolleh Bangura went further to read the agenda of the inception workshop in Sierra Leone after the opening prayers and individual introductions.

Dr Kolleh A. Bangura making his open statement on the 15th of December 2011

Picture taken by Abdulai Conteh 2011.

THE PROJECT OVERVIEW BY ELISE BELLE (UNEP-WCMC)

Presenting the overview of the project, Dr. Elise Belle said that the PARCC West Africa PROJECT, officially known as 'Evolution of Protected Area systems with regard to climate change in West Africa region', is a full – size GEF project focusing on the issues of climate change and protected areas. UNEP - World Conservation Monitoring Centre (UNEP-WCMC) is the executing agency (Project Management unit, PMU), and IUCN PAPACO is the main regional partner (Regional Management Unit, RMU).

She went further to inform the gathering that the project will run from 2011 to 2015. The geographic scope of the project covers 5 pilot countries in West Africa: i.e. Chad, Gambia, Mali, Sierra Leone and Togo. An additional 3 countries (Burkina Faso, Cote d' Ivoire and Ghana) will be participating in the participatory activities relating to trans-boundary conservation aspect of PARCC project. Also, five other countries, namely Guinea, Liberia, Niger, Nigeria, and Senegal have expressed interest to participate in the consultations.

Dr Elise Belle went further to state that the project represents a significant body of work to be undertaken across a wide geographic area and that the project has potentially huge benefits to the West Africa region by using the tools developed to increase the resilience of protected areas to climate change. The project will also allow for additional trans-boundary conservation initiatives. To achieve these, Dr Elise said that the project will require significant support from its local, regional and international partners. She said that the national workshop will launch the full implementation of the project at the national level, with the review of available data for the project and the design of an action plan for data collection. She then gave the following objectives for the two days meetings.

- Review the data situation for each country on protected areas, climate change, species, vegetation and other relevant GIS data.

- Collect data that national experts will have brought to the meeting.
- Design a national data collection action plan to gather missing data needed.

PRESENTATION ON THE EFFECT OF CLIMATE CHANGE IN SIERRA LEONE BY DR. R JOHNSON

See attached presentation for ease of reference

OVERVIEW OF PROTECTED AREAS IN WEST AFRICA BY BORA MASUMBUKO (IUCN PAPACO)

Madam Bora Masumbuko made a presentation on the status of protected areas in West Africa, as well as the institutions and projects involved in PA and climate change issues. Some of the main pressures on PAs in the sub region are:

- Poaching,
- illegal exploitation of timber and NTFP,
- bushfire,
- Encroachment in to forest reserved areas,
- Overfishing,
- Pastoralism
- Farming

She also made mention of the introduction of foreign invasive species that normally out compete the native species, climate change and REDD++, rapid population growth etc. This situation she emphasises has worsened by other factors such as governance, poverty, inadequate capacities, and growing insecurity in the Sub-Saharan African countries.

In general, from the assessments already made in the sub region, there are few results of the management, data and reports especially on climate change issues and regional organisations that are dedicated to conservation efforts.

The IUCN protected areas programme for West and Central Africa (IUCN-PAPACO) is the IUCN programme that is dedicated to Protected Areas conservation in West and Central Africa.

The main objective of the said programme it to contribute to the conservation of biological diversity by improving the management effectiveness of protected areas within the Africa region.

She said that in most countries, the institutions that were responsible for the management of protected areas are generally under the umbrella of the Ministry of Environment. In Sierra Leone, the Ministry of Agriculture, Forestry and Food Security is responsible.

Climate Change Issues

With regards to the projects in Africa that addresses the aspect of Climate Change issues, she said that, there are some projects but not directly addressing actions against the effects of climate change on Protected Areas. For example:

- NAPA projects – National Adaptation Plan of Action
- Project «Support to the Sahel region adaptation capacities to CC, AGRHYMET
- Climate Change Adaptation Programme in Africa (ACCA)
- AMMA Programme (Analyse multidisciplinaire de la mousson africaine)
- In some countries of the sub-region, Cape Verde, Guinea Bissau, Mauritania, Sierra Leone and Senegal, parliamentarians have commitment themselves to participate in efforts to combat the effects of climate change (under the PRCM) project.

She went further to say that, even if some exists, they are not at the implementations phase or are just starting, such as the REDD+ programme. Examples of such projects are:

About the challenges facing Protected areas, she said that, the management systems are in place in West Africa, but the pressures on Protected Areas are too high that their

values have reduced and that, there is an urgent need to find solutions to these problems.

Suggested new approaches to solve the problems encountered by Protected Area Managers.

