



# Terminal Evaluation

Atlas ID: 70449; PIMS No. 4073; GEF ID 57120

## Sustainable Land and Ecosystem Management in Shifting Cultivation Areas of Nagaland for Livelihood and Ecological Security



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**Front cover:** Clockwise from top left: jhum with forest towards and along ridge top (Wokha District); jhum with freshly cleared land (Wokha District); women's self-help group at new colony of Zuvotong, Wokha District; village elder (Tuimei, Mon District); homestead (Hongphoi, Mon District); contour bunding in Mokokchung District, with fence and trench to reduce soil erosion – centre. [© M.J.B. Green]

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## ACRONYMS AND ABBREVIATIONS

AAU	Assam Agriculture University
AOFG India	Agriculture & Organic Farming Group
APR	Annual Project Report
APC	Agriculture Production Commissioner
ATMA	Agricultural Technology Management Agency
AWP	Annual Work Plan
CBOs	Community-based organizations
CDR	Combined Delivery Report
CO	Country Office (UNDP)
CONFU	Confederation of Nagaland Farmers Union
CPP	Country Partnership Programme
DFEEW	Department of Forests, Ecology, Environment & Wildlife
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
GIS	Geographic Information System
GoI	Government of India
IFAD	International Fund for Agricultural Development
IFD	Integrated Farm Development
IWDP	Integrated Waste Land Development Program
IWMP	Integrated Watershed Management Program
JFM	Joint Forest Management
KFW	Kreditanstalt für Wiederaufbau
KVK	Krishi Vigyan Kendra (Farm Science Centre)
LUC/SLUC	Land Use Committee/Sustainable Land Use Committee
LUP	Land Use Planning
M&E	Monitoring and Evaluation
MoEFCC	Ministry of Environment, Forests & Climate Change
MoHSFAC	Ministry of Horticulture and Small Farmers Agribusiness Consortium
MTR	Mid Term Review
NAP	National Action Programme
NEHU	North Eastern Hill University
NEPED	Nagaland Environmental Protection and Economic Development,
NERIWALM	North Eastern Regional Institute of Water and Land Management
NGO	Non-Governmental Organization
NIM	National Implementation Modality
NRM	Natural Resource Management
NTFP(s)	Non-timber Forest Product(s)
NU	Nagaland University
NWDPRA	National Watershed Development Project for Rainfed Areas
PA(s)	Protected Area(s)
PIR	Project Implementation Review
PLUP	Participatory Land Use Planning
PMU	Project management Unit
ProDoc	Project Document
PSC	Project Steering Committee
QPR	Quarterly Progress Report
REDD	Reduction of Emission from Deforestation and Forest Degradation
RRL-Jorhat	Regional Research Laboratory
RTA	Regional Technical Advisor (UNDP-GEF)
RVP	River Valley Project
SHG	Self Help Group
SL(E)M	Sustainable Land (and Ecosystem) Management
STA	Senior Technical Assistant
ToR	Terms of Reference
TRAC	Target for Resource Assignments from the Core
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
VC(s)	Village Council(s)
VDB	Village Development Board
WB	World Bank
WDPSCA	Watershed Development Project in Shifting Cultivation Areas

## **ACKNOWLEDGEMENTS**

Appreciation and thanks are due to the many people who willingly and enthusiastically spared their time to meet with the Evaluators, often at short notice, and share their experiences and observations, all of which helped to inform this evaluation. Details of those officially met and interviewed are given in **Annex 4** but there were many others, particularly among the village communities, who generously gave their time and hospitality.

The mission was hosted by the Department of Soil & Water Conservation, State Government of Nagaland, and its Project Management Unit. Particular thanks are due to Mr Imkongmar Aier (National Project Director, DSWC) and Mr Limameren Ao (Programme Coordinator, PMU), respectively, for their oversight of the mission. Their District Support Officers, Kedino Zango (Mokokchung District), Khekihe Zhimo (Mon District), Zulukumzuk Pongen (Wokha District) and their respective teams worked hard in facilitating the field visits and engagements with local communities.

Within UNDP Country Office, Ms Lianchawii (Programme Analyst) provided valuable guidance to the Evaluators and Anushree Bhattacharjee (Research Associate) efficiently facilitated the planning and logistics of the entire mission, while also ensuring that the Evaluators' many information and other requests were promptly met.

The Evaluators appreciated being able to share their initial findings with members of the Project Steering Committee, chaired by the Chief Secretary, Government of Nagaland, and receive their feedback. Mr Imkonglemba Ao (Agriculture Production Commissioner) also very helpfully made himself available to the Evaluators at other times. Doley Tshering's (GEF Regional Technical Advisor) effort in joining the Project Steering Committee meeting was also very much welcomed. Likewise, the Ministry of Environment, Forests & Climate Change was briefed on these initial findings with the full support of the UNDP Country Office, including its Country Director.

The Evaluators are grateful to all those who provided feedback on the draft report: PMU, State Government of Nagaland and UNDP Country Office. The opinions and recommendations in this report, however, remain those of the consultants and do not necessarily reflect the position of GEF, UNDP, Department of Soil & Water Conservation or any other government agency collaborating in the project's implementation. The consultants are responsible for any errors or omissions.

## **PROJECT DETAILS**

UNDP/GEF Project Title:	<b>Sustainable Land and Ecosystem Management in Shifting Cultivation Areas of Nagaland for Ecological and Livelihood Security</b>
GEF Project ID No:	<b>57120 (Atlas Project ID: 00070449)</b>
UNDP Project ID No:	<b>PIMS: 4073</b>
Evaluation Time Frame:	<b>16 September – 31 December 2015</b>
Date of Evaluation Report:	<b>December 2015 (draft), March 2016 (final)</b>
Region and Countries included in the Project:	<b>South Asia, India</b>
GEF Focal Area:	<b>Multiple Focal Areas</b>
GEF-4 Strategic Program:	<b>LD SP1: Supporting Sustainable Agriculture and Rangeland Management; SP 2: Supporting Sustainable Forest Management in Production Landscapes. BD SP4: Strengthening the Policy and Regulatory Framework for Mainstreaming Biodiversity</b>
Implementing Agency	<b>State Government of Nagaland, Department of Soil and Water Conservation</b>
Executing Agency:	<b>UNDP India</b>
Implementing Partners:	<b>Department of Soil &amp; Water Conservation</b>
Evaluation Team Members:	<b>Michael J.B. Green and Joy Dasgupta</b>

## EXECUTIVE SUMMARY

<b>Project Summary Table</b>				
<b>Project Title:</b> Sustainable Land and Ecosystem Management in Shifting Cultivation Areas of Nagaland for Ecological and Livelihood Security				
<b>GEF Project ID:</b>	57120 (Atlas: 00070449)		<b>at endorsement (US\$)</b>	<b>at completion (US\$)</b>
<b>UNDP Project ID:</b>	PIMS: 4073	<b>GEF financing:</b>	3,600,000	3,600,000
<b>Country:</b>	India (Nagaland)	<b>IA/EA own (UNDP core):</b>		30,382
<b>Region:</b>	South Asia	<b>Government: cash in kind</b>	18,000,000 7,416,612	367,694 21,600,000
<b>Focal Area:</b>	Multiple	<b>Other:</b>		
<b>Operational Program:</b>	OP15	<b>Total co-financing:</b>	25,416,612	21,998,076
<b>Executing Agency:</b>	UNDP	<b>Total Project Cost:</b>	29,016,612	25,598,076
<b>Other Partners involved:</b>	Department of Soil & Water Conservation, Nagaland	<b>ProDoc Signature (date project began):</b>	July 2009	
		<b>(Operational) Closing Date:</b>	Proposed: June 2014	Actual: 31.12.2015

### Brief description of the project

The North Eastern Region (NER) of India, within which lies Nagaland, is endowed with high plant and animal species diversity and endemism due to its location that embraces the confluence of the Indo-China, Indo-Myanmar and Indian biogeographical zones. It forms part of the Indo-Burma hotspot, one among 34 globally important centres of biodiversity. Much of the NER lies within the Naga-Manipuri-Chin Hills Moist Forests, one of the Global 200 ecoregions prioritized by WWF for global conservation on account of being the most outstanding and representative areas of biodiversity remaining on Earth.

Most of Nagaland falls within the Mizoram-Manipur-Kachin Rain Forests ecoregion, which represents the semi-evergreen submontane rain forests that extend from the mid-ranges of the Arakan Yoma and Chin Hills north into the Chittagong Hills of Bangladesh, the Mizo and Naga hills along the Myanmar-Indian border, and into the northern hills of Myanmar. This ecoregion still retains almost half of its natural habitat and its avifaunal diversity is second to none, with 580 species. This is the highest number of bird species recorded within any ecoregion completely within the Indo-Pacific region.

Nagaland covers a total land area of 16,579 km<sup>2</sup>, with altitudes ranging from 100 m to 3,840 m, and experiences sub-temperate to sub-tropical climatic conditions. Its topography, isolated geographical location and range in climatic conditions have contributed to the State's unique ecosystems that are home to a highly diverse flora and fauna, including numerous endemic and threatened species. Flowering plants, for example, total 2,431 species: that amounts to 13.6% of the angiosperm flora of India, estimated at 17,926 species, for a state that occupies just 0.5% of the Republic's total area (3,287,590 km<sup>2</sup>). Nagaland's agrobiodiversity (both wild and domesticated varieties of plants, including fruits) is also among the most diverse in the region. Very little of Nagaland's biodiversity is formally conserved within protected areas. The State has one national park and three wildlife sanctuaries, amounting to 22,236 ha (1.3% of total land area).

According to the Project Document, 73% of the population is engaged in agriculture and, being largely tribal, the production system retains traditional proto-agricultural practices of assisting the growth of wild plants. Shifting cultivation, locally known as *jhum* cultivation, continues to dominate agricultural practices in Nagaland and covers approximately 917,087 hectares (55% of total land area) and involves some 116,050 families. The annual cultivated area under *jhum* is 131,349 ha (8% of total land area), which alone accounts for 59% of the total net cultivated area.

The basic principle of *jhum* cultivation is the alternation of short cropping phases (usually of one or two years duration) with phases of natural (or slightly modified) fallow vegetation. Yield is thus managed on a long-term basis, rather than maximizing gains over the short-term. *Jhum* systems traditionally maintain diversity through mixed cropping, the perennial shrubs and trees being separated in time and confined to the fallow regenerative phase of the forest that is essentially an agro-forestry system. Here, regulating ecosystem services such as nutrient cycling and pest population dynamics are controlled both through the complex cropping and the fallow phases.

Forests, Nagaland's most valuable natural resource, cover 13,044 km<sup>2</sup> (79% of total land area) but their rate of decline is the highest of any state and amounted to 4% between 2005 and 2013 (India State of Forest Reports). More recent forest cover data for Nagaland from Global Forest Watch show that the amount of tree cover gained between 2001 and 2014 has been exceeded two to three times by the amount of tree cover lost for different canopy densities.

*Jhum* cultivation is identified in the Project Document as a key direct driver of degradation of forest ecosystems in Nagaland and throughout the NER, and the associated loss of ecosystem services. While *jhum* is the socially preferred practice in the region and often the most suitable form of agriculture for the agro-climatic conditions and steep terrain, changing socio-economic scenarios are resulting in increasing amounts of land being brought under *jhum* within a shortened rotational cycle. At any given time, it is estimated that one-sixth of total *jhum* land is under cultivation. The *jhum* cycle that was once 14 years or more has been reduced to 6 years or less in many places, leaving insufficient time for regeneration and resulting in accelerated soil erosion and disruption of the hydrology of the area. It is estimated that 70% of topsoil loss, land degradation and water source deterioration is attributable to the practice of shifting cultivation. This system of cultivation coupled with high rainfall causes heavy erosion to the extent of removing up to 40 tonnes of top soil per hectare per year.

While the main thrust of government efforts has been to wean tribal families away from the practice of *jhum* by providing assets for settled agriculture, little progress has been made and the lesson has emerged that: "...if the adverse impacts of *jhum* on land and ecosystems are to be effectively mitigated, the emphasis needs to be on controlling distortions or retrogressive developments rather than on controlling shifting agriculture itself." Thus, in the wake of past experience, the emphasis is now on improving *jhum* by integrating soil and water conservation measures with this traditional practice that is socially preferred and often the most suited form of agriculture for Nagaland's climate and terrain. The preferred solution to the problem of the shortening fallow cycle, therefore, is to strengthen this weakened agro-forestry system and over the long term provide a mix of different sustainable land uses integrated across the watershed/landscape, thereby maintaining ecosystem services and meeting the livelihood needs of the local communities.

Thus, the overall goal of the project, as defined in the Project Document, is:

*"To promote sustainable land management and use of biodiversity as well as maintain the capacity of ecosystems to deliver goods and services while taking account of climate change."* It is intended that the project will contribute to this goal, along with other projects being developed under the Sustainable Land and Ecosystem Management Programme.



The project objective is:

*“To develop, demonstrate and upscale sustainable land management practices for the conservation of jhum (shifting cultivation) lands in Nagaland through an ecosystem approach.”*

Three outcomes were designed to address the three barriers to the solution, specifically:

- **Outcome 1:** The policy, regulatory and institutional environment in support of jhum agroforestry systems is strengthened.
- **Outcome 2:** Options for improving the sustainability of jhum agroforestry systems are developed and demonstrated in selected project sites.
- **Outcome 3:** Enhanced capacity to replicate the project’s policy reform and field-level experiences in other parts of Nagaland, as well as in other States of India, where shifting cultivation agroforestry systems are prevalent.

### **Evaluation purpose, approach and methods**

Terminal Evaluation (TE) is an integral part of the UNDP-GEF project cycle. Its purpose is to provide a comprehensive, systematic and evidence-based account of the performance of the completed project by assessing its design, process of implementation, achievements (outputs, outcomes, impacts and their sustainability) against project objectives endorsed by the GEF (including any agreed changes to the objectives during project implementation) and any other results. It is intended to enhance organizational and development learning; enable informed decision-making; and create the basis for replication of successful project outcomes.

External international and national consultants carried out this TE. The field mission comprised 13 days in-country (2-12 November 2015 inclusive) meeting and interviewing implementing partners, contractors, beneficiaries and other key stakeholders in New Delhi, Kohima and in the field at selected project sites in the three target districts of Nagaland (Mon, Mokokchung, Wokha).

The evaluation was undertaken in as participatory a manner as possible in order to build consensus on achievements, challenges and lessons learnt, about which stakeholders were interviewed informally, with the help of interpretation as necessary. Evidence was cross-checked (triangulation) between as many different sources as possible to confirm its veracity.

### **Evaluation Results**

**The Project has met with considerable success and is evaluated as Satisfactory / Moderately Satisfactory with respect to the achievement of its overall objective:** to develop, demonstrate and upscale sustainable land management practices for the conservation of *jhum* (shifting cultivation) lands in Nagaland through an ecosystem approach.

This means that it has both minor and moderate shortcomings in the achievement of its objective in terms of relevance, effectiveness, or efficiency. This result is an above ‘average’ accolade for those involved in the Project’s formulation and implementation, being marginally above the third highest of six possible scores awarded to GEF projects. Furthermore, **Outcomes 1 and 2**, concerning the strengthening of enabling environment in support of jhum and the demonstration of options for improving the sustainability of jhum agroforestry systems, are evaluated as **Satisfactory** and having only minor short-timings. **Outcome 3**, to enhance capacity to replicate the project’s policy reform and field experiences in other parts of Nagaland and in other States of India where shifting cultivation agroforestry systems are prevalent, is evaluated as **Moderately Satisfactory** and having some moderate short-comings with respect to community-based systems for monitoring changes resulting from project interventions and documentation of project experiences. Such short-comings, which limit the project’s capacity to realize this 3<sup>rd</sup> Outcome, are considered to be largely a result of insufficient time to consolidate its achievements due to

implementation delays, initially post-MTE when it was necessary to re-orient the project and latterly when funding dried up at the end of 2014 and implementation came to a standstill for six months.

The overall objective is visionary, breaking new ground in appreciating the environmental and socio-economic pros and cons of jhum, as traditionally practiced, and seizing the opportunity to embrace the pros and address the cons by focusing on improving jhum, rather than seeking alternatives to jhum that may be less sustainable in biodiversity, agro-diversity and cultural diversity terms over the longer term.

Important values associated with jhum as practiced in Nagaland include:

- its cyclical rotational nature confined to a given area;
- ownership of the land by the community (tribe) or members of it;
- strong and effective governance, based on traditional systems that have been transformed into today's Village Councils and are highly respected by the entire community;
- agricultural produce that is essentially organic and likely to remain so because farmers are aware of the disadvantages of chemical fertilizers and pesticides; and
- farmers are also becoming increasingly aware of potential, increasing niche market opportunities for producing 'safe' food; and high diversity of crops and varieties, which reduces losses from crop failures and contributes to economic stability at household and community levels, especially in the face of a changing climate.

Challenges associated with jhum include:

- slash and burn practices degrade or destroy biodiversity, expose soils to erosion, cause smog and related visibility and health problems, and release greenhouse gases (CO<sub>2</sub>) into the atmosphere;
- hard, manual work often in difficult terrain (steep hill slopes);
- reducing trend of labour availability as people migrate from rural to urban areas;
- poor access to/from jhum lands and to markets; and
- conflicts with wildlife.

Some excellent results have been achieved at the project sites, distributed across the three target districts; and the achievements and lessons learned will inform and strengthen the land use policy that is currently being assembled by the State. Strategically important results within the context of the challenges and opportunities afforded by the introduction of SLEM to improve jhum include:

- **Sound analysis and clear guidance on policy, regulatory and institutional reforms necessary to support improvements in jhum agroforestry systems.**
- **Establishment of Land Use Committees, as sub-committees under their respective village councils, within 40 target villages** and their development of integrated Land Use Plans (37 to date) facilitated by the District PMUs.
- **Engagement of line departments in technically supporting livelihood and income generating activities within 40 target villages.** Multi-sector district committees on jhum under District Collectors are in the process of being set up at district levels to coordinate land use planning at district levels.
- **Significant improvements in crop production, reductions in soil erosion, increases in incomes** as result of project interventions. These are supported by evidence-based impact assessments commissioned by the project.
- **Strong ownership by State Government at highest levels**, including financial commitments of INR 2.34 crore (US\$ 480,000) in 2015 and a further INR 4.5 crore (US\$ 730,000) for a follow up phase of the project in 2016.

- **Such ownership is reflected at district and village levels, facilitated by a committed PMU and District PMUs** who have engaged effectively with target villages and coordinated inputs from line departments.

Such achievements, however, are at risk of being usurped or jeopardised due to some serious shortcomings incurred during project implementation, notably:

- Significant delays in project implementation, including over a year for the project to become operational in the field, lack of commencement of work on some key outputs until after the MTE, and a six month period in 2015 when the project came to a virtual standstill due to cash flow shortages, have resulted in there being limited time (one year or less) for communities to implement their LUPs. Local livelihoods depend on these plans being effectively implemented and, therefore, are at risk in the absence of adequate, continuing support from line departments.
- Limited documentation and dissemination of the project's wealth of experience, encapsulating policy reform, land use planning processes and concepts, jhum management case studies (best practice), etc during the life of the project. This hinders capacity to replicate the project's policy reform and field-level experience in other districts. Efforts are underway post-project to translate materials into local tribal dialects for wider dissemination.
- Longer term mainstreaming of SLEM is likely to remain in jeopardy until such time as carbon financing, ecosystem servicing and other mechanisms can be set up to sustain jhum agroforestry.
- There is no specific Exit Strategy for the project, although there have been extensive discussions between UNDP CO and the Government of Nagaland about how best to take forward the project objective. These have focused on replication and scaling up participatory land use planning (PLUP), which will be institutionalised under the State Land Use Policy that is being drafted with the project's support.

In line with GEF requirements (UNDP-GEF 2012), performance has also been rated in terms of project relevance, effectiveness, efficiency, sustainability and impacts, as well as the quality of M&E systems. These ratings are provided in the Table below, along with a brief justification.

Criteria	Rating	Comments
<b>Monitoring and Evaluation</b> (using 6-point satisfaction scale)		
Overall Quality of Monitoring & Evaluation	<b>MU</b>	Further details in <b>Sections 3.1.1, 3.2.1 and 3.2.3.</b>
<i>M&amp;E design at project start up</i>	<b>MS</b>	Overall design of M&E framework is reasonable, a main obstacle being that indicators in Logical Framework bear little or no coherent relationship with the project outputs. Thus, evaluation of outputs lacks quantifiable measures. Some indicators are poorly defined (e.g. no explanation in ProDoc about how baseline erosion rates measured); others insufficiently SMART (e.g. primary forest cover – barely exists in Nagaland and certainly not in target project sites; even if it did exist, satellite imagery would be required). Numerous inconsistencies between citing of outcomes and outputs in text and in tables, including LogFrame - never picked up at Inception, MTE or by PMU.
<i>M&amp;E Plan Implementation</i>	<b>MU</b>	Routine reporting (Quarterly Progress Reports, APRs/PIRs), annual work plans and budgets, and meetings (PSC) undertaken but at expense of Logical Framework which has never once been revised with respect to indicators or targets. As noted in MTE report, PMU appears not to appreciate strategic value of LogFrame, nor use it proactively. Failure to establish all baselines at project onset is a significant weakness, as is failure to review and update LogFrame at inception. Also, PMU updates on status of indicator targets at mid-/end of term are not always focused on such targets, indicating some limited understanding.

<b>IA &amp; EA Execution</b> (using 6-point satisfaction scale)		
Overall Quality of Project Implementation/Execution	<b>MS</b>	<p>Implementation rated as Moderately Unsatisfactory at mid-term because the project had failed to follow the guidance in the ProDoc and, despite 58% of the budget expended on a plethora of activities up to mid-term, there was very limited progress towards any of the intended outcomes/outputs in accordance with the project's LogFrame. Major corrective actions have since been taken by UNDP and its Implementing Partner (SWCD) under the leadership of the APC, with strong support from the State government and continuing high level village commitment, to the extent that many outputs have been and are continuing to be delivered with considerable success.</p> <p>For example, a most significant and far reaching achievement that UNDP and SWCD have been instrumental in designing and executing has been the creation and establishment of a land use planning mechanism at village level (i.e. LUC), under the delegated authority the Village Council to address the tradition of jhum cultivation. Most importantly, the mechanism includes women in the membership of the LUC. Thus, women, who have no land holding rights in the State and may not participate in Village Council meetings, have been empowered to contribute to decision-making processes within the community and for the first time.</p> <p>The National Implementation Modality (NIM) is proving to be effective, with the SWCD as the Implementing Partner and strengthened by its more recent anchorage under the APC in late 2015. Likewise, the establishment of multi-sector coordination platforms at district level is finally underway to support the LUCs in implementing the actions in their LUPs.</p> <p style="text-align: right;">Further details for IA &amp; EA execution in <b>Section 3.2.6</b></p>
<i>Implementing Agency Execution</i>	<b>MS</b>	<p>Currently, the main shortcomings in project implementation for which responsibility lies largely within the Implementing Partner (DSWC), concern:</p> <ul style="list-style-type: none"> <li>▪ reduced implementation in 2015, due to unexpected delays in State government's release of funds, which has undermined consolidation on various fronts and especially with respect to Outcome 3;</li> <li>▪ limited time available to implement LUPs; and</li> <li>▪ continuing difficulties in communication between village LUCs and line departments through the district administrations in the absence of the above mentioned multi-sector coordination platforms.</li> </ul>
<i>Executing Agency Execution</i>	<b>MS</b>	<p>There are a number of fundamental weaknesses identified in MTE that have improved but still constrain effective delivery of project outputs and outcomes. Responsibility for such weaknesses lies largely with the Executing Agency (UNDP India) as these are more strategic (e.g. alignment of interventions) or process-oriented in nature (e.g. M&amp;E), or concern the quantity and quality of deliverables. Weaknesses relate to the following needs:</p> <ul style="list-style-type: none"> <li>▪ alignment and prioritisation of interventions within the overall project concept and its strategic delivery;</li> <li>▪ application and refinement of the M&amp;E strategy, as designed in the ProDoc, and use of the LogFrame as a tool to monitor delivery of outputs and outcomes in a strategic and focused way that will inform and underpin subsequent upscaling of SLEM jhum in agro-forestry systems; and</li> <li>▪ more focus and prioritisation on documenting the project's extensive, prolonged and invaluable experience in promoting and demonstrating the importance of improved jhum within Nagaland's socio-economic and environmental context. Several studies documenting the project's experience and knowledge gained have yet to be translated into local tribal dialects.</li> </ul>
<b>Outcomes</b> (using 6-point satisfaction scale)		
Overall Quality of Project Outcomes	<b>S</b>	<p>Rating based on separate assessment of project Outcomes and Outputs (<b>Table 3.4</b> and <b>Annexes 8-9</b>). In general, Outcome 1 well informed by high quality legal response to institutionalising PLUP into Nagaland's governance frameworks (Output 1.2); and Outcome 2 largely dependent on politically and technically sound design and implementation of land use planning process under the authority of LUCs conferred upon them by VCs, alongside a wide range of jhum and livelihood improvement initiatives (Outputs 1.3, 2.1-2.5). Insufficient time to</p>

		consolidate inputs to Outcome 3 due to 6-month stall in implementation in 2015.
<i>Relevance</i>	<b>R</b>	In principle, the objective of the project and its three outcomes remain as, if not more, relevant today as when the project was conceived, given the continuing loss in Nagaland's forest cover - 4% loss between 2005 and 2013, the highest rate of any State in India. State government's commitment to finance follow on phase in 2016 is further validation of project's relevance (see <b>Section 3.3.2</b> ).
<i>Effectiveness</i>	<b>MS</b>	Extent of achievement of objective and outcomes, or likelihood of being achieved: Delays or incompleteness of certain outputs have reduced extent of achievement of Outcomes 1-3 (see <b>Section 3.3.3</b> ).
<i>Efficiency</i>	<b>MS</b>	Cost effectiveness of delivery of results diluted by inappropriately targeted interventions during initial 30 months of project and by 6 months delay in implementation in 2015, raising ratio of costs: achievement of outcomes.
<b>Sustainability</b> (using 4-point likelihood scale)		
Overall Likelihood of Sustainability <sup>1</sup>	<b>ML</b>	
<i>Financial resources</i>	<b>ML</b>	There is considerable country ownership of this project, sufficient most probably to secure additional resources to mainstream the approach across other districts in Nagaland. UNDP will be providing technical person to resource applications. Government of Nagaland has committed INR 4.5 crores (approx. US\$ 680,000) for a follow up phase in 2016 during which efforts will need to focus on securing adequate resources to transition from piloting to mainstreaming improvements in jhum agroforestry through an ecosystem approach. Significant funds ring-fenced for NER states are available from North Eastern Council and Compensatory Afforestation Management Project Authority (CAMPA); other opportunities to explore include REDD+; North Eastern Electric Power Corporation (NEEPCO).
<i>Socio-economic</i>	<b>ML</b>	Concerns were raised in the MTE report (p. 31) that the project had been promoting a shift away from jhum agriculture/agroforestry, towards more sedentary and monetized production systems without safeguards. This could open the door to increasing encroachment and disenfranchisement of traditional peoples from the land base that has supported them for generations. Such a scenario may have arisen because the project lacked a transparent, robust set of criteria and screening process to ensure that interventions focused on promoting sustainable jhum, including safe food products. Without the benefit of land use planning, improved regulatory structures, and other safeguards designed to protect traditional values and address critical food security issues, there is a very real risk that the policies being pursued under this project will result in substantial, negative social impacts. It will be important to revisit and clarify the project's core vision and strategy at the outset of the transition phase, initially among implementing partners and then with the communities and other beneficiaries.
<i>Institutional framework and governance</i>	<b>L</b>	Project is in the process of strengthening institutional capacities and creating an enabling environment for improved jhum, through uniform land use policy approach; grounded in PLUP under the aegis of LUCs; and supported technically at district and community development block levels by multi-sectoral coordinating groups for jhum policies and management. (see <b>Section 3.2.6</b> )
<i>Environmental</i>	<b>ML</b>	Potential for environment is huge if SLEM for jhum conservation is upscaled through PLUP process under remit of LUC: vegetation cover will increase due to lengthening jhum cycle; forest cover will increase due to reservation of community forests and protection of gullies, river banks and ridge/hilltops from erosion; erosion from jhum cultivations reduced from contour bunding/trenches and crop yields increased (more carbon sequestered). Also, LUP policies will provide protection of cultivated jhum and fallow from livestock grazing, as required; chemical fertilizer free and pesticide free jhum lands producing 'safe'

<sup>1</sup> The 2012 Guidance for conducting terminal evaluations of UNDP-supported, GEF-financed projects states in the Rating Project Performance table on page 30: Overall likelihood of risks to sustainability. This is misleading as it is the likelihood of sustainability which is supposed to be assessed, not the likelihood of the risk occurring.

		food and increasing the potential for safe drinking water. Such a vision is achievable through local governance structure (VC) as it is sufficiently authoritative and well respected, provided technical and financial resources can be accessed via District's/Community Development Block's jhum-coordinating body.
<b>Impact</b> (using 3-point impact scale)		
<i>Environmental status improvement</i>	<b>M</b>	Examples: Improved forest cover on jhum land is 35,472 ha over the life of this project. This amounts to 2% of total area of the State, which is minimal in terms of impact. Impacts will become significant once upscaling begins at district level.
<i>Environmental stress reduction</i>	<b>M</b>	Examples: improved fallow management practices and soil/water conservation measures (contour bunding and trenching to capture soil/water run-off on hillsides) applied to 27,661 ha of jhum agro-forestry systems of target villages during project's life. Amounts to 1.7% of total area of the State, which is minimal in terms of impact. Impacts will be significant once upscaling begins at district level.
<i>Progress towards stress/status change</i>	<b>not known</b>	Improved forest cover over 35,472 ha jhum land in target villagers needs to be assessed within national context of 4% reduction in forest cover since 2005 (see <b>Section 3.3.6</b> ). There will have been some loss of forest cover within the 35,472 ha jhum land where forest cover improved from project intervention but extent not known (see <b>Figures 2.2</b> and <b>2.3</b> which illustrate forest losses and gains within same areas). More sophisticated monitoring techniques are required to detect net changes, such as Global Forest Watch type of approach (see <b>Table 2.2</b> ).
<b>Overall Project Results</b> (using 6-point satisfaction scale)	<b>S</b>	

**Satisfaction scale:** Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory

**Sustainability scale:** Likely, Moderately Likely, Moderately Unlikely, Unlikely

**Impact scale:** Significant, Minimal, Negligible

**Relevance scale:** Relevant; Not Relevant

Further conclusions can be drawn from an analysis of the strengths, weaknesses, opportunities and threats (SWOT) of the project and its implementation, the results of which are tabled below.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>▪ <b>Major cash</b> (INR 2.34 crore - US\$ 480,000) <b>and in-kind financing by Nagaland Government.</b> Further INR 4.5 crore (US\$ 730,000) committed to 2016 follow-on phase.</li> <li>▪ <b>Strong ownership:</b> by government at State and District levels; and Village Councils and Land Use Committees.</li> <li>▪ <b>Strong governance of jhums:</b> under-pinned by Village Councils and introduction of Land Use Plans under LUCs.</li> <li>▪ <b>Committed PMU,</b> supported well by Executing Agency (UNDP).</li> <li>▪ <b>Positive response to MTR</b> resulting in establishment of 40 LUCs, with &gt;37 LUPs prepared to date.</li> <li>▪ <b>Increased income generation</b> through a diversity of farming activities underway.</li> <li>▪ <b>Conservation policies applied:</b> forest reserves, erosion control, organic farming (niche markets).</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Project design</b> <ul style="list-style-type: none"> <li>– Values of agro-biodiversity overlooked.</li> <li>– Some indicator baselines absent at project inception.</li> </ul> </li> <li>▪ <b>Implementation</b> <ul style="list-style-type: none"> <li>– Totally inadequate Inception Report</li> <li>– Over 6 months implementation delay in 2015 due to lack of government funds.</li> <li>– Vision of 'improving sustainability of jhum' not consistently maintained and applied.</li> <li>– Criteria for selection of target villages and interventions not clearly defined and transparent.</li> <li>– Low awareness within project team at state and district levels of LogFrame and its critical monitoring role.</li> <li>– Proactive monitoring of outputs and LUP implementation absent.</li> </ul> </li> <li>▪ <b>Lack of coordination mechanism</b> between LUCs and district agencies.</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>▪ <b>Landscape approach:</b> informed by State strategy to enhance integrity/connectivity of remaining natural habitats within jhum lands.</li> <li>▪ <b>Agrobiodiversity</b> identified in order to conserve wild crop relatives and land races for future food and health</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Increasing human/wildlife conflict</b> <ul style="list-style-type: none"> <li>– Elephant attracted by ponds, crops</li> <li>– State landscape strategy absent</li> </ul> </li> <li>▪ <b>Climate change</b> <ul style="list-style-type: none"> <li>– Increasing frequency of extreme conditions</li> </ul> </li> </ul>

<p>security.</p> <ul style="list-style-type: none"> <li>▪ <b>Research and monitoring</b> of soil erosion, species diversity and ecosystem services to inform jhum policies and management.</li> <li>▪ <b>Participatory monitoring</b> by communities to inform LUPs.</li> <li>▪ <b>Production of 'safe' food</b> for home/community consumption and <b>niche markets</b>.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Emigration from villages</b> <ul style="list-style-type: none"> <li>– Decreasing labour to manage jhum</li> </ul> </li> <li>▪ <b>Sustainability</b> <ul style="list-style-type: none"> <li>– Lack of research and M&amp;E field trials on 'improving jhum'.</li> <li>– Lack of state policies to support LUP policies.</li> <li>– Lack of TA and financing mechanisms to sustain LUP implementation.</li> </ul> </li> </ul>
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The current status of the project is summarised as follows:

#### Status quo

- The project has successfully demonstrated, albeit not completely as yet with respect to replication and mainstreaming, that jhum lands can be managed in much improved, sustainable ways that benefit nature (biodiversity), environment (soil, water) and local livelihoods.
- Ownership of the project and its strategy is very strong at state, district and village levels. The Government of Nagaland has demonstrated significant ownership, as reflected in its previous and future financial commitments to the project and its successor, respectively, as have the district line departments and village communities in their engagement with project interventions.
- The project is recently anchored under the aegis of the Agriculture Production Commissioner and it has been agreed to establish multi-sector district jhum committees, chaired by the respective District Collectors, to provide a platform for coordinating the promotion and support of sustainable jhum agroforestry systems.
- Local governance by Village Councils is very strong and, through its Village Development Committees and Land Use Committees, provides a secure foundation for the development and implementation of jhum land use plans using participatory land use planning (PLUP) approaches.
- Land Use Committees (LUCs) are committed through their LUPs to jhum cultivation that is free from chemical fertilisers and pesticides: essentially, they recognise the importance of producing 'safe' food for their families and its higher market value, for which there are existing niche markets in Nagaland and especially across the border in Assam and more widely across India.

