

**MINISTRY OF LANDS AND NATURAL RESOURCES
NATURAL RESOURCES AND ENVIRONMENTAL GOVERNANCE PROGRAMME
(TECHNICAL ASSISTANCE- TA)**

DRAFT

**TERMS OF REFERENCE
FOR PREPARATION OF FOREST MANAGEMENT
PLANS**

**The present Terms of Reference is a draft that is being further refined by
the Government of Ghana.**

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Introduction

Under the Forestry component of the Natural Resources and Environmental Governance Technical Assistance (NREG TA), the Ministry Lands and Natural Resources (MLNR) will engage the services of a firm for the preparation of *Forest Management Plans (FMP)* for four selected Forest Reserves, in consultation with all sector stakeholders. This document sets out the terms of reference for this assignment.

1. Background

The Forestry Development policy and forest management in Ghana

Forest resources are of great importance to millions of people, especially those whose livelihoods largely depend on them. These resources play a key role in protecting the environment and are of tremendous importance to the sustainable development. Recognizing the importance of forest resources and the need for appropriate measures to optimize their management and utilisation in Ghana, successive governments formulated policies for developing a national forest estate and a timber industry that guarantee a full range of sustainable benefits for the population. However, most of the forest policies have failed to address the fundamental challenges of forest management in the country. Their implementation, with all the associated reforms could not halt the degradation in the forest resource base. Indeed, some forest reserves are well-managed, but others may have been over-harvested and off-reserve forests are often unregulated.

In addition, many managed forest reserves are without management plans. As a result, illegal chainsaw and mining (*galamsey*) operations in forest areas have thrived over the years despite conscious national efforts to curb the situation in collaboration with the security agencies. Wood fuel production especially in the fragile areas of the savannah regions and transition zones has remained unsustainable. Though it has significantly reduced in the North (-64% according to latest reports), wildfires continue to be an annual occurrence in all the ecosystems. The timber industry still operates with obsolete equipment and has installed capacities exceeding the Annual Allowable Cut (AAC). In order to address these challenges a new Forest and Wildlife Policy-2011 has been developed.

With regard to forest ecosystem management, the new policy seeks to: (i) manage gazetted Forest Reserves based on forest management units (FMU) system in line with national policies and legislation as well as international treaties that the country has ratified; (ii) develop Off-reserve forest production areas with well-defined and clearly established objectives compatible with sustainable forest management principles. In line with these strategic directions, the NREG-TA will support the Forestry Commission to prepare management plans for selected, priority forest reserves.

The NREG TA operation

The NREG TA operation

7. *The second phase of the Natural Resources and Environmental Governance Program* aims at supporting the national program of governance reform in the forestry and mining sectors as well as environmental management and climate change. The development objective of NREG is to establish and strengthen policies and institutions that promote the maximization of natural resource development benefits whilst adequately managing the undesired social and environmental consequences of such development.

8. *The NREG technical assistance (NREG TA)* is designed to help the Government formulate policies and develop concrete ways in which policies could be more broadly adopted. The development objective of the TA operation is to increase the knowledge base and to strengthen capacities at Government and local levels to support policy reforms under the NREG program. The TA will contribute to further deepen the policy reform program and help translate reforms into activities on the ground in a manner consistent with Sustainable Development principles, the Ghanaian legal framework and World Bank operational policies, in particular social and environmental safeguards. It will help the Government identify methods and tools and suitable institutional arrangements to better embed the reforms in the development programs to improve sustainability and promote positive impacts.

The aim of the NREG TA in the Forestry Sector is to finance studies and consultations in support of policy reforms and capacity building activities in the forestry sector in various themes. Among the priorities agreed upon, the TA will support the preparation of forest management plans, aligned to the new Forest and Wildlife policy-2011 and other relevant Ghanaian legislation. The proposed Management Plans should also observe the requirements of the World Bank operational policies, in particular of the social and environmental safeguard policies.

2. Objectives of the consultancy

The objective of the assignment is to develop Forest Management Plans for four Forest Reserves.

3. Proposed Approach

The work will follow a phased approach – outputs at each phase will be reviewed by the Technical Director Forestry, assisted by the Forestry Commission, before the subsequent phase starts:

- Phase 1: Refinement of the Methodology based on initial data and consultations
- Phase 2: Forest Inventory and Social and Environmental Analysis
- Phase 3: Development of the Forest Management Plans

The selected consultant firm will work closely with the Technical Director, Forestry in the Ministry of Lands and Natural Resources and the Forest Services Division (FSD) of the Forest Commission.