- Protected area managers should always solve identified problems or optimize strengths in managing their area.
- Protected area managers should always continue to assess management effectiveness and use the results as sensitization tools for the public.
- Training should be an essential element in the management of protected areas.
- Take into account ecosystems services to improve on Protected Areas.
- How to tackle problems that we do not control in the areas of governance, insecurity and armed conflicts etc.

Some issues were raised after the presentation including the fact that the difference should be made between poaching and hunting; for example, in some countries there are non hunting areas because of the issue of bushmeat. Participants also mentioned that in Sierra Leone there is bushfire that farmers create as a farming practice and it may cause shifts in vegetation.

PRESENTATION ON COMMUNICATION STRATEGIES BY DR ELISE BELLE

Under the communication strategy component, she made mention of the audience of the PARCC project with their average of involvement.

- National Governments (Average: 9.0)
- NGOs: Birdlife and IUCN (PAPACO and Species Programme) and other local NGOs (Average: 8.7)
- UNEP-WCMC (Average: 8.2)
- Meteorological Institutions: Hadley Centre, AGHRYMET, ACMAD, and national stations (Average: 7.6)
- UNEP DEPI/GEF (Average: 7.5)

- Experts and national consultants (Average: 6.5)
- ECOWAS (Average: 6.2)
- Academic Institutions: Durham University, DICE, and national universities (Average: 6.2)
- Technical Advisory Group (TAG) (Average: 6.2)

Strategic Approach

Dr Elise Belle said that, they will be using the double approach method to disseminate news or messages to UNEP, WCMC and the project partners will in turn disseminate the results of the projects as widely as possible to all interested individuals and institutions. Direct promotion of the PARCC project will be done by giving the project a specific and easily recognizable identity through the design of a logo and appropriate branding.
She then informed the audience that, the project will also be relying on the wide variety of partners for more information and to reach out to other relevant stakeholders.

Internal Communication

Dr Elise Belle informed the gathering that, the most important tools that will be used according to the questionnaire will be the following.

- Website (Average: 3.2)
- Data Portal (Average: 3.0)
- Online Mapping Tool (Average: 3.0)
- Reports (Average: 3.5)
- Maps (Average: 3.3

Dissemination of Project Outputs

The most important tools according to the survey that was conducted by the project management team for the dissemination of project outputs will be Website (Average: 3.7), Reports and publications (Average: 3.5), Guidelines for protected areas managers

(Average: 3.0),Final regional meeting (Policy and outreach) (Average: 3.2) and IUCN PAPACO Newsletter (Average: 3.0).

Also, the mailing lists, international conferences and meetings, briefings and press releases, brochures, type of messages to be sent out to the public, Logo and monitoring the project output, Project Website and Data Portal, online Mapping Tool and discussion will be dealt with by the project management team.

Why communication strategy.

The aim of the communication strategy is to ensure an effective collaboration between all project partners throughout the life span of the project and to detail the way communication should take place with all the project's external stakeholders.

PARCC West Africa will build the capacity in the region to better integrate the likely effect of climate change on protected areas, and develop new management approaches that will be replicated in other countries.

Mapping Tool

PARCC project aims to strengthen capacity to better understand and manage protected areas in West Africa within the context of climate change scenarios and facilitate the access to spatial data.

About the functionalities of the on line mapping tools, the presenter suggested the following ones:

- Climatic scenarios
- Species distributions
- Vulnerability of protected areas
- Other etc.

After the presentation, participants said that the main need for data portal was to have harmonised data for the five countries. They also mentioned that marine protected

areas should be included in the mapping tool given the fact that Sierra Leone is a coastal country.

PRESENTATION ON THE DATA NEEDED AND DATA AVAILABLE BY BORA MASUMBUKO

The following data are needed for the five project countries.

- Data on PAs: mainly info on boundaries (GPS limits), but also (if any)Legal texts, decrees of creation, laws
- Pressures and threats (GIS data)
- Governance of the Protected Areas (State, communities, private, etc.)
- Management plans
- IUCN category (but all Protected Areas are not necessarily classified according to IUCN categories)
- International label: World Heritage, Ramsar, etc.

Species

List of species in Sierra Leone and by protected area

She later informed the gathering that, the above data will serve as a basis to

- ❖ assess the vulnerability of species to the impacts of Climate Change
- ❖ and also for building climatic models and scenarios within the Africa Regions and even the Universities.

Climate

- Rainfall (monthly and daily) and list of meteorological station within or outside the PAs
- Temperatures
- Hydrological data etc.

These data she said will be used to build on future climatic change scenarios and thus predict possible climatic projections in the future and the impacts of Climate Change on Protected Areas and Species.

