Estimation of Potential Value of Ecosystem Services and Development of REDD+ Project for Assam (TA -9)

Assam Jurisdictional REDD+ Project Implementation Plan

IORA Ecological Solutions

ASSAM PROJECT ON FOREST & BIODIVERSITY CONSERVATION

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Acronyms

AFD: Assam Forest Department
APFBC: Assam Project on Forest and Biodiversity Conservation
CSR: Corporate Social Responsibility
DMS: Data Management System
EVI: Enhanced Vegetation Index
GCC: Global Climate Change
GHG: Green House Gases
GPG: Good practice Guidance
IORA: IORA Ecological Solutions
IPCC: Intergovernmental panel on Climate Change
JNR: Jurisdictional and Nested REDD+
LoA: Letter of Association
LULC: Land Use land Cover Change
MoEFCC: Ministry of Environment Forests and Climate Change
MRV: Monitoring Reporting and Verification
MSAVI: Modified Soil Adjusted Vegetation Index
NDVI: Normalized Difference Vegetation Index
NGO: Non-Governmental Organization
NTFP: Non Timber Forest Produce
PAMs: Policies and Measures
PDD: Project Design Document
PPP: Public Private Partnership
PR: Public Relations
REDD+: Reducing Emissions from Deforestation and Forest Degradation
RL/REL: Reference Level/Reference Emission Level
RS/GIS: Remote Sensing/Geographic Information System
UNFCCC: United Nations Framework on Climate Change
UN-REDD: United Nations – Reducing Emissions from deforestation and Forest Degradation

1 INTRODUCTION

Assam is rich in forest and biodiversity. Six prevalent forest types are found here; spread over approximately 33% of the total area. The richness of the forests can be assuaged by the high number of national parks/wildlife sanctuaries spread over Assam[1].

However this rich forests are increasingly facing disturbances and degradation owing to many reasons, *inter alia*, increase in demand of natural resources, encroachment in forest land, felling in tea gardens, biotic pressure and shifting cultivation etc. (State of the Forest Report, 2015, Forest Survey of India). The forests in these landscapes contain natural stocks of high environmental, economic and cultural value, and provide services to over 32 million people spread across more than 26,000 villages and 210 towns of the state. A substantial number of people are dependent on the flow of services from these forests for their subsistence.

With this background, IORA Ecological Solutions (IORA) has been hired by Assam Forest Department (AFD) in response to the submission of proposals to the request for proposals, RFP No.: AVOM-PVE-C-ES-2/34/CDM-2/35, for Estimation of potential value of ecosystem services and development of REDD+ project for Assam (TA -9). This is against component 4.3 of the Assam Project on Forest and Biodiversity Conservation (APFBC). In the following sections the implementation plan of the REDD+ project in Assam has been detailed. The REDD+ landscape has been finalized as Nagaon district.

This document (REDD+ implementation Plan) has been developed and is being submitted along with the inception report, to augment the methodology which was detailed out in the REDD+ inception report.

2 OBJECTIVE

The Government of Assam is engaged in the development of Jurisdictional REDD+ project in Assam to avail intended benefits of this mechanism which includes carbon and non-carbon benefits from the forestry and allied sectors such as Biodiversity conservation, organic farming and ecosystem services which according to national policy are integral to REDD+ implementation. The nodal Department for the advancement and implementation of Jurisdictional REDD+ in Assam is Assam Forest Department with technical assistance from IORA.

Within the REDD+ portfolio several activities will be initiated with the objective to conserve and enhance carbon stock within the forests with the ultimate intention to trade them in the potential National and International markets. The co benefits being the environment and social benefits.

[1] http://assamforest.in/common/

The assignment will help the APFBC in developing and implementing a jurisdictional REDD+ project, which will help in sustainable forest management and income generation of forest dependent communities. The specific objectives of the project are to support APFBC in the following:

1. In the development of a departmental REDD+ Task Force and a Multi Department REDD+ Cell in Assam.
2. Developing a pilot (Jurisdictional) REDD+ project.
3. Analyzing drivers and agents of forest change corresponding to the project landscape based on a thorough socio-economic analysis.
4. Establish a baseline through historical remote sensing analysis, based on nationally appropriate and internationally accepted guidelines.
5. Develop a REDD+ implementation plan to reduce identified negative drivers and enhance identified positive drivers of forest change in the chosen landscapes. The implementation plan will be centered on existing planned budgets of the forest department but will also develop actions plans towards convergence with budgets of other departments, leverage of private sector finance and finally identifying possible international and national sources for leveraging ecosystem (carbon) finance.
6. Training and capacity building of nominated/ identified Assam Forest Department staff to take over the management of the project post exit of consulting support.
7. Identifying benefit sharing mechanism and recommending safeguard measures.

3 MAJOR ACTIVITIES UNDER THE PROJECT

Assam government will implement the jurisdictional REDD+ mechanism for improving its forest carbon stock and ecosystem services. A large amount of data is needed to design and implement a jurisdictional REDD+ project. This includes data to identify drivers, agents and underlying causes, develop REDD+ interventions, calculate baselines, carry out ongoing monitoring and accounting including leakage assessments, stakeholder consultations, adherence to safeguards, design of benefit sharing mechanisms, etc.