#### Transition recommendations: to follow up or reinforce initial benefits from the project

The Project has broken new ground in Nagaland, demonstrating to good effect how SLEM can be introduced to jhum lands in ways that reduce environmental impacts, maintain and enhance biodiversity and improve livelihoods. Much needs to be done **to consolidate** the Project's achievements, **complete** some unfinished business and **transition** towards mainstreaming the successes within the three target districts and more widely across other districts in Nagaland.

The Government of Nagaland has committed INR 4.5 crore (US\$ 730,000) to support a follow on phase of the project in 2016, providing much needed funds to consolidate experiences to data and plan for future replication over the next 12-18 months. UNDP also intends to provide some technical support during 2016. Priorities during this transition phase are considered to be as follows:

- 1) Continue to provide technical support to existing target villages to enable them to **monitor and deliver their LUPs and action plans**.
- 2) The **policy and regulatory framework in support of jhum agroforestry** is in the process of being established, following pioneering inputs from the project, and **needs to be fast**

- tracked by government** so that the enabling environment is in place ahead of mainstreaming.
- 3) Building on the establishment of multi-sector district platforms for improved planning and management of jhum lands for provisioning of ecosystem services to benefit local livelihoods, public welfare and biodiversity, **establish equivalent platforms at the level of Community Development Blocks on which LUCs are to be represented**. This completes the infrastructure necessary for subsequent mainstreaming of jhum agroforestry.
  - 4) **Comprehensively document the project's experience**, providing guidelines on the concept, policies and practices for improvement of jhum agroforestry systems within an ecosystem services and landscape context, and translate them into relevant local tribal dialects. Distribute widely using multi-media, including the project's website currently hosted by UNDP. (Note: this activity links to mainstreaming activities in **Section 4.3**.)
  - 5) **The role of selected farm schools/demonstrations (at least one per district) will be enhanced and include monitoring and experimental research functions** to complement their educational/demonstration role. Such research will validate and enhance improvements in jhum agroforestry through monitoring and experiment in the field (jhum lands). UNDP is encouraged to introduce reflective practice<sup>2</sup> into these farm schools, both for their own benefit and also for them to use as a tool with visiting LUCs and jhumias to train others in such good practice.
  - 6) **Pilot the organisation of producer companies**, one per district, to realise the high potential for marketing such products as ginger, cardamom, Naga chilli and vegetables<sup>3</sup>, as recommended in the 2014 *Market Development Assessment for Organic Agri-Horticultural Produce* commissioned by the project. Focus on securing higher returns by setting up sorting, processing, packaging and marketing (including branding) systems in consultation with the Central Institute of Horticulture (CIH), School of Agricultural Sciences (SASRD) and the Agricultural Department. (Note that this activity links to mainstreaming activities in **Section 4.3**.)
  - 7) **Establish participatory monitoring systems for village jhum lands** that are compatible with their respective LUPs and associated action plans. These should be based on a common framework with a view to being maintained in a centralised database system for maintaining an overview at block and district levels. The framework should link to the project's Logical Framework or certainly its successor for the transition framework, having first addressed weaknesses with some of the indicators, as identified in **Section 2.6** and **3.1.1**. (Note that this activity links to mainstreaming activities in **Section 4.3**.)
  - 8) **Pilot sustainable, community-based tourism that features agri-, eco- and cultural aspects of tourism**. For example, develop a circuit that might embrace Longjang and New Wokha villages, where elephants are regularly seen.
  - 9) **Collaborate with other projects to develop synergies**, such as the KFW-funded biodiversity project that is currently held up by some procedural delays in the central government. UNDP is in discussion with KFW to work out possible synergies. UNDP is also supporting the state government to access funds from IFAD to scale up the project's best practices.

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<sup>2</sup> Reflective practice is a process of individually or, as in this case, collectively stopping, to think about practice, consciously analyzing decision making and drawing on theory (knowledge) and relate this to what is being practiced. Most importantly, the process of reflective practice must be carried out in a non-threatening, nurturing environment in a spirit of learning from failures as well as successes.

<sup>3</sup> It is worth noting the suggestion from the PSC at its meeting with the TE team: that marketing and branding/certifying of safe/organic food products should start with dried foods as these are less perishable and, therefore, do not require special storage facilities.



- 10) **Work in partnership with other institutions and organisations**, such as:
  - i. Nagaland University to document traditional biodiversity-based knowledge, especially with reference to land use planning.
  - ii. Community-based youth organizations to facilitate land use planning and management.
  - iii. Various outreach and community-oriented based organisations; and strengthen existing partnerships as in the case of ATMA and KVK.
- 11) **Source new funding to mainstream the project objective across the State**. Potential opportunities include:
  - i. Working with UNDP to develop community-based REDD readiness programmes.
  - ii. Exploring major funds, such as those ring-fenced for NER states and available from North Eastern Council (NEC); National Mission for a Green India (GIM), under Gol's National Action Plan on Climate Change; Compensatory Afforestation Management Project Authority (CAMPA); and, for jhum villages, North Eastern Electric Power Corporation (NEEPCO).
  - iii. Bi-/multi-lateral funds (e.g. JICA for forest conservation, GEF for biodiversity and climate change, GEF Small Grants for LUPs and their implementation e.g. marketing safe food).
  - iv. Project Elephant – for specific wildlife conflict areas such as in Wokha.
  - v. Corporate Social Responsibility (CSR) funding from the private sector.
- 12) **Institutionalise the future initiative/programme** by, for example, registering it as a society (e.g. Meghalaya Rural Development Society).

#### **Mainstreaming recommendations: for future directions underlining main objectives**

The project has made substantial progress towards its overall goal (development objective): “*To promote sustainable land management and use of biodiversity as well as maintain the capacity of ecosystems to deliver goods and services while taking account of climate change.*” Its success to date has led to the State Government's commitment, with keen support from UNDP, to replicate this approach and mainstream it across Nagaland as an integral part of participatory land use planning. Government's commitment is fully supported and encouraged, based on the evidence-based findings of this TE.

Mainstreaming will be most effective if it follows a transition phase, already funded by the State Government, during which outstanding project activities are completed, outcomes are consolidated with regard to their respective outputs, certain new initiatives are piloted, and funding for future upscaling is secured, as outlined above.

Key considerations and directions for the future are identified as follows:

- 1) Lessons from the SLEM project are learnt and applied to the mainstreaming of SLEM. Key lessons are identified in **Section 4.4.1**. Most importantly, **mainstreaming must be focused solely on upscaling jhum agroforestry; funds and other resources should not be diverted into supporting settled agriculture** as has been observed in the present project because it undermines the concept and strategy of improving jhum and devalues what is being delivered. For this purpose, it is imperative that a consistent, transparent, criteria-based process is used to screen activities to be supported.
- 2) Jhum agroforestry mainstreaming will be supported by the infrastructure established by the project and consolidated during the transition. It will be anchored under the remit of the APC, and supported at District and Community Development Block levels by multi-sector platforms on jhum policy and management, with LUCs directly engaged at the Block level.
- 3) Land use planning for jhum lands will continue to be delivered by the LUCs, building on experience to date; and with more emphasis on watershed and landscape consideration within the context of the Block and District, ultimately feeding into and being informed by a

State Landscape Strategy that provides an overarching framework for conserving the State's biodiversity and agrobiodiversity, and embracing traditional values and practices.

- 4) Thus, the State Landscape Strategy will be developed concomitantly with the mainstreaming of jhum agroforestry. It will identify internationally, nationally and regionally important biodiversity and agro-biodiversity hotspots, and provide an overarching spatial framework for their conservation. It will also embrace agri-'cultural' practices. The Strategy will provide a framework for land use planning at district and block levels and, vice versa, LUPs consolidated at block and district levels will apply the Strategy and inform the fine-tuning of the Strategy.
- 5) Establish and maintain a centralised database and GIS on the status of jhum lands, based on participatory monitoring of LUPs by their respective LUCs and associated action plans initiated during the transition phase (**Section 4.2**). This will be accessible via the website for the programme (**Recommendation 11 below**).
- 6) The role of farm schools expanded during the transition phase (**Section 4.2**) will be mainstreamed across districts (at least one farm school per district).
- 7) Establish Farmer Producer Organisations (FPOs)<sup>4</sup> with support from the Ministry of Horticulture and Small Farmers Agribusiness Consortium (SFAC), as recommended in the 2014 *Market Development Assessment for Organic Agri-Horticultural Produce* commissioned by the project. Development of FPOs will be informed by the piloting of producer companies during the transition phase, as described in **Section 4.2**.
- 8) In parallel with the establishment of FPOs, engage with the organic certification programmes of the Government of Nagaland to explore opportunities for linking farmers directly to markets under an organic brand name to secure better prices for their produce. Meanwhile, promote a system of participatory guarantees of organic certification, whereby farmers self-certify organic production, as supported by the National Centre of Organic Agriculture and the Participatory Guarantee Systems Organic Council.
- 9) Mainstream sustainable, community-based tourism that features agri-, eco- and cultural aspects of tourism, as piloted during the transition phase.
- 10) Introduce sustainable waste management into communities that manage jhum lands, based on the principle that all agricultural and organic household waste should be returned (recycled) to jhum lands.
- 11) Develop a comprehensive website that is maintained by the institution managing the programme, which subsumes the existing project website hosted by UNDP.

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<sup>4</sup> FPOs facilitated by SFAC have a two-tier structure: groups of 15-20 farmers for Farmers' Interest Groups; and about 50 of these FIGs come together to establish an FPO.

## 1. INTRODUCTION

### 1.1 PURPOSE OF THE EVALUATION

The GEF Monitoring and Evaluation Policy<sup>5</sup> has two overarching objectives at the project level, namely: to promote accountability for the achievement of GEF objectives through the assessment of results, effectiveness, processes and performance of the partners involved in GEF activities; and to improve performance by the promotion of learning, feedback and knowledge sharing on results and lessons learned among the GEF and its partners, as a basis for decision-making on policies, strategies, programme management, projects and programmes.

Terminal evaluation (TE) is an integral part of the UNDP/GEF project cycle. Its purpose is to provide a comprehensive and systematic account of the performance of the completed project by assessing its design, process of implementation, achievements (outputs, outcomes, impacts and their sustainability) against project objectives endorsed by the GEF (including any agreed changes in the objectives during project implementation) and any other results.

Terminal evaluations have four complementary purposes:

- i. To promote accountability and transparency, and to assess and disclose levels of project accomplishments.
- ii. To capture and synthesize lessons that may help improve the selection, design and implementation of future GEF activities, as well as to suggest recommendations of replication of project successes.
- iii. To provide feedback on issues that are recurrent across the portfolio and need attention, and on improvements regarding previously identified issues.
- iv. To contribute to the GEF Evaluation Office databases for aggregation, analysis and reporting on effectiveness of GEF operations in achieving global environmental benefits and on the quality of monitoring and evaluation across the GEF system.

To this end, the terminal evaluation is intended to:

- i. enhance organizational and development learning;
- ii. enable informed decision-making; and
- iii. create the basis for replication of successful project outcomes.

### 1.2 SCOPE AND METHODOLOGY OF THE EVALUATION

#### 1.2.1 *Scope and context*

An independent team, comprising one international and one national consultant, undertook this TE of the full-size project on *Sustainable Land and Ecosystem Management in Shifting Cultivation Areas of Nagaland for Livelihood and Ecological Security*. The terms of reference (ToR), attached as **Annex 1**, are based on the UNDP guidance for TEs of GEF-financed projects.<sup>6</sup>

The TE has been undertaken in line with GEF principles concerning independence, credibility, utility, impartiality, transparency, disclosure, ethical, participation, competencies and capacities<sup>3</sup>. The consultants have signed the Evaluation Consultant Code of Conduct Agreement Form (**Annex 2**), thereby agreeing to abide by the UNEG Code of Conduct in the UN System (2008).

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<sup>5</sup> *The GEF Monitoring and Evaluation Policy 2010*, Evaluation Document November 2010, No. 4. 32 pp.

<sup>6</sup> *Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-Financed Projects*, UNDP Evaluation Office, 2012.

The evaluation process is independent of GEF, UNDP Ministry of Environment, Forests &, Climate Change (MoEFCC) – Government of India, Department of Soil & Water Conservation (DSWC) – Government of Nagaland, and project partners. The opinions and recommendations in this TE are those of the Evaluation Team and do not necessarily reflect the position of GEF, UNDP, or any of the project stakeholders. Once accepted, the TE becomes a recognised and publicly accessible component of the project's documentation.

This TE follows in the wake of a Mid-Term Evaluation (MTE) conducted in June 2012, during month 31 of the project's intended 60 months duration, and completed in August 2012<sup>7</sup>. Key findings of the MTE are summarised in **Section 2.7**. The project's management response to the MTE recommendations, attached as **Annex 3**, and the way in which implementation has been adapted to address weaknesses and reinforce benefits identified in the MTE is an important consideration for this TE.

The TE was carried out between late-September and December 2015. The field mission comprised 13 days in-country (2-14 November inclusive) meeting and interviewing implementing partners, contractors, beneficiaries and other key stakeholders in New Delhi, Kohima and in the field at a selection of project sites in the three target districts of Nagaland (Mon, Mokokchung and Wokha). Details of the itinerary and schedule of meetings with stakeholders, including representatives from 18 of the 40 target villages, are given in **Annex 4**.

### **1.2.2 Approach and methodology**

Terminal evaluation is an evidence-based assessment of a project's concept and design, its implementation and its outputs, outcomes and impacts as documented in the Annual Progress Reviews (APRs), Project Implementation Reports (PIRs) and Sustainable Results Framework (SRF), which provides indicators and targets for measuring success in implementation. Evidence was gathered by reviewing documents, interviewing key, selected stakeholders, visiting project sites and from other ad hoc observations. A list of documents reviewed is attached as **Annex 5**.

The evaluation commenced with a desk review of relevant project documents. This informed the itinerary and scheduling of the mission, which was planned in close cooperation with the UNDP Country Office who, in turn, liaised with the Project Management Unit (PMU). The evaluators specified that all target districts should be visited in order to be able to appreciate the range of contexts within which the project had been implemented. This also meant that findings would be more readily comparable with those of the MTR, which had covered the three target districts. Subject to a comprehensive representation of project interventions being visited, the selection of target villages was largely left to the PMU because they were best qualified to work out the logistics in relation to road conditions, travel times and availability of stakeholders. This preparatory phase culminated with an Inception Report that included the planned itinerary, identified stakeholders to be met, described the approach and provided a series of templates for completion by the PMU.

During the field mission, meetings were held with government implementing partners and associated outreach agencies at state and district levels, consultants and with members of 17 of the 40 target villages. Five target villages were visited in Mon District, three in Mokokchung District (where representatives from five other target villages were also met) and four from Wokha District. communities (including Village Council and Village Development Board members and self-help groups). Project villages took 2-3 hours to visit and involved meeting Land Use Committee (LUC) members, as a priority, and visiting their demonstration sites. LUC members invariably included a few Village Council representatives. Focus group discussions were held with LUC and other community members, including representatives of self help

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<sup>7</sup> Mid-Term Review of Project entitled "Strengthening Sustainable Forest Management and Bio-Energy Markets to Promote Environmental Sustainability and to Reduce Greenhouse Gas Emissions in Cambodia. Sept. 2013.

groups, the *Gaon Bura* and *Putu Menden*, and very often the village pastor. Women were present in all but one of these community meetings (New Wokha Village).

Interviews with stakeholder groups were undertaken in as participatory a manner as possible and facilitated sensitively in order to gain and maintain their interest and build consensus. The confidence of individual household beneficiaries was gained by 'hearing their story' and then engaging with it constructively. Evidence was validated by cross-checking (triangulation) in as many different ways as possible. This was achieved by comparing responses to the same interview question between a sample of informants within the same and different stakeholder groups, as well as using other sources of information (e.g. reports) and, where appropriate and practicable, reinforced with direct observation of project interventions.

Interviews with implementing partners and consultants were usually held on a one-to-one basis and semi-structured around the evaluation questions framed in **Annex 6**. Those with village communities were conducted in groups and framed by a simple set of three questions relating to the project interventions in which the participants were engaged, specifically:

- What have been your main achievements?
- What have been your main challenges (difficulties)?
- What would you do differently in future (i.e. lessons learned)?

A fourth consideration was income generation and the extent (percentage) to which it had increased (or decreased) as a result of specific interventions during the life of the project. Project beneficiaries were invited to mark on a flip chart the approximate percentage increase (or decrease) change in their household income since their engagement with the project (decrease, 0-25%, 26-50%, 51-75%, 76-100%, >100%).

Meetings with village communities were usually held in plenary, using a facilitated, round-table forum, in the case of there being less than approximately 10 participants. Larger gatherings were split up into groups of about 6-8 persons following an initial introduction, each group facilitated by a member of the project's respective District PMU. Care was taken to ensure that women, who tended to be fewer in number, were distributed among the different groups and contributed by actively soliciting their views. Findings from the group discussions were then shared in a final plenary session, with reporting back shared between men and women. Following the community meetings, the evaluators followed up with individual participants at their discretion. Feedback from these meetings is summarised in **Annex 7**.

PMU staff and district coordinators maintained a low profile during community meetings, tending to be absent unless they were required by the Evaluators as resource persons, translators and/or facilitators of group discussions.

Key aspects of the evaluation approach included:

- Planning the evaluation as a team in consultation UNDP and PMU (Inception Report).
- Identifying the project's key stakeholders and ensuring that a full range of views was solicited in the interviews with implementing partners and beneficiaries.
- Cohesive, integrated working together by the International and National Consultant, to maximise the effective use of their time and ensure that the achievements and short-comings identified by stakeholders were consistently acknowledged and, where appropriate, challenged.
- Building consensus among the different stakeholders about the project's success, challenges (short-comings) and lessons learnt.

- Basing findings on evidence that is considered to be credible, reliable and useful. This is particularly important with respect to assessing changes in baseline indicators and evaluating the extent to which targets have been met, as reflected in the SRF.
- Taking into account changes made and progress achieved as a consequence of the MTE.

Preliminary findings were shared at a meeting of the Project Steering Committee (PSC), chaired by the Chief Secretary, Government of Nagaland, Shri Pankaj Kumar IAS, on 13 November 2015. PSC members included the Executing and Implementing agencies (UNDP and DSWC), together with their partners. This provided an important opportunity to validate these findings in an open, objective manner and generate further consensus through discussion and additional feedback before committing them to paper. It was followed up by a meeting with the Ministry of Environment, Forests and Climate Change (MOEFCC) on 16 November.

In addition to a descriptive assessment, project achievements (outputs and outcomes), sustainability of outcomes, monitoring and evaluation system (design and application), were rated with respect to **either** the level of satisfaction achieved **or** the likelihood of various dimensions of the outcomes being sustainable by the end of the project. Also, three criteria (relevance, effectiveness and efficiency) were used, as appropriate, to evaluate the levels of achievement attained with respect to the project objective and outcomes in accordance with GEF requirements. These criteria are defined as follows<sup>8</sup>:

- **Effectiveness** is the extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.
- **Efficiency** is a measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.
- **Relevance** is the extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies.

The different scales for rating various criteria are shown in **Table 1.1**, and further defined in **Table 1.2** (level of satisfaction scale) and **Table 1.3** (likelihood of sustainability scale). Sustainability concerns the extent to which environmental, social and economic benefits are likely to continue from a particular project or program after GEF assistance/external assistance has ended<sup>8</sup>.

**Table 1.1** Ratings and their scales for different evaluation criteria<sup>8</sup>

Outcomes, Effectiveness, Efficiency, M&E, I&E Execution	Sustainability	Relevance
<b>6. Highly Satisfactory (HS):</b> no shortcomings <b>5. Satisfactory (S):</b> minor shortcomings <b>4 Moderately Satisfactory (MS):</b> moderate shortcomings <b>3. Moderately Unsatisfactory (MU):</b> significant shortcomings <b>2. Unsatisfactory (U):</b> major shortcomings <b>1. Highly Unsatisfactory (HU):</b> severe shortcomings	<b>4. Likely (L):</b> negligible risks to sustainability <b>3. Moderately Likely (ML):</b> moderate risks <b>2. Moderately Unlikely (MU):</b> significant risks <b>1. Unlikely (U):</b> severe risks	<b>2. Relevant (R)</b> <b>1. Not relevant (NR)</b>
	<b>Additional ratings if relevant</b>	<b>Impact</b>
	<b>Not Applicable (N/A)</b> <b>Unable to Assess (U/A)</b>	<b>3. Significant (S)</b> <b>2. Minimal (M)</b> <b>1. Negligible (N)</b>

<sup>8</sup> *Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-Financed Projects*, UNDP Evaluation Office, 2012

The project objective and outcomes were rated according to their respective outputs (**Table 3.4**), based on evidence provided by PMU and assessed by the evaluators (**Annex 8**), and by means of performance indicators (**Annex 9**) using the 6-point satisfaction scale (**Table 1.2**). Other aspects of performance, such as effectiveness, efficiency, relevance and sustainability, were assessed using the full set of ratings shown in **Table 1.1**.

**Table 1.2** Definitions of ratings of levels of satisfaction (*Guidelines for GEF Agencies in Conducting Terminal Evaluations*, 2008)

Rating	Definition
<b>Highly Satisfactory (HS)</b>	The project had <b>no shortcomings</b> in the achievement of its objectives in terms of relevance, effectiveness, or efficiency.
<b>Satisfactory (S)</b>	The project had <b>minor shortcomings</b> in the achievement of its objectives in terms of relevance, effectiveness, or efficiency.
<b>Moderately Satisfactory (MS)</b>	The project had <b>moderate shortcomings</b> in the achievement of its objectives in terms of relevance, effectiveness, or efficiency.
<b>Moderately Unsatisfactory (MU)</b>	The project had <b>significant shortcomings</b> in the achievement of its objectives in terms of relevance, effectiveness, or efficiency.
<b>Unsatisfactory (U)</b>	The project had <b>major shortcomings</b> in the achievement of its objectives in terms of relevance, effectiveness, or efficiency.
<b>Highly Unsatisfactory (U)</b>	The project had <b>severe shortcomings</b> in the achievement of its objectives in terms of relevance, effectiveness, or efficiency.

**Table 1.3** Definitions of levels of risk to sustainability of Project outcomes (*UNDP Evaluation Guidance for GEF-Financed Projects*, 2012)

Rating	Definition
<b>Likely (L)</b>	<b>Negligible risks</b> to sustainability, with key outcomes expected to continue into the foreseeable future.
<b>Moderately Likely (ML)</b>	<b>Moderate risks</b> , but expectations that at least some outcomes will be sustained.
<b>Moderately Unlikely (MU)</b>	<b>Substantial risk</b> that key outcomes will not carry on after project closure, although some outputs and activities should carry on.
<b>Unlikely (U)</b>	<b>Severe risk</b> that project outcomes as well as key outputs will not be sustained.

UNDP CO was provided with a draft report in early January 2016 to share with the Implementing Agency and UNDP Regional Office and the report was subsequently finalised after receiving feedback in February 2016. The audit trail for the evaluators' response to these review comments can be found in **Annex 10**.

### 1.3 STRUCTURE OF THE EVALUATION REPORT

The structure of this Terminal Evaluation report follows the latest UNDP guidance for terminal evaluation of GEF-Financed Projects<sup>4</sup> and follows Annex F of the UNDP template for Terminal Evaluation Terms of Reference. This first introductory chapter describes the purpose of evaluation and methods used. Chapter 2 describes the project and its objectives, within the development context of Nagaland. Findings from the evaluation are presented in Chapter 3, focusing in turn on the formulation, implementation and results (outputs, outcomes and impacts) of the project. Aspects of each of these three components of the project cycle were assessed using the rating systems outlined above in **Table 1.1**. Conclusions are drawn in Chapter 4,

highlighting the strengths, weaknesses and outcomes of the project. Lessons learned from the experience are identified, along with practical, feasible recommendations that build on the project's interventions. These are linked to follow-on opportunities arising from the Government of Nagaland's commitment to continue to support this project in the immediate future (2016), while developing a strategy and securing resources to mainstream the SLEM approach to jhum improvement over the long term.



## 2. PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT

### 2.1 PROJECT START AND DURATION

Implementation of this UNDP/GEF full-size project entitled *Sustainable Land and Ecosystem Management in Shifting Cultivation Areas of Nagaland for Livelihood and Ecological Security* commenced on 20 July 2009, following which an orientation meeting with line agencies at state and district levels was held on 28 August 2009. The project was formally launched at a ceremony on 22 October 2009. Originally planned as a five-year project, it was extended on a no cost basis to 31 December 2015 in response to the recommendations of the MTR.

Project milestones are listed in **Table 2.1**. The inception phase continued through to 2010, during which time a project head office was established in Kohima and project district offices in each of the three districts, Mon, Mokokchung and Wokha, A Project Coordinator was appointed in the 3<sup>rd</sup> quarter of 2010 to head up the PMU. Thus, the project took over one year to become fully operational.

**Table 2.1** Project milestones and their dates

	Milestone	Date
1	Revised project concept certified as meeting GEF criteria for PIF purposes	November 2007
2	Local Project Appraisal Committee meeting/GEF Operational Focal Point letter of endorsement	April 2009
3	Approval of full-size project (FSP) Project Document	May 2009
4	GEFSEC approval/CEO endorsement	May 2009
5	Delegation of authority from GEFSEC to UNDP India	June 2009
6	Project start date (Project Document signed by Government of Nagaland and UNDP CO)	20 July 2009
7	Project launched (workshop)	22 October 2009
8	Inception Report	January 2010
9	Actual field implementation starts	June 2010
10	Mid-Term Review	August 2012
11	18 month no-cost project extension approved by Project Board and UNDP	July 2013
12	Terminal Evaluation	December 2015
13	Proposed project closing date	June 2014
14	Actual project closing date	31 December 2015

### 2.2 PROBLEMS THAT THE PROJECT SOUGHT TO ADDRESS

#### 2.2.1 Environmental Context

The North Eastern Region (NER) of India, within which lies Nagaland, is endowed with high plant and animal species diversity and endemism due to its location that embraces the confluence of the Indo-China, Indo-Myanmar and Indian biogeographical zones. It forms part of the Indo-Burma hotspot, one of 34 globally important centres of biodiversity<sup>9</sup>. Much of the NER lies within the Naga-Manipuri-Chin Hills Moist Forests, one of the Global 200 ecoregions<sup>10</sup> prioritized by WWF for global conservation on account of being the most outstanding and representative areas of biodiversity remaining on Earth<sup>11</sup> (**Figure 2.1**). This Global 200

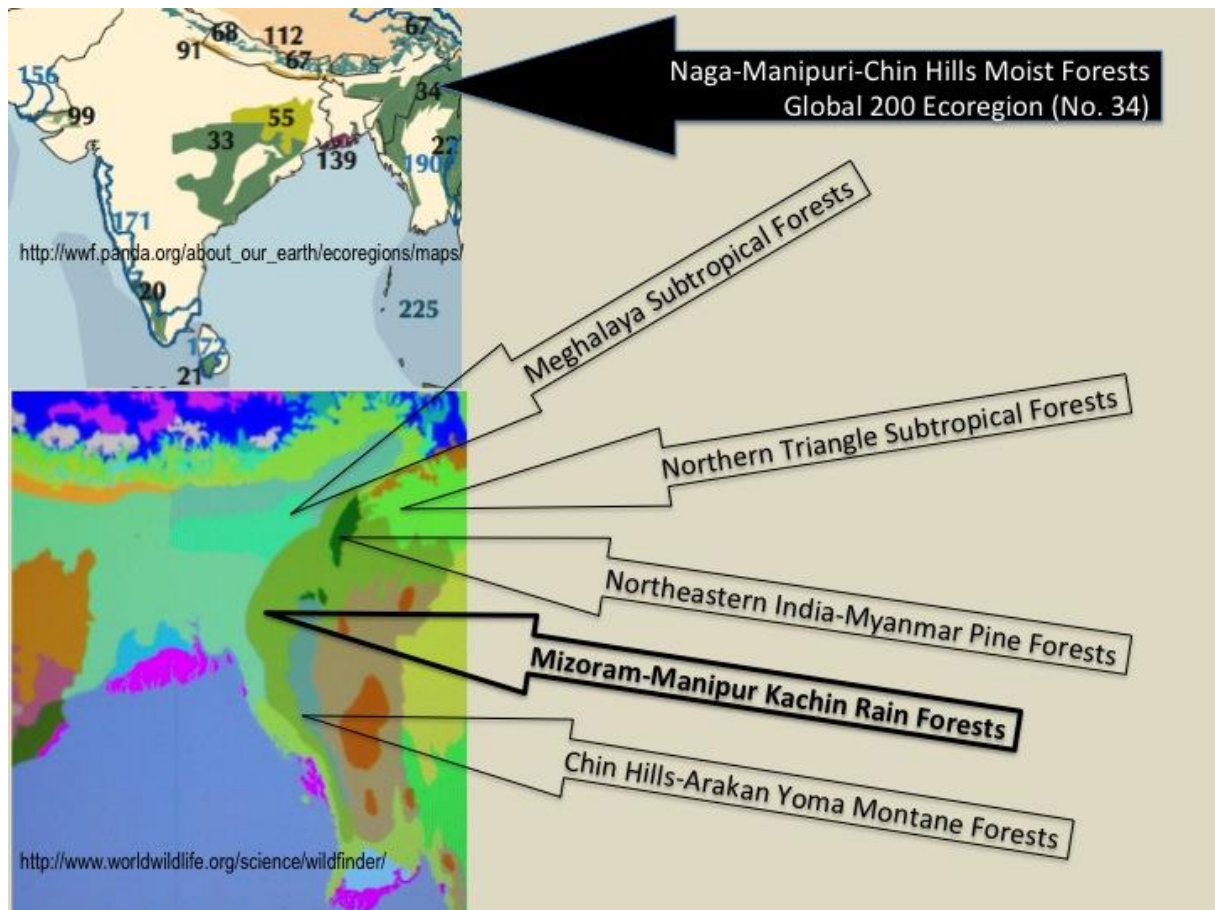
<sup>9</sup> Mittermeier, R.A., Gil, P.R., Hoffman, M., Pilgrim, J., Brooks, T., Mittermeier, C.G., Lamoreux, J. and da Fonseca, G.A.B (2005). *Hotspots revisited: Earth's biologically richest and most threatened terrestrial ecoregions*. Conservation International, Washington D.C. 392 pp.

<sup>10</sup> Ecoregions, of which there are 867 such terrestrial units, are defined as "relatively large units of land containing a distinct assemblage of natural communities." (Olsen et al., 2001, *Terrestrial Ecosystems of the World. Bioscience* 51 (11): 933-938)

<sup>11</sup> Olson, David M. and Eric Dinerstein, 2002. The Global 200: Priority ecoregions for global conservation. *Annals*

ecoregion, which comprises five terrestrial ecoregions<sup>12</sup> (**Figure 2.1**), is classified as *vulnerable* with respect to its ability to maintain viable species populations, to sustain ecological processes, and to be responsive to short- and long-term environmental changes.

Most of Nagaland falls within the Mizoram-Manipur- Kachin Rain Forests ecoregion, which represents the semi-evergreen submontane rain forests that extend from the mid-ranges of the Arakan Yoma and Chin Hills north into the Chittagong Hills of Bangladesh, the Mizo and Naga hills along the Myanmar-Indian border, and into the northern hills of Myanmar. This ecoregion still retains almost half of its natural habitat and its avifaunal diversity is second to none, with 580 species<sup>13</sup>. This is the highest number of bird species recorded within any ecoregion completely within the Indo-Pacific region.



**Figure 2.1** Nagaland lies within a Global 200 Ecoregion, Naga-Manipuri-Chin Hills Moist Forests (**top**) that comprises five ecoregions (**bottom**) of which the Mizoram-Manipur Kachin Rain Forests ecoregion encompasses most of the State.

Nagaland covers a total land area of 16,579 km<sup>2</sup>, with altitudes ranging from 100 m to 3,840 m, and experiences sub-temperate to sub-tropical climatic conditions. Its topography, isolated geographical location and range in climatic conditions have contributed to the State's unique ecosystems that are home to a highly diverse flora and fauna, including numerous endemic and threatened species. Flowering plants, for example, total 2,431 species: that amounts to 13.6%

of the Missouri Botanical Garden 89: 119-224.

<sup>12</sup>The five terrestrial ecoregions are: Northern Triangle subtropical forests; Mizoram-Manipur-Kachin rain forests; Chin Hills-Arakan Yoma montane forests; Meghalaya subtropical forests; and NE India-Myanmar pine forests (Source: [http://wwf.panda.org/about\\_our\\_earth/ecoregions/naga\\_manipuri\\_chin\\_moist\\_forests.cfm](http://wwf.panda.org/about_our_earth/ecoregions/naga_manipuri_chin_moist_forests.cfm))

<sup>13</sup>Further details about the biodiversity importance of this ecoregion can be found at: <http://www.worldwildlife.org/ecoregions/im0131>.

of the angiosperm flora of India, estimated at 17,926 species<sup>14</sup>, for a state that occupies just 0.5% of the Republic's total area (3,287,590 km<sup>2</sup>). Nagaland's agrobiodiversity (both wild and domesticated varieties of plants, including fruits) is also among the most diverse in the region<sup>15</sup>.

Apart from its intrinsic values, Nagaland's biodiversity provides a wealth of ecosystem services to the state, its near neighbours and east Indian parts of the subcontinent. Its watersheds are critical catchments that regulate hydrological flows to some of the world's most densely populated agricultural lands and cities. Other important services include: provision of food, fresh water, fuel, wood and non-timber forest products (NTFPs); culture services for the tribal communities living in close relationship with nature and its forests; and supporting services such as soil formation, nutrient cycling and primary production. Carbon sequestration is also likely to become an increasingly important service.

### 2.2.2 Socioeconomic Context

The State of Nagaland was inaugurated on 1 December 1963 as the 16<sup>th</sup> State of the Indian Union. It comprises 11 administrative districts, inhabited by 16 major tribes along with other sub-tribes. Each tribe is linguistically and customarily distinct. Land ownership is determined by tradition, according to customary laws that remain uncodified but are effectively applied and interpreted by traditional Village Councils in the event of any dispute. In practice, land is owned either by the entire village community, or by a clan within the village, or by individuals.

The population of Nagaland is estimated to be 1.979 million (2011 Census), which amounts to a 0.58% decline since the 2001 Census (1.989 million). This represents a very significant change as the population increased by 65% during the decade prior to 2001<sup>16</sup>. While the number of females increased by about 11,000, males decreased by over 22,000 during the decade 2001-2011. However, there has been a 28.9% increase in the urban population over this period, reflecting the movement of people (especially youth) from rural areas in search of employment and related opportunities.

According to the Project Document, 32.67% of Nagaland's population live below the poverty line. A more recent estimate from the Planning Commission, Government of India (2012) is 18.88% of Nagaland's population living below the poverty line, which is less than the national average of 21.92% population<sup>17</sup>. India's official poverty line in 2014 was INR 972 (US\$ 15) per month in rural areas and INR 1407 (US \$21) per month in cities. Nagaland ranks 15<sup>th</sup> for literacy at 79.6% (82.8% for males and 76.1% for women)<sup>18</sup>.

According to the Project Document, 73% of the population is engaged in agriculture and, being largely tribal, the production system retains traditional proto-agricultural practices of assisting the growth of wild plants. Shifting cultivation, locally known as *jhum* cultivation, continues to dominate agricultural practices in Nagaland and covers approximately 917,087 hectares (55% of total land area). The annual cultivated area under *jhum* is 131,349 hectares (8% of total land area), which alone accounts for 59% of the total net cultivated area. Reference in the Project Document to 0.45 million families practicing shifting cultivation are dated; the latest figure is 116,046 families Error! Bookmark not defined.

The basic principle of *jhum* cultivation is the alternation of short cropping phases (*usually of one or two years duration*) with phases of natural (*or slightly modified*) fallow vegetation. Yield is thus managed on a long-term basis, rather than maximizing gains over the short-term. *Jhum* systems traditionally maintain diversity through mixed cropping, the perennial shrubs and trees

<sup>14</sup>Status of plant diversity in India: an overview. W. Arsdason & P. Lakshminarasimhan, Botanical Survey of India. [http://www.bsienviis.nic.in/Database/Status\\_of\\_Plant\\_Diversity\\_in\\_India\\_17566.aspx](http://www.bsienviis.nic.in/Database/Status_of_Plant_Diversity_in_India_17566.aspx) (last updated 28.12.2015)

<sup>15</sup><http://www.plantauthority.gov.in/hotspots.htm>

<sup>16</sup><http://www.census2011.co.in/census/state/nagaland.html>

<sup>17</sup><https://www.rbi.org.in/scripts/PublicationsView.aspx?id=16603>

<sup>18</sup><http://www.census2011.co.in/literacy.php>

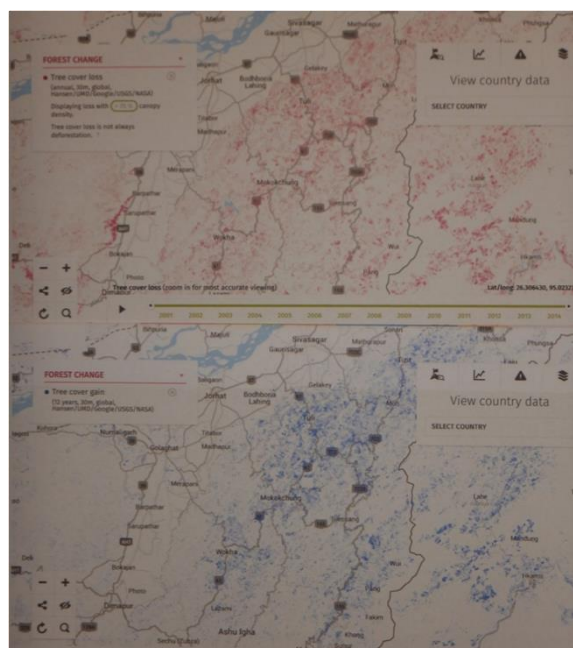
being separated in time and confined to the fallow regenerative phase of the forest that is essentially an agro-forestry system. Here, regulating ecosystem services such as nutrient cycling and pest population dynamics are controlled both through the complex cropping and the fallow phases.

Farmers also raise livestock, mainly pigs, cattle and *Mithun* (*Bos frontalis*), a semi-domesticated wild cattle. Livestock are allowed to graze freely in village lands where villagers have grazing rights, subject to Village Council approval. Uncontrolled grazing is an increasing problem.

Forests, Nagaland's most valuable natural resource, cover 13,044 km<sup>2</sup> (78.68% of total land area) but their rate of decline is the highest of any state and amounts to 4% between 2005 and 2013 (see India State of Forest Reports ). More recent forest cover data for Nagaland from Global Forest Watch<sup>19</sup> show that the amount of tree cover gained between 2001 and 2014 has been exceeded two to three times by the amount of tree cover lost for different canopy densities (Table 2.2). While some of these losses and gains must be attributable to the jhum cycle of clearing forest, cultivating the cleared land for one or two years and then leaving it fallow for the forest to regenerate, there has been a net loss in tree cover over the last decade and more.

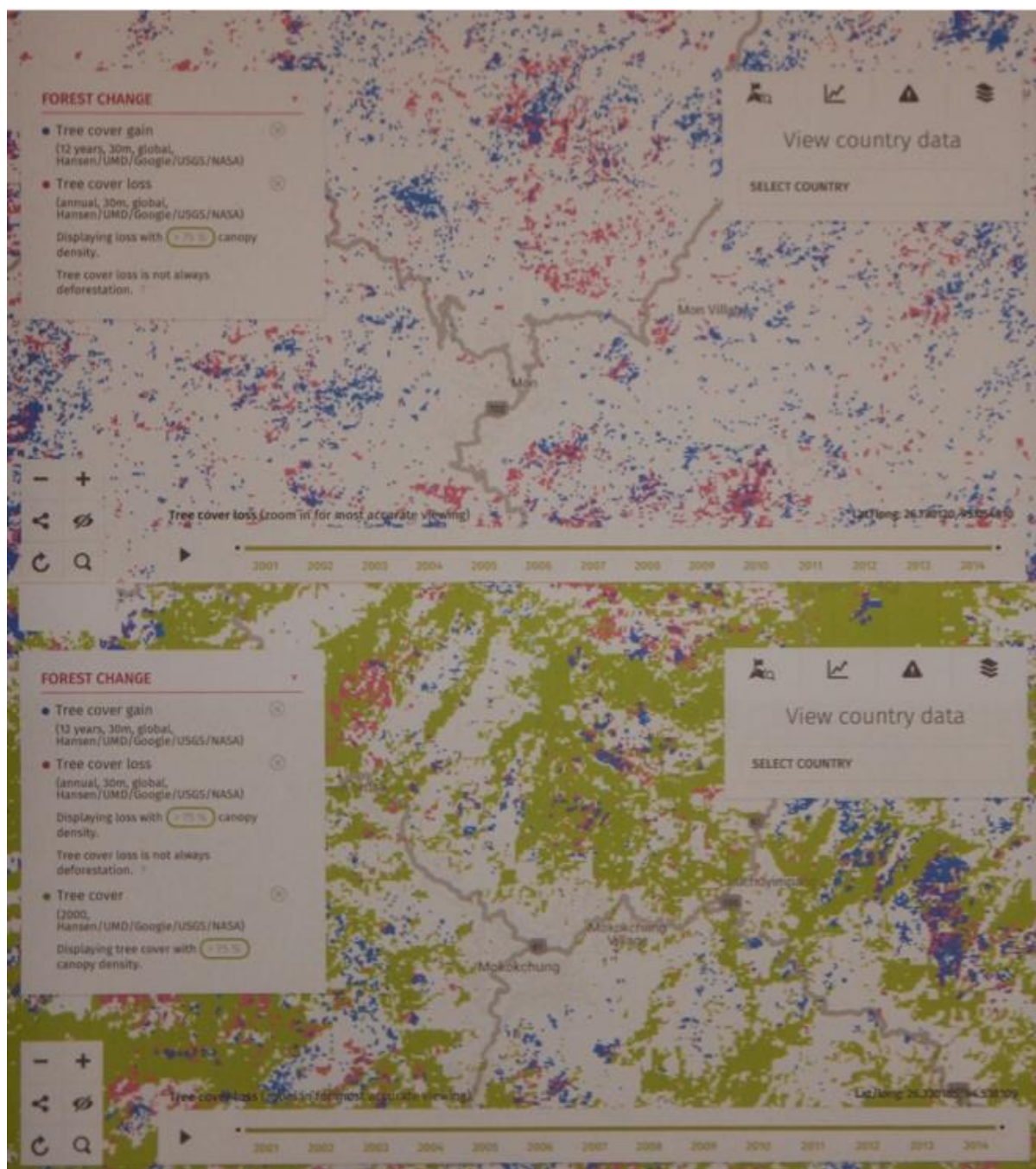
**Table 2.2** Losses and gains in Nagaland's tree cover between 2001 and 2014 for different densities of tree canopy, using tree cover in 2000 as the baseline. (Source: Global Forest Watch)

Tree canopy density	Tree cover, 2000	Tree cover, 2000	Tree cover loss	Tree cover gain
75%	939,000 ha	57%	90,301 ha	43,967 ha
50%	1,000,000 ha	75%	115,621 ha	43,967 ha
30%	1,000,000 ha	79%	122,222 ha	43,967 ha
25%	1,000,000 ha	80%	123,115 ha	43,967 ha
10%	1,000,000 ha	82%	125,799 ha	43,967 ha



**Figure 2.2** Losses in 2001-2014 (**top**) and gains in 2001-2012 (**bottom**) of tree cover with >75% canopy density in Nagaland. (Source: <http://www.globalforestwatch.org/country/IND/25#>)

<sup>19</sup><http://www.globalforestwatch.org/country/IND/25#>



**Figure 2.3** Losses in 2001-2014 and gains in 2001-2012 of tree cover having >75% canopy density in the vicinity of Mon Village (**top**) and Mokokchung Village (**bottom**). The 2000 forest cover layer is also shown in the bottom map. (Source: <http://www.globalforestwatch.org/country/IND/25#>)

Forest losses and gains are distributed throughout the State, as evident from the maps in **Figures 2.2** and **2.3**, and often in juxtaposition as would be expected from the jhum cycle of cutting forest, cultivating crops and prolonged fallow periods to allow forests to regenerate. Some patches of forest having >75% canopy density have remained relatively less disturbed during the last decade or so, as evident from the map of Mokokchung (**Figure 2.3**).

Very little of Nagaland's biodiversity is formally conserved within protected areas. The State has one national park and three wildlife sanctuaries, totalling 22,236 ha (1.3% of total land area). These are Intanki National Park (20,202 ha) and Fakim (641 ha), Puliebadze (923 ha) and Rangapahar (470 ha) wildlife sanctuaries. Rangapahar houses the National Zoological Park.

### **2.2.3 Drivers of deforestation**

Jhum cultivation is identified in the Project Document as a key direct driver of degradation of forest ecosystems in Nagaland and throughout the NER, and the associated loss of ecosystem services. While jhum is the socially preferred practice in the region and often the most suitable form of agriculture for the agro-climatic conditions and steep terrain, changing socio-economic scenarios are resulting in an increasing area of land being brought under jhum within a shortened rotational cycle. At any given time, it is estimated that one-sixth of total jhum land is under cultivation. The jhum cycle that was once 14 years or more has been reduced to 6 years or less in many places, leaving insufficient time for regeneration and resulting in accelerated soil erosion and disruption of the hydrology of the area. It is estimated that 70% of topsoil loss, land degradation and water source deterioration is attributable to the practice of shifting cultivation. This system of cultivation coupled with high rainfall causes heavy erosion to the extent of removing up to 40 tonnes of top soil per hectare per year.

The shortened jhum cycle remains inadequate to allow the restoration of soil fertility before the land is again cultivated, with the result that crop yields have successively declined over time. Families that were once almost self sufficient in food grains are unable to produce enough food to sustain themselves for even a few months of the year. Thus, the major challenge continuing to face Nagaland and the rest of the NER, in particular, is to find workable strategies within the current context, cultural ethos and social fabric of the indigenous communities in order that land use practices and production systems can meet the changing lifestyles of a population that is beginning to migrate towards urban centres, while sustaining the integrity and ecological functioning of ecosystems upon which livelihoods in rural area are largely dependent.

The Government of Nagaland, through its centrally sponsored and other schemes including some supported by donors, has looked at various aspects of jhum cultivation including: intensification of jhum and extending the cropping season; promoting terraced cultivation to reduce jhum; community-based forestry; promotion of integrated watershed management including construction of contour bunds, terraces and water harvesting structures; agro-forestry based intensification of jhum; and promotion of community based natural resource management. Further details can be found in the Project Document. While the main thrust of government efforts has been to wean tribal families away from the practice of jhum by providing assets for settled agriculture, little progress has been made and the lesson has emerged that: "... if the adverse impacts of jhum on land and ecosystems are to be effectively mitigated, the emphasis needs to be on controlling distortions or retrogressive developments rather than on controlling shifting agriculture itself."

The project follows in the wake of the Nagaland Empowerment to the People through Economic Development (NEPED) project, 1995-2005 in two phases, which focused on jhum improvement and promoted participatory land use planning. The latter proved to be a major success during the last two years of the project.

### **2.2.4 Underlying problem and resolution of the barriers to its solution**

The Project Document identifies the following barriers to promoting SLEM on jhum lands:

- **Institutional barriers:** There is a need to better integrate local knowledge and technologies to improve jhum cultivation into institutional mandates of the concerned departments (Agriculture, Land Resources, Soil and Water Conservation) and, thereby, provide an enabling environment for jhum cultivation, as government programs and extension services are largely geared towards supporting settled agriculture<sup>20</sup>.

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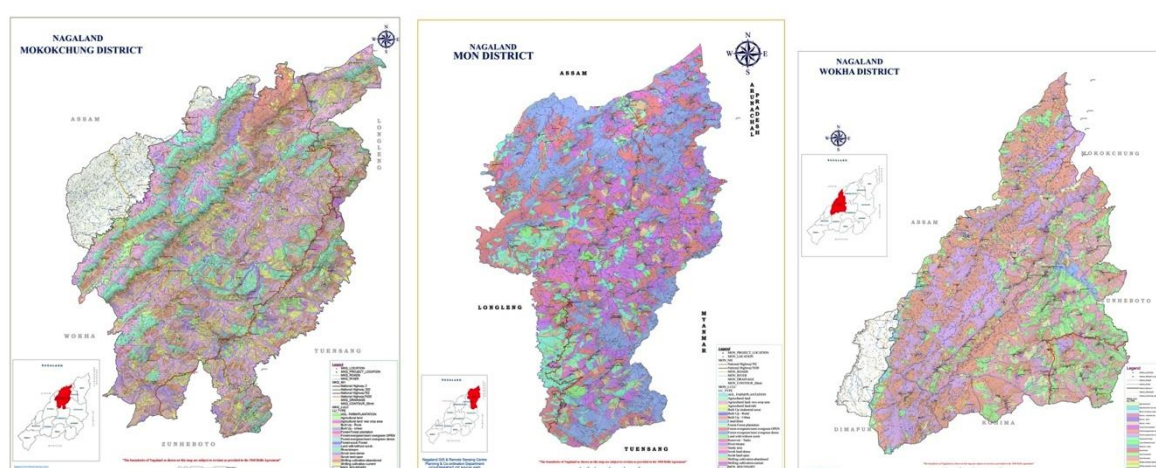
<sup>20</sup>According to the Project Document, the total area of the NER is 25.5 million ha, of which some 3 million ha is under settled agriculture and about 2.7 million ha is under jhum.

- **Barriers imposed by tenure insecurity and related difficulties in obtaining credit:** Jhum cultivators do not have adequate security of land tenure for both the agricultural and fallow phases. Jhum land comes under the category of common village land, which does not belong to any individual but is owned by the community and regulated through Village Councils. Existing common property regimes need to be strengthened, to avoid capture of the land and improved fallows by elites from within the communities. Also, credit facilities need to be made accessible to enable farmers to invest in diversification, product development and exploring new markets.
- **Capacity barriers:** At the community-level, customary institutions and farmers do not have the ability to undertake community-based land use planning that promotes a mosaic of different land uses that together can meet livelihood needs and also maintain ecosystem health. Local governance of community-owned natural resources needs to be strengthened so that it can support a mosaic of different land uses. Similarly, state department staff and extension agents do not have the experience and skills to work with farmers to promote improved, sustainable jhum practices as part of a SLEM strategy.

It is also important to note that while an increasing population (64%) in the decade prior to 2001 may have been a significant driver of conversion of forest to jhum lands, Nagaland's population appears to have stabilized and rural communities are now experiencing difficulty on finding enough labour to practice their jhum.

Thus, in the wake of past experience outlined in the previous **Section 2.2.3**, the emphasis is now on improving jhum by integrating soil and water conservation measures this traditional practice that is socially preferred and often the most suited form of agriculture for Nagaland's climate and terrain. The preferred solution to the problem of the shortening fallow cycle, therefore, is strengthen this weakened agro-forestry system and over the long term provide a mix of different sustainable land uses integrated across the watershed/landscape to maintain ecosystem services and meet the livelihood needs of the local communities.

The project strategy is to focus on removing the above outlined barriers to improving jhum practices as part of a SLEM strategy at the community level. It will be realized by introducing participatory planning processes and financing priority activities that are identified through the involvement of the entire community in the development of community resource management plans that reflect more productive and sustainable use of available resources.



**Figure 2.4** Location of target villages within the three districts (Mokokchung, Mon and Wokha)

The overall goal is to maintain ecosystem services while also meeting livelihood needs, as demonstrated in selected districts and villages (**Figure 2.4**). Mokokchung, Mon and Wokha were selected for demonstrating the project strategy primarily because jhum cultivation is widely

practiced in these three districts and in different ways<sup>21</sup>. Villages having the greatest proportion of jhumia families were selected for project interventions and, where feasible, chosen also on account of their proximity to biodiversity hot spots. A total of 70 villages were targeted within a total area of approximately 90,000 ha, though this target was reduced to 40 villages post-MTR.

Relevant government departments will be involved (Soil & Water Conservation, Land Resource Development, Agriculture, Horticulture, and Forests, Ecology, Environment & Wildlife) and the project will be implemented through all administrative levels (State, District, Village Council, Village Development Boards) to help ensure that processes are internalised and institutionalised.

### 2.3 IMMEDIATE AND DEVELOPMENT OBJECTIVES OF THE PROJECT

The overall goal of the project, as defined in the Project Document, is:

*“To promote sustainable land management and use of biodiversity as well as maintain the capacity of ecosystems to deliver goods and services while taking account of climate change.”* It is intended that the project will contribute to this goal, along with other projects being developed under the Sustainable Land and Ecosystem Management Programme.

The project objective is:

*“To develop, demonstrate and upscale sustainable land management practices for the conservation of jhum (shifting cultivation) lands in Nagaland through an ecosystem approach.”*

The project is aligned with GEF policies and priorities in the Land Degradation and Biodiversity focal areas, notably:

- **Land degradation: Strategic Objective 1 (SO1)** to create an enabling environment for mainstreaming SLM into development policies and practices at national, state, local levels; and **Strategic Priorities 1 and 2 (SP1&2)** to support sustainable agriculture and rangeland management, and sustainable forest management in production landscapes, respectively.
- **Biodiversity conservation: Strategic Priority 4 (SP4)** on strengthening the policy and regulatory framework for mainstreaming biodiversity by ensuring the biodiversity conservation interests are integrated within the community resource management plans.

### 2.4 MAIN STAKEHOLDERS

A wide range of stakeholders having interests vested in the project are identified in the Project Document and summarised in the MTR (2012). They include government, research institutions, village communities, NGOs and donor organisations as summarised in **Table 2.3**. Of the 16 main tribes in Nagaland, the project works with four tribes: Ao, Lotha, Konyak and Sumi.

**Table 2.3** Stakeholders identified in the Project Document and subsequently reviewed during MTR

Stakeholder	Contribution to project objective
<b>State Government / Statutory bodies</b>	
Department of Agriculture	<ul style="list-style-type: none"> <li>▪ Supports strengthening agricultural policy to include jhum in SLEM strategy</li> <li>▪ Providing expertise, extension services on the extension of the jhum cycle</li> <li>▪ Monitoring impacts</li> </ul>
Department of	<ul style="list-style-type: none"> <li>▪ Selection of horticultural crops suitable to local agro ecological conditions</li> </ul>

<sup>21</sup>The *Market Development Assessment for Organic Agri-Horticultural Produce 2014*, commissioned by the project, covered 26 villages (10,436 households) in these target districts and found that 73% were involved in agriculture (98% in Mon, 84% in Wokha and 55% in Mokokchung). Of the 7,695 farmers surveyed, 83% practiced jhum (100% in Mon, 97% in Wokha and 55% in Mokokchung). Average length of jhum cycle was 10 years (8.4 in Mon, 8.7 in Wokha and 12 years in Mokokchung).



Horticulture	<p>and with good economic returns that can be integrated into the project's demonstration sites so as to reduce pressures to shorten the jhum cycle.</p> <ul style="list-style-type: none"> <li>▪ Providing expertise, extension services.</li> <li>▪ Monitoring impacts.</li> </ul>
Directorate of Land Resources	<ul style="list-style-type: none"> <li>▪ Support formation of watershed committees that will lead on land use planning by watershed.</li> <li>▪ Participation in training for integrated LUP on a watershed basis.</li> <li>▪ Raising awareness on degradation of land resources, protection of environment and economic sustainability of the farmers.</li> <li>▪ Internalization of integrated land use planning approach/guidelines (prepared under the project) into their regular operations.</li> <li>▪ Providing expertise, extension services.</li> <li>▪ Monitoring impacts.</li> </ul>
Dept. of Forest, Ecology, Environment & Wildlife	<ul style="list-style-type: none"> <li>▪ Village Biodiversity Boards where appropriate</li> <li>▪ Promotes State's Bamboo Policy by integration of bamboo in agroforestry</li> <li>▪ Advice on including biodiversity conservation concerns as a part of the sustainable jhum system promoted by the project</li> <li>▪ Technical supports creation of community biodiversity conservation sites</li> <li>▪ Advice on sustainable harvest of NTFPs</li> <li>▪ Monitoring impacts</li> </ul>
Dept. of Soil & Water Conservation	<ul style="list-style-type: none"> <li>▪ Ensuring that sustainable jhum systems are accepted as part of the SLEM strategy for Nagaland</li> <li>▪ Internalizing the improved land management practices demonstrated by the project for jhum lands into its regular operations</li> <li>▪ Providing expertise, extension services</li> <li>▪ Monitoring impacts</li> </ul>
NEPED	<ul style="list-style-type: none"> <li>▪ Sharing experiences from the results of their project (phase-wise).</li> <li>▪ Providing expertise, extension services</li> </ul>
Village Councils	<ul style="list-style-type: none"> <li>▪ Principal counterparts at village/ community level who, post-MTR, set up and delegated authority to Land Use Committees that became responsible for: developing integrated land use plans; location and oversight of demonstration sites; and providing knowledge and farming/jhum expertise.</li> </ul>
<b>Universities/ Research Institutions</b>	
NU	<ul style="list-style-type: none"> <li>▪ Providing research support, information building, and dissemination</li> </ul>
NEHU	<ul style="list-style-type: none"> <li>▪ Providing research support, information building, and dissemination</li> </ul>
AAU	<ul style="list-style-type: none"> <li>▪ Providing research support, information building, and dissemination</li> </ul>
RRL - Jorhat	<ul style="list-style-type: none"> <li>▪ Providing research support, information building, and dissemination</li> </ul>
<b>NGOs</b>	
The Missing Link	<ul style="list-style-type: none"> <li>▪ Policy Advocacy</li> <li>▪ Providing expertise</li> <li>▪ Monitoring impacts</li> </ul>
AOFG India	<ul style="list-style-type: none"> <li>▪ Organizing and conducting trainings on organic farming, fair-trade, farmer-led certification (for both ecological and social standards), entrepreneurship for rural development, natural resource management and conservation of mountain ecology &amp; biodiversity.</li> </ul>
ICIMOD	<ul style="list-style-type: none"> <li>▪ Policy Advocacy</li> <li>▪ Providing expertise</li> <li>▪ Monitoring impacts</li> </ul>
<b>Communities</b>	
Farming families in project sites	<ul style="list-style-type: none"> <li>▪ Provide their local knowledge in development of integrated land use plans, and selection of strategies that can lengthen the jhum cycle</li> <li>▪ Active participants in all project-led training and capacity building efforts</li> <li>▪ Monitoring impacts</li> </ul>

## 2.5 EXPECTED RESULTS

The project is designed to address the three barriers to promoting SLEM on jhum lands by means of three Outcomes and their respective 12 Outputs (**Table 2.4**).

**Outcome 1:** is designed to create an enabling environment to integrate SLM practices on jhum lands at state, district, and village levels. It includes strengthening both policy and institutional frameworks by: creating a formal inter-sectoral coordination platform; making recommendations to strengthen the policy and regulatory environment for all three levels; and, creating guidelines to for integrated, village level land use planning. It is also intended to provide for sustainable alternatives where jhum is not/no longer ecologically viable.

**Outcome 2:** is intended to result in operationalized community-based sustainable land use plans based upon watershed boundaries. It comprises: documentation of the existing baseline, including environmental factors and best principles and practices; development of non-production market incentives; implementation of formal SLM training programs for farmers, extension workers, and village councils; development of model land use plans; and establishment of community biodiversity conservation sites.

**Table 2.4** Project outcomes and outputs, as specified in the Project Document

<b>Outcome 1</b>	<b>The policy, regulatory and institutional environment supports the integration of sustainable land management practices on jhum lands<sup>22</sup></b>
Output 1.1	Establishment of an inter-sectoral coordination platform on jhum policies and programs
Output 1.2	Recommendations for strengthening the policy and regulatory environment affecting jhum lands
Output 1.3	Guidelines for integrated land-use planning at the landscape/ village level
<b>Outcome 2</b>	<b>Options for improving the sustainability of jhum agroforestry systems are developed and demonstrated in selected project sites</b>
Output 2.1	Agri-silvi-pastoral models developed for enhancing alternative sources of livelihoods, mainstreaming biodiversity considerations and promoting greater ecological and cultural security
Output 2.2	Linkages established for alternate agri-silvi-pastoral practices
Output 2.3	Capacity building of farmers, government extension workers, and Village Councils
Output 2.4	Development and implementation of integrated land use plans on a watershed basis that improve delivery of ecosystem services and livelihood benefits
Output 2.5	Establishment of community biodiversity conservation sites
<b>Outcome 3</b>	<b>Enhanced capacity to replicate the project's policy reform and field-level experiences<sup>23</sup></b>
Output 3.1	Community-based system for monitoring change realized by the project at the farm/village level and in terms of policies in support of jhum
Output 3.2	Documentation of project experiences with improved land management techniques and approaches at the village level
Output 3.3	Assessment of the potential (carbon storage, benefit sharing possibilities) of these improved shifting cultivation agroforestry systems to be replicated and upscaled
Output 3.4	Center of Excellence is established comprising a consortium of different institutions in Nagaland

<sup>22</sup>Note that this is the correct version, whereas Outcome 1 is also incorrectly cited in the Logical Framework of the Project Document as: The policy, regulatory and institutional environment in support of jhum agroforestry systems is strengthened

<sup>23</sup>Note that this is the correct version, whereas Outcome 3 is also incorrectly cited in the Logical Framework of the Project Document as: *Enhanced capacity to replicate the project's policy reform and field-level experiences in other parts of Nagaland, as well as in other States of India, where shifting cultivation agroforestry systems are prevalent.*

**Outcome 3:** is focused on enhancing capacities to replicate the project's experiences in other parts of Nagaland and other States of India where shifting cultivation agroforestry systems are prevalent. By the end of project the following are expected to be in place: community-based system for ecosystem monitoring and planning; comprehensive learning tools documenting project experiences; thorough assessments of conservation and social benefits resulting from project activities; and, a functional centre for SLM excellence.

## **2.6 BASELINE INDICATORS ESTABLISHED**

Indicators, their baselines and targets are presented in the Logical Framework of the Project Document. A number of shortcomings are evident, as follows:

- Indicators are identified but mostly without any details about how the baselines should be measured/established and subsequently monitored. This is particularly unhelpful in the case of some of the more challenging indicators, such as change in primary forest cover, decrease in soil erosion rates, lengthening of cropping and fallow periods and increasing productivity from jhum lands at project sites. Methodologies should be transparent and clearly documented for those implementing the project.
- Many of the baselines required measurement in Year 1 and the Inception Report should have included an updated log frame, with the bulk of the baselines established. All of this was overlooked during the inception period. As noted in the MTR report, key baseline figures necessary to measure project impact had not been generated even by mid-term.
- The limited attention to the log frame and its baseline indicators at the onset of project implementation and thereafter, up until the MTR, may to some extent reflect the lack of descriptive details in the Project Document and guidance on exactly what was required to establish the baselines.

Design considerations with respect to indicator SMARTness are reviewed in **Section 3.1.1**.

## **2.7 MID-TERM EVALUATION**

The overall rating of the project awarded at mid-term was **Moderately Satisfactory**. Project design, stakeholder participation in design and in implementation, were rated as **Satisfactory**; financial planning and M&E as **Moderately Satisfactory**; and implementation approach and attainment of outcomes/project objective were rated as **Moderately Unsatisfactory**.

The MTR evaluators concluded that project design is sound and the project remains highly relevant. However, much concern was expressed about the project not being on track to deliver the intended results; rather, the project was somewhat off track investing in farm production and/or integrated farm development models, for example: improved contour bunds supplemented by cash crops. These interventions were considered to encourage a shift towards cash-based production and away from traditional subsistence models. Some such models may represent a risk to SLM objectives and ultimately reduce both land and food security for local villagers.

The bottom line was epitomised in the MTR report quite simply: "More than two years and two million dollars have been spent implementing a project almost entirely different [than] the one GEF intended to fund. The result is: There is almost no measureable progress made towards any of the project's outcomes/outputs."

The irony of the situation is highlighted by the high praise credited to the capacity and dedication of the project implementation team, commitment of government, and ownership and hard work of the target villages. These achievements, however, do not reflect activities that GEF intended to fund.

Thus, the project required a drastic course correction and re-alignment to follow the intent of the original Project Document. This will require suspending on-the-ground activity until a strategic work plan linked directly to the achievement of project outcomes/outputs is completed. Development of the strategic work plan should benefit from a third party facilitator with international experience with both the successful implementation of GEF projects and extensive working knowledge of SLEM principles and practices.

**Key recommendations from the MTE were:** (i) immediately initiate emergency project implementation hiatus; (ii) request a no-cost extension; (iii) create a strategic work plan to guide project implementation; and (iv) increase project implementation oversight and technical support.

### 3. FINDINGS<sup>24</sup>

#### 3.1 PROJECT FORMULATION

##### 3.1.1 Analysis of Logical Framework

The TE team concurs with the MTE findings that the overall design of the original project is sound (MTR report, Section 5.1.1). The design challenges widely held beliefs and perceptions that shifting agriculture is a problem to the extent that it should be abandoned; and advocates that, if properly managed, shifting agriculture can maintain critical cultural, food security, and ecosystem services. The problem is how to improve the management of jhum in the light of changing population and economic demands.

Whereas, government programs and extension services have been largely geared towards supporting settled agriculture, the project recognizes that moving away from traditional farming practices and creating incentives for more cash-based and sedentary practices risks destabilizing inherent land tenure systems. Pursuing such a policy will likely result in more mono cropping, increasing encroachment by outside interests, and eventual disenfranchisement of local communities from their traditional land base. This approach would destabilize the existing culture, social infrastructure and ecological safeguards, all of which is contrary to the project's intent.

As the Project Document states:

- “Though often considered primitive and unproductive, jhum is a complex agricultural system that is well adapted under certain conditions, and requires exhaustive comprehension of the environment to succeed. It is a time-tested system of cultivation, drawing upon traditional knowledge and indigenous practices...”
- “The major challenge continuing to face Nagaland is how to adapt this land use and production system to the increased population and changing lifestyles, while also maintaining its ecological sustainability.”
- “An important lesson that has emerged is that if the adverse impacts of jhum on land and ecosystems are to be effectively mitigated, the emphasis needs to be on controlling distortions or retrogressive developments rather than on controlling shifting agriculture itself.”

The project is designed specifically to shift from the baseline of jhum abandonment to a GEF alternative of strengthened traditional practices able to withstand increasing internal and external land development pressures by improving overall land management practices. It should help local communities generate the tools required to capture traditional knowledge and integrate this with best national and international SLM principles and practices. Existing government programs are to be mobilized to support a paradigm shift from “replacing jhum” to “improved jhum that integrates principles of SLEM”.

The strategy outlined in the Project Document is logical, with outcomes and outputs clearly designed to generate progress towards the desired project objective. The Project Document identifies the need to create an enabling environment for jhum by integrating local knowledge and technologies to improve jhum cultivation into the institutional mandates of relevant government departments. This includes building the expertise and skills to work with jhumias to promote improved, sustainable jhum practices as part of a SLEM strategy. At the community

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<sup>24</sup>In addition to a descriptive assessment, all criteria marked with an asterisk in the 2012 *Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects* are supposed to be rated. The relevant subsections in Section 3 on *Findings* are marked by an asterisk; and the rating and its justification are provided immediately at the beginning of the subsection, followed by the evidence.

level, customary institutions and farmers do not have the ability or mechanisms to undertake community-based land use planning that promotes the maintenance of ecosystem services. This level of capacity strengthening is critical if local communities are to be able to withstand growing internal and external pressures to pursue less sustainable practices. The project is designed to provide local communities with the tools necessary to identify and monitor threats and set in place the management mechanisms required to address these threats, including land use management planning supported by an informed constituency.

More specifically, with regard to the Logical Framework in the Project Document, there are a number of weaknesses in its design and inconsistencies with what is stated in other parts of the Project Document. These should have been picked up and a corrected/revised version produced for the Project Inception Report but this document was far short of addressing inception needs and did not even include a work plan for the first year of implementation, let alone address some of the missing indicator baselines in the Logical Framework as discussed in **Section 2.6**.

Weaknesses in design of the Logical Framework relate principally to the indicators, some of which fall short of being SMART<sup>25</sup>. Examples include the following:

- Indicators and their targets provide the basis for rating project outcomes. Given that outcomes are delivered by means of a set of outputs, it is usual practice to ensure that the indicators cover the spectrum of outputs, or at least key outputs. Often this is achieved by transforming an output into an indicator. In the case of this project, the relationship between indicators and outputs is not very clear or non-existent. The net result is two sets of ratings that may not compliment each other: one based on the Logical Framework using indicator targets to assess outcomes; and the other based on achievement of outputs to assess outcomes. Examples are:
  - Outcome 2 concerns demonstrating improved sustainability of jhum agroforestry systems, as measured by increased length of jhum cycle (fallow and jhum cropping phases), increased jhum land productivity, increased income from organically grown crops and increased women benefitting from marketing of produce. Some important outputs are not captured in the Logical Framework indicators: specifically Output 2.3 concerns building the capacity of farmers, government extension workers and Village Councils, with emphasis on women representation; and Output 2.4 concerns the development of land use plans. Note also that the indicator for women does not capture the essence of the Output 2.4, which concerns their capacity building.
  - Under Outcome 3 the first indicator about number of requests is very weak and should be based on actual visits to project sites; and the second indicator about plans for upscaling the project strategy to other districts is too vague. (In fact, the text in the Project Document (p. 28) refers to a 'budgeted' plan but that is also weak; it would be better if based on actual upscaling having commenced in a certain number of districts.) Important outputs not covered by the indicators for this outcome concern: the provision of a comprehensive monitoring system, including participatory monitoring by community members; and documentation of the project's experience.
- The primary forest cover indicator for project sites is an example of a poorly defined indicator, with no thought given to how it should be measured. This indicator raises questions about how is 'primary' defined, at what level should cover be measured (>75% canopy cover or 100%, for example), and how will the monitoring be achieved? More fundamentally, is primary forest cover an appropriate indicator for project sites? There is probably very little or no primary forest remaining in project sites de facto of these sites

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<sup>25</sup>Indicators should be: **S**pecific, **M**easurable, **A**chievable, **R**elevant and **T**ime-bound (UNDP-GEF 2012, *Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-Financed Projects*)

being jhum lands. A more appropriate indicator would be an indicator that captures the composition of jhum agroforestry systems.

With respect to inconsistencies in the Project Document regarding the Logical framework, examples include the following:

- Some outcomes are worded differently in the text (Section 2.2 pp. 23-26), tables (Section 2.3 Table 9, p. 27) and Logical Framework (Part B2 pp. 44-46) of the Project Document, itself. For example, Outcome 1 reads as follows:
  - The policy, regulatory and institutional environment supports the integration of sustainable land management practices on jhum lands. [Section 2.2 Text, p. 23]
  - The policy, regulatory and institutional environment in support of jhum agroforestry is strengthened. [Table 9, p.27; Part B2 Logical Framework, p. 44]
  - The policy, regulatory and institutional environment in support of jhum agroforestry strengthened. [Part B2 Logical Framework – Outcome/Outputs, p. 46]
- Some outputs are worded differently in the text (Section 2.2 pp. 23-27) and Logical Framework (Part B2 – Outcome/Outputs, p. 46) of the Project Document. This applies particularly to all outputs under Outcome 1, as follows:
  - **Output 1:** Establishment of an inter-sectoral coordination platform on jhum policies and programs  
Output 1: Establishment of an inter-sectoral coordination platform on jhum policies and programs that brings together representative from state government (soil and water conservation, agriculture, horticulture, forests, and resource development), academic institutions (Nagaland university, North Eastern University), and community-based organizations.
  - **Output 2:** Recommendations for strengthening the policy and regulatory environment affecting jhum lands  
Output 2: Recommendations for strengthening the policy and regulatory environment affecting jhum (Forest Policy, Agricultural Policy etc) based on (a) an analytical review of policy gaps and (b) a consultative dialogue among the group of stakeholders identified in 1.1 above.
  - **Output 3:** Guidelines for integrated land-use planning at the landscape/ village level
  - Output 3: Recommendations for integrated land-use planning at the landscape/ village level.
- Output 2.5 appears in the text (p. 26) but is missing from the Logical Framework (p. 46) of the Project Document.

### **3.1.2 Assumptions and risks**

Risk and assumptions identified in the Project Document for the project's Objective and three outcomes are reproduced in **Table 3.1**. Three of the five risks proved to be more serious than anticipated, as follows:

- Outcome 2: Cooperation among line departments having a vested interest in jhum land improvements was not as close and effective as anticipated, jeopardised by the absence of multi-sector coordinating platform to coordinate jhum affairs. This was only resolved in the second half of 2015.
- Outcome 2: Cofinancing commitments by the State government were delayed in their being realized in time, which resulted in implementation being held up for at least six months due to there being no cash.
- Outcome 3: The institutional mechanism for operationalizing SLEM (Centre of Excellence for jhum policies and practice) was not realized; instead training modules were incorporated within existing educational systems.

**Table 3.1** Risks and assumptions, as identified in the Project Document

Strategy	Risk	Rating	Risk Mitigation Strategy	Assumption
<b>Objective:</b> To develop, demonstrate and upscale sustainable land management practices for the conservation of <i>jhum</i> (shifting cultivation) lands in Nagaland through an ecosystem approach	Political acceptance of the project approach of supporting <i>jhum</i> as an essential component of a long-term strategy to promote biodiversity conservation and control of land degradation in hilly areas is low	Low to medium	In recent years there has been a change in the prevailing perception of <i>jhum</i> as a destructive practice. This is illustrated by the acceptance of the potential role that sustainable <i>jhum</i> systems can play in maintaining biodiversity and curtailing land degradation in policy-level publications such as the Nagaland Human Development Report (2004) and the Shillong Declaration. The project will build on this momentum. Its high-level Steering Committee will also include representation from the Central MOEF and <i>jhum</i> advocacy groups.	There is a high level of political acceptance of the project approach of supporting <i>jhum</i> as an essential component of a long-term strategy to promote biodiversity conservation and control of land degradation in hilly areas
<b>Outcome 1:</b> The policy, regulatory and institutional environment in support of <i>jhum</i> agroforestry systems is strengthened	Cooperation among the various state departments that address <i>jhum</i> land issues – Agriculture, Horticulture, Forest, Land Resource Development, Animal Husbandry – is not forthcoming.	Low to medium	The project will ensure that key state-level departments are involved in an inter-sectoral coordination platform on <i>jhum</i> and capacity of members will be enhanced to ensure that they are effective agents of change receive (Output 1.1). The project will also ensure that an integrated plan will be prepared for coordinated, joint delivery of extension services to farmers in project sites across the different departments (Output 1.2) <sup>26</sup> .	There is close cooperation among the various state departments that address <i>jhum</i> land issues – Agriculture, Horticulture, Forest, Land Resource Development, Animal Husbandry
<b>Outcome 2:</b> Options for improving the sustainability of <i>jhum</i> agroforestry systems are developed and demonstrated in selected project sites (70 villages spread over the 3 districts of Mon, Mokokchung and Wokha in Nagaland)	Communities are not actively involved in demonstration activities and adoption of improved approaches is low.	Low	As recent experience has shown, when communities are presented with viable options for improving their livelihood security and reducing adverse impacts on land and biodiversity, they are active participants. The project will ensure that selection of demonstration measures is driven by local needs and context (Output 2.1), farmers are helped with backward and forward linkages to support alternative practices (Output 2.2), and they are provided training and technical assistance (Output 2.3)	There is active community participation and adoption of improved approaches. Cofinancing commitments are realized.
	Cofinancing commitments by the state government are not kept.	Low	This risk is low as cofinancing commitments have been officially committed by the Department of Soil and Water Conservation from allocations under the 11 <sup>th</sup> five- year plan. These commitments have been confirmed through a letter.	
<b>Outcome 3:</b> Enhanced capacity to replicate the project's policy reform and field-level experiences in other parts of Nagaland, as well as in other States of India, where shifting cultivation agro forestry systems are prevalent	The central institutional mechanism that is to be established under the SLEM programme is not leading to expected dissemination and replication of results.	Low	The mechanism is expected to be established under the aegis of a GEF-funded MSP, as part of the overall SLEM program. The project will ensure that appropriate publications documenting the challenge and successes of this project are made available to this central institutional mechanism (Output 3.2).	The central institutional mechanism that is to be established under the SLEM programme is operational, and is effectively fulfilling its knowledge management, dissemination and uptake role.

Little or no serious attention appears to have been given to monitoring these risks and assumptions throughout the duration of the project. There is no mention of risks or assumptions

<sup>26</sup>This Output 1.2 does not exist as such (see **Table 3.5**) and must have been changed during the development of the Project Document.



in the Inception Report, when they should have been reviewed, or MTE Report. Feedback from the Annual PIR reports for 2013-2015 is minimal: the 2013 Report states: “No critical risk identified in this reporting period”, which is inconsistent with the MTE findings in mid-2012 that the Project had failed to make any significant achievement towards its objective and outcomes by mid-term; there is a blank space under Critical Risks Management in the 2014 Report; and the 2015 PIR leaves the reader guessing by recording that “Critical risk management measures undertaken in 2015”, without any further explanation.

Given the significant impact that above risks had on the project, there has been a serious lack of due diligence in monitoring and reporting these issues, as well as identifying new risks as they emerged during implementation.

### **3.1.3 Lessons from other relevant projects incorporated into project design**

A dozen or more of the State Government’s baseline programmes related to jhum management were reviewed during the project’s formulation in order to learn from these experiences. These have already been described in **Section 2.2.3**. The thrust of many of these programmes has been to wean tribal families away from the practice of jhum by providing assets for settled agriculture. Experience from these programmes covering countries in South, South East and East Asia has shown that state intervention to rehabilitate shifting cultivators has invariably failed and in many cases jhumias were turning back to their traditional practices. The main lesson to have emerged is that the emphasis needs to be on managing the adverse impacts of jhum on land and ecosystems rather than controlling shifting agriculture itself. Other lessons learned from past jhum control efforts to enhance effectiveness that have guided the project’s design are summarised in **Table 11** of the Project Document.

Much of this experience is captured in the 2004 Shillong Declaration, promulgated by a wide range of government, NGOs, donor agencies, scientific institutions and farmers from eastern Himalayan countries, concerned about shifting cultivation:

- a) That Shifting Cultivation must be recognised as an agricultural and an adaptive forest management practice which is based on scientific and sound ecological principles.
- b) That it is imperative to provide an enabling environment in order to address the urgent livelihood and ecological concerns arising out of rapid transformations driven by development and other externalities including market forces.
- c) That it is imperative to empower shifting cultivators as practitioners of rotational agroforestry to become active participants in decision making and policy processes that impact them most.
- d) That it is essential to make existing research and extension services sensitive and relevant to the needs and challenges of Shifting Cultivation and shifting cultivators and simultaneously assimilate the traditional ecological knowledge of Shifting Cultivation into future research, development and extension processes.
- e) That it is necessary to recognise the traditional institutions and intellectual capital generated from traditional practices relating to Shifting Cultivation and ensure its protection in the legal and policy regime.
- f) That it is essential to provide interactive forums and environment for information access and sharing between multiple stakeholders at local, national, regional and global levels.
- g) That it is imperative to acknowledge that women usually play the most critical role in Shifting Cultivation both at the activity and the impact level and therefore any development intervention must be sensitive to this fact.

In 2006, the Government of Meghalaya decided to switch from suppressing shifting cultivation to integrating soil and water conservation measures within it; and the State Government of Nagaland has followed suit, assigning its DSWC to take the lead agency role in implementing this project.

### **3.1.4 Planned stakeholder participation**

The main stakeholders are identified in **Section 2.4**, many of whom were involved throughout the design and implementation of the project. Not all of those listed in **Table 2.3** remained involved in the project, as in the case of the three organisations listed under NGOs (Missing Link, AOFG and ICIMOD). Others joined, such as HADO (Hill Area Development Organization) who were brought in to assist the existing SHG with finding banks for their revolving funds.

As noted in the MTE Report, the project has benefitted from substantial government implementation support, which is a project highlight. However, this support has been limited to certain line agencies and the level of support varied by district. Such shortcomings relate primarily to the project not creating an intersectoral coordination platform early on in implementation.

The level of target village community participation in the implementation of this project is impressive. The PMU and District PMUs, supported by line Departments to varying extents, have worked diligently to involve local users in project implementation and decision-making. Some further details about partners and other stakeholder involvement during implementation are given in **Section 3.4.2**.

### **3.1.5 Replication approach**

Replication, fundamental to the design of the project, was planned to enhance capacity to apply the project's experiences elsewhere in Nagaland and more widely in India under Outcome 3. Outputs are focused on developing a community-based system to monitor changes at site level (village jhum land), document the project's experience in order to share it more widely, assess the potential benefit of improved jhum agroforestry systems to be replicated (e.g. carbon storage) and establish a centre of excellence for promoting the project's approach and experience in sustaining jhum agroforestry.

While somewhat ambitious, Outcome 3 is the cornerstone to the project's strategy and intended to pave the way for mainstreaming sustainable jhum agricultural systems post project. Progress in delivering this outcome and its associated outputs is discussed in **Section 3.3.5**.

### **3.1.6 UNDP comparative advantage**

The comparative advantage of UNDP's execution of this project is not provided in the Project Document.

### **3.1.7 Linkages between project and other interventions within the sector**

The development planning process of the Government of India is articulated in its Five-Year Plans. A central theme of the 11<sup>th</sup> Plan (2007-2008 to 2011-2012) is to achieve inclusive economic growth, based on the recognition that India needs a "...growth process that will achieve a rapid reduction in poverty, accelerate the pace of both industrialization and employment-generation, reduce the rural-urban divide, and bring measurable benefits to Scheduled Castes/Scheduled Tribes, minorities and other excluded groups". This planning theme fits well with the objective of addressing ecosystem degradation trends in Nagaland that are having a disproportionate effect on tribal communities that comprise 89% of the total population.

Government policies have a bearing on jhum at national and state levels are reviewed in the Project Document (**Table 6**), from which it is evident that there has been a growing appreciation of the need to recognise that shifting cultivation is the basis of life for many tribal people, especially in NE India, and needs to be accommodated within more sustainable framework of SLM.

Government programmes and more recent interventions, such as the 2004 Shillong Declaration on Shifting Cultivation in the Eastern Himalayas, have already been mentioned in **Section**

**3.1.3**, all of which have contributed to the design of this project for which the long-term goal is to promote a mosaic of different sustainable land uses which are integrated across the landscape (watershed) in ways that both maintain ecosystem services and meet the livelihood needs of the growing population. The mix of land uses would comprise a combination of jhum fields, secondary forest (jhum fallows), intensive organic farming, and community-based biodiversity conservation sites. Each of these land uses would be managed in a sustainable manner to enhance local livelihood opportunities and preserve ecosystem services. Further details are provided in **Table 8** of the Project Document.

There is recognition of the adverse impacts of land and ecosystem degradation on the sustainable development trajectory of the country. Chapter 5 of the National Action Programme to Combat Desertification (2001) notes that “the process of desertification is impacting every aspect - loss of agricultural productivity, loss of natural resources (forests and vegetative cover, biodiversity, soil changes), socio-economic conditions (economic losses, problems of sustenance, decline in quality of life), etc.” This recognition is also being supported by various policies and programs by GoI, ranging from social sector and community development programs to conservation of land resources and eco-restoration of degraded lands. Further, GoI recognizes the importance of (a) shifting from sectoral to integrated watershed management approaches, and (b) moving to more decentralized governance systems that are underpinned by greater community and NGO involvement in decision-making and implementation, in order to address the drivers of land and ecosystem degradation.

To translate this momentum into a more systematic national approach, GoI has engaged with the GEF and its Agencies (World Bank, FAO and UNDP) in the development of the Sustainable Land and Ecosystem Management (SLEM) Partnership. This project in Nagaland has been prioritized by the GoI as a critical component of the SLEM partnership insofar as it focuses on the issue of shifting cultivation that has been identified in the 2001 National Action Programme of UNCCD as “one of the major causes of desertification in the country”. Further, the NAP notes that “the annual erosion rate in the north-eastern region (which practice shifting cultivation) show top soil losses exceeding 40 t/ha/yr”. The NER is an area of the country where degradation of ecosystems both has a significant impact on the long term well-being of poor, marginalized sections of society and compromises the production of ecosystem goods and services.

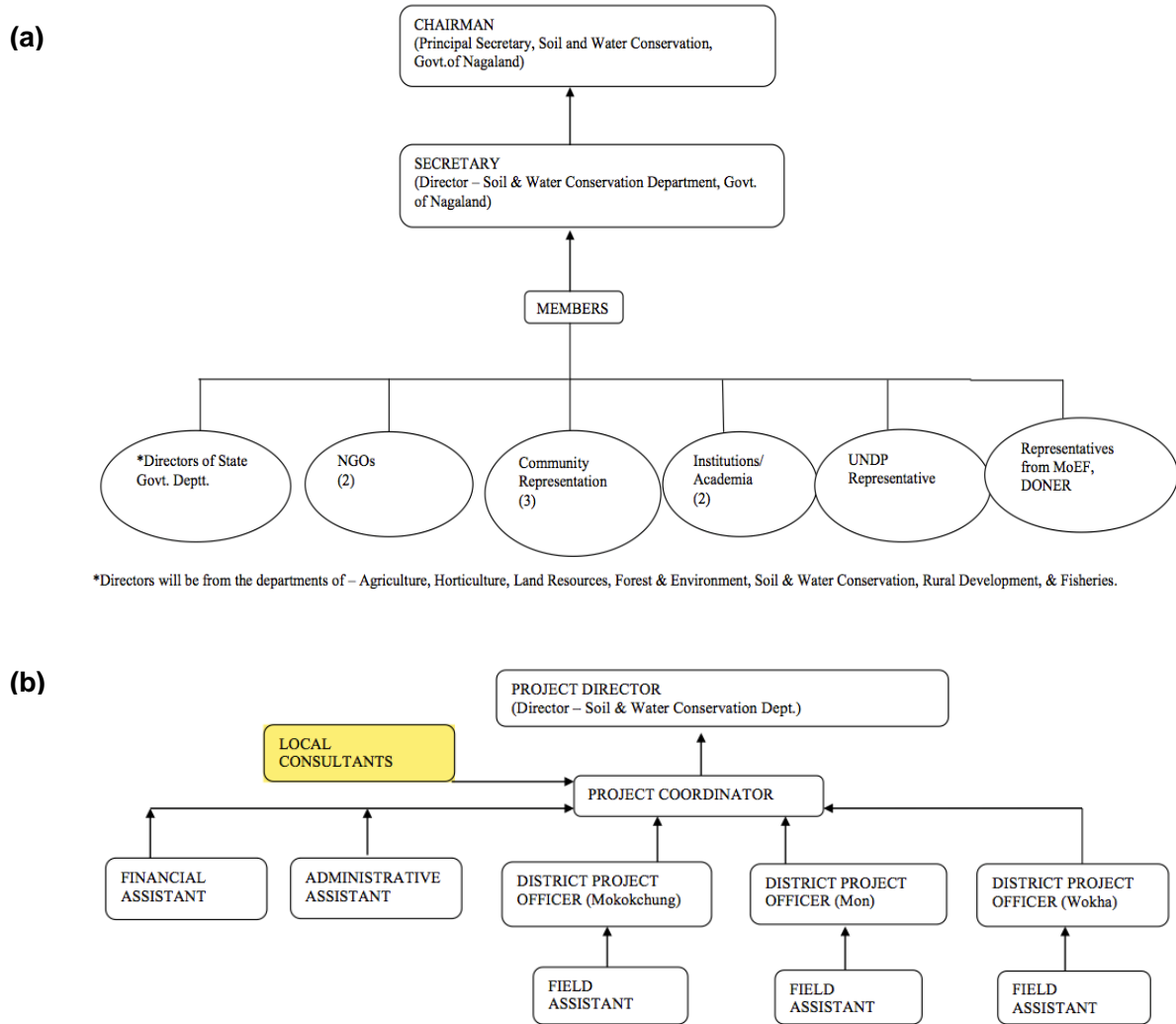
Thus, the Government of Nagaland is committed to aligning its various sectoral efforts that have a bearing on sustainable land and ecosystem management at the State level with the integrated strategy being proposed under this GEF project and, more broadly, with the SLEM partnership. This is reflected in the financial support being provided by the State government from its own budgetary resources.

### **3.1.8 Management arrangements**

**UNDP-CO** is responsible to the GEF Secretariat for the implementation of the project, which is being executed by the **Department of Soil & Water Conservation** as the Implementing Partner under the UNDP National Implementation Modality (NIM).

UNDP assumes a project assurance role, drawing on its knowledge networks to provide best practice methodologies to the project team as deemed necessary. It also monitors the project's implementation and achievement of project outcomes and outputs, ensuring the proper use of GEF funds. Financial transactions, reporting and auditing are carried out in compliance with national regulations and established UNDP rules and procedures for national project execution.

The organisational structure of the project as proposed in the Project Document is shown in **Figure 3.1** with respect to both the Project Steering Committee (PSC), also referred to as the Project Board in the Project Document, and the Project Management Unit.



**Figure 3.1** Project organisational structure as planned in Project Document: (a) Project Steering Committee, (b) Project Monitoring Unit (i.e. Project Management Unit)

The **Project Director** is a senior government official assigned by DSWC to be responsible for overall implementation of the Project. This responsibility includes representing and furthering project objectives at high decision making levels within GoI; and having primary responsibility for representing the project to co-financiers, as well as for ensuring that the required government support is available to achieve the project.

The **Project Coordinator** reports to the Project Director and has overall responsibility for the successful implementation of project activities and the achievement of planned project outputs. S/he works closely with national and international experts hired under the project, as well as the Project Assistant, and is responsible for ensuring that the project is implemented in close coordination and with all relevant government institutions, local communities and NGOs, as well as with other related projects in the project area.

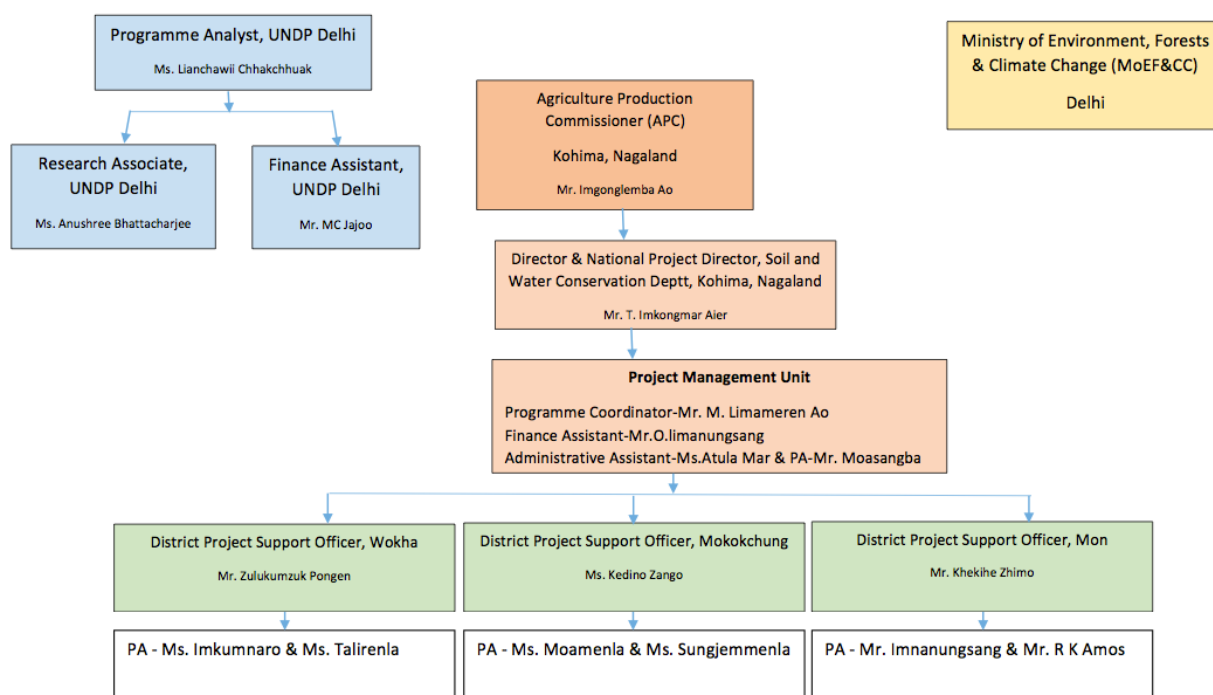
The **Administrative and Financial Assistant** (shown as two positions in Figure 3.1) supports the Project Coordinator in the implementation of day-to-day project activities. S/he is responsible for all administrative (contractual, organizational and logistical) and accounting (disbursements, record-keeping, cash management) matters related to the project.

The **PSC**, established by the Government of Nagaland, comprises representatives of all key stakeholders, including community level interests. Potential members include UNDP, MOEF,

Ministry for the Development of the NER, Nagaland Soil and Water Conservation Department, Department of Agriculture, Department of Animal Husbandry, Department of Horticulture, Department of Land Resources Development, Nagaland University, North Eastern Hill University, Assam Agriculture University, NERIWALM, RRL-Jorhat, The Missing Link, AOFG-India, and ICIMOD.

The PSC is the highest policy-level body of the parties directly involved in the implementation of the project. It monitors the project's implementation, provides guidance and advice, and facilitates communication, cooperation, and coordination among project partners and other stakeholders. The PSC meets annually or, if deemed advantageous, more frequently to build common understanding and to ensure that the project is effectively implemented.

The project management structure is reasonably sound; and the national project team is highly motivated and knowledgeable in both agricultural production and local culture. However, as noted in the MTE Report, there is no depth of project implementation experience, which is understood given the limited exposure to international donor projects in this relatively remote area, and no institutional experience with GEF projects. The project would have benefited from international expertise oversight on an intermittent basis to at least mid-term to ensure an M&E framework was in place and project interventions were in line with the Logical Framework.



**Figure 3.2** Project organisational structure by the end of its term

There has been little change to the overall organisational structure during the life of the project, the key developments being: the appointment of the Chief Secretary, Government of Nagaland, as Chairman of PSC, with the Agriculture Production Commissioner (APC) as Co-Chair; and Anchoring the project directly under the APC, as shown in **Figure 3.2**. Both of these changes raise the profile of the project and its Implementing Partner (DSWC) considerably. The other important development, which is only recently underway, is the establishment of jhum coordinating platforms within each of the three project districts, as explained in **Section 3.2.2**.

### 3.2 PROJECT IMPLEMENTATION

#### 3.2.1 Adaptive management (changes to project design and project outputs during implementation)

Prior to the MTE in mid-2012 there was little or no evidence of the project practicing adaptive management, as clearly articulated in Section 5.2.1(ii) of that report with such comments as:

- “The project does not appear to be using and/or referencing the Logical Framework in any meaningful way.”
- “... the project has until the mid-term continued to make almost no meaningful adjustments to address basic implementation approach issues.”
- “In many ways, project management has continued to use project resources to fund the existing baseline ... This includes funding activities such as rubber plantations, piggeries, tea plantations, and other interventions that were not envisioned in the Project Document and do not implement the project as designed and/or address fundamental SLM priorities.”

Subsequent to the MTE, project management has adapted swiftly and well to address the major short-comings. Corrective actions were taken to implement what was actually specified in the Project Document, with Land Use Committees (LUCs) established under the respective Village Councils to drive forward the formulation of Land Use Plans (LUPs) under the guidance of an international consultant hired specifically for designing, guiding and documenting the process for immediate replication. Outputs were reviewed and project villages were reduced from 70 to 40 to make this target more achievable within the available time and resources. With respect to the latter, budgets were realigned to take into account the fact that 91% of the allocations for Outcomes 1 (US\$ 700,000) and 3 (US\$ 800,000) had been spent by mid-term and 62% in the case of Outcome (US\$ 1.091, 382). Evidence for these and other corrective actions, including agreement on a no cost extension to the end of 2015, are detailed further in **Annex 8**.

Very little attention has been given to the Logical Framework. Reference is made in the MTE report about it not being used “... in any meaningful way” (Section 5.2.1ii) and that is confirmed by the very fact that the original Project Document version has not changed or, rather, has not been regularly updated despite there having been changes to some indicators, baselines and targets (e.g. 70 villages continues to be specified as the target). The exception is the update on status of targets, updated at mid-term and end of term (**Annex 8**). Further, there has been no attention to detail (quality assurance) or, if so, then due processes and procedures have not been followed (e.g. inception, annual and mid-term evaluation reporting) to correct/clarify the mistakes and potential confusions inherent in the original Project Document that remains current, as discussed in **Section 3.1.1**.

No/little attempt was made either during the inception phase or at mid-term to address the inconsistencies in outcomes and outputs; and, more importantly, to improve the SMARTness of the indicators and establish the baselines as a matter of priority in order to make them more coherent with the planned interventions and, thereby, enhance monitoring of project implementation. There appears to have been a fundamental lack of appreciation of the value of the Logical Framework as a tool for monitoring progress at a strategic, project level and as a catalyst for securing changes through a process that involves endorsement by the Project Steering Committee (PSC), UNDP-GEF RTA and, in certain cases, the GEF Secretariat itself.

### **3.2.2 Partnerships arrangements (with relevant stakeholders in the country/region)**

Partnership arrangements as envisaged under Output 1.1 of the Project Document did not materialise until after this serious deficiency had been highlighted during the MTE and initiatives were taken to establish an inter-sectoral coordination platform for jhum policies and programmes. Central to the challenge of setting up such a coordinating mechanism is the limited influence or convening power of the SWCD with respect to other line departments, as well as delays caused by frequent changes in government officials at state and district levels. In the MTR report (Section 5.2.1iv), it is noted that the project faced significant challenges in

generating cohesion between the various line departments at state level. Only in 2015, when the project became anchored within the office of the Agriculture Production Commissioner (APC), was it possible for the Project Steering Committee (PSC), at their 6<sup>th</sup> meeting on 31 August 2015, to endorse the setting up of district level committees on jhum, with the District Collector as head of the committee and heads of all line departments as members.

The district PMUs, comprising the District Soil Conservation Officer, UNDP District Project Support Officer and their respective assistants, have established strong working relationships with the LUCs of the respective target villages and been very effective in facilitating the development of LUPs. However, the project's cash flow shortage during the first half of 2015 limited their ability to facilitate implementation of the actions in these plans through soliciting the technical inputs and support from other line departments, as well local institutions including Village Councils and their affiliated local bodies (e.g. women's SHGs, churches, farmers' and students' groups), and support from NGOs such as the Hill Area Development Organization (HADO) who work with SHGs.

### **3.2.3 Feedback from M&E activities used for adaptive management**

The M&E framework, comprising a plan and budget, is outlined in the Project Document (Part A.4 pp. 32-37). No further details are given in the Inception Report, despite detailed specifications for the Project Inception Workshop (pp. 32-33) to include such tasks as: providing a detailed overview of UNDP-GEF reporting and M&E requirements; and fine-tuning progress and performance/impact indicators and developing specific targets for Year 1 implementation progress indicators. Monitoring reports identified in the framework comprise the following:

- Inception Report, which should include a detailed Year 1 Annual Work Plan of activities and progress indicators, as well as an annual budget and M&E requirements to measure performance in Year 1.
- Annual Project Report (APR), which is a UNDP reporting requirement.
- Project Implementation Report (PIRs), which is a GEF annual reporting requirement.
- Quarterly Progress Reports, which are provided to the UNDP CO and Regional Centre.
- Periodic Thematic Reports as requested by UNDP, UNDP-GEF or Implementing Partner.
- Project Terminal Report, which is a comprehensive summary of all activities, achievements, shortcomings and lessons learnt prepared during the last three months of the project.
- Project Publications, which provide a key means of collating and disseminating the results of the project and lessons learnt concerning the main elements of the project strategy.
- Independent evaluations at mid- and end of term.

The Logical Framework provides a results-based methodology for monitoring progress against targets, using a suite of supposedly SMART indicators that track the project's objective and outcomes. It was intended that the baselines of the indicators be established at the onset of the project. The log frame is routinely subject to review and refinement during the inception phase and mid-term; in neither case was it revised, despite changes to at least one target<sup>27</sup> post-MTE.

Thus, there is very little evidence to show that feedback from M&E activities was used in a robust and comprehensive way to adapt management, the exception being the management response and actions taken in the light of the findings and recommendations for the MTE.

### **3.2.4 Project finance**

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<sup>27</sup>The number of target villages was reduced from 70 to 40 post-MTR. While supported by the evaluators, it is unclear as to whether or not this change was approved by the PSC and endorsed by the RTA.

The total budget in the Project Document is US\$ 25,598.076, of which US\$ 3.6 million (14.1%) is grant-aided by GEF, US\$ 303,382 (0.1%) is TRAC funding (grant) from UNDP and the rest is contributed by the State Government of Nagaland, US\$ 367,694 (1.4%) in cash and US\$ 21.6 million (84.4%) in kind (**Table 3.2**).

**Table 3.2** Status of budget by funding source at endorsement, start, mid-term and end of project

Fund source	Fund type	Fund status at CEO endorsement (US\$) <sup>1</sup>	Fund status at inception (US\$) <sup>2</sup>	Fund status at mid-term (US\$) <sup>3</sup>	Fund status at term end (US\$) <sup>4</sup>
GEF	Grant	3,600,000	3,600,000	3,600,000	3,600,000
UNDP	Grant (TRAC)	0	0	0	30,382
<b>Subtotal</b>	<b>Grant</b>	<b>3,600,000</b>	<b>3,600,000</b>	<b>3,600,000</b>	<b>3,630,382</b>
Government of Nagaland, DSWC	Cash	18,000,000	18,000,000	18,000,000	367,694
	In-kind	7,416,612	7,416,612	7,416,612	21,600,000
<b>Subtotal</b>	<b>Cash</b>	<b>18,000,000</b>	<b>18,000,000</b>	<b>18,000,000</b>	<b>367,694</b>
<b>Subtotal</b>	<b>In kind</b>	<b>7,416,612</b>	<b>7,416,612</b>	<b>7,416,612</b>	<b>21,600,000</b>
<b>Total</b>		<b>29,016,612</b>	<b>29,016,612</b>	<b>29,016,612</b>	<b>25,598,076</b>

**Sources:** <sup>1</sup>Project Document (12-2008); <sup>2</sup>Inception Report (11-2011); <sup>3</sup>MTR (08-2012) Report, <sup>4</sup>UNDP (10-2015)

As noted in the MTE Report, the budget and time allocated to implement the project was ambitious but sufficient to achieve the intended results. However, the level of committed State government financing (US\$ 18 million in cash) was unrealistic and should have raised red flags. The cash and in-kind contributions from government were juxtaposed in 2015 but even then only about US\$ 367,694 was forthcoming within the project's time frame (31 December 2015).

Annual disbursement from the three funding sources is summarised in **Table 3.3**. This shows that rate of disbursement peaked in 2011, with 50% of the budget spent by then end of that year and 30% spent during the year. Thereafter, annual disbursement declined to approximately 15% of the budget in 2012 and 2013. A small amount of funding from UNDP kicked in during 2014 and the DSWC contribution was released in July 2015 just in time to see the project through to its end.

**Table 3.3** Annual disbursement of funds (US\$) by source

Fund source	Budget	2009	2010	2011	2012	2013	2014	2015**	Total	% Budget
GEF disbursements	3,600,000	39,133	720,387	1,233,709	619,270	530,410	335,855	35,653	3,514,417	98%
UNDP disbursements	31,000						30,382		30,382	98%
DSWC disbursements	367,694							207,673	207,673	56%
<b>Total disbursements</b>	<b>3,998,694</b>	<b>39,133</b>	<b>720,387</b>	<b>1,233,709</b>	<b>619,270</b>	<b>530,410</b>	<b>366,237</b>	<b>243,326</b>	<b>3,752,472</b>	<b>94%</b>
Accumulative % budget		1.0%	19.0%	49.8%	65.3%	78.6%	87.8%	93.8%		

\*\*Data for 2015 do not include the last quarter.

Analysis of annual disbursements by project outcome and management (**Table 3.4**) shows that budgets for Outcome 1 was overspent by about US\$ 230,000, which is a little curious given that Output 1.1 was not delivered but it may partly reflect the additional costs of hiring an international consultant to assist with developing and piloting land use planning guidelines. Outcome 2 was underspent by approximately US\$ 124,000 and Outcome 3 by approximately US\$ 530,000. The latter reflects the very limited progress in delivering several outputs (see **Annex 8**). Management costs were double what was budgeted, resulting in an overspend of approximately US\$ 338,00. Much of this overspend is due to the no cost extension, resulting in two additional years of project management fees and administrative costs. Extensions are costly in management terms and, in the case of this project, cost effectiveness was further reduced by the six-month delay in DSWC's release of funds in 2015 when some aspects of implementation came to a standstill.



**Table 3.4** Annual disbursement of funds by project outcomes and project management

Years	2009	2010	2011	2012	2013	2014	2015**	Total
<b>Outcome-1 Policy, regulatory and institutional environment support</b>								
Total Project Budget in Prodoc	155,000	130,000	155,000	130,000	130,000			700,000
Annual Work Plan	32,500	10,875	95,000	44,500	34,000	73,000	0	289,875
Disbursed	24,327	62,137	544,541	196,219	30,159	66,818	5,242	929,444
Remaining GEF Fund	130,673	67,863	-389,541	-66,219	99,841	-66,818	-5,242	-229,444
<b>Outcome-2 Options for improving the sustainability for jhum agro-forestry systems</b>								
Total Project Budget in Prodoc	340,000	390,000	390,000	340,000	290,000			1,750,000
Annual Work Plan	0	572,395	925,000	584,500	263,236	30,000		2,375,131
Disbursed	12,400	565,403	513,579	219,955	252,764	62,219		1,626,320
Remaining GEF Fund	327,600	-175,403	-123,579	120,045	37,236	-62,219	0	123,680
<b>Outcome-3 Enhanced capacity to replicate the project's experiences in others part of Nagaland</b>								
Total Project Budget in Prodoc	55,000	85,000	220,000	220,000	220,000			800,000
Annual Work Plan	0	0	15,000	29,000	173,000	146,918	0	363,918
Disbursed	0	7,190	0	22,710	139,143	101,356	-75	270,324
Remaining GEF Fund	55,000	77,810	220,000	197,290	80,857	-101,356	75	529,676
<b>Project Management</b>								
Total Project Budget in Prodoc	65,000	75,000	75,000	75,000	60,000			350,000
Annual Work Plan	23,500	118,230	265,000	283,000	125,000	134,700	31,089	980,519
Disbursed	2,406	85,657	175,589	180,386	108,344	105,462	30,486	688,329
Remaining GEF Fund	62,594	-10,657	-100,589	-105,386	-48,344	-105,462	-30,486	-338,329
<b>Grand Total</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Total</b>
Total Project Budget in Prodoc	615,000	680,000	840,000	765,000	700,000	0	0	3,600,000
Annual Work Plan	56,000	701,500	1,300,000	941,000	595,236	384,618	31,089	4,009,443
Disbursed	39,133	720,387	1,233,709	619,270	530,410	335,855	35,653	3,514,417
Unrealized Gain/loss	-2,019	11,028	22,420	38,559	19,620	540	163	90,311

\*\*Data for 2015 do not include the last quarter.

As noted at mid-term, financial management was unsatisfactory because it was being allocated at accelerated rates for activities outside the scope of the approved project in spite of showing little achievement towards delivering the required outcomes (MTE Report, p. 22). Corrective actions were taken as evident from the findings of this TE but from a disadvantageous position of having only 35% of the budget remaining to distribute not over the remaining life of the project (two years) but including an additional 18 month no cost extension. Clearly, this budget became increasingly challenging to manage and both DSWC and UNDP have been very vigilant to keep the budget on track.

### 3.2.5 Monitoring and evaluation: design at entry and implementation\*

**The design of the M&E framework at entry is rated as *Moderately Satisfactory* and its subsequent application during implementation is rated as *Moderately Unsatisfactory*.** The project engages in normal reporting mechanisms and the design of the Logical Framework is adequate but there are moderate shortcomings in its design that should have been addressed at inception and more particularly after the MTE, which highlights weaknesses in some of the indicators and their monitoring. The limited application of the M&E framework during implementation resulted in significant shortcomings in meeting some project targets.

Monitoring & Evaluation was rated as Moderately Satisfactory at mid-term. In Section 5.2.2 of the MTE report it is concluded that while the project engages in normal reporting mechanisms and has an adequate, albeit far from perfect, Logical Framework, M&E tools are not used effectively to link budget and impact reporting to the project's results framework. Furthermore, key baseline figures necessary to measure impact had not been generated. The project had

sufficient financial resources to conduct comprehensive monitoring but there are gaps in capacity. These most likely stem from a limited understanding on the part of the PMU regarding GEF project management and M&E requirements.

The TE team concur with these MTE findings and the observation that, although M&E tools exist, the monitoring and reporting of progress, budget and impact was not strategically linked to the achievement of intended project outcomes and outputs. Furthermore, despite corrective actions being taken by the project's management in response to MTE recommendations, weaknesses identified in some indicators of the Logical Framework were not addressed post-MTE and immediate priority should be given to establishing outstanding baseline targets. The limited and weak application of the M&E framework during implementation, especially with respect to the Logical Framework, undoubtedly resulted in significant shortcomings in delivering certain outputs and meeting some project targets. Examples include some of the hold ups in project implementation, such as the six month delay in the release of funds committed by the State government, the 18 months post-MTE taken to anchor the project under the APC, and the continuing months of delay in having LUPs translated into the local languages of the respective target villages, all of which may have been reduced or even averted with more robust monitoring, reporting and follow up mechanisms in place.

Clearly, the project would have benefitted from the services of an M&E specialist during the inception phase to validate/refine the Logical Framework and apply the monitoring system outlined in the Project Document.

### **3.2.6 UNDP and Implementing Partner implementation / execution\*, coordination and operational issues**

**Implementation by UNDP and its Implementing Partner (SWCD) is rated as *Moderately Satisfactory*.** This is a huge improvement on the *Moderately Unsatisfactory* rating of Implementation Approach at mid-term.

Implementation Approach was rated as Moderately Unsatisfactory at mid-term. The project was judged to be achieving a great many things but suffered from a lack of a cohesive strategy, with the result that what was being implemented was not what had been designed nor what GEF had intended to fund. The project had failed to follow the guidance in the Project Document and, arguably, many of the activities funded were contrary to accepted SLEM practices. As a result, the project had made very limited progress towards any of the intended outcomes/outputs, while expending 58% of available GEF financing (MTE Report, Section 5.2.4.i).

Major corrective actions have since been taken by UNDP and its Implementing Partner (SWCD) under the leadership of the APC, with strong support from the State government and continuing high level village commitment, to the extent that many outputs have been and are continuing to be delivered with considerable success. A most significant and far reaching achievement that UNDP and SWCD have been instrumental in designing and executing has been the creation and establishment of a land use planning mechanism at village level (i.e. LUC), under the delegated authority the Village Council, addresses the tradition of jhum cultivation. Most importantly, the mechanism includes women, who have no land holding rights in the State and may not participate in Village Council meetings, in the membership of the LUC and thereby empowers them to contribute to decision-making processes within the community and for the first time. A total of 37 LUCs had been established by December 2016; and the success of this initiative is clearly apparent from the fact that and additional 28 villages from within the project and remaining eight district districts have requested technical assistance on SLEM from UNDP.

The implementation approach, described in **Section 3.1.8**, was soundly designed and the organisational structure has evolved during implementation to being fit for purpose (**Figure 3.2**).

The National Implementation Modality (NIM) is proving to be effective, with the SWCD as the Implementing Partner and strengthened by its more recent anchorage under the APC in late 2015. Likewise, the establishment of multi-sector coordination platforms at district level is finally underway to support the LUCs in implementing the actions in their LUPs.

Currently, the main shortcomings in project implementation concern: the reduced implementation in 2015, due to unexpected delays in State government's release of funds, which has undermined consolidation on various fronts and especially with respect to Outcome 3; the limited time available to implement LUPs; and the continuing difficulties in communication between village LUCs and line departments through the district administrations in the absence of the above mentioned multi-sector coordination platforms. This last shortcoming also raises questions about whether coordinating mechanisms should also be set up under the district multi-sector coordination platforms at Community Development Block levels. Responsibility for these shortcomings lies largely within the Implementing Partner (DSWC).

There are also some more fundamental weaknesses identified during the MTE that have improved but still constrain effective delivery of project outputs and outcomes. Responsibility for these weaknesses lies largely with the Executing Agency (UNDP India) as they are more strategic (e.g. alignment of interventions) or process-oriented in nature (e.g. M&E), or concern the quantity and quality of deliverables. Such weaknesses relate to the following areas:

- alignment and prioritisation of interventions within the overall concept of the project and its strategic delivery;
- application and refinement of the M&E strategy, as designed in the Project Document, and use of the Logical Framework as a tool to help deliver outputs and outcomes in a strategic and focused way that will inform and underpin subsequent upscaling of SLEM jhum in agro-forestry systems; and
- more focus and prioritisation on documenting the project's extensive, prolonged and invaluable experience in promoting and demonstrating the importance of improved jhum within Nagaland's socio-economic and environmental context.

The PSC, chaired by the Chief Secretary and responsible for making executive decisions, met for a 6<sup>th</sup> time in August 2015. Board members also participated in the briefing on the initial findings of the TE Evaluators, when it was confirmed that the State government had committed a further 4.5 crores (approximately US\$ 923,000) from April 2016. This is additional to the 2.34 crores (approximately US\$ 480,000) released in August 2015 and reflects the State government's strong commitment to building on the achievements to date, beyond the life of the current project.

The PMU and District PMUs have continued to facilitate implementation, particularly through their close engagement with village LUCs in developing LUPs and supporting delivery of the actions. The latter has lacked the benefit of the planned district jhum committees to coordinate inputs from line departments but operated on a rather more *ad hoc* basis.

### 3.3 PROJECT RESULTS

#### 3.3.1 Overall results (attainment of objectives)\*

**The Project has met with considerable success and is evaluated as Satisfactory / Moderately Satisfactory with respect to the achievement of its objective:** to develop, demonstrate and upscale sustainable land management practices for the conservation of *jhum* (shifting cultivation) lands in Nagaland through an ecosystem approach.

This means that it has both minor and moderate shortcomings in the achievement of its objective in terms of relevance, effectiveness, or efficiency. This result is an above 'average'

accolade for those involved in the Project's formulation and implementation, being marginally above the third highest of six possible scores awarded to GEF projects. Furthermore, **Outcomes 1 and 2**, concerning the strengthening of enabling environment in support of jhum and the demonstration of options for improving the sustainability of jhum agroforestry systems, are evaluated as **Satisfactory** and having only minor short-timings. **Outcome 3**, to enhance capacity to replicate the project's policy reform and field experiences in other parts of Nagaland and in other States of India where shifting cultivation agroforestry systems are prevalent, is evaluated as **Moderately Satisfactory** and having some moderate short-comings with respect to community-based systems for monitoring changes resulting from project interventions and documentation of project experiences. Such short-comings, which limit the project's capacity to realize this 3<sup>rd</sup> Outcome, are considered to be largely a result of insufficient time to consolidate its achievements due to implementation delays, initially post-MTE when it was necessary to re-orient the project and latterly when funding dried up at the end of 2014 and implementation came to a standstill for six months.

This result is based on the assessment of project outputs (**Annex 8**, summarised in **Table 3.5**), project performance (summarised in **Table 3.6**) and project performance indicators (**Annex 9**).

The overall objective is visionary, breaking new ground in appreciating the environmental and socio-economic pros and cons of jhum, as traditionally practiced, and seizing the opportunity to embrace the pros and address the cons by focusing on improving jhum, rather than seeking alternatives to jhum that may be less sustainable in biodiversity, agro-diversity and cultural diversity terms over the longer term.

Important values associated with jhum as practiced in Nagaland include:

- its cyclical rotational nature confined to a given area;
- ownership of the land by the community (tribe) or members of it;
- strong and effective governance, based on traditional systems that have been transformed into today's Village Councils and are highly respected by the entire community;
- agricultural produce that is essentially organic and likely to remain so because farmers are aware of the disadvantages of chemical fertilizers and pesticides; and
- farmers are also becoming increasingly aware of potential, increasing niche market opportunities for producing 'safe' food; and high diversity of crops and varieties, which reduces losses from crop failures and contributes to economic stability at household and community levels, especially in the face of a changing climate.

Challenges associated with jhum include:

- slash and burn practices degrade or destroy biodiversity, expose soils to erosion, cause smog and related visibility and health problems, and release greenhouse gases (CO<sub>2</sub>) into the atmosphere;
- hard, manual work often in difficult terrain (steep hill slopes);
- reducing trend of labour availability as people migrate from rural to urban areas;
- poor access to/from jhum lands and to markets; and
- conflicts with wildlife.

Some excellent results have been achieved at the project sites, distributed across the three target districts; and the achievements and lessons learned will inform and strengthen the land use policy that is currently being assembled by the State. Strategically important results within the context of the challenges and opportunities afforded by the introduction of SLEM to improve jhum include:

- **Sound analysis and clear guidance on policy, regulatory and institutional reforms necessary to support improvements in jhum agroforestry systems.**

- **Establishment of Land Use Committees, as sub-committees under their respective village councils, within 40 target villages** and their development of integrated Land Use Plans (37 to date) facilitated by the District PMUs.
- **Engagement of line departments in technically supporting livelihood and income generating activities within 40 target villages.** Multi-sector district committees on jhum under District Collectors are in the process of being set up at district levels to coordinate land use planning at district levels.
- **Significant improvements in crop production, reductions in soil erosion, increases in incomes** as result of project interventions. These are supported by evidence-based impact assessments commissioned by the project.
- **Strong ownership by State Government at highest levels**, including financial commitments of INR 2.34 crores (US\$ 480,000) in 2015 and a further INR 4.5 crores (US\$ 730,000) for a follow up phase of the project in 2016.
- **Such ownership is reflected at district and village levels, facilitated by a committed PMU and District PMUs** who have engaged effectively with target villages and coordinated inputs from line departments.

Such achievements, however, are at risk of being usurped or jeopardised due to some serious shortcomings incurred during project implementation, notably:

- Significant delays in project implementation, including over a year for the project to become operational in the field, lack of commencement of work on some key outputs until after the MTE, and a six month period in 2015 when the project came to a virtual standstill due to cash flow shortages, have resulted in there being limited time (one year or less) for communities to implement their LUPs. Local livelihoods depend on these plans being effectively implemented and, therefore, are at risk in the absence of adequate, continuing support from line departments.
- Limited documentation and dissemination of the project's wealth of experience, encapsulating policy reform, land use planning process and concepts, jhum management case studies (best practice), etc during the life of the project. This hinders capacity to replicate the project's policy reform and field-level experience in other districts but efforts are underway post-project to translate materials into local tribal dialects for wider dissemination.<sup>28</sup>
- Longer term mainstreaming of SLEM is likely to remain in jeopardy until such time as carbon financing, ecosystem servicing and other mechanisms can be set up to sustain jhum agroforestry.
- There is no specific Exit Strategy for the project, although there have been extensive discussions between UNDP CO and the Government of Nagaland as to how best to take forward the project objective. These have focused on replication and scaling up participatory land use planning (PLUP), which will be institutionalised under the State Land Use Policy that is being drafted with the project's support.

The last chapter of this report considers such shortcomings and other priorities in more detail.

The project's objective comprises three immediate outcomes that are the subject of a qualitative assessment of the extent to which their respective outputs have been addressed in **Annex 8**, taking into account what was originally planned (Project Document), findings of the MTE and subsequent observations from this TE. These findings provide the basis of the more quantitative evaluation of the Logical Framework in **Annex 9** in which the project objectives, outcomes and outputs are rated, based on the extent to which targets have been met. The ratings for

<sup>28</sup>It should be noted that the legal and policy study, as well as the socio-ecological assessments supported by the project, have been cited in government reports. In addition, the agriculture market surveys and assessment have provided an important baseline for the Agriculture Department.

outcomes and their respective outputs are summarised in **Table 3.5** but the reader should refer to **Annexes 8** and **9** in order to fully appreciate the achievements, challenges and shortcomings in implementation at outcome and output levels. Key achievements and related considerations are summarised below.

### **Outcome 1**

- **Outcome 1** is rated as **Satisfactory**. Recommendations developed under **Output 1.2 (Highly Satisfactory)** for strengthening the policy and regulatory framework for jhum agroforestry systems proved to be sound and were well-received by government and others at a high level workshop in March 2015, at which consensus emerged on the most appropriate legal and institutional options to adopt. This framework has been well informed by the experience gained and lessons learned from developing an integrated, participatory land use planning approach (PLUP) for village jhum lands, for which guidelines have been produced in English and Konyak under **Output 1.3 (Satisfactory)**. The development and piloting of this approach did not start until after mid-term due to the project being somewhat side-tracked by a host of less important activities, hence it became necessary to re-quantify the output from 70 to 40 villages. Nevertheless the achievement is immense and perfectly adequate in terms of having a sufficient quantity of sites to raise awareness about PLUP and pilot a wealth of initiatives to improve the environmental sustainability of jhum and increase the diversity and production of jhum agroforestry systems.
- The establishment of an intersectoral coordination platform for jhum policy and management under **Output 1.1 (Moderately Satisfactory)** has proved elusive, due to frequent changes in government officers, and institutionally challenging in terms of designing something that will work for all key players within existing frameworks. The decision of the PSC taken in August 2015 to anchor the project (and presumably its Phase 2 successor) in the office of the APC and establish district level committees on jhum, with the District Collector as head of the committee and heads of departments of all line department as members. This places SWDC in a much more strategic position to coordinate the inputs from other line departments and, thereby, more efficiently and effectively facilitate the formulation of LUPs and implementation of associated action plans under the responsibility of the LUCs delegated to them by their respective Village Councils.
- It will be impracticable, however, for the District jhum committees to directly service the needs of the 100 or more villages within their respective districts, particularly once the project moves from piloting to mainstreaming improved jhum. This has already been identified as an outstanding challenge under Outcome 1 that can best be addressed by also establishing jhum sub-committees at the Community Development Block level, each Block comprising a dozen or so villages. Thus, Block level sub-committees would comprise one LUC member from each village engaged in jhum; and each Block sub-committee would be represented by one of its members on the District jhum committee. Two immediate advantages of such an arrangement are:
  - It would be relatively easy to ensure that LUPs for adjacent villages embrace more of a landscape and/or watershed approach to land use and management.
  - There will be greater opportunity to engage with other partners, such as the Agricultural Technology Management Agency (ATMA), Krishi Vigyan Kendra (KVK) and other organizations who are very much field oriented. ATMA, with its young officers for example, is well placed to facilitate multi-sector support for LUCs at Block level.

## Outcome 2

- **Outcome 2** is rated as **Satisfactory** with respect to the many, varied and extensive and improvements in jhum agroforestry systems that have been piloted, demonstrated and run their course in the 40 target villages of the three project districts. Many of these are the product of **Outputs 2.1 (Satisfactory)** and **2.4 (Satisfactory)** that, respectively, have been concerned with developing agri-silvi-horticultural models alongside land use planning. Community biodiversity conservation sites have been identified and earmarked for reservation in their respective LUPs under **Output 2.5 (Satisfactory)**, alongside various LUP conservation policies to protect the vegetation along stream/river gullies and banks, along ridges and on hill tops to minimise soil erosion. An important next step for the community conservation reserves will be inventorying their biodiversity using a simple participatory method, establishing a simple monitoring program and identifying any conservation measure necessary maintain and enhance the reserve. This will require some leadership from the DFEEW. Notable among all villages visited, without exception, is the firm intention not to introduce chemical fertilizers or pesticides to jhum lands. There is some evidence, albeit a little premature, that the trend in declining length of jhum cycles is being reversed; and plenty of evidence that income levels have increased, partly as a result of introducing more cash crops but also due to higher yields.
- Much has also been achieved under **Output 2.2 (Moderately Satisfactory)** with respect to alternate IGAs, such as fish ponds, piggeries, bee-keeping, but concerns were expressed by the MTE team about their linkages to the overall SLEM strategy, which is to improve jhum in terms of its ecological and economic viability. The TE team share these same concerns (see **Sections 3.1.1 and 4.3.1**). Another concern relates to the very good, comprehensive *Market Development Assessment for Organic Agri-Horticulture Produce* completed in 2014. A set of activities were identified for the interim period ending with the project's closure and it would have been pertinent to align these strategically with the implementation of the Land Use Action Plans, while deferring the Future Road Map to the next phase of the project. Instead all follow up has been deferred.
- Much capacity building has also been undertaken under **Output 2.3 (Moderately Satisfactory)** with respect to farmers, extension workers, Village Councils and LUCs. This appears to be poorly documented and again it is unclear how it is related to the SLEM strategy and, more particularly, how it has been or needs to be aligned with the actions (relating to training needs) in the LUPs. Importantly, there appears to be no means of monitoring the effectiveness of capacity building, for example by means of feedback forms distributed at the end of training sessions and workshops. Thus, in the absence of further data, this Output is being treated cautiously.

## Outcome 3

- **Outcome 3** is very much about enhancing capacity to replicate the project's policy reform and field experience in other parts of Nagaland and India where jhum agroforestry systems are practiced. It is rated as **Moderately Satisfactory**, along with **Outputs 3.1 and 3.4**, reflecting the fact that the project has been in catch-up mode ever since shifting back on course post-MTE and absorbing the impact of a six-month hiatus in the first half of 2015 while awaiting the release of funds from the State government.
- With respect to **Output 3.1**, there is no community-based system for monitoring change realised by the project at site level, nor the capability to use such a system. The LUPs do have a very basic M&E section for monitoring progress with the action plan but there is little evidence of this being used proactively, nor is there any process for reporting on performance. An assessment of the project's impact on fallow management, soil productivity, soil erosion, agriculture productivity and livelihoods communities was undertaken in the project area in Sept. 2014 – Jan. 2015 by the InsPIRE Network for

Environment<sup>29</sup>. Best practices were documented and policy/legal bottlenecks identified for upscaling and replicating lessons learnt from the project.

- **Output 3.4** relates to establishing a Centre of Excellence for sustainable jhum, which has since been dropped in favour of incorporating materials on the concept, experience and practice of improved jhum within the pre-service curriculum of Zubza Training Centre in DSWC. This has been completed.
- Very little has been achieved by way of documenting and disseminating the project's experience with jhum improvement, other than the guidance on PLUP (**Output 3.2 Moderately Unsatisfactory**)<sup>30</sup>. This is a very real shortcoming that needs priority attention at the onset of the follow-on phase to this project.
- **Output 3.3** on carbon storage was dropped post-MTE, apparently, due to a shortfall in resources. The Logical Framework had not been updated to reflect this change, which raises questions about due process being followed.

**Table 3.5** TE ratings of Project Outcomes and Outputs, based on evidence in **Annex 8**

Outcomes and Outputs		Rating*					
		HS	S	MS	MU	U	HU
<b>Outcome 1</b>	<b>The policy, regulatory and institutional environment in support of jhum agroforestry systems is strengthened.</b>		✓				
Output 1.1	Establishment of an inter-sectoral coordination platform on jhum policies and programs			✓			
Output 1.2	Recommendations for strengthening the policy and regulatory environment affecting jhum lands	✓					
Output 1.3	Guidelines for integrated land-use planning at the landscape/ village level		✓				
<b>Outcome 2</b>	<b>Options for improving the sustainability of jhum agroforestry systems are developed and demonstrated in selected project sites</b>		✓				
Output 2.1	Agri-silvi-pastoral models developed for enhancing alternative sources of livelihoods, mainstreaming biodiversity considerations and promoting greater ecological and cultural security		✓				
Output 2.2	Linkages established for alternate agri-silvi-pastoral practices			✓			
Output 2.3	Capacity building of farmers, government extension workers, and Village Councils			✓			
Output 2.4	Development and implementation of integrated land use plans on a watershed basis that improve delivery of ecosystem services and livelihood benefits		✓				
Output 2.5	Establishment of community biodiversity conservation sites		✓				
<b>Outcome 3</b>	<b>Enhanced capacity to replicate the project's policy reform and field-level experiences in other parts of Nagaland, as well as in other States of India, where shifting cultivation agroforestry systems are prevalent</b>			✓			
Output 3.1	Community-based system for monitoring change realized by the project at the farm/village level and in terms of policies in support of jhum			✓			
Output 3.2	Documentation of project experiences with improved land management techniques and approaches at the village level				✓		
Output 3.3	Assessment of the potential (carbon storage, benefit sharing possibilities) of these improved shifting cultivation agroforestry systems to be replicated						

<sup>29</sup>The InsPIRE study was intended to equate to the planned annual ecological performance audits, while also assessing socio-economic and ecological impacts.

<sup>30</sup>PMU has documented various integrated farming development practices, such as *Azolla* farming, vermicomposting, pig breeding and livestock rearing but some of these are more concerned with alternative livelihood options rather than being focused on jhum improvement, *per se*.



	and upscaled [Output 3.3 dropped post-MTE]					
Output 3.4	Center of Excellence is established comprising a consortium of different institutions in Nagaland		✓			

\* **HS** = Highly Satisfactory; **S** = Satisfactory; **MS** = Moderately Satisfactory;  
**MU** = Moderately Unsatisfactory; **U** = Unsatisfactory; **HU** = Highly Unsatisfactory

In line with GEF requirements (UNDP-GEF 2012), performance has also been rated in terms of project relevance, effectiveness, efficiency, sustainability and impacts, as well as the quality of M&E systems. These ratings are provided in **Table 3.6**, along with a brief justification based on evidence outlined earlier in this Terminal Evaluation report or in the sub-sections below.

**Table 3.6** Project performance ratings

Criteria	Rating	Comments
<b>Monitoring and Evaluation</b> (using 6-point satisfaction scale)		
Overall Quality of Monitoring & Evaluation	<b>MU</b>	Further details in <b>Sections 3.1.1, 3.2.1 and 3.2.3.</b>
<i>M&amp;E design at project start up</i>	<b>MS</b>	Overall design of M&E framework is reasonable, a main obstacle being that indicators in Logical Framework bear little or no coherent relationship with the project outputs. Thus, evaluation of outputs lacks quantifiable measures. Some indicators are poorly defined (e.g. no explanation in ProDoc about how baseline erosion rates measured); others insufficiently SMART (e.g. primary forest cover – barely exists in Nagaland and certainly not in target project sites; even if it did exist, satellite imagery would be required). Numerous inconsistencies between citing of outcomes and outputs in text and in tables, including LogFrame - never picked up at Inception, MTE or by PMU.
<i>M&amp;E Plan Implementation</i>	<b>MU</b>	Routine reporting (Quarterly Progress Reports, APRs/PIRs), annual work plans and budgets, and meetings (PSC) undertaken but at expense of LogFrame which has never once been revised with respect to indicators or targets. As noted in MTE report, PMU appears not to appreciate strategic value of LogFrame, nor use it proactively. Failure to establish all baselines at project onset is a significant weakness, as is failure to review and update LogFrame at inception. Also, PMU updates on status of indicator targets at mid-/end of term are not always focused on such targets, indicating some limited understanding.
<b>IA &amp; EA Execution</b> (using 6-point satisfaction scale)		
Overall Quality of Project Implementation/Execution	<b>MS</b>	Implementation was rated as Moderately Unsatisfactory at mid-term because the project had failed to follow the guidance in the ProDoc and, despite 58% of the budget expended on a plethora of activities up to mid-term, there was very limited progress towards any of the intended outcomes/outputs in accordance with the project's LogFrame. Major corrective actions have since been taken by UNDP and its Implementing Partner (SWCD) under the leadership of the APC, with strong support from the State government and continuing high level village commitment, to the extent that many outputs have been and are continuing to be delivered with considerable success. For example, a most significant and far reaching achievement that UNDP and SWCD have been instrumental in designing and executing has been the creation and establishment of a land use planning mechanism at village levels (i.e. LUC), under the delegated authority of Village Councils to address the tradition of jhum cultivation. Most importantly, the mechanism includes women in LUC membership. For the first time, women, who have no land holding rights in the State and cannot participate in Village Council meetings, have been empowered to contribute to decision-making processes within the community. The National Implementation Modality (NIM) is proving to be effective, with the SWCD as the Implementing Partner and strengthened by its more recent anchorage under the APC in late 2015. Likewise, the establishment of multi-sector coordination platforms at district level is finally underway to support the

		LUCs in implementing the actions in their LUPs. Further details for IA & EA execution in <b>Section 3.2.6</b>
<i>Implementing Agency Execution</i>	<b>MS</b>	Currently, the main shortcomings in project implementation for which responsibility lies largely within the Implementing Partner (DSWC), concern: <ul style="list-style-type: none"> <li>▪ reduced implementation in 2015, due to unexpected delays in State government's release of funds, which has undermined consolidation on various fronts and especially with respect to Outcome 3;</li> <li>▪ limited time available to implement LUPs; and</li> <li>▪ continuing difficulties in communication between village LUCs and line departments through the district administrations in the absence of the above mentioned multi-sector coordination platforms.</li> </ul>
<i>Executing Agency Execution</i>	<b>MS</b>	There are a number of fundamental weaknesses identified in MTE that have improved but still constrain effective delivery of project outputs and outcomes. Responsibility for such weaknesses lies largely with the Executing Agency (UNDP India) as these are more strategic (e.g. alignment of interventions) or process-oriented in nature (e.g. M&E), or concern the quantity and quality of deliverables. Weaknesses relate to the following needs: <ul style="list-style-type: none"> <li>▪ alignment and prioritisation of interventions within the overall project concept and its strategic delivery;</li> <li>▪ application and refinement of the M&amp;E strategy, as designed in the ProDoc, and use of the LogFrame as a tool to monitor delivery of outputs and outcomes in a strategic and focused way that will inform and underpin subsequent upscaling of SLEM jhum in agro-forestry systems; and</li> <li>▪ more focus and prioritisation on documenting the project's extensive, prolonged and invaluable experience in promoting and demonstrating the importance of improved jhum within Nagaland's socio-economic and environmental context. Several studies documenting project's experience and knowledge gained have yet to be translated into local tribal dialects.</li> </ul>
<b>Outcomes</b> (using 6-point satisfaction scale)		
Overall Quality of Project Outcomes	<b>S</b>	Rating based on separate assessment of project Outcomes and Outputs ( <b>Table 3.4</b> and <b>Annexes 8-9</b> ). In general, Outcome 1 well informed by high quality legal response to institutionalising PLUP into Nagaland's governance frameworks (Output 1.2); and Outcome 2 largely dependent on politically and technically sound design and implementation of land use planning process under the authority of LUCs conferred upon them by VCs, alongside a wide range of jhum and livelihood improvement initiatives (Outputs 1.3, 2.1-2.5). Insufficient time to consolidate inputs to Outcome 3 due to 6-month stall in implementation in 2015.
<i>Relevance</i>	<b>R</b>	In principle, the objective of the project and its three outcomes remain as, if not more, relevant today as when the project was conceived, given the continuing loss in Nagaland's forest cover - 4% loss between 2005 and 2013, the highest rate of any State in India. State government's commitment to finance follow on phase in 2016 is further validation of project's relevance (see <b>Section 3.3.2</b> ).
<i>Effectiveness</i>	<b>MS</b>	Extent of achievement of objective and outcomes, or likelihood of being achieved: Delays or incompleteness of certain outputs have reduced extent of achievement of Outcomes 1-3 (see <b>Section 3.3.3</b> ).
<i>Efficiency</i>	<b>MS</b>	Cost effectiveness of delivery of results diluted by inappropriately targeted interventions during initial 30 months of project and by 6 months delay in implementation in 2015, raising ratio of costs: achievement of outcomes.
<b>Sustainability</b> (using 4-point likelihood scale)		
Overall Likelihood of Sustainability <sup>31</sup>	<b>ML</b>	
<i>Financial resources</i>	<b>ML</b>	There is considerable country ownership of this project, sufficient most

<sup>31</sup> The 2012 Guidance for conducting terminal evaluations of UNDP-supported, GEF-financed projects states in the Rating Project Performance table (p. 30): Overall likelihood of risks to sustainability. This is misleading as it is the likelihood of sustainability which is supposed to be assessed, not the likelihood of the risk occurring.

		<p>probably to secure additional resources to mainstream the approach across other districts in Nagaland. UNDP will be providing technical person to resource applications.</p> <p>Government of Nagaland has committed INR 4.5 crores (approx. US\$ 680,000) for a follow up phase in 2016 during which efforts will need to focus on securing adequate resources to transition from piloting to mainstreaming improvements in jhum agroforestry through an ecosystem approach. Significant funds ring-fenced for NER states are available from North Eastern Council and Compensatory Afforestation Management Project Authority (CAMPA); other opportunities to explore include REDD+; North Eastern Electric Power Corporation (NEEPCO).</p>
<i>Socio-economic</i>	<b>ML</b>	<p>Concerns were raised in the MTE report (p. 31) that the project had been promoting a shift away from jhum agriculture/agroforestry, towards more sedentary and monetized production systems without safeguards. This could open the door to increasing encroachment and disenfranchisement of traditional peoples from the land base that has supported them for generations. Such a scenario may have arisen because the project lacked a transparent, robust set of criteria and screening process to ensure that interventions focused on promoting sustainable jhum, including safe food products.</p> <p>Without the benefit of land use planning, improved regulatory structures, and other safeguards designed to protect traditional values and address critical food security issues, there is a very real risk that the policies being pursued under this project will result in substantial, negative social impacts.</p> <p>It will be important to revisit and clarify the project's core vision and strategy at the outset of the transition phase, initially among implementing partners and then with the communities and other beneficiaries.</p>
<i>Institutional framework and governance</i>	<b>L</b>	<p>Project is in the process of strengthening institutional capacities and creating an enabling environment for improved jhum, through uniform land use policy approach; grounded in PLUP under the aegis of LUCs; and supported technically at district and community development block levels by multi-sectoral coordinating groups for jhum policies and management. (see <b>Section 3.2.6</b>)</p>
<i>Environmental</i>	<b>ML</b>	<p>Potential for environment is huge if SLEM for jhum conservation is upscaled through PLUP process under remit of LUC: vegetation cover will increase due to lengthening jhum cycle; forest cover will increase due to reservation of community forests and protection of gullies, river banks and ridge/hilltops from erosion; erosion from jhum cultivations reduced from contour bunding/trenches and crop yields increased (more carbon sequestered). Also, LUP policies will provide protection of cultivated jhum and fallow from livestock grazing, as required; chemical fertilizer free and pesticide free jhum lands producing 'safe' food and increasing the potential for safe drinking water.</p> <p>Such a vision is achievable through local governance structure (VC) as it is sufficiently authoritative and well respected; provided technical and financial resources can be accessed via District's/Community Development Block's jhum-coordinating body.</p>
<b>Impact (using 3-point impact scale)</b>		
<i>Environmental status improvement</i>	<b>M</b>	<p>Examples: Improved forest cover on jhum land is 35,472 ha over the life of this project. This amounts to 2% of total area of the State, which is minimal in terms of impact. Impacts will become significant once upscaling is at district level.</p>
<i>Environmental stress reduction</i>	<b>M</b>	<p>Examples: improved fallow management practices and soil/water conservation measures (contour bunding and trenching to capture soil/water run-off on hillsides) applied to 27,661 ha of jhum agro-forestry systems of target villages during project's life. Amounts to 1.7% of total area of the State, which is minimal in terms of impact. Impacts will be significant once upscaling is at district level.</p>
<i>Progress towards stress/status change</i>	<b>not known</b>	<p>Improved forest cover over 35,472 ha jhum land in target villagers needs to be assessed within national context of 4% reduction in forest cover since 2005 (see <b>Section 3.3.6</b>). There will have been some loss of forest cover within the</p>

		35,472 ha jhum land where forest cover improved from project intervention but extent not known (see <b>Figures 2.2</b> and <b>2.3</b> which illustrate forest losses and gains within same areas). More sophisticated monitoring techniques are required to detect net changes, such as Global Forest Watch type of approach (see <b>Table 2.2</b> ).
<b>Overall Project Results</b> (using 6-point satisfaction scale)	<b>S</b>	

**Satisfaction scale:** Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory

**Sustainability scale:** Likely, Moderately Likely, Moderately Unlikely, Unlikely

**Impact scale:** Significant, Minimal, Negligible

**Relevance scale:** Relevant; Not Relevant

### 3.3.2 *Relevance\**

*Extent to which objectives of interventions are consistent with key stakeholder requirements*

In principle, the objective of the project and its three outcomes remain as relevant today, with respect to promoting SLEM practices for the conservation of jhum lands, as when the project was conceived. Indeed, lessons learned from the project are even more relevant today than ever before, given that Nagaland has the highest rate of forest loss of any State in India, with a 4% decline in forest cover in period 2005-2013 years<sup>Error! Bookmark not defined.</sup>. State Government of Nagaland's commitment to finance follow on phase in 2016 is further validation of project's relevance.

Most of the project interventions have been demonstrated to be highly relevant, for example the introduction of SLM to jhum agroforestry systems through innovative participatory land use planning process at village level. Interventions have been supported by impact assessments to confirm and, where possible, quantify their impacts in terms of environmental, social and economic benefits at household, community and watershed/landscape levels.

Other research and assessment concerning the development of markets<sup>21</sup> for organic produce has contributed to confirming the relevance of various project interventions to improve jhum and identified future opportunities. For example, products from Nagaland are considered to be organic by default and 'exotic' by the rich elite – a niche market that can be secured, in terms of maintaining the organic integrity of such produce, and branded in ways that can better inform and, thereby, improve the public's often negative perceptions of jhum and raise the profile of jhum farmers.

### 3.3.3 *Effectiveness and efficiency\**

*Extent of achievement of objective and outcomes, or likelihood of them being achieved*

The effectiveness with which project outcomes were delivered is **Moderately Satisfactory** as summarised in **Table 3.6**.

Outcomes 1-2 have been achieved to a large extent, albeit the likelihood of Outcome 1 being fully realized is now in the hands of the State government with regard to making the necessary changes to policies and legislation. There is good reason for this to be given priority treatment in order to make best use of government's financial commitment to the next phase of the project in 2016. Effective delivery of both these Outcomes has been constrained by the long delays in establishing an inter-sectoral platform to coordinate project interventions and the provision of technical support services but this is now being addressed at district level (**Section 3.3.1**).

Delivery of Outcome 3 has not been fully achieved, there being shortfalls with respect to having a community-based system in place to monitor changes realized by project interventions at site and jhum policy levels (Output 3.1); and comprehensive documentation of the project's experience with improved land management approaches and techniques (Output 3.3) in order

to enhance replication of the experience elsewhere in Nagaland and India. Implementation was held up for the first six months of 2015 due to funding delays that had a knock-on effect on Outputs 3.1-3.2.

#### ***Cost effectiveness of delivery of results***

The efficiency with which project outcomes were delivered is **Moderately Satisfactory** as summarised in **Table 3.6**. This rating is influenced mostly by the findings of the MTE. As of June 2012, 30 months into the project, approximately 58% of the US\$ 3.6 million GEF budget, of which US\$ 700,000 was allocated to Outcome 1, US\$ 1,750,000 to Outcome 2 and US\$ 800,000 to Outcome 3. Expenditure accounted for 91% of the Outcome 1 allocation and 62% of the Outcome 2 allocation. During this time the project pursued field-level activities without the existence of the necessary frameworks (assessment, analysis, baseline data, land use plans, strategies and policies, etc.) to strategically focus and prioritize investment. As a result, activities were not strategically aligned to achieve the project's outcomes. Although the project made substantial alternative-livelihood contributions, to the extent that nearly all 70 target villages benefitted financially from setting up improved farming demonstrations, the cost-effectiveness of these expenditures was evaluated as low, with very limited measureable progress made towards the project objective and/or any outcomes/outputs (see MTE report, Section 5.2.4ii).

Clearly there were huge improvements in cost effectiveness post-MTE, when the project re-focused its efforts on core deliverables while cutting back on ad hoc interventions. The recent six-month delay in implementation will also have impacted on the project's cost-effectiveness because core staff will have been receiving their salaries but unable to progress aspects of their work that involved disbursement of funds.

#### **3.3.4 Country ownership**

The project concept benefits from strong national and state level support. The SLEM programme is a joint initiative of the Government of India and the GEF under the latter's Country Partnership Programme (CCP). Its objective is to promote sustainable land management and use of biodiversity as well as to maintain the capacity of ecosystems to deliver goods and services, while taking into account climate change. The SLEM CPP was developed to contribute to the implementation of the 11th Plan, wherein GoI has placed a high priority on raising agricultural productivity to achieve more than 4.1% annual growth. The plan acknowledges that this target cannot be achieved in the face of ongoing loss and degradation of the country's natural resources; therefore, it commits to conserving, harnessing and developing the natural resource base. The Plan further acknowledges that in order to be effective, SLEM must contribute directly to poverty reduction at household and community levels, in addition to maintaining land quality and ecosystem integrity. The SLEM CPP has established a dedicated, program-level management and coordination function in the form of a medium-size project (MSP) titled Policy and Institutional Reform for Mainstreaming and Up-scaling SLEM in India.

Environmental protection is an integral part of the constitutional, legislative, policy and programming foundation of the GoI. There is recognition of the adverse impacts of land and ecosystem degradation on the sustainable development trajectory of the country. The National Action Plan to Combat Desertification (2001) notes that "the process of desertification is impacting every aspect - loss of agricultural productivity, loss of natural resources (forests and vegetative cover, biodiversity, soil changes), socio-economic conditions (economic losses, problems of sustenance, decline in quality of life), etc. To translate this momentum into a more systematic national approach, GoI has engaged with the GEF and its Agencies (World Bank, FAO and UNDP) in the development of the SLEM Partnership. This project in Nagaland has been prioritized by the GoI as a critical component of the SLEM partnership insofar as it focuses on the issue of shifting cultivation that has been identified in the NAP, 2001 of the UNCCD as "one of the major causes of desertification in the country".

The State Government of Nagaland has shown commitment to this project from the outset, exemplified by its financial cash commitment of INR 2.34 crore to the project budget and, more recently, an additional INR 4.5 crore, which amounts to a total in excess of US\$ 1 million.

### **3.3.5 Mainstreaming**

The project has a sound and well-intentioned replication plan, as noted in the MTE Report and outlined in **Section 3.1.5**. All of Outcome 3 is dedicated to this purpose, with lessons learned from all project activities captured, systematically recorded from inception through completion, and used to inform a sustainable replication strategy to leverage village, district, state and national level upscaling.

The project had made no measurable progress with the implementation or realization of this strategy by mid-term. Subsequent progress, summarised in Annex 8 under Outcome 3, has fallen short of achieving the indicator targets (**Annex 9**) and clearly the project is not in a sufficiently consolidated and well-prepared position to move immediately into mainstreaming jhum agroforestry systems. Limitations include the lack of comprehensive documentation capturing the project's experience, the inexperience in participatory monitoring change at farm/village level (not as yet routinely underway in target villages) and the lack of experience in delivering the training modules in sustainable jhum agroforestry management systems which have only recently been incorporated into the pre-service curriculum of the Zubza Training Centre in DSWC. Also, Output 3 has yet to be delivered and is an important activity to accomplish in the follow-on phase.

### **3.3.6 Sustainability\***

The four dimensions of sustainability are rated in **Table 3.6**, with evidence provided alongside.

### **3.3.7 Impact**

Project impacts concern longer-term global environmental benefits, replication and other local effects.<sup>32</sup> They are rated in **Table 3.6** but it should be appreciated that this is on a local scale limited to the relatively small target sites.

Within a national context, the project's impact to date has been minimal at most. For example, the 35,472 ha of improved forest on jhum lands, cited in **Annex 9**, amounts to 2% of the area of the State, which is a minimal impact and does not even account for the 4% loss in forest cover since 2005<sup>Error! Bookmark not defined.</sup>.

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<sup>32</sup> Project impacts are defined in the 2012 UNDP *Guidance for Terminal Evaluation of GEF-funded and UNDP-implemented Projects* as: Actual or anticipated, positive or negative changes in global environmental benefit, as verified by environmental stress and/or status change, and also taking into account sustainable development impacts, including changed livelihoods.

## 4. CONCLUSIONS, RECOMMENDATIONS AND LESSONS

### Conclusions

This is a very visionary, opportune and challenging project: visionary on account of its objective to conserve rather than replace jhum lands through an ecosystem approach; opportune because jhum lands continue to be managed predominantly in traditional ways and, therefore, are free from chemical fertilizers and pesticides, thereby providing huge opportunities to fill increasing niche markets for safe food; and challenging because of the need to work in integrated, holistic ways that require multi-sectoral coordination and cooperation among line departments at state and district levels in order to achieve sustainable development manage jhum lands sustainably to meet and improve livelihoods while protecting and enhancing the environment.

Following a less than satisfactory start involving many interventions that used up some 60% of the budget over 30 months without marked progress towards the project outcomes due to limited appreciation of the Project Document, its strategy and results-based Logical Framework, many corrective actions have been taken and the project has achieved some good results. These include:

- Sound analysis and clear guidance on policy, regulatory and institutional reforms necessary to support improvements in jhum agroforestry systems.
- Establishment of Land Use Committees within 40 target villages and their development of integrated Land Use Plans (37 to date) facilitated by the District PMUs.
- Engagement of line departments in technically supporting livelihood and income generating activities within 40 target villages.
- Significant improvements in crop production, reductions in soil erosion and increases in incomes as a result of project interventions.
- Strong ownership by State Government at highest levels, including financial commitments of INR 2.34 crore (US\$ 480,000) in 2015 and a further INR 4.5 crore (US\$ 730,000) to a follow on phase of the project in 2016.
- Such ownership is reflected at district and village levels; facilitated by a committed PMU and District PMUs who have engaged effectively with target villages and coordinated inputs from line departments.

Further conclusions can be drawn from an analysis of the strengths, weaknesses, opportunities and threats (SWOT) of the project, the results of which are shown in **Table 4.1**. The current status of the project is summarised as follows:

#### Status quo

- The project has successfully demonstrated, albeit not completely as yet with respect to replication and mainstreaming, that jhum lands can be managed in much improved, sustainable ways that benefit nature (biodiversity), environment (soil, water) and local livelihoods.
- Ownership of the project and its strategy is very strong at state, district and village levels. The Government of Nagaland has demonstrated significant ownership, as reflected in its previous and future financial commitments to the project and its successor, respectively, as have the district line departments and village communities in their engagement with project interventions.
- The project is recently anchored under the aegis of the Agriculture Production Commissioner and it has been agreed to establish multi-sector district jhum committees,

chaired by the respective District Collectors, to provide a platform for coordinating the promotion and support of sustainable jhum agroforestry systems.

- Local governance by Village Councils is very strong and, through its Village Development Committees and Land Use Committees, provides a secure foundation for the development and implementation of jhum land use plans using participatory land use planning (PLUP) approaches.
- Land Use Committees (LUCs) are committed through their LUPs to jhum cultivation that is free from chemical fertilisers and pesticides: essentially, they recognise the importance of producing 'safe' food for their families and its higher market value, for which there are existing niche markets in Nagaland and especially across the border in Assam and more widely across India.

**Table 4.1** SWOT analysis of the project and its implementation

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>▪ <b>Major cash</b> (INR 2.34 crores - US\$ 480,000) <b>and in-kind financing by Nagaland Government.</b> Further INR 4.5 crores (US\$ 730,000) committed to 2016 follow on phase.</li> <li>▪ <b>Strong ownership:</b> by government at State and District levels; and Village Councils and Land Use Committees.</li> <li>▪ <b>Strong governance of jhums:</b> under-pinned by Village Councils and introduction of Land Use Plans under LUCs.</li> <li>▪ <b>Committed PMU,</b> supported well by Executing Agency (UNDP).</li> <li>▪ <b>Positive response to MTR</b> resulting in establishment of 40 LUCs, with &gt;37 LUPs prepared to date.</li> <li>▪ <b>Increased income generation</b> through a diversity of farming activities underway.</li> <li>▪ <b>Conservation policies applied:</b> forest reserves, erosion control, organic farming (niche markets).</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Project design</b> <ul style="list-style-type: none"> <li>– Values of agro-biodiversity overlooked.</li> <li>– Some indicator baselines absent at project inception.</li> </ul> </li> <li>▪ <b>Implementation</b> <ul style="list-style-type: none"> <li>– Totally inadequate Inception Report</li> <li>– Over 6 months implementation delay in 2015 due to lack of government funds.</li> <li>– Vision of 'improving sustainability of jhum' not consistently maintained and applied.</li> <li>– Criteria for selection of target villages and interventions not clearly defined and transparent.</li> <li>– Low awareness within project team at state and district levels of LogFrame and its critical monitoring role.</li> <li>– Proactive monitoring of outputs and LUP implementation absent.</li> </ul> </li> <li>▪ <b>Lack of coordination mechanism</b> between LUCs and district agencies.</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>▪ <b>Landscape approach:</b> informed by State strategy to enhance integrity/connectivity of remaining natural habitats within jhum lands.</li> <li>▪ <b>Agrobiodiversity</b> identified in order to conserve wild crop relatives and land races for future food and health security.</li> <li>▪ <b>Research and monitoring</b> of soil erosion, species diversity and ecosystem services to inform jhum policies and management.</li> <li>▪ <b>Participatory monitoring</b> by communities to inform LUPs.</li> <li>▪ <b>Production of 'safe' food</b> for home/community consumption and <b>niche markets.</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Increasing human/wildlife conflict</b> <ul style="list-style-type: none"> <li>– Elephant attracted by ponds, crops</li> <li>– State landscape strategy absent</li> </ul> </li> <li>▪ <b>Climate change</b> <ul style="list-style-type: none"> <li>– Increasing frequency of extreme conditions</li> </ul> </li> <li>▪ <b>Emigration from villages</b> <ul style="list-style-type: none"> <li>– Decreasing labour to manage jhum</li> </ul> </li> <li>▪ <b>Sustainability</b> <ul style="list-style-type: none"> <li>– Lack of research and M&amp;E field trials on 'improving jhum'.</li> <li>– Lack of state policies to support LUP policies.</li> <li>– Lack of TA and financing mechanisms to sustain LUP implementation.</li> </ul> </li> </ul>

**The project has met with considerable success and is evaluated as Satisfactory / Moderately Satisfactory with respect to the achievement of its objective:** to develop, demonstrate and upscale sustainable land management practices for the conservation of *jhum* (shifting cultivation) lands in Nagaland through an ecosystem approach. This means that it has both minor and moderate short-comings in the achievement of its objective in terms of relevance, effectiveness, or efficiency. This result is an above 'average' accolade for those



involved in the Project's formulation and implementation, being marginally above the third highest of six possible scores awarded to GEF projects.

This overall rating reflects significant improvement since mid-term, when two of the three outcomes were evaluated as not having substantively or measurably progressed. The project was given an overall rating of **Moderately Satisfactory** at mid-term but further comparison between the two sets of ratings is not possible, as the criteria rated do not match.

#### **4.1 CORRECTIVE ACTIONS FOR PROJECT DESIGN, IMPLEMENTATION, MONITORING AND EVALUATION**

The overall design of the project is sound as outlined in **Section 3.1.1** and previously confirmed in the MTE Report. The main shortcomings concern the Logical Framework, details of which are provided in **Sections 2.6** and **3.1.1**, and these can be summarised as follows:

- Indicators and their targets provide the basis for rating project outcomes, which comprise a series of outputs. In order to assess outcomes comprehensively, it is imperative that indicators embrace at least the key outputs. In a number of cases, as exemplified in Section 3.1.1, there is little or no relation between the indicators and certain key outputs.
- Some indicators are weak and, arguably, the primary forest cover indicator for Outcome 1 is inappropriate as most jhum lands are unlikely to retain any 'primary' forest; they mostly concern secondary forest. A more appropriate indicator would be one that captures the essence of sustainably managed jhum agroforestry vegetation cover (e.g. secondary forest).
- There is no/inadequate information in the Project Document about how some of the indicator baselines should be measured.
- There are inaccuracies in the wording of outcomes and outputs between the main text, various tables in the main text (Part A) and the Logical Framework, itself, in Part B of the Project Document. These are identified in **Section 3.1.1**.

The above shortcomings should have been picked up and addressed during project implementation, notably during the inception phase when a cleaned up and appropriated revised version of the Logical Framework should have been included in the Inception Report. Moreover, a number of indicator baselines required measurement in Year 1 and should have been established during the inception period but this was not done, nor by mid-term in time for the MTE.

Serious corrective actions were taken by project management in response to the findings of the MTE in order to bring the project back on track and in line with what was planned in the Project Document. The actions proposed and measures taken were commensurate with what was required to address the project's failings at that time and some very good progress has been made since the MTE. These corrective actions are documented in UNDP's management response, shown in **Annex 3**, supplemented by comments from the TE team.

The project's M&E framework was applied with respect to routine reporting mechanisms but the monitoring and reporting of progress, budget and impact was not strategically linked to the achievement of intended project outcomes and outputs. This led to corrective actions to the budget in the wake of the MTE but further budgetary adjustments had to be taken in 2014 due to the State Government's financial contributions not being released until mid-2015, following concerted actions by UNDP CO and the APC. Meanwhile, implementation was severely jeopardised by a shortage of cash during the first half of 2015 (**Section 3.2.4**)

More generally, the limited and weak application of the M&E framework during implementation, especially with respect to the Logical Framework, undoubtedly resulted in significant shortcomings in delivering certain outputs and meeting some project targets. Examples include some of the delays and hold ups in project implementation, such as the six month delay in the

release of funds committed by the State Government, the 18 months post-MTE taken to anchor the project under the APC, and the continuing months of delay in having LUPs translated into the local languages of the respective target villages, all of which may have been reduced or even averted with more robust monitoring, reporting and follow up mechanisms in place.

Arguably, the project should have hired an M&E specialist during the inception phase to validate/refine the Logical Framework and apply the monitoring system outlined in the Project Document (**Section 3.2.5**).

## 4.2 ACTIONS TO FOLLOW UP OR REINFORCE INITIAL BENEFITS FROM THE PROJECT

### Recommendations – Transition Phase

The Project has broken new ground in Nagaland, demonstrating to good effect how SLEM can be introduced to jhum lands in ways that reduce environmental impacts, maintain and enhance biodiversity and improve livelihoods. Much needs to be done **to consolidate** the Project's achievements, **complete** some unfinished business and **transition** towards mainstreaming the successes within the three target districts and more widely across other districts in Nagaland.

The Government of Nagaland has committed INR 4.5 crores (US\$ 730,000) to support a follow on phase of the project in 2016, providing much needed funds to consolidate experiences to data and plan for future replication over the next 12-18 months. UNDP also intends to provide some technical support during 2016. Priorities during this transition phase are considered to be as follows:

- 1) Continue to provide technical support to existing target villages to enable them to **monitor and deliver their LUPs and action plans**.
- 2) The **policy and regulatory framework in support of jhum agroforestry** is in the process of being established, following pioneering inputs from the project, and **needs to be fast tracked by government** so that the enabling environment is in place ahead of mainstreaming.
- 3) Building on the establishment of multi-sector district platforms for improved planning and management of jhum lands for provisioning of ecosystem services to benefit local livelihoods, public welfare and biodiversity, **establish equivalent platforms at the level of Community Development Blocks on which LUCs are to be represented**. This completes the infrastructure necessary for subsequent mainstreaming of jhum agroforestry.
- 4) **Comprehensively document the project's experience**, providing guidelines on the concept, policies and practices for improvement of jhum agroforestry systems within an ecosystem services and landscape context, and translate them into relevant local tribal dialects. Distribute widely using multi-media, including the project's website currently hosted by UNDP<sup>33</sup>. (Note: this activity links to mainstreaming activities in **Section 4.3**.)
- 5) **The role of selected farm schools/demonstrations (at least one per district) will be enhanced and include monitoring and experimental research functions** to complement their educational/demonstration role. Such research will validate and enhance improvements in jhum agroforestry through monitoring and experiment in the field (jhum lands). UNDP is encouraged to introduce reflective practice<sup>34</sup> into these farm

<sup>33</sup>There is very limited documentation available from the project's website, currently hosted by UNDP. As a minimum, reports of all commissioned studies and guidance should be readily accessible from this site. ([http://www.undp.org/content/india/en/home/operations/projects/environment\\_and\\_energy/sustainable\\_land\\_and\\_ecosystem\\_management\\_in\\_shifting\\_cultivation\\_areas.html](http://www.undp.org/content/india/en/home/operations/projects/environment_and_energy/sustainable_land_and_ecosystem_management_in_shifting_cultivation_areas.html))

<sup>34</sup>Reflective practice is a process of individually or, as in this case, collectively stopping to think about practice, consciously analyzing decision making and drawing on theory (knowledge) and relate this to what is being

schools, both for their own benefit and also for them to use as a tool with visiting LUCs and jhumias to train others in such good practice.

- 6) **Pilot the organisation of producer companies**, one per district, to realise the high potential for marketing such products as ginger, cardamom, Naga chilli and vegetables<sup>35</sup>, as recommended in the 2014 *Market Development Assessment for Organic Agri-Horticultural Produce* commissioned by the project. Focus on securing higher returns by setting up sorting, processing, packaging and marketing (including branding) systems in consultation with the Central Institute of Horticulture (CIH), School of Agricultural Sciences (SASRD) and the Agricultural Department. (Note that this activity links to mainstreaming activities in **Section 4.3.**)
- 7) **Establish participatory monitoring systems for village jhum lands** that are compatible with their respective LUPs and associated action plans. These should be based on a common framework with a view to being maintained in a centralised database system for maintaining an overview at block and district levels. The framework should link to the project's Logical Framework or certainly its successor for the transition framework having first addressed weaknesses with some of the indicators, as identified in **Section 2.6** and **3.1.1**. (Note that this activity links to mainstreaming activities in **Section 4.3.**)
- 8) **Pilot sustainable, community-based tourism that features agri-, eco- and cultural aspects of tourism**. For example, develop a circuit that might embrace Longjang and New Wokha villages, where elephants are regularly seen.
- 9) **Collaborate with other projects to develop synergies**, such as the KFW-funded biodiversity project that is currently held up by some procedural delays in the central government. UNDP is in discussion with KFW to work out possible synergies. UNDP is also supporting the state government to access funds from IFAD to scale up the project's best practices.
- 10) **Work in partnership with other institutions and organisations**, such as:
  - i. Nagaland University to document traditional biodiversity-based knowledge, especially with reference to land use planning.
  - ii. Community-based youth organizations to facilitate land use planning and management.
  - iii. Various outreach and community-oriented based organisations; and strengthen existing partnerships as in the case of such as ATMA and KVK.
- 11) **Source new funding to mainstream the project objective across the State**. Potential opportunities include:
  - i. Working with UNDP to develop community-based REDD readiness programmes.
  - ii. Exploring major funds, such as those ring-fenced for NER states and available from North Eastern Council (NEC); National Mission for a Green India (GIM), under Gol's National Action Plan on Climate Change; Compensatory Afforestation Management Project Authority (CAMPA); and, for jhum villages, North Eastern Electric Power Corporation (NEEPCO).
  - iii. Bi-/multi-lateral funds (e.g. JICA for forest conservation, GEF for biodiversity and climate change, GEF Small Grants for LUPs and their implementation e.g. marketing safe food).

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practiced. Critical analysis and evaluation may be used to refocus thinking on existing knowledge and help generate new knowledge and ideas. In its simplest form, reflective practice is about reflecting on what the individual or group do and learning from their experience. Most importantly, the process of reflective practice must be carried in in a non-threatening, nurturing environment in a spirit of learning from failures as well as successes.

<sup>35</sup>It is worth noting the suggestion from the PSC at its meeting with the TE team: that marketing and branding/certifying of safe/organic food products should start with dried foods as these are less perishable and, therefore, do not require special storage facilities.

- iv. Project Elephant – for specific wildlife conflict areas such as in Wokha.
  - v. Corporate Social Responsibility (CSR) funding from the private sector.
- 12) **Institutionalise the future initiative/programme** by, for example, registering it as a society (e.g. Meghalaya Rural Development Society).

#### 4.3 PROPOSALS FOR FUTURE DIRECTIONS UNDERLINING MAIN OBJECTIVES

##### **Recommendations - Mainstreaming**

The project has made substantial progress towards its overall goal (development objective): “*To promote sustainable land management and use of biodiversity as well as maintain the capacity of ecosystems to deliver goods and services while taking account of climate change.*” Its success to date has led to the State Government’s commitment, with keen support from UNDP, to replicate this approach and mainstream it across Nagaland as an integral part of participatory land use planning. Government’s commitment is fully supported and encouraged, based on the evidence-based findings of this TE.

Mainstreaming will be most effective if it follows a transition phase, already funded by the State Government, during which outstanding project activities are completed, outcomes are consolidated with regard to their respective outputs, certain new initiatives are piloted, and funding for future upscaling is secured as outlined in **Section 4.2**.

Key considerations and directions for the future are identified as follows:

- 1) Lessons from the SLEM project are learnt and applied to the mainstreaming of SLEM. Key lessons are identified in **Section 4.4.1**. Most importantly, **mainstreaming must be focused solely on upscaling jhum agroforestry; funds and other resources should not be diverted into supporting settled agriculture** as has been observed in the present project because it undermines the concept and strategy of improving jhum and devalues what is being delivered. For this purpose, it is imperative that a consistent, transparent, criteria-based process is used to screen activities to be supported.
- 2) Jhum agroforestry mainstreaming will be supported by the infrastructure established by the project and consolidated during the transition. It will be anchored under the remit of the APC, and supported at District and Community Development Block levels by multi-sector platforms on jhum policy and management, with LUCs directly engaged at the Block level.
- 3) Land use planning for jhum lands will continue to be delivered by the LUCs, building on experience to date; and with more emphasis on watershed and landscape consideration within the context of the Block and District, ultimately feeding into and being informed by a State Landscape Strategy that provides an overarching framework for conserving the State’s biodiversity and agrobiodiversity, and embracing traditional values and practices.
- 4) Thus, the State Landscape Strategy will be developed concomitantly with the mainstreaming of jhum agroforestry. It will identify internationally, nationally and regionally important biodiversity and agro-biodiversity hotspots, and provide an overarching spatial framework for their conservation. It will also embrace agri-‘cultural’ practices. The Strategy will provide a framework for land use planning at district and block levels and, vice versa, LUPs consolidated at block and district levels will apply the Strategy and inform the fine-tuning of the Strategy.
- 5) Establish and maintain a centralised database and GIS on the status of jhum lands, based on participatory monitoring of LUPs by their respective LUCs and associated action plans initiated during the transition phase (**Section 4.2**). This will be accessible via the website for the programme (**Recommendation 11 below**).

- 6) The role of farm schools expanded during the transition phase (**Section 4.2**) will be mainstreamed across districts (at least one farm school per district).
- 7) Establish Farmer Producer Organisations (FPOs)<sup>36</sup> with support from the Ministry of Horticulture and Small Farmers Agribusiness Consortium (SFAC), as recommended in the 2014 *Market Development Assessment for Organic Agri-Horticultural Produce* commissioned by the project. Development of FPOs will be informed by the piloting of producer companies during the transition phase, as described in **Section 4.2**.
- 8) In parallel with the establishment of FPOs, engage with the organic certification programmes of the Government of Nagaland to explore opportunities for linking farmers directly to markets under an organic brand name to secure better prices for their produce. Meanwhile, promote a system of participatory guarantees of organic certification, whereby farmers self-certify organic production, as supported by the National Centre of Organic Agriculture and the Participatory Guarantee Systems Organic Council.
- 9) Mainstream sustainable, community-based tourism that features agri-, eco- and cultural aspects of tourism, as piloted during the transition phase.
- 10) Introduce sustainable waste management into communities that manage jhum lands, based on the principle that all agricultural and organic household waste should be returned (recycled) to jhum lands.
- 11) Develop a comprehensive website that is maintained by the institution managing the programme, which subsumes the existing project website hosted by UNDP.

#### **4.4 BEST/WORST PRACTICES IN ADDRESSING RELEVANCE, PERFORMANCE AND SUCCESS ISSUES**

##### **4.4.1 Lessons**

Lessons identified from the design and implementation of this project and that should be applied to the follow on transition and mainstreaming phases include the following:

- Nagaland's governance structure at village level provides a solid foundation for sustainable land use management, provided it is developed within an overarching landscape approach that secures diversity of agriculture and wildlife.
- Consistent, transparent, criteria-based approach to improve and sustain jhum should be applied to the screening and selection of interventions resourced by the project. **On no account should resources be expended on activities concerned with the development of settled cultivation.**
- Maintaining a policy of organic/safe food production in jhum lands, supported by integrated pest management, is environmentally sustainable and in keeping with traditional practices. Most importantly, it provides Nagaland jhumias with niche marketing opportunities for safe food, particularly since products from Nagaland are considered to be organic by default and 'exotic' by the rich elite of neighbouring states. Furthermore, Nagaland is among a small number of states in India, primarily in the NER, uniquely placed to secure the health and wealth of its people through mainstreaming the production and marketing of safe food from jhum.
- Further successes and mainstreaming are largely dependent on improved access between jhum areas and markets, and food storage facilities (refrigeration, drying, processing).
- Improved jhum must be informed by sound science, hence the recommendation to include a research and monitoring role within farm schools (at least one per district). Such

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<sup>36</sup>FPOs facilitated by SFAC have a two-tier structure: groups of 15-20 farmers for Farmers' Interest Groups and about 50 of these FIGs come together to establish an FPO.

research should include the piloting of techniques to reduce burning (e.g. composting and/or use of tethered goats to process leaves/shoots on cleared areas prior to their cultivation).

- Mainstreaming needs policy support, which has been identified during the course of the project and now needs to be introduced through appropriate enabling legislation by the Government of Nagaland.
- Agricultural and organic household waste must be returned to jhum areas to sustain productivity. This should also be demonstrated and researched at the farm schools.
- Use of the Logical Framework is fundamental to the effective monitoring and evaluation of projects. Lack of due attention to ensuring it is fit for purpose at project inception stage will jeopardise subsequent monitoring of implementation and ultimately be detrimental to the MTR and TE results. It is very important, therefore, to ensure that: (i) any changes to the project during the inception period and post-MTR are adequately reflected in the Logical Framework; and (ii) progress towards targets is reviewed at least annually.
- Solutions to natural resource management normally involve a wide range of interest groups (stakeholders). This project has demonstrated the importance of multi-sector cooperation and the recent establishment of multi-sector platforms for jhum at district levels is expected to reinforce this lesson.
- Wildlife conflict is an issue in some parts of some districts, for examples elephants destroying crops in the vicinity of New Wokha to where they have been recently attracted by the construction of new ponds for fish and planting of banana trees. Much more holistic thinking and planning is required in the development of LUPs, as such issues can be averted sometimes. In this instance, ecotourism (elephant viewing) rather than cultivation may prove to be an equally remunerative IGA.

#### **4.4.2 Best practices**

Best practices, many of which have already have been highlighted in **Section 3.3.1** and elsewhere, are considered to be as follows:

- Grounding SLEM within a robust local governance system, in this case Land Use Plans under the authority of LUCs delegated by their respective Village Councils, and thereby maximising its institutionalisation and ownership at grassroots level. This bottom-up approach also increases opportunities for securing future resources through village, block and district level budgets, reducing reliance on more distant funding from state and central governments and/or development agencies, and lends its to developing a landscape-scale approach to SLEM and biodiversity conservation over the longer term.
- Multi-sector platforms, established at district levels and comprising focal persons from the relevant line departments, to regularly coordinate their technical and other support to village communities engaged in jhum cultivation.
- Maintaining the status quo of jhum lands as traditionally being free from chemical fertilizers and pesticides/herbicides because of impacts on environmental and human health and the opportunity to produce safe food, for which there are niche marketing opportunities.
- Establishment of demonstration farms and schools to promote improved jhum agroforestry. There are also opportunities to widen the remit of farm schools to include monitoring and research, as well as the promotion of reflective practice<sup>34</sup> among jhumias.

#### **4.4.3 Worst practices**

The worst practice evident from this project concerns its failure to follow the Project Document from the outset of implementation. This is epitomised by the complete inadequacy of the four-

page Inception Report, which did not provide a proper account of how the project would be implemented. This appears not to have picked up and addressed by the PSC, nor by UNDP. The net result was a large number of project interventions implemented by mid-term that did not address project outputs and outcomes in any strategic manner, by which time 58% of the budget had been spent. Fortunately, this was picked up at mid-term and remedial measures were clearly articulated and to a large extent successfully implemented, albeit not always to completion.

**Annex 1: Terms of Reference for Terminal Evaluation****INDIVIDUAL CONSULTANT PROCUREMENT NOTICE**Closing Date: 20<sup>th</sup> August 2015**ASSIGNMENT: INTERNATIONAL CONSULTANT/ TEAM LEADER FOR Terminal Evaluation (TE) of the Sustainable Land and Ecosystem Management in Shifting Cultivation Areas of Nagaland for Ecological and Livelihood Security (PIMS 4073)**

Duration: Twenty Five working days spread over three months;

Duty Station: Home based with travel to Nagaland &amp; New Delhi as per assignment

**INTRODUCTION**

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. These terms of reference (TOR) sets out the expectations for a Terminal Evaluation (TE) of the *Sustainable Land and Ecosystem Management in Shifting Cultivation Areas of Nagaland for Ecological and Livelihood Security (PIMS 4073)*

The essentials of the project to be evaluated are as follows:

**PROJECT SUMMARY TABLE**

Project Title:	Sustainable Land and Ecosystem Management in Shifting Cultivation Areas of Nagaland for Ecological and Livelihood Security			
GEF Project ID:	70449		<i>at endorsement (Million US\$)</i>	<i>at completion (Million US\$)</i>
UNDP Project ID:	4073	GEF financing:	US\$ 3,600,000	
Country:	India	IA/EA own:		
Region:	South Asia	Government:	US\$ 25,426,612	
Focal Area:		Other:		
FA Objectives, (OP/SP):		Total co-financing:	US\$ 25,426,612	
Executing Agency:	UNDP	Total Project Cost:	US\$ 29,026,612	
Other Partners involved:	ProDoc Signature (date project began):			2009
	(Operational) Closing Date:		Proposed: 31 December, 2015	Actual:

**OBJECTIVE AND SCOPE**

The project will contribute to the achievement of the following goal of the SLEM Programme: "To promote sustainable land management and use of biodiversity as well as maintain the capacity of ecosystems to deliver goods and services while taking account of climate change." The project will contribute to this goal along with the other projects being developed under the Sustainable Land and Ecosystem Management Programme.



The project objective is: To develop, demonstrate and upscale sustainable land management practices for the conservation of *jhum* (shifting cultivation) lands in Nagaland through an ecosystem approach. The project objective will be achieved through the following outcomes.

- Outcome 1: The policy, regulatory and institutional environment supports the integration of sustainable land management practices on *jhum* lands
- Outcome 2: Options for improving the sustainability of *jhum* agroforestry systems are developed and demonstrated in selected project sites (70 villages spread over the 3 districts of Mon, Mokokchung and Wokha in Nagaland)
- Outcome 3: Enhanced capacity to replicate the project's policy reform and field-level experiences in other parts of Nagaland, as well as in other States of India, where shifting cultivation agroforestry systems are prevalent

**Outcome 1: The policy, regulatory and institutional environment supports the integration of sustainable land management practices on *jhum* lands**

The objective of this project outcome is to ensure an enabling environment is created, which may include strengthening of policies, institutions and related programs in ways that support sustainable management of *jhum* lands or provide for sustainable alternatives where *Jhum* is no longer ecologically viable.. Historically, the emphasis has been on replacing *jhum* and this approach has not received much success. In addition, there are a number of different institutions working on different aspects of the livelihood system of *jhumias* (subsistence agriculture, market agriculture, timber and NTFPs, livestock). What is needed is an integrated approach at the community-level. Further policies need to be modified to take into account the unique situation of the NER and *jhum* lands in particular.

*Output 1.1 Establishment of an inter-sectoral coordination platform on *jhum* policies and programs*

This group will bring together representatives from state government departments (namely, Soil and Water Conservation; Agriculture; Horticulture; Forests, Ecology, Environment and Wildlife; and Land Resource Development), academic institutions (Nagaland University, North Eastern Hill University), and community-based organizations.

The primary mandate of this group will be to focus on how government policies, programs and resources can be mobilized to support *jhum* cultivation as an integral part of a landscape-level sustainable land and ecosystem management strategy. The group will be formed by a notification from the state government detailing its mandate, functions, and responsibilities. In order to develop the capacity of the group to be effective agents of change at the policy-level, training and information exchange workshops will be held to share international best-practice on the issue of enhancing sustainability of *jhum* lands.

*Output 1.2 Recommendations for strengthening the policy and regulatory environment affecting *jhum* lands*

An analytical review will be undertaken of the main policy gaps that pose barriers to mainstreaming sustainable land and ecosystem management practices in *jhum* agriculture. Policies to be analyzed include, but are not limited to, the State Forest Policy, the State Agricultural Policy and Land Use Policy that are under development, Credit Policy, and the Bamboo Policy. Specific amendments to these policies will be recommended. These policies will be assessed to identify how they can directly support sustainability of *jhum* lands. The policies should support a mosaic of different land uses which when integrated across the landscape diversify and enhance livelihoods as well as maintain ecosystem services. In addition, an integrated plan will be prepared for coordinated, joint delivery of extension services to farmers in project sites across the different departments (agriculture, horticulture, S&WC, land resource development, forest, and animal husbandry).

The analytical review will be followed by a consultative dialogue involving inputs from government, non-government, and research institutions, in order to facilitate policy change. The dialogue and follow-up process will be led by the inter-sectoral coordination group.

*Output 1.3 Guidelines for integrated land-use planning at the landscape/ village level*

Based on existing good practice guidelines on community-based, landscape-level land use planning, specific guidelines will be developed for Nagaland. The guidelines will outline the key steps and process for stakeholders (community members, Village Councils, Village Development Boards, scientists, government representatives, and private businesses if applicable) to come together and discuss how to manage lands for the benefit of current and future generations and to ensure ecological sustainability of lands and resources. The purpose of the planning process will be to

develop management and governance strategies that respond to scientific understanding of natural and social systems as well as changing societal conditions and values.

**Outcome 2: Options for improving the sustainability of *jhum* agroforestry systems are developed and demonstrated in selected project sites**

The development and implementation of community-based sustainable land use plans will be organized on a watershed basis (clustering villages/ communities within the watershed). The aim is to reach out to approximately 70 villages (Mokokchung – 30, Mon - 21, Wokha – 19). The three districts of Mon, Mokokchung and Wokha have been selected for demonstrating the project strategy primarily because *jhum* cultivation is widely practiced here. Within these districts, those villages with the greatest proportion of *jhumia* families will be selected. Where feasible, sites will be chosen based on their proximity to biodiversity hot spots (see map in Part D5). The main outputs under this outcome are as follows.

*Output 2.1 Agri-silvi-pastoral models developed for enhancing alternative sources of livelihoods, mainstreaming biodiversity considerations and promoting greater ecological and cultural security*

In order to tailor agri-silvi-pastoral models to community needs and circumstances, under this output, biophysical characteristics (e.g., soil, biodiversity richness), socio-economic characteristics, and important cultural considerations will be documented for the target villages. This baseline information will be useful for designing integrated land use plans, and monitoring impacts. In order to properly document traditional knowledge, Village Biodiversity Boards will be revived in target villages. These Boards are mandated to maintain Peoples' Biodiversity Registers (PBRs).

In recent years, efforts have been made to identify techniques for reducing the adverse impacts of *jhum* systems on biodiversity and to enhance their role in controlling land degradation (most notably through the NEPED programs, as well as research trials being conducted by institutes in the NER). Based on this existing documentation and consultation with local farmers and state-level stakeholders, an inventory will be prepared of techniques that can be successfully adopted in the target sites. Special emphasis will be placed on obtaining women's input on the feasibility of proposed techniques because women conduct almost 70% of activities in *jhum* systems. For each target village, based on its biophysical and socio-economic baseline, the most appropriate agro-silvi-pastoral model will be identified.

*Output 2.2 Linkages established for alternate agri-silvi-pastoral practices*

Some of the key barriers to adoption of alternative models are the absence of adequate forward (access to markets, green premiums for organic produce) and backward linkages (services such as storage facilities, access to credit, and other inputs that can support sustainable production practices) that enable farmers to generate greater value from their existing production. This output will focus on identifying and ensuring that these linkages are made for target villages.

**Credit:** The project will improve the availability of credit and investment to enhance the generation of marketable surplus from the agri-silvi-pastoral system. This will be achieved through the establishment of micro-credit facilities (such as revolving funds), as well as by encouraging local level credit institutions to increase lending to farmers. The project will work to further enhance and empower existing credit systems (like those operated by NEPED in Phase II).

**Quality control, storage, transportation and marketing:** Resources will be targeted to improving the system of collection, quality-control, storage, transportation and marketing of the produce. In terms of marketing, special emphasis will be placed on brokering favorable agreements for the organically produced outputs of the agri-silvi-pastoral system (which is a defining characteristic of *jhum* agricultural systems). The project will draw on the growing experience in the NER with marketing of organic produce and tap into existing institutional capacities to help farmers' groups in project sites access organic markets.

*Output 2.3 Capacity building of farmers, government extension workers, and Village Councils*

One of the lessons learned from past experience is that there is a lack of awareness among the shifting cultivators on possible means to integrate SLEM principles into their farming practices. Further, there is a lack of trained and dedicated extension workers. The project will, therefore, target resources for building farmers' capacities and that of government extension workers in SLEM practices. Capacity building and input support will be provided to farmer self-help groups (SHGs). Adequate representation of women in these SHGs will be ensured. Training will be provided in (a) relevant government policies that provide the framework for undertaking sustainable use of forest and

land resources, (b) application of improved techniques and approaches that enhance livelihoods and ecosystem health, (c) accessing credit to maximize value of production, (d) quality control methods, storage techniques and facilities, and transportation and marketing opportunities.

Government agriculture/ horticulture/ soil and water conservation extension agents are not trained in participatory land management and supporting community-selected priorities. Therefore, capacity building efforts will also include selected local representatives of government line departments (forest, agriculture, horticulture, land development, soil and water conservation). Training will focus on (a) application of improved techniques and approaches that enhance livelihoods and ecosystem health, (b) relevant government policies that provide the framework for undertaking sustainable use of forest and land resources, (c) application of participatory methods (principles and techniques).

Similarly, the capacity of Village Councils and Village Development Boards to promote biodiversity conservation and sustainable land management in their decision-making will be enhanced through training on (a) application of improved techniques and approaches that enhance livelihoods and ecosystem health, (b) relevant government policies that provide the framework for undertaking sustainable use of forest and land resources, (c) application of participatory methods (principles and techniques), (d) project planning and management, (e) community mobilization, and (f) conflict resolution.

*Output 2.4 Development and implementation of integrated land use plans on a watershed basis that improve delivery of ecosystem services and livelihood benefits*

For each watershed a comprehensive, integrated land use plan will be developed based on community priorities and in line with land capability. The Department of Soil and Water Conservation has introduced the concept of participatory three-dimension model maps (P3DM). This will be used to produce a scale relief model of a community-defined management area as a first step for the community to understand its land and biodiversity resources. Communities will be supported with a community-based landscape planning approach consisting of: (a) identifying and demarcating areas suitable for *jhum*, (b) maintaining and enforcing sustainable *jhum* cycle by appropriately dividing the available *jhum* land into several blocks with community regulation ensuring that only 1 block is cultivated per year (as practiced by the Ao tribe); (c) identifying and demarcating areas not suitable for *jhum* and implementing alternative land use systems; (d) identifying areas for soil and water conservation; (e) implementing improved farming systems (both technology and cropping patterns) to increase the productivity and sustainability of *jhum*.

Pilot farms/ plots will be identified in the 70 villages on which the alternative land and water management practices are to be implemented. Full participation of Village Councils will be ensured because they have the authority to determine and allocate village lands to different uses. Land will be allocated to different uses with the dual objective of promoting biodiversity conservation and sustaining livelihoods. The VCs will issue guidelines/ codes of conduct on how the different land uses (*jhum* fields, fallows, intensive farming areas, and community-based biodiversity conservation sites) are to be undertaken. Resources will be allocated to different land users/ self-help groups to undertake activities in these lands according to the issued guidelines.

*Output 2.5 Establishment of community biodiversity conservation sites*

In villages that are close to biodiversity hot spots (see map in Part D5), the project will work with the Village Council to establish community biodiversity conservation sites. Building on recent experience in this regard, agreements will be reached with communities on conservation set-asides. Community representatives will be provided with training in the management of these areas, with the technical assistance of the Forest Department. The potential to tap in to ecotourism revenues will also be explored with the collaboration of the Tourism Department.

**Outcome 3: Enhanced capacity to replicate the project's experiences in other parts of Nagaland, as well as in other States of India, where shifting cultivation agroforestry systems are prevalent**

*Output 3.1 Community-based system for monitoring change realized by the project at the farm/ village level and in terms of policies in support of jhum*

The project's effectiveness will be monitored and evaluated throughout its course against set performance indicators (the initial set of indicators have been outlined in the project's LogFrame; these will be refined and fine-tuned during the project's initiation phase). Adaptive management will be employed to provide a basis for learning lessons and adjusting the project to maximize its

effectiveness. Project monitoring and evaluation will follow the UNDP/GEF quality guidelines as described in detail in the project's M&E Plan and M&E Budget.

In line with GEF and UNDP policy independent, external, mid-term and final evaluations of the project will be conducted. In terms of ecological evaluation, the project would envisage an annual ecological performance audit, to be carried out by an independent organization in collaboration with regional environment and natural resources protection agencies. Results from the audit will be fed back to the project and to the local authorities via an audit report, in order that the identified recommendations and environmental mitigation and/or enhancement measures can be considered and adopted by the project moving forward. Moreover, the audit process will also include parallel (mainly on-the-job) training, awareness and capacity- building in sustainable natural resource management for both project beneficiaries and regulatory authorities, such that in time the awareness and capacity to identify and address environmental issues is mainstreamed within both the project communities and regional natural resources protection agencies alike.

The monitoring of impacts of modified land use practices on *jhum* lands will be undertaken by community representatives. Community Based Impact Assessment (CBIA) and other techniques will be employed, while also incorporating indigenous knowledge on impact monitoring. Community representatives participating in monitoring field-level impacts will be trained in documenting and mapping village level natural resources and their status and collecting data on change realized as a result of project interventions. Technical advice and guidance will be provided by external competent support agencies. Measurement of impact indicators related to global benefits (impact indicators are identified at the level of the project objective) will be undertaken through subcontracts to qualified institutions.

*Output 3.2 Documentation of project experiences with improved land management techniques and approaches at the village level*

The Sustainable Land and Ecosystem Management Programme (of which this project forms a part) addresses the issue of institutional coordination, and outreach and scaling up of SLM solutions through an MSP titled "Policy and Institutional Reform for Mainstreaming and Upscaling SLM in India"

that is to be established within the MoEF. This is to serve as the node for the management, outreach and M&E functions of the Program. Lessons learned under this project in Nagaland will be fed into this system for replication in other parts of the country where shifting cultivation is practiced.

To facilitate the dissemination and replication of best practices, the project will dedicate resources to compiling lessons learned on the main elements of the project strategy – policy reform to support integration of SLEM in *jhum* lands, as well as field level demonstrations of more sustainable community-based management of land resources. These will be geared to the different audiences and translated in local languages as appropriate. A replication plan will be developed and agreed on by the Steering Committee of the project. It will identify other watersheds and villages for application of project lessons and instruments, in 5 and 10 year increments, following project closure.

*Output 3.3 Assessment of the potential (carbon storage, benefit sharing possibilities) of these improved shifting cultivation agroforestry systems to be replicated and upscaled*

The evolving opportunities for developing countries to mobilize financing for preserving ecosystem services. Reduced Emissions from Deforestation and Degradation (REDD) is one such area. Under this output a study will be undertaken to assess the potential for tapping into REDD schemes. The study will cover all aspects including the enabling environment that needs to be in place (public policies, institutions, human resource capacities) so that Nagaland is in a better position to leverage these new sources of environmental finance, as well as operational aspects such how the payments should be made to ensure equity and efficiency.

*Output 3.4 Center of Excellence is established comprising a consortium of different institutions in Nagaland*

Given the strong historical emphasis on replacing *jhum* and converting *jhumias* to settled agriculture, special efforts will have to be made to promote and popularize the project's approach of integrating sustainable land and ecosystem management principles into the socially-preferred *jhum* cultivation system. To mobilize a critical mass of thought leaders, the project will establish a Centre of Excellence on Sustainable *Jhum* that will bring together and support the work of existing, like-minded research groups and individuals. This will largely be co-financed. GEF resources will cover the necessary institutional assessments and technical analysis to determine the most appropriate and effective

institutional make-up of the Center. Any recurrent costs of the Center (such as space, salaries) will be covered by the State government.

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

### EVALUATION APPROACH AND METHOD

An overall approach and method<sup>37</sup> for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator is expected to frame the evaluation effort using the criteria of **relevance, effectiveness, efficiency, sustainability, and impact**, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. A set of questions covering each of these criteria have been drafted and are included with this TOR ([Annex C](#)) The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall annex it to the final report.

The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser based in the region and key stakeholders. The evaluator is expected to conduct a field mission to Nagaland, including the PMU at Kohima and the three project districts of Mon, Mokokchung and Wokha. Key stakeholders to be interviewed will include a) farming communities, b) NGOs, c) Self Help Groups, d) Village Management Committees/Eco-development Committees, e) Land Use Committees, f) Relevant agri and allied department officials, Project Steering Committee, State Level Coordination committee, District Level Committee, etc, and other relevant stakeholders.

The evaluator will review all relevant sources of information, such as the Project Document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in [Annex B](#) of this Terms of Reference.

### EVALUATION CRITERIA & RATINGS

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see [Annex A](#)), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: **relevance, effectiveness, efficiency, sustainability and impact**. Ratings must be provided on the following performance criteria. The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in [Annex D](#).

<b>Evaluation Ratings:</b>			
<b>1. Monitoring and Evaluation</b>	<i>rating</i>	<b>2. IA&amp; EA Execution</b>	<i>rating</i>
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
Overall quality of M&E		Overall quality of Implementation / Execution	
<b>3. Assessment of Outcomes</b>	<i>rating</i>	<b>4. Sustainability</b>	<i>rating</i>
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental :	
		Overall likelihood of sustainability:	

<sup>37</sup>For additional information on methods, see the [Handbook on Planning, Monitoring and Evaluating for Development Results](#), Chapter 7, pg. 163.

## PROJECT FINANCE / COFINANCE

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator(s) will receive assistance from the Country Office (CO) and Project Team to obtain financial data in order to complete the co-financing table below, which will be included in the terminal evaluation report.

Co-financing (type/source)	UNDP own financing (mill. US\$)		Government (mill. US\$)		Partner Agency (mill. US\$)		Total (mill. US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual
Grants								
Loans/Concessions								
<input type="checkbox"/> In-kind support								
<input type="checkbox"/> Other								
Totals								

## MAINSTREAMING

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will assess the extent to which the project was successfully mainstreamed with other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender.

## IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in ecological status, b) verifiable reductions in stress on ecological systems, and/or c) demonstrated progress towards these impact achievements.<sup>38</sup>

## CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of **conclusions, recommendations and lessons**.

## IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation resides with the UNDP CO in India. The UNDP CO will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the evaluation team. The Project Team will be responsible for liaising with the Evaluators team to set up stakeholder interviews, arrange field visits, coordinate with the Government etc.

## EVALUATION TIMEFRAME

The total duration of the evaluation will be 25 days according to the following plan:

Activity	Timing
<b>Preparation</b>	<b>2 days</b>
<b>Evaluation Mission</b>	<b>15 days</b>
<b>Draft Evaluation Report</b>	<b>5 days</b>
<b>Final Report</b>	<b>3 days</b>

<sup>38</sup>A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROtI) method developed by the GEF Evaluation Office: [ROTI Handbook 2009](#)

The evaluation team is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
<b>Inception Report</b>	Evaluator provides clarifications on timing and method	No later than 2 weeks before the evaluation mission.	Evaluator submits to UNDP CO
<b>Presentation</b>	Initial Findings	End of evaluation mission	To project management, UNDP CO
<b>Draft Final Report</b>	Full report, (per annexed template) with annexes	Within 3 weeks of the evaluation mission	Sent to CO, reviewed by RTA, PCU, GEF OFPs
<b>Final Report*</b>	Revised report	Within 1 week of receiving UNDP comments on draft	Sent to CO for uploading to UNDP ERC.

\* When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report.

### TEAM COMPOSITION

The evaluation team will be composed of 2 consultants – **international and national**. The international consultant will be designated as the Team Leader and will be responsible for finalizing the report. The consultants shall have prior experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The evaluators selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.

The Team Leader must present the following qualifications:

#### Team Leader -International consultant

1. A minimum of 10 years of working experience in the related field is required
2. Master's Degree (preferably Ph.D.) in the field of natural sciences or social sciences or a subject closely related to SLM/ integrated natural resource management. In-depth understanding of landscape ecology conservation approaches and community-based natural resource management as well as experience in shifting cultivation practices is desirable.
3. Should have good knowledge of UNCCD process; NAP and other relevant UN conventions (CBD and UNFCCC) will be an added advantage.
4. Experience and familiarity with assessments of policies, strategies and possess sufficient knowledge of land degradation and desertification issues at the national and local levels is necessary.
5. Highly knowledgeable of participatory monitoring and evaluation processes, and experience in evaluation of technical assistance projects with major donor agencies; previous evaluation/review experience of UNDP-GEF projects is an advantage;
6. Familiar with conservation approaches in Asia either through management and/or implementation or through consultancies in evaluation of conservation projects. Understanding of local actions contributing to global benefits is crucial;
7. Demonstrated ability to assess complex situations, succinctly distil critical issues, and draw forward-looking conclusions and recommendations;
8. Ability and experience to lead multidisciplinary and national teams, and deliver quality reports within the given time.

### EVALUATOR ETHICS

Evaluation consultants will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex E) upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the [UNEP 'Ethical Guidelines for Evaluations'](#)

## ANNEX A: PROJECT LOGICAL FRAMEWORK

## ANNEX A: PROJECT LOGICAL FRAMEWORK

**Overall goal:** To promote sustainable land management and use of biodiversity as well as maintain the capacity of ecosystems to deliver goods and services while taking account of climate change. The project will contribute to this goal along with the other projects being developed under the Sustainable Land and Ecosystem Management Programme.

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
Objective: To develop, demonstrate and upscale sustainable land management practices for the conservation of <i>jhum</i> (shifting cultivation) lands in Nagaland through an ecosystem approach	No change in primary forest cover in project sites	Baseline measured in Y1	In Y4, improved forest cover or remains the same as in baseline	Annual independent ecological performance audit; mid-term and final independent evaluation	There is a high level of political acceptance of the project approach of supporting <i>jhum</i> as an essential component of a long-term strategy to promote biodiversity conservation and control of land degradation in hilly areas
	Land area where improved <i>jhum</i> agroforestry systems are in place	0	90,000 hectares of land covering approximately 70 villages in 3 districts by Y4	Annual independent ecological performance audit; mid-term and final independent evaluation	
	Decrease in rates of soil erosion in project sites	Baseline for project sites to be measured in Y1; erosion rates for the target districts are estimated as: Mokokchung: 60 mt/ha/year  Mon: 40-50 mt/ha/year  Wokha: 40-50 mt/ha/year	Same or less than baseline	Annual independent ecological performance audit	
	Increase in incomes of target communities	Baseline to be measured during the project	10% improved income	Annual project monitoring report; mid-term and final independent evaluation	

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
		inception phase			
Outcome 1: The policy, regulatory and institutional environment in support of <i>jhum</i> agroforestry systems is strengthened	Strengthened Agriculture frameworks that explicitly support enhancing sustainability of <i>jhum</i> systems	Policy does not support enhancing sustainability of <i>jhum</i> systems	Policy explicitly supports enhancing sustainability of <i>jhum</i> systems by Y4	Annual project monitoring report; mid-term and final independent evaluation	There is close cooperation among the various state departments that address <i>jhum</i> land issues – Agriculture, Horticulture, Forest, Land Resource Development, Animal Husbandry
	Creating enabling environment in Forest regulations that explicitly recognize and support improved <i>jhum</i> systems as sustainable agroforestry systems that improve forest health	Stresses adverse environmental impact of <i>jhum</i>	Explicit recognition and support for improved <i>jhum</i> systems as sustainable agroforestry systems that improve forest health by Y4	Annual project monitoring report; mid-term and final independent evaluation	
	Credit provisioning systems enabled for farmers who work on communally owned lands	No support for extending credit to farmers who work on communally owned lands	Provisions for extending credit to such farmers are integrated into the policy by Y4	Annual project monitoring report; mid-term and final independent evaluation	
	Integrated land-use planning at landscape level encouraged and strengthened.	No guidelines	Draft guidelines approved by Y2	Annual project monitoring report; mid-term and final independent evaluation	
	Increase in joint extension activities by different departments (agriculture, horticulture, S&WC, land resource development, forest, animal husbandry)	Extension activities are undertaken separately	In target villages all extension services are coordinated according to an integrated plan by Y2	Annual project monitoring report; mid-term and final independent evaluation	
Outcome 2: Options for improving the sustainability of <i>jhum</i> agroforestry systems are	Land productivity indicator (measure of returns from farming calculated as outputs minus inputs, e.g. yield minus inputs)	Baseline measured in Y1	Productivity improved by 5% over the baseline	Annual project monitoring report; mid-term and final independent evaluation	There is active community participation and adoption of improved approaches



Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
developed and demonstrated in selected project sites (70 villages spread over the 3 districts of Mon, Mokokchung and Wokha in Nagaland)	Lengthening of <i>jhum</i> cropping phase	2 years	3 years by Y4	Annual project monitoring report; mid-term and final independent evaluation	Cofinancing commitments are realized
	Lengthening of <i>jhum</i> fallow phase	8 years	9 years	Annual project monitoring report; mid-term and final independent evaluation	
	Contribution of income from sale of (organically grown) produce to local economy increases	Baseline measured in Y1	Increase of 5% over baseline. Effort will be made to include as much as women beneficiaries as possible (say 50%)	Annual project monitoring report; mid-term and final independent evaluation	
	Number of women benefiting from marketing of produce from <i>jhum</i> fields	Baseline measured in target villages in Y1	300 women beneficiaries (100 from each district)		
Outcome 3: Enhanced capacity to replicate the project's policy reform and field-level experiences in other parts of Nagaland, as well as in other States of India, where shifting cultivation agroforestry systems are prevalent	Number of requests from other districts and states to visit project sites and obtain assistance from the Center of Excellence	0	At least 5-6 requests by Y4	Annual project monitoring report; mid-term and final independent evaluation	The central institutional mechanism that is to be established under the SLEM programme is operational, and is effectively fulfilling its knowledge management, dissemination and uptake role
	Plan for extending project strategy to additional villages and districts with associated resource commitments from government	0	By Y4, at least 3 more districts have a budgeted plan for replicating	Annual project monitoring report; final independent evaluation	

**Outcome 1:** The policy, regulatory and institutional environment in support of *jhum* agroforestry systems strengthened

Output 1.1 Establishment of an inter-sectoral coordination group on *jhum* policies and programs that brings together representatives from state government departments (soil and water conservation, agriculture, horticulture, forests, land resource development), academic institutions (Nagaland University, North Eastern

Hill University), and community-based organizations.

Output 1.2 Recommendations for strengthening the policy and regulatory environment affecting *jhum* (Forest Policy, Agricultural Policy, etc) based on (a) an analytical review of policy gaps and (b) a consultative dialogue among the group of stakeholders identified in 1.1 above.

Output 1.3 Recommendations for integrated land-use planning at landscape/village level.

**Outcome 2:** Options for improving the sustainability of *jhum* agroforestry systems are developed and demonstrated in selected project sites (70 villages spread over the 3 districts of Mon, Mokokchung and Wokha in Nagaland)

Output 2.1 Agri-silvi-pastoral models for enhancing alternative sources of livelihoods, mainstreaming biodiversity considerations and promoting greater ecological and cultural security

Output 2.2 Linkages established for alternate agri-silvi-pastoral practices

Output 2.3 Capacity building of farmers, government extension workers, and Village Councils (with a special emphasis on adequate representation of women)

Output 2.4 Development and implementation of integrated land use plans on a watershed basis that improve delivery of ecosystem services and livelihood benefits

**Outcome 3:** Enhanced capacity to replicate the project's policy reform and field-level experiences in other parts of Nagaland, as well as in other States of India where shifting cultivation agroforestry systems are prevalent

Output 3.1 Monitoring system to measure change realized by the project at the farm/ village level and in terms of policies in support of *jhum*.

Output 3.2 Documentation of project experiences with policy-reform and improved land management techniques and approaches at the village level – various information dissemination products, in different languages, geared to different audiences.

Output 3.3 An assessment of the potential (carbon storage, benefit sharing possibilities) of these improved shifting cultivation agroforestry systems to be replicated and up scaled.

Output 3.4 A Center of Excellence is established comprising a consortium of different institutions in Nagaland.

## ANNEX B: LIST OF DOCUMENTS TO BE REVIEWED BY THE EVALUATORS

- Project Document
- Inception Workshop Report
- Mid-term review report of project
- Nagaland Project Fact sheet
- Annual Project Report/ Project Implementation Review till 2014
- Minutes of the Project Steering Committee Meetings
- Quarterly Reports
- Annual financial audit reports
- Back to office reports of UNDP staff (if any)
- Study reports/Conference proceedings/government guidelines, etc.
- GEF Monitoring & Evaluation Policy
- Other publications prepared under the Nagaland Project

**ANNEX C: EVALUATION QUESTIONS**

*This is a generic list, to be further detailed with more specific questions by CO and UNDP GEF Technical Adviser based on the particulars of the project.*

<b>Evaluative Criteria Questions</b>	<b>Indicators</b>	<b>Sources</b>	<b>Methodology</b>
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

**ANNEX D: RATING SCALES**

<p><b>Ratings for Outcomes, Effectiveness, Efficiency, M&amp;E, I&amp;E Execution</b></p> <p>6: Highly Satisfactory (HS): no shortcomings</p> <p>5: Satisfactory (S): minor shortcomings</p> <p>4: Moderately Satisfactory (MS)</p> <p>3: Moderately Unsatisfactory (MU): significant shortcomings</p> <p>2: Unsatisfactory (U): major problems</p> <p>1: Highly Unsatisfactory (HU): severe problems</p>	<p><b>Sustainability ratings:</b></p> <p>4. Likely (L): negligible risks to sustainability</p> <p>3. Moderately Likely (ML): moderate risks</p> <p>2. Moderately Unlikely (MU): significant risks</p> <p>1. Unlikely (U): severe risks</p>	<p><b>Relevance ratings</b></p> <p>2. Relevant (R)</p> <p>1.. Not relevant (NR)</p> <p><b>Impact Ratings:</b></p> <p>3. Significant (S)</p> <p>2. Minimal (M)</p> <p>1. Negligible (N)</p>
<p><b>Additional ratings where relevant:</b></p> <p>Not Applicable (N/A)</p> <p>Unable to Assess (U/A)</p>		

**ANNEX E: EVALUATION CONSULTANT CODE OF CONDUCT AND AGREEMENT FORM<sup>39</sup>****Evaluators:**

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

**Evaluation Consultant Agreement Form****Agreement to abide by the Code of Conduct for Evaluation in the UN System**

Name of Consultant: \_\_\_\_\_

Name of Consultancy Organization (where relevant): \_\_\_\_\_

**I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.**Signed at *place* on *date* Signature: \_\_\_\_\_<sup>39</sup>[www.unevaluation.org/unegcodeofconduct](http://www.unevaluation.org/unevaluation.org/unegcodeofconduct)

**ANNEX F: EVALUATION REPORT OUTLINE<sup>40</sup>****i. Opening page:**

- Title of UNDP supported GEF financed project
- UNDP and GEF project ID#s.
- Evaluation time frame and date of evaluation report
- Region and countries included in the project
- GEF Operational Program/Strategic Program
- Implementing Partner and other project partners
- Evaluation team members
- Acknowledgements

**ii. Executive Summary**

- Project Summary Table
- Project Description (brief)
- Evaluation Rating Table
- Summary of conclusions, recommendations and lessons

**iii. Acronyms and Abbreviations (See: UNDP Editorial Manual<sup>41</sup>)****1. Introduction**

- Purpose of the evaluation
- Scope & Methodology
- Structure of the evaluation report

**2. Project description and development context**

- Project start and duration
- Problems that the project sought to address
- Immediate and development objectives of the project
- Baseline Indicators established
- Main stakeholders
- Expected Results

**3. Findings (In addition to a descriptive assessment, all criteria marked with (\*) must be rated<sup>42</sup>)****3.1 Project Design / Formulation**

- Analysis of LFA/Results Framework (Project logic /strategy; Indicators)
- Assumptions and Risks
- Lessons from other relevant projects (e.g., same focal area) incorporated into project design
- Planned stakeholder participation
- Replication approach
- UNDP comparative advantage
- Linkages between project and other interventions within the sector
- Management arrangements

**3.2 Project Implementation**

- Adaptive management (changes to the project design and project outputs during implementation)
- Partnership arrangements (with relevant stakeholders involved in the country/region)
- Feedback from M&E activities used for adaptive management
- Project Finance:
- Monitoring and evaluation: design at entry and implementation (\*)
- UNDP and Implementing Partner implementation / execution (\*) coordination, and operational issues

<sup>40</sup> The Report length should not exceed 40 pages in total (not including annexes).

<sup>41</sup> UNDP Style Manual, Office of Communications, Partnerships Bureau, updated November 2008.

<sup>42</sup> Using a six-point rating scale: 6: Highly Satisfactory, 5: Satisfactory, 4: Marginally Satisfactory, 3: Marginally Unsatisfactory, 2: Unsatisfactory and 1: Highly Unsatisfactory, see section 3.5, page 37 for ratings explanations.



### 3.3 Project Results

- Overall results (attainment of objectives) (\*)
- Relevance(\*)
- Effectiveness & Efficiency (\*)
- Country ownership
- Mainstreaming
- Sustainability (\*)
- Impact

### 4. Conclusions, Recommendations & Lessons

- Corrective actions for the design, implementation, monitoring and evaluation of the project
- Actions to follow up or reinforce initial benefits from the project
- Proposals for future directions underlining main objectives
- Best and worst practices in addressing issues relating to relevance, performance and success

### 5. Annexes

- ToR
- Itinerary
- List of persons interviewed
- Summary of field visits
- List of documents reviewed
- Evaluation Question Matrix
- Questionnaire used and summary of results
- Evaluation Consultant Agreement Form

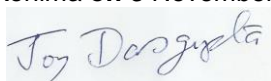
## ANNEX G: EVALUATION REPORT CLEARANCE FORM

*(to be completed by CO and UNDP GEF Technical Adviser based in the region and included in the final report)*

<b>Evaluation Report Reviewed and Cleared by</b>	
<b>UNDP Country Office</b>	
Name: _____	
Signature: _____	Date: _____
<b>UNDP GEF RTA</b>	
Name: _____	
Signature: _____	Date: _____

**Annex 2: Evaluation Consultant Code of Conduct Agreement Form<sup>43</sup>****Evaluators:**

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and: respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

**Evaluation Consultant Agreement Form****Agreement to abide by the Code of Conduct for Evaluation in the UN System****Name of Consultant:** Joy Dasgupta**Name of Consultancy Organization** (where relevant):**I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.****Signed at Kohima on 3 November 2015****Signature:****Evaluation Consultant Agreement Form****Agreement to abide by the Code of Conduct for Evaluation in the UN System****Name of Consultant:** Michael J.B. Green**Name of Consultancy Organization** (where relevant):**I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.****Signed at Kohima on 3 November 2015****Signature:**<sup>43</sup> [www.unevaluation.org/unegcodeofconduct](http://www.unevaluation.org/unegcodeofconduct)

## Annex 3:

## UNDP Management Response to Mid-Term Evaluation

**Note** that the management response and its tracking have been reviewed by the Evaluators and any comments of theirs are confined *in italics* to the last column, preceded and highlighted by the word '*Evaluation comments*', in the table below.

MTE Recommendations (August 2012)	Management Response (October 2012)	Key Actions* [Timeframe]	Responsible Party	End of Project Status (November 2015)
<p><b>Recommendation 1:</b> Immediately initiate emergency project implementation hiatus and commence the process of activities under:</p> <ul style="list-style-type: none"> <li>▪ Output 1.2 (Recommendations for strengthening the policy and regulatory environment affecting jhum lands);</li> <li>▪ Output 1.3 (Guidelines for integrated land-use planning at the landscape/ village level);</li> <li>▪ Output 2.3 (Capacity building of farmers, government extension workers, and Village Councils);</li> <li>▪ Output 3.2 (Documentation of project experiences with improved land management techniques and approaches at the village level).</li> </ul>	<p>One of the immediate actions taken post MTR was to discontinue some of the planned activities for 2012 and accordingly