Vegetation, Fire and Socio-economic Data

Vegetation - site descriptions, GIS data on vegetation cover and plant species.

Fire - fire monitoring strategy or systems in Sierra Leone.

Socio-economic data - population (number), population density, population growth rate, rural population, food security and sanitation data, etc.

PRESENTATION ON PROTECTED AREAS AND THEIR BIODIVERSITY STATUS IN SIERRA LEONE BY KATE M. B. GARNETT.

In her presentation, Madame Garnett informed the gathering about the proposed creation of a network of fifteen protected areas in Sierra Leone. A list of the protected areas was presented highlighting their legal status, IUCN category, size in hectares and location in the country. Species richness, diversity and distribution for selected protected areas was also presented.

Mrs. Kate M.B. Garnett making her presentation on Protected Areas and Biodiversity in Sierra Leone

Picture taken by Abdulai Conteh 2011

The participants were asked what their needs are with regards to this project and what the policy priorities of the country were in terms of conservation. They mentioned the following:

- Re-demarcate the PAs
- Finalise the draft Climate Change Policy
- Build on the recent policies on conservation (Wildlife conservation policy and forestry policy)
- There should be legal status for some MPAs
- Inventory of the 15 PAs that have been proposed to be classified

The participants then split into groups to collect available data on the different themes and not the gaps.

Data Gaps on the Protected Areas in Sierra Leone

- 7 of the fifteen protected areas have no legal status in Sierra Leone.
- Lack of adequate and update information on the biodiversity and vegetation status for most of the protected areas in Sierra Leone.
- No information on the buffers zones/ people that are living closer to the protected areas to determine the level of encroachments.
- Lack of adequate number of technical people that has knowledge on biodiversity conservation issues.
- Lack of scientific instrument or devices to do proper research.
- There is no data base system on protected area species in Sierra Leone, the distribution maps of species is also not available, no management plans etc.

Existing GIS data in Sierra Leone

- Base maps of the whole country
- Topographic sheets
- Cadastral maps for Western Area
- Shape files for Western Area
- Vulnerability of people to food security
- Shape files for Administrative boundaries
- Administrative boundary information
    - Chiefdoms
    - District
    - Sections
    - Population
    - Settlements etc.

GIS Data Gaps in Sierra Leone

Site specific data of all the PAs (vegetation types, species, climate, soil, geology, hydrology, socio-economic etc.)

Existing Socio economic data

National data on demography, health, and poverty/vulnerability maps etc.

Socio- economic data Gaps in Sierra Leone

Site specific socio-economic survey data on all the protected areas in Sierra Leone are absent.

Existing data on fire issues in Sierra Leone

There is absolutely no information or research work on fire for PAs in Sierra Leone. However, there is a Sustainable Land Management Project that has a component on fire.

Existing Climatic data in Sierra Leone.

Temperature, rainfall, wind, pressure, solar radiation, clouds etc. (up to 1990 and then from 2000 to date for few stations across the country) – Daru, Freetown, Lungi, Makeni, Kabala, Bo, Bonthe, Njala, Shenge, Kono, Yele.

Climate Change data Gaps in Sierra Leone

- No data on Climate scenarios
- Upper air data
- Climate modelling
- Climate model data from ACMAD is not regular

Existing data on Species in Sierra Leone

- Existing data has to be revised

Data Gaps on Species in Sierra Leone

- There is no distribution map of species

THE PROPOSED DATA COLLECTION ACTION PLAN FOR SIERRA LEONE

Proposed Action plan by the Protected Area Team Members

	Input	output	Indicator	Equipments	Time Line	Institutions /People responsible	Budget
1	Ground truthing of all the protected areas in Sierra Leone	Update /acquire information of the existing and the proposed Protected areas respectively.	Development of topographical maps of all the protected areas and their new boundary coordinates.	Hand GPS Topographic Maps, Vehicles, 10 Personnel's	Three Months	Mr. Abdulai Conteh Mr. Hassan R.S Mohamed Mrs. Kate M.B Garnett Mr. Anthony Sell.	
2	Assessment of the Biodiversity	Field investigations and inventory of the existing and proposed protected areas with	Up dated information on all the species richness and identification of threats.	Transect walk, Binoculars, rain gears, Sleeping tents, camp beds, touch lights etc.	Three Months	Mr. Abdulai Conteh Mr. Hassan R.S Mohamed Mrs. Kate M.B Garnett Mr. Anthony Sell.	