Remote sensing imageries, along with field data for biomass estimates of the forest and land classes will be required to develop the baseline. Social assessments also will be carried out. This information will be needed for the initial program development and validation. This will also feed into periodic monitoring.

- A series of meetings/workshops will be conducted to spread awareness, vision and plan the development of Jurisdictional REDD+ mechanism being developed.
- The district where the REDD+ project will be developed shall be chosen as the “REDD+ landscape” during the interdepartmental consultation and meeting to be held at Aranya Bhawan, Panjabari on 04th August 2016. Nagaon scores highest among the districts where the REDD+ project can be implemented.

- The government will form a State level REDD+ Cell for implementation of jurisdictional REDD+ program. The REDD+ Cell shall be headed by the Principal Secretary, Environment and Forests. Members shall include secretaries of concerned departments under the Government of Assam. The mandate of this committee is to facilitate capacity building within various sectors of the government to implement REDD+, effective coordination between sectors and monitor progress and advice the government on issues relating to REDD+. Notification of this REDD+ cell has been put up for approval.
- The AFD also has formed a REDD+ Task Force within the department for implementation and coordination of the project activities.
- IORA RS/GIS team is providing technical assistance and is working on satellite imageries as per the RS/GIS Tools Techniques and Methods (TTMs) developed under the Forest-PLUS Program, which is USAID funded, of which IORA is a main implementation partner. Degradation mapping using fractional cover downscaling model and multi-temporal land use land cover mapping are under process. These will be used for forest mapping in Assam also.
- The officials of the Forest Department will undergo several training programs to build their capacities towards understanding global climate change, estimation of forest carbon stock which include in-situ measurements of tree volume, basic GIS/RS training, fractional cover down scaling using RS/GIS tools and Data Management System for Carbon estimation, etc.
- IORA is conducting a preliminary survey/secondary literature survey to identify direct and indirect drivers of deforestation, forest degradation and forest enhancement in state of Assam.
- A socio-economic survey will be conducted in the selected landscape to identify drivers of deforestation and forest degradation. Further a survey will be conducted to study the suitable benefit sharing mechanism structure for Jurisdictional REDD+ in Assam.
- To increase the reach and awareness of the activities, a series of communication campaigns are being planned. All these campaigns shall be developed and designed after detailed consultations with the Assam Forest Department.
- Trainings shall be conducted for creation of awareness and capacity development of AFD. Trainings will be imparted to the forest department on Global Climate Change, Forest Carbon Inventory, Data Management System, and basic RS/GIS.
- There are several training planned in the future for the android based mobile apps also.

4 ACTIVITIES REQUIRED TO DEVELOP JURISDICTIONAL REDD+ PROJECT

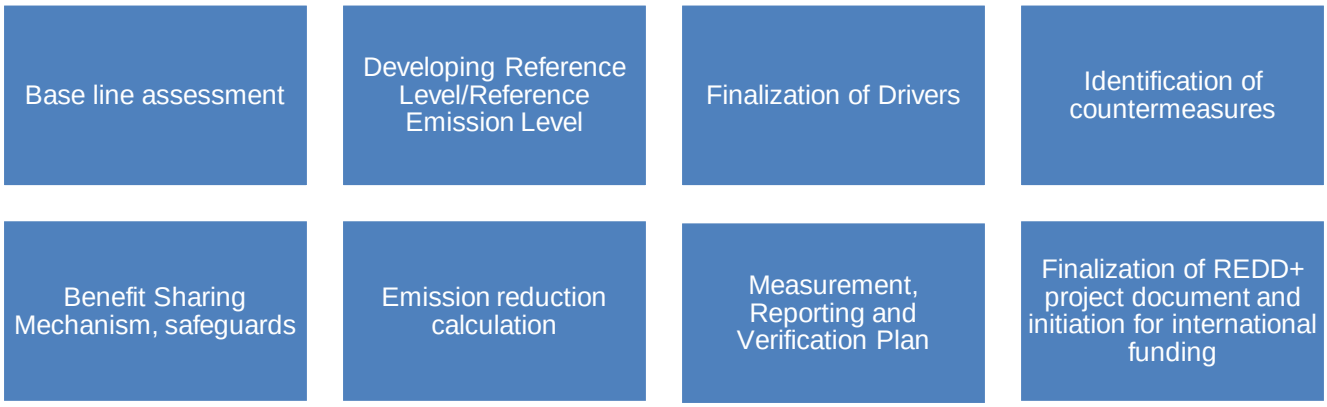

Figure 1: Activities to be pursued for the development of Jurisdictional REDD+ Project in Assam

In order to develop the project, a set of activities are required. The following sections provide a brief of the approaches to be pursued for undertaking these activities for the development of Jurisdictional REDD+ project in Assam.

4.1 DEVELOPMENT OF REFERENCE LEVELS

4.1.1 **Introduction:**

Remote Sensing and GIS application is an efficient source of primary data in designing of REDD+ (and other forestry) projects. Availability of historic satellite images, provide forest manager and landscape planners to effectively monitor their resources regularly. In particular to REDD+, temporal satellite images are used to quantify the historical baseline on deforestation and forest degradation process in terms of activity data (i.e. change in area per hectares) over the reference period.

In addition to baseline quantification, the GIS application helps in defining the project area or jurisdictional boundaries, leakage management belts, planning of forest inventory, spatial mapping and correlation of drivers of forest change etc. The RS/GIS analysis will finally feed into the Reference Level/Reference Emission Level of Assam Jurisdictional REDD+ project.

4.1.2 **Approach towards Assam RS/GIS Component**

In order to set emission reduction targets, a baseline scenario must be developed. This baseline scenario estimates what would have happened in the absence of the project. It is required so that the mitigation impact of a project or policy can be quantified. In the forestry sector, the baseline is particularly important in attempts to reduce emissions from deforestation and degradation (Bond et al., 2009). IORA RS/GIS team is conducting several sets of activities for the development of historical baseline for the assessment of the change in forest over a time period.

To setup the baseline scenario, the Land Use Land Cover classification of satellite images for the selected reference period need to be assessed, as per IPCC protocol with minimum of six land use land cover classes (refer to IPCC good practice guidance 2003). The final LULC maps will be prepared after accuracy assessment using field data for each class of LULC map. Field data will be collected simultaneously with the mapping activities and will cover extensive field exercises to collect data as per the prescribed protocols. After this a change matrix will be developed through the historical years to analyze the dynamics in the landscape, in order to map and estimate the deforestation and reforestation rates and activity data in hectares. Forest degradation will be assessed using fractional cover down-scaling model by IORA. Under this the vegetation fractional products will be generated for each historical time points, using vegetation indices like NDVI, MSAVI and EVI etc. The fractional cover product is a continuous map, and provides us with the values in terms of percentage of greenness inside a pixel of a satellite image. As fractional cover is a continuous map, this require masking of all the non-forest classes in the landscape, in order to quantify the actual forest degradation. After this the fractional map of forested areas, will be correlated with field biomass plot values as per the forest types to quantify the carbon content in the Landscape. Field biomass will be estimated through extensive field exercise for laying the carbon plots. Analysis of the potential emission reduction and sequestration will be carried out using internationally approved guidelines.

4.2 IDENTIFICATION OF DRIVERS OF FOREST CHANGE

4.2.1 **Introduction**

Going by the definition of REDD+, it stands for the efforts to Reduce Emissions from Deforestation and forest Degradation, and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks.

In order to design interventions that would lead to reduction in emissions from deforestation and forest degradation, it is important to understand the underlying causes that are leading to degradation and deforestation. These are known as the “Drivers” of forest change. Drivers can be ‘Direct’ drivers and ‘Indirect’ drivers of deforestation and forest degradation.

Direct drivers can be defined as actions that directly impact forest cover or its quality resulting in loss of carbon. These causes can be grouped into categories such as agriculture expansion (both commercial and subsistence), Unsustainable NTFP collection, infrastructure extension and wood extraction etc.

Indirect drivers are complex interactions of fundamental social, economic, political, cultural and technological processes that are often distant from their area of impact. The indirect drivers can be the markets, commodity prices, population growth, domestic markets, national/state policies, governance and local circumstances example change in household behavior.

Analysis of drivers will produce information on what type of forest and land-use change is occurring in a jurisdiction. This will help inform the decision on scope of a REDD+ program – i.e. whether it covers reducing deforestation only, or includes reducing degradation or forest enhancement activities.

An analysis of drivers, agents and underlying causes may allow the relative contribution of each driver to be quantified or ranked against other drivers. If drivers differ across the jurisdiction, this information could be broken down geographically. This analysis is also the foundation for developing the strategies, policies or measures needed to reduce emissions or promote enhancements, which should be mapped against specific drivers, agents, or underlying causes they are expected to address.

4.2.2 Approach for finalization of Drivers

Identification of additional drivers if any will be done through desk review and consultative workshops. The drivers will be validated again through the same workshops.

It is proposed that through the workshops prioritization of direct drivers based on their relative contribution at each location will be carried out. This will enable identification and development of suitable interventions to address the direct drivers. For example, if forest fire is a direct driver for a particular location, then, interventions to control the forest fires and thus enhance carbon stock will be designed.
The analysis of drivers will also enable the development of strategies, policies or measures needed to reduce emissions or promote enhancements. These will be mapped against specific drivers they are expected to address. This will be done qualitatively (i.e., to provide a theory of change) and quantitatively where possible (i.e., to estimate expected results).

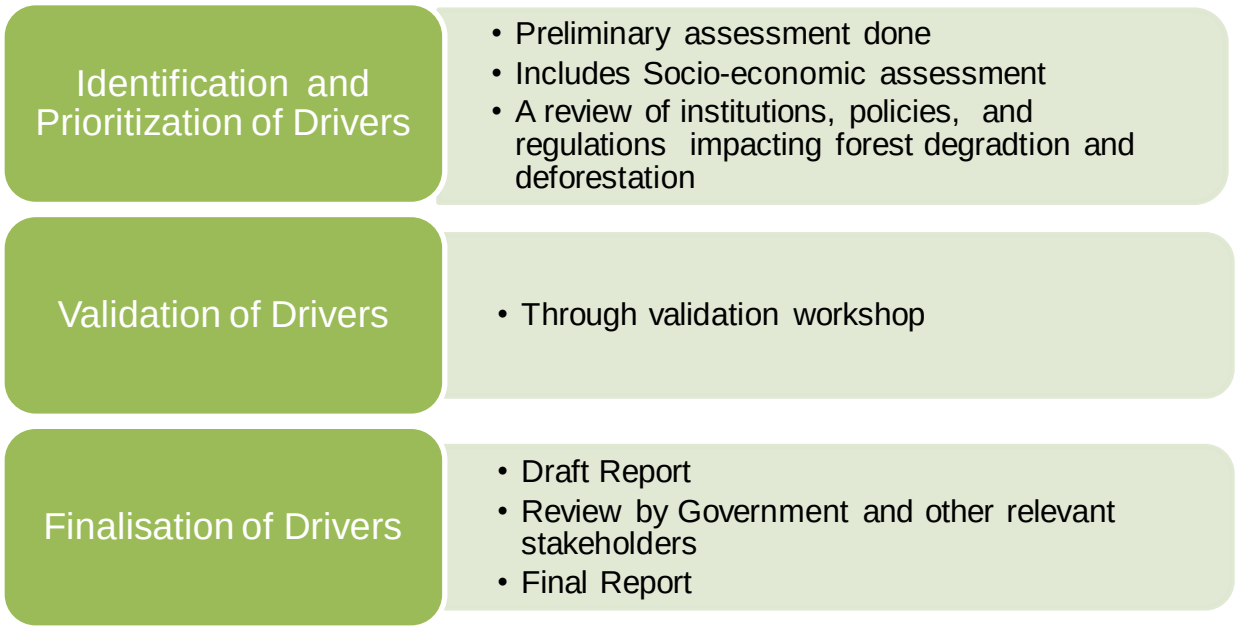

Figure 2: Steps towards finalization of drivers

4.3 IDENTIFICATION OF INTERVENTIONS

4.3.1 Introduction

The prioritized drivers will form the basis of choosing the interventions. The guiding principle for choosing the REDD+ strategies will ensure that the strategy chosen is not only demonstrating quantifiable emissions reductions but also addresses the critical underlying factors that determine whether direct driver interventions can be successful in achieving the intended emissions reductions. A mix of incentive investments, disincentives and enabling measures, under a comprehensive REDD+ strategy, will provide greatest leverage to affect drivers of deforestation and degradation.

A study carried out by Kissinger et al, 2012[2] across 31 countries to assess REDD+ readiness indicates that sustainable forest management and fuel wood efficiency may be the most often chosen interventions/strategies for implementing REDD+.

4.3.2 Methodology for identification of REDD+ Interventions/Strategies

The prioritized drivers will be used for mapping the possible interventions that will lead to reducing emissions and enabling landscape for reducing emissions.

This will be done through desk research and through consultative process. Each and every driver prioritized will lead to identification of a bouquet of interventions.

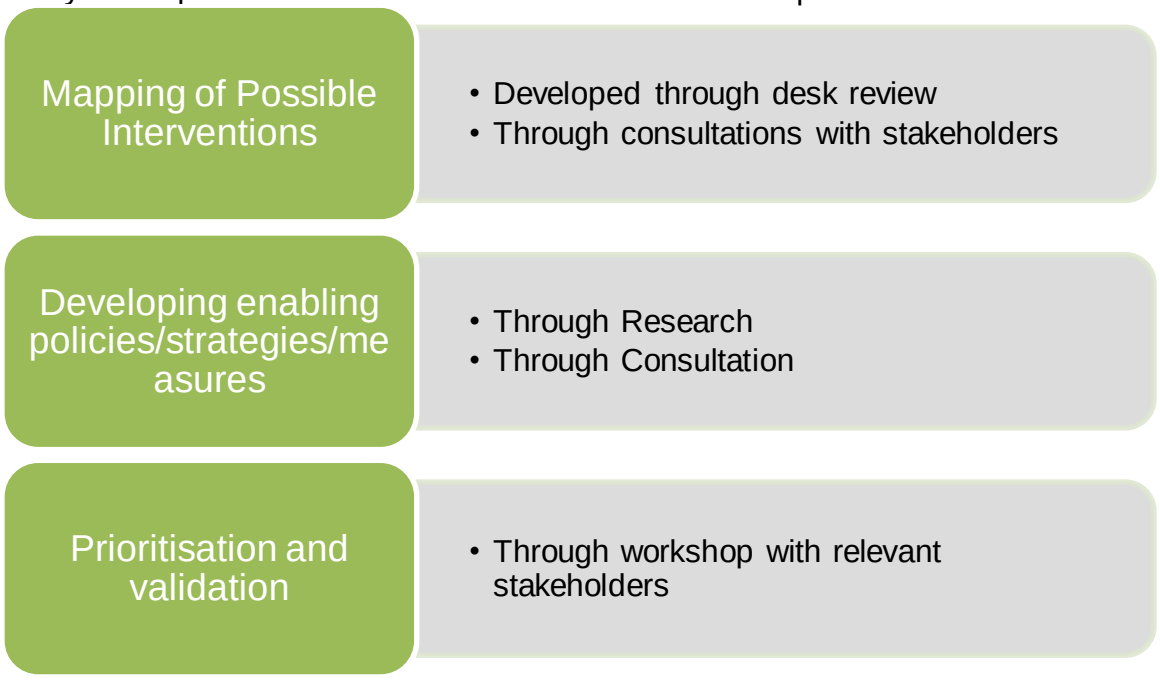

Figure 3: Possible set of steps towards choice of interventions

[2] Kissinger, G., M. Herold, V. De Sy. Drivers of Deforestation and Forest Degradation: A Synthesis Report for REDD+ Policymakers. Lexeme Consulting, Vancouver Canada, August 2012.

4.4 IDENTIFICATION OF SAFEGAURDS

4.4.1 Introduction

REDD+ safeguards is a set of principles, rules and procedures put in place to achieve REDD+ goals. Whereas principles and rules outline safeguards' substantive elements (e.g., protection of indigenous rights and biodiversity), procedures delineate the task of implementing, monitoring and enforcing safeguards (e.g., safeguard information systems).

The Safeguards aim not only to mitigate the risk of adverse environmental and social impacts of REDD+ activities, but also to actively promote benefits beyond carbon emission reductions, such as increased land tenure security, enhancing biodiversity, improving forest governance and empowering relevant stakeholders by ensuring their full and effective participation. The UNFCCC REDD+ has developed a set of Safeguards that outline a global framework of social, environmental and governance principles according to which REDD+ actions and activities must be implemented. By following this framework, countries can minimize risks posed by REDD+ activities, and maximize potential for realizing REDD+ benefits both carbon and non-carbon.

REDD+ Safeguards may help to:

- Ensure that there is more equitable distribution of the benefits and costs of REDD+;
- Design REDD+ schemes that will be more sustainable by taking into account wider socio-economic issues and environmental concerns that are likely to be important in addressing the underlying drivers of deforestation;
- Increase investment in REDD+ because safeguards can reduce risk, a key factor in investment decisions;
- In addition to reducing risks, help to deliver social and environmental benefits.
- Meet the safeguard requirements of many of the international organizations funding (or likely to fund) REDD+;

Identification of REDD+ Interventions	• Through round table discussion
Selection of Criteria and Identification of Indicators	• Criteria and Indicators for REDD+ safeguards will be identified through consultations and Workshops.
Validation of indicators	• Validation of selected identicators wil be done through field survey.
Development of SIS	• State specific Safeguard Information System will be developed • Multisatkeholder Consultation/ Workshops to develop a common sunderstanding on the above.
Monitoring and reporting	• Monitoring and reporting will be a part of Safeguard Information System.

Figure 4: Approach towards safeguard identification and Safeguard Information System

4.4.2 Proposed activities

IORA in consultation with the Assam Forest Department has proposed certain activities (i.e., consultations, workshops and training) to address the above aspects and to raise capacity of various stakeholders on REDD+ and its associated issues. Following are the consultation/meeting, workshops proposed:

- Stakeholder Consultations for Identifying Safeguard Indicators in REDD+ for Assam- The objective of this consultation is to develop a common understanding with the stakeholders on the various State-specific environmental and associated social Safeguard indicators that need to be put in place for REDD+ activities.
- Stakeholder Consultations for Identifying Laws, Policies and other Regulatory Frameworks in Assam- Its objective is to identify the Gaps in the Policies, Laws and Regulations currently prevailing for the Safeguards in the Forestry Sector and to highlight the scope of its modification before implementation in order to reduce or fill the gaps.

4.5 BENEFIT SHARING MECHANISM

4.5.1 Introduction

One of the important questions about the implementation and design of the REDD+ architecture includes benefit sharing mechanism. The first notion for the benefit sharing mechanism for the natural resources management evolved in 1992 during the Convention

for Biodiversity summit. Initially the concept of benefit sharing referred to the distribution of financial benefits which evolved eventually. In the context of REDD+ benefit sharing refers to the distribution of both the monetary and the non-monetary benefits generated through the implementation of REDD+ projects. Both policy makers and the local communities are concerned about the benefit sharing mechanism.
The two main costs involved in the REDD+ project development includes:

1. Implementation and transaction costs for setting up of REDD+ project.
2. Opportunity costs, or the foregone profits from the best alternative forest and land use.

Category of benefits in the REDD+ projects as per Luttrell et al. (2013) are:

1. Benefits (net) from implementation of a REDD+ project, program or policy (e.g. direct financial payments);
2. Benefits (net) from changes in forest use (e.g. improved provision of ecosystem services or non-timber forest products); and
3. Indirect and non-monetary (net) benefits from REDD+ implementation (e.g. improved governance, technology transfer, enhanced participation in decision-making, and infrastructure provision)

According to the UNFCCC (2007), benefit-sharing mechanisms are created through what are known as REDD+ Policies and Measures (PAMs). Two types of PAMs related to benefit-sharing mechanisms are:

1. Compensation for the foregone opportunity costs of deforesting the land and
2. Incentives to induce positive choices of behavior (Brown et al. 2008; Peskett et al. 2008).

Other types of PAMs can be either delivered upfront, to enable REDD+ activities to begin, or dispensed over time to guarantee their continuation (Gebara 2010). Success of REDD+ will greatly depend on the effectiveness, efficiency and equity of the implementation and design of the benefit sharing mechanism. Benefit-sharing mechanisms can be organized along two main axes (Lindhjem et al. 2010; UN-REDD 2011):

1. A vertical axis of benefit sharing across scales from national to local, and a
2. Horizontal axis of sharing within scales, including within and across communities, households and other local stakeholders and within regional and national levels.

Both the vertical and horizontal aspects of a REDD+ benefit-sharing mechanism need to be designed in case of Assam:

1. To maximize equity among the actors responsible for the reduction of deforestation and forest degradation,
2. To improve the effectiveness of forest management and
3. To increase the efficiency of national and subnational programs (largely by minimizing transaction and implementation costs) (Brockhaus et al. 2013).

4.5.2 **Approach towards Benefit Sharing Mechanism Structure**

In case of Assam, both the vertical and horizontal axis of benefit sharing mechanisms will be focused at the regional level and community level. Benefit sharing mechanisms in Assam needs to be organized at the following levels:

1. Regional scale (state level)

2. Within communities
3. Across communities

A survey has already been conducted in Assam to assess the present benefit sharing mechanism structure in context of the Jurisdictional REDD+ project. The structure will be further developed through stakeholder consultation and further validation by the forest department.

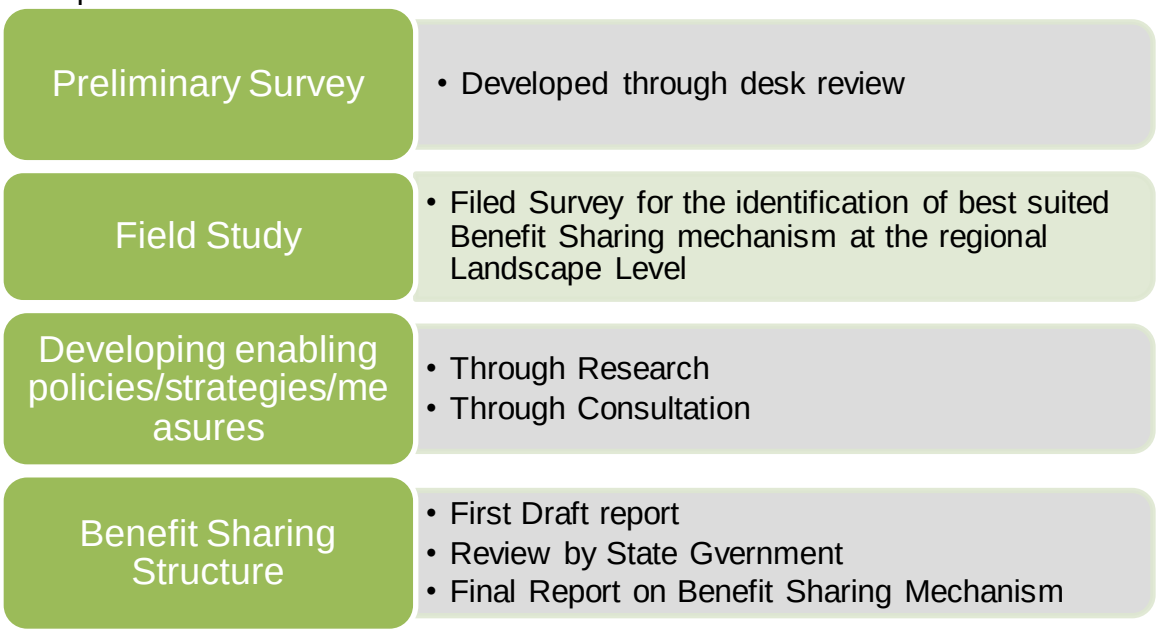

Figure 5: Approach towards Development of Benefit Sharing Mechanism Structure for REDD+ in Assam

4.6 PARTNERSHIPS

4.6.1 Introduction

Engaging public and private partners would lead to better and more efficient leverage of available resources. Post the Identification of drivers and region-wise interventions, potential PPP partners would be introduced to the Jurisdictional REDD+ project in Assam and their respective roles in making this pilot project a success.

Jurisdictional REDD+ cell and State Level Steering Committee has been successfully created in Assam, the next steps in converging public sector are going to play a significant role for the program implementation.

4.6.2 Approach towards public private partnership development

Following are the steps followed for PPPs for Jurisdictional REDD+ in Assam:

a) Interdepartmental Roundtable:

IORA will be assisting AFD in holding interdepartmental convergence roundtable for the convergence of various schemes with the REDD+ project in Assam. The first interdepartmental convergence meeting is planned to be held on 4th August 2016, with the AFD as the host. The roundtable focused on potential REDD project area selection and on the way forward for convergence with government line departments in Assam. The aim is to appoint a nodal person from each of the government line departments and identify potential government schemes that can be converged with REDD+.

b) Meeting with potential partners:

Post the interdepartmental roundtable, interaction with other line departments will be carried out through field survey in Assam. The idea is to converge with as many government schemes as possible which would lead to better leveraging of the resources for the program.

c) Identification of Partners:

The partners will be identified as per the planned intervention activities in Assam and where there role can best fit with REDD+ convergence.

4.7 COMMUNICATION PLAN

4.7.1 Introduction

Communicating the role of forests, forest management, and forest use in potentially mitigating global climate change, the place of India's forests in this global context, and the actions and technologies of forest management available to India in managing its forest landscapes for climate change benefits in addition to its contributions to environment and human livelihoods is an important aspect of IORA's communication plan. IORA will organize consultations and campaigns towards education of all stakeholders on the criticality of global climate change, particularly with respect to forestry. This would allow a broader sector of society to join the debate on the future and shape of REDD+ in India.

4.7.2 Approach towards Communication

Communication plan for the Jurisdictional REDD+ Cell in Assam will be done through different form of media in close consultation with AFD to increase the outreach of the program activities in Assam. The various forms of communication media will consist of outdoor campaigns, mobile exhibition, media briefing, through radio, etc. Under the program several communication and awareness campaigns has been conducted to extend the outreach of the Jurisdictional REDD+ in Assam. The major communication activities planned for Assam Jurisdictional REDD+ project includes:

1. 'People and Forests' - An awareness generating communication campaign imparting on connection between Forests and Climate change and basics of REDD+ concepts and positive benefits to local communities on successful implementation of REDD+. Where possible, we also proposes to use folk media for the campaigns.

The activities planned include plantation of local species in selected/degraded forest patches. Other than this activity several other communication campaigns are being planned for the Jurisdictional REDD+ project to create aware among the villagers on the NTFPs and fuelwood consumption, man-elephant conflict etc.

4.8 TRAININGS:

4.8.1 Introduction

Capacity building of State Forest Department and other major stakeholders to address climate change issues at local, regional and national level by adopting mitigation

measures through forests. A series of capacity building programs including class room training, demonstrations and hands-on training at field level.

Training program under IORA focus on strengthening knowledge base and enhancing capacity of State Forest Department officials and community to work on climate change related issues to scale up REDD+ activities. Thus broader thematic areas of capacity enhancement identified are as follows:

1. Carbon inventory and MRV
2. Ecosystems management
3. Global Climate Change and Greenhouse Gas effect
4. Social sciences and community involvement in managing forest resources

Training programs are developed under these thematic areas in consultation with experts and key stakeholders. Under these themes major focus would be on creating expertise on carbon inventory, social issues, institutional strengthening, Global Climate Change (GCC) and Greenhouse Gas (GHG) related issues. Training programs are mainly planned to enhance knowledge base of forest department officials, researchers, NGOs, education institutions, and community on the issues related to REDD+ and climate change. Broadly these training programs will be organized for following stakeholders:

1. Community based organizations
2. Front line staff of forest department- forest guard, watchers
3. Senior and middle level officials of forest department
4. Indian Forest Service Officials

4.8.2 Upcoming Training:

1. Training on mForest (Mobile Application) for Forest Carbon Measurement. The objective of the training is to train Master Trainers on use of Mobile Apps for Forest mapping and management to ensure sustainable forest management.
2. Training on Forest Carbon Inventory tools, techniques and methods

4.9 MEASUREMENT, REPORTING AND VERIFICATION PLAN

The UN-REDD Program provides the following definition of MRV:

1. **Measurement:** “The process of data collection over time, providing basic datasets, including associated accuracy and precision, for the range of relevant variables. Possible data sources are field measurements, field observations, detection through remote sensing and interviews.”
2. **Reporting**: “The process of formal reporting of assessment results to the UNFCCC, according to predetermined formats and according to established standards, especially the Intergovernmental Panel on Climate Change (IPCC) Guidelines and GPG [Good Practice Guidance].”
3. **Verification**: “The process of formal verification of reports, for example, the established approach to verify national communications and national inventory reports to the UNFCCC.”

The MRV plan will be developed as such to meet the compliance with the international and national guidelines. The MRV plan will include the requirements of National, UNFCCC and other relevant platforms.

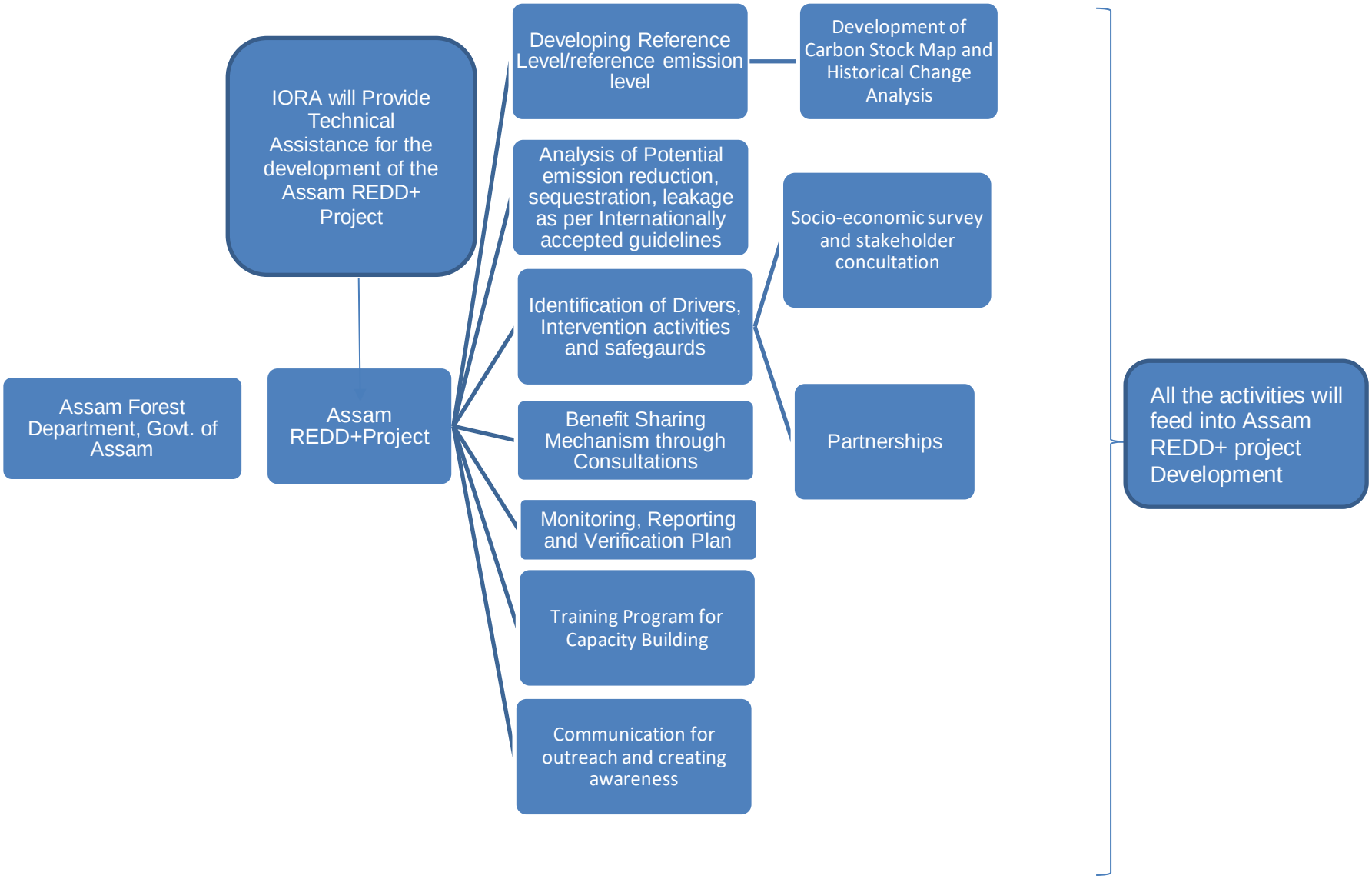

Figure 6: Overarching Framework for the Development for Assam Jurisdictional REDD+ project

5 TIMELINES AND IMPLEMENTATION PLAN

Nagaon: Major activity	Activity Type	Theme	Aug-Oct	Nov-Dec	Jan-Feb	Suggested RTF member
Field Survey	Field	Carbon content per strata		**1**		DFO
	Field	Drivers and intervention		**1**	**1**	DFO
Training and Capacity Building	Training	Carbon inventory		**1**		DFO
	Training	Carbon calculation			**1**	HQ
	Training	Mobile app		**1**		HQ/DFO
	Training	REDD design			**1**	HQ/DFO
LULC validation	Consultation	LULC change matrix and validation		**1**		RE&WP
Baseline determination	Consultation	Drivers and interventions			**1**	B&CC
	Consultation	Baseline scenario determination, ER calculations			**1**	RE&WP, B&CC
Benefit Sharing Mechanism , Safeguards Information System	Consultation	Consultation on SIS			**1**	SF
	Consultation	Finalization of SIS			**1**	SF
Drivers of Forest change	Consultation	Mapping schemes for convergence	**1**			HQ
	Consultation	Finalization in a multi stake holder validation			**1**	HQ
Communication	Consultation	Communication programs		**1**	**1**	RE&WP
Inter Departmental Convergence	Consultation	Mapping activities that can be synchronised		**1**	**1**	HQ
GCF finalization Consultation	Consultation	Jurisdictional REDD+ design finalization for international funding			**1**	DFO, RE&WP, B&CC

6 CONCLUSION

Various components of REDD+ as mentioned above will feed into the development of the Jurisdictional REDD+ project. The holistic approach includes the development of RL/REL, identification of drivers of deforestation and forest, intervention measures to address them, safeguards identification and planning, benefit sharing structure for REDD+, training and capacity building, communication and outreach activities. The whole gamut of activities will eventually fit into blocks and pieces in the first Jurisdictional REDD+ project in India.

Environmental Finance • Climate Policy • Clean Technology • Ecosystem Conservation

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