The approach to developing the FMP should emphasize the need for building broad agreement, and as a result, wide and inclusive consultations with all relevant stakeholders (in the field and at the national level) will be required.

When collecting data within communities the Consultant is expected to use the Sustainable Livelihood Analysis (SLA) method to collect the primary data on all aspects of livelihoods of those communities and biodiversity.

The Consultant will prepare detailed report(s), including tables and graphs, explaining the results of the surveys. In consultation with the FSD, the consultant will: (i) develop a survey plan indicating the sampling procedures to be followed, the sample size and distribution, the statistical considerations taken into account, the survey timetable and the resources required; (ii) design and submit for review suitable household and community survey instruments (questionnaires); (iii) review literature on the socio-economic and biodiversity value and use of the forest areas prior to the application of the questionnaire; (iv) carry out the actual survey and compilation of field data; (v) prepare and submit draft forest management plans to the Technical Director Forestry; (vi) present the draft management plans to at least three local community and other stakeholders meetings for input.

Deliverables will be based on comprehensive reviews of all relevant reports and documentation in the sector and, as noted above, consultations with a broad range of stakeholders (including field visits.) In addition, the Consultant will take note of complementary activities and studies contracted under the NREG TA (including specifically the development of tree tenure pilots, the preparation of the Forestry Master Plan, and the development of the SESA under the REDD+ program) and collaborate with relevant teams to ensure synergies and avoid duplication of efforts wherever possible.

4. Activities and expected outputs - deliverables

The expected outputs are as follows: (a) an inception report, (b) a draft report on assessment findings and (c) Four FMPs. Each report will be submitted to the Technical Director, Forestry)/Forestry Commission in the form of five hard copies and one CD, with all background information, data sets and reports and annexes in an agreed upon, readily readable digital format.

5. Scope of Work

Phase 1: Refinement of the methodology

During the selection process (technical proposal), the firm will prepare an inception report detailing the methodology and based on an initial literature review and discussions with the experts at the national and international level. The inception report will include the following elements.

- A detailed methodology (not more than ten pages) including the approach for (i) the biological surveys (forest inventory); (ii) the socio-economic surveys and consultations; (iii) the assessment of ecotourism potential; and (iv) the preparation of forest management programs. A list of specific issues (non-exhaustive) is presented in the tentative outline of the Forest Management Plan (see annex).
- A detailed timeline.
- A detailed budget indicating fees and costs for logistics.

Phase 2: Forest Inventory, Environmental, Social and Tourism Potential Assessment

The consultant is expected to perform the following tasks:

- a) **Consolidate and Synthesize Information from Biological surveys (forest inventory).**
The consultant will incorporate the results of a comprehensive inventory data conducted by the Forestry Commission (Resource Management Support Center, RMSC) providing available biodiversity information for the forest area¹. The inventory data should include the
 - Species composition, age/diameter structure, volume. The data shall generate phytosociological information for the characterization of plant communities and biodiversity indexes (e.g.: Shannon- Weaver)
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- b) Consolidate and synthesize related information about environmental status and threats, including conservation needs, economic and environmental threats, human uses, etc. This material will be gathered from literature review, consultation with experts, and review of historical or trend information to complement the field survey information. Work will include the following:
 - c)
 - Baseline information on the forest status in terms of flora and fauna (inventory) emphasizing their utilization and value to the community.
 - Information in terms of conservation importance - locally, regionally, nationally and globally – and temporal trends.
 - Opportunities and challenges for retaining and increasing the status of biodiversity.
 - Threats to the forest, and local values, which may impact on the conservation of the forest biodiversity, as well as livelihoods and forest management opportunities.
 - Assess environmental threats in the area and establish their root causes and relations with the forest and the aims for the use of the forest, as reflected in the FMP.
 - Factors affecting habitats and important flora and fauna, including pressures and management actions and responses.
 - Appropriate mechanisms to enhance biodiversity conservation.
 - b) **Social and livelihood assessment.** This will target communities adjacent to and/or in identified forest reserves. The assessment will pay particular attention to vulnerability and sources of conflict. The assessment will address the following areas (non-exhaustive):

Stakeholder analysis. Identify groups, public and private agencies or individuals dependent or impacted by the forest and characterize their roles, responsibilities, rights and benefits/rewards including use of forestry resources. Consider particularly under-served or marginalized groups within other populations: women, the elderly, or non-dominant ethnic groups.

¹ According to the Forestry Commission, the inventory will be better conducted by the Forestry Commission itself. The WB team should discuss this issue with FC. If the option is confirmed, the inventory should be planned and budgeted. If not, it can be part of the consultancy tasks.

Socio-economic status. Provide information on prevailing socio-economic status of the local communities including household-level data focusing on, but not limited to, the following: demography (including dependency ratios, gender, migrants, etc.), education levels, income levels, dependence on natural resources, vulnerability to external and internal shocks and related coping strategies, access to production resources (land, labor and capital), access to information, access to decision-making processes, etc.)

Forest dependency. Examine the levels and nature of dependency that target communities have on the forest – looking at socio-cultural, economic, and environmental aspects. This will include participatory resource assessments to determine the extent and nature of targeted forests, forest users, forest management, and the decision-making process on natural resource use (including land and forests). Additional areas of analysis include: (i) identification and mapping of non-living features (e.g., water bodies, roads) and their use in relationship to the community and (ii) analysis of seasonal use of resources by listing the resources, seasons when they are used and reasons for seasonality.

Livelihood assessment. Identify all community groups including vulnerable groups within the area, their main sources of income, levels of capital and livelihood assets, coping mechanisms, linkages to use of forestry resources. Characterize trends in livelihoods and community coping strategies and identify threats or opportunities, such as increasing drought or varying rainfall patterns.

Institutional assessment. Assess the level to which the community and other partners have been involved in the forest ecosystem, focusing on how existing structures (actors, agencies) will impede or facilitate implementation of the plan. Assess the capacity of the local communities in terms of forest management and make recommendations on ways and means of enhancing their capacity (this assessment should take account of intra-group differences). List existing institutions, identify their roles and responsibilities and carry out a SWOT analysis for each institution.

Conflict analysis. Map existing conflicts and sources of potential conflicts related to natural resource management. Identify structures within communities and the MLNR and other agencies that support grievance redress. Provide recommendations on ways to mitigate conflict, to address existing conflicts, and to strengthen grievance redress mechanisms.

Vulnerability analysis. Assess the extent to which mitigations against vulnerability (based on gender, origin, age, disability, etc.) has been or can be integrated in the ongoing activities in the forest. Ensure that forest management plans are responsive to the needs of primary beneficiaries (the communities whose livelihoods rely on forest resources).

Analysis of community and household impacts. Assess the potential impacts of the proposed forest management plans on relevant communities, looking at a range of issues, including but not limited to, ownership of economic assets (land, crops, etc.), displacement, access to resources such as water, access to cultural resources, etc. Identify mitigation measures to ameliorate negative impacts of the proposed forest management plans on specific

communities or groups. Mitigation measures should be informed by the World Bank's policy OP 4.12 on Involuntary Resettlement.

- d) **Eco-tourism.** The Consultant will identify eco-tourism potential in the forest and adjacent neighborhoods in terms of presence, proximity to other recreation sites and attractions. These sites should be clearly displayed on a GIS Map (use of geo-spatial tool in generating this map is encouraged and recommended). This activity will involve:
- A desk assessment of existing forest and biodiversity related tourism and trends and opportunities as identified in prior assessments by other institutions, both governmental and non-governmental.
 - An assessment of the interaction with tourism operators (private enterprises, concession holders, etc.) for the valorization of the eco-tourism potentials.
 - Analysis and provision of information on viability of these sites in terms of business and community organization.
 - Development of survey information and feedback about tourism development potential from surveys and consultations.

Based on the activities above, the Consultant will submit the following outputs:

- a) **A report presenting the findings from the activities above (accompanied by a Power Point presentation).** The report should be presented according to the outline approved by the Technical Director Forestry, in phase 1.
- b) The consultant will be required to make a presentation of the draft report to the Technical Director, Forestry.

Phase 3: Development of the new Forest Management Plans, in consultation with stakeholders

The consultant will perform the following tasks:

- a) **Develop draft forest management plans (FMPs) for each of the four target forest reserves.** The FMPs will ensure sustainable and sound forest management and addresses livelihood issues. The plans should consider different models of managing different types (hill sanctuary, globally significant biodiversity area, production reserve) of reserves. The FMPs should include, but should not be limited to, the following:

Activities. Provide a profile of various activities or plan interventions to be implemented during the period for each forest management plan, with cost tables of all the interventions.

Monitoring and Evaluation. Incorporate a project monitoring and evaluation framework, including monitoring indicators on both performance and impact (environmental, social and poverty) and define the role of the community in project monitoring/propose a participatory monitoring methodology.

Governance. Identify existing forest governance structures and propose new structures set up based on the existing legislative framework.

- b) **Organize consultations.** The consultations will have the following characteristics (the list is not exhaustive):

Representation. Participants will represent the range of stakeholders relevant for the FMPs ranging from community based organizations to national level organizations. Within the groups of stakeholders (traditional authorities, community based organizations, etc.) it will be expected that there will be representation along the lines of gender and youth.

Location. Consultation workshops will be held for each forest and one national stakeholders consultation workshop to discuss the draft forest management plans.

Opportunity and Advance Notice: Consultations will be organized and announced with sufficient notice and provision of materials so that affected people and stakeholder groups have sufficient opportunity to prepare and comment on the content of the proposed plans. Guidelines on effective consultation practices are available on the World Bank and FIP websites.

The Consultant will submit the following outputs:

- a) **The four FMPs validated by sector stakeholders.** The tentative proposed table of contents is presented in annex 1.
- b) **A report detailing the outputs of the consultation with stakeholders.** This will include:
- Key issues raised in the consultations, including concerns and how they were addressed.
 - Identification of areas of concern that remain amongst stakeholders and recommendations on the measures that will be used to determine broad agreement on the plan.
 - Details on the participants including interest groups, gender, and other relevant aspects to demonstrate representation.

The consultant will make a presentation of these reports to the Technical Director and his team. Consultation minutes and reports will be prepared and disclosed by the Ministry of Lands and Natural Resources.

6. Team composition

The qualified firm must be conversant with Forest related laws and Acts and its provision for developing participatory and or management plans (PFM). To ensure adequate mapping, the consultant should be conversant with GIS tools such as Arcview and ArcGIS and in addition have good knowledge on flora and fauna. Evidence of having been involved in Sustainable Livelihood Analysis (SLA) approach is essential. Clear evidence of involvement in development of Forest

Management Plans previously is essential. This evidence and experience should be detailed in the response to request for proposals as a key qualification for the performance of the proposed work.

The consultancy team shall have at least the following specialists:

- **Lead consultant/Coordinator** specialized in forest management, with a Ph. D. and at least 15 years of experience. Good knowledge of the situation in Ghana is highly desirable. S/He will have proven experience delivering quality outputs on time and will have proven experience leading multi-disciplinary teams. S/He will be responsible for leading the team, coordinating the preparation of outputs, taking full responsibility for the overall technical quality of the final products, and engaging directly with the client. The lead consultant should have substantial experience in communicating with the public about complex natural resource management issues.
- **Forester Engineer:** with a Ph. D. and at least 15 years of experience. Good knowledge of the situation in Ghana is highly desirable. S/He should have knowledge of the forest sector in Ghana. In addition, they will have knowledge of benefit sharing arrangements and natural resource management/extractive industries, in West Africa, preferably in Ghana. S/He will have experience with the silvicultural and ecological dimensions of forestry.
- **Forest/Socio Economist:** with a Ph. D. and at least 15 years of experience. Good knowledge of the situation in Ghana is highly desirable. S/He should have knowledge of the forest sector in Ghana. In addition, they will have knowledge of benefit sharing arrangements and natural resource management/extractive industries, in West Africa, preferably in Ghana. S/He will have experience working on the economic and financial dimensions of forestry, including the distribution of benefits across different interest groups, and the economics of livelihood activities among forest dependent communities.
- **Forest Ecologist:** with a Ph. D. and at least 15 years of experience. Good knowledge of the situation in Ghana is highly desirable. S/He should have knowledge of the forest sector in Ghana. In addition s/he will have experience working on the applied forest/vegetation ecology, succession, landscape ecology.
- **Biologist/Fauna specialist:** with a Ph. D. and at least 15 years of experience. Good knowledge of the situation in Ghana is highly desirable. S/He should have knowledge of the forest sector in Ghana. In addition, s/he will have experience working on the animal taxonomy and fauna surveys and management.
- **Social scientist (anthropologist, sociologist, rural economist)** with minimum of 10 years of experience. S/He will have knowledge of the forest sector and the land tenure system in Ghana. In addition, they will have knowledge of benefit sharing arrangements and natural resource management/extractive industries, in West Africa, preferably in Ghana. S/He will have experience with participatory methodologies and proven experience collecting and analyzing both quantitative and qualitative data.

- **Social scientist** with minimum of 10 years of experience with experience in the design and conduct of surveys at the community level and with the design and conduct of consultations at the community level.
- **Communications specialist** with minimum of 5 years of experience expert in developing materials that can be used for explaining the purpose and scope of this activity in general terms, and specifically at consultation events.
- **A legal expert, with at least 10 years of experience.** Specific expertise in tree and/or land tenure regimes in West Africa is required as is knowledge of national laws and implications for tree tenure and benefit sharing in Ghana.
- **GIS specialist:** with at least 5 years experience.. Working knowledge of remote sensing and aerophotogrametry is a plus.

7. Duration

The assignment is expected to be completed in 18 months including all the stakeholder consultations and workshops starting from June or July 2013.

Annex
Tentative Outline for the Forest Management Plans

1. Background information
 - Forest location
 - Description of the vegetation cover in the landscape
 - History of management
 - Strengths, weaknesses, opportunities and threats to be addressed in the management plan

2. Forest Technical Information
 - Areas and Features
 - Forest resources characteristics
 - Species composition
 - Dendrometric structure (height, diameter, volumes, bole quality) of commercial and non-commercial species.
 - Recruitment structure
 - Phyto-sociological parameters (density, frequency, dominance, IVI).
 - Seed bank analysis
 - Site description
 - Landform, Geology, Soils, Climate, Hydrology
 - Present vegetation and land use and trends or threats
 - Natural Disturbance and local conservation concerns
 - Significant hazards, constraints and threats
 - Rare threatened and endangered species

3. Socio-cultural Issues and Information critical to successful forest management
 - Social interests and livelihood uses of forest or non forest areas within or adjacent to the reserve that is the subject of the FMP.
 - Characterization of key stakeholder groups, their economic, political, historical, cultural and legal interests and concerns regarding the status and use of the forest.
 - Description of the prevailing socio-economic status of the local communities and other related groups with interests in or uses of the forest. Characterize groups' livelihoods, forest uses, trends, and threats.
 - Description of forest dependency based on participatory resource assessments. Analysis of vulnerability of specific groups (based on gender, origin, age, disability, etc.) and potential mitigations or improvements built into the FMP.
 - Description of social and economic decision-making process on natural resource use (including land and forests) both traditional and modern and how this affects proposed management plans, legal status and ongoing threats.
 - Assessment of institutional strengths, weaknesses, opportunities and threats and the relationship to improved forest management, and the specific activities and recommendations in the FMP.
 - Describe social, environmental, economic, historical or ethnic conflict among stakeholders and forest user groups and beneficiaries. Describe potential conflict mitigations and grievance redress mechanisms built into the FMP.

- Assessment of community and household impacts and proposed mitigations
 - Cultural, historical and archeological resources and issues that affect the management plan
 - Legal and regulatory issues that affect communities, rights, economics and the successful implementation of the management plan.
 - Review of eco-tourism potential and opportunities as an enhancement to livelihoods and economic returns to forest management.
 - Proposed forest management plan and key interaction with nearby communities
 - Adjacent land uses and conditions
 - Illegal forest occupations and land use history
 - Other ecological and socio-economic factors interacting with the forest management opportunities
4. Long term vision, management objectives and strategy
- Long term vision (including rights, roles, responsibilities of stakeholder groups)
 - Management objectives (including interactions and benefits sharing with stakeholder groups)
 - Strategy (including participation, benefit sharing and co management approaches)
5. Management prescriptions – operations
- Management of social and cultural issues and interactions related to the FMP vision and strategy
 - Roles, responsibilities, rights, and benefits of communities with the reserves
 - Roles, responsibilities, rights, and benefits of communities adjacent to the reserves
 - Roles, responsibilities and accountabilities of Government institutions with respect to the forest management plan and the interactions/sharing with communities.
 - Transparent and accountable provision of public access to biological or cultural resources, information, benefits, and redress
 - Management of Archeology and sites of cultural interest
 - Sylvicultural systems
 - Harvesting
 - Phased felling and restructuring plantations
 - Establishment, restocking and regeneration
 - New planting
 - Other operations
 - Protection and maintenance
 - Pest and disease management
 - Fire plan
 - Waste disposal and pollution
 - Protection from unauthorized activities
 - Roles and responsibilities of forest stakeholders and adjacent communities.
 - Game management
 - Overall objectives and management philosophy
 - Roles and responsibilities of forest stakeholders and adjacent communities.
 - Protecting and enhancing biodiversity

- Management of designated areas
 - Measures to enhance biodiversity
 - Special measures for specific stands
- Tourism and eco tourism management, promotion and protection
6. Consultation Processes, key issues and how addressed
 7. Monitoring plan summary
 8. Work programs
 - Outline long-term work program
 - Short term work program
 9. Maps