		regards their biodiversity status					
	Status and upgrading the remaining seven proposed Protected areas to National Parks.					Mr. Abdulai Conteh Mr. Hassan R.S Mohamed Mrs. Kate M.B Garnett Mr. Anthony Sell.	
3	Development of Management Plans of the gazetted protected areas in Sierra Leone	Development of the various managements plans of the different Protected areas	Production of the management plans.		To be Contracted in Sierra Leone.	The Environmental Consulting Services in Sierra Leone. www.ecssierraleone.org	

Proposed Action Plan for the GIS, Socioeconomic, Climate Change and Fire Team Members in Sierra Leone

Existing data	Missing data	Action plan for data collection	Time line	Responsible person
GIS				
• Base maps • Topographic sheet • Cadastral maps for Western Area • Administrative boundary information o Chiefdoms o District o Sections o Population o Settlements etc. • Western Area Peninsula Forest	➢ Site specific data of all the PA's ➢ (vegetation types, ➢ species ➢ climate ➢ soil, ➢ geology ➢ hydrology ➢ socio-economic etc)	• Desk review of existing information data of the 6 selected PA's in Sierra Leone • Demarcation and re-assessment of all 6 selected PA's • Digitization of existing maps if relevant • Field/site visits (collect coordinate information using differential GPS and/or satellite information – vegetation, soils, geology, hydrological data, socio-economic data, land use	2- 6 months	Mr. Dwight Jusu, Mr. Jobo Samba (GIS experts) and related institutions and experts

		planning etc.) • Produce maps of selected PA's (integrate all other geographical features and socioeconomic data) • Develop shape files (GIS) • Develop a cadastral database including all geographical and socioeconomic features of all 6 selected PA's		
Socio-economic				
➢ National data on demography, ➢ Health ➢ Poverty and ➢ vulnerability maps etc.	• Site specific socio-economic survey	• Desk review • Field studies/visits • Socio-economic surveys for all 6 selected PA's • Maps/shape files for socioeconomic data for all 6 PA's (poverty/wealth status,	2- 6 months	Mr. Braima Koroma Mr.Abubakarr Bob Conteh Mr. Dwight Jusu Mr. Jobo Samba

		vulnerability etc.)		and Mr. Abdulai Conteh
Fire				
• Not available	• On all sites	• Field visits • Existing local laws and institutions for fire management in communities around PA's • Work with the communities to develop fire management plans for PA's • Training on basic fire fighting skills/techniques	2-3 months	Fire Protection Agency /institutional/ Experts

Climate				
• Temperature, rainfall, wind, pressure, solar radiation, clouds etc.	• Climate scenario's • Upper air data	• Field visits to assess suitable MET stations locations around the	1-6 months	• MET Department • University • Local communities

(up to 1990 and then from 2000 to date for few stations across the country) – Daru, Freetown, Lungi, Makeni, Kabala, Bo, Bonthe, Njala, Shenge, Kono, Yele.	• Climate modelling • Climate model data from ACMAD not regular	selected PA's • Climate data monitoring (daily/weekly/monthly) in selected PA's • Training of local experts for climate modelling • Construction of base reception RANET/SADIS system for MET data collection • Field studies on climate change and protected areas using climate scenario's (in all 6 selected PA's)		
				Climate Change Expert Dr. R. Johnson Alpha Bockari and Mr. Briama Koroma

Proposed Action Plan for the data collection team members on Species

Target species: Plants, birds, mammals and primates, insects, herptiles,

<table>
<tr><th>ACTION</th><th>TIME LINE</th><th colspan="2">MATERIALS</th></tr>
<tr><td>Field survey</td><td rowspan="8">One month for each protected area</td><td>GENERAL</td><td>SPECIFICS</td></tr>
<tr><td>Plants</td><td rowspan="7">Sleeping tents and mats, GPS, Head lamps, Identification Field Guides, Maps, formaldehyde</td><td>Plastic bags, Sacateur, plant press,</td></tr>
<tr><td>Birds</td><td>Binoculars, mist nets,</td></tr>
<tr><td>Mammals</td><td>Traps (smalls mammals), baits, pick axes, rubber buckets, plastic sheets</td></tr>
<tr><td>Insects</td><td>Insects traps, butterfly nets, baits, pitfall traps, alcohol</td></tr>
<tr><td>Herptiles</td><td>Handling bags, hand gloves etc.</td></tr>
<tr><td>Fish</td><td>Fishing nets, storage containers, scooping nets,</td></tr>
<tr><td>Collation and analysis of data</td><td></td><td></td><td>Team Members Present.
- Alhaji B M S Turay
- Alhaji H. Kamara
- Rashida K Dumbuya
- Abdulai Conteh</td></tr>
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PARCC Project Meeting in Freetown, Sierra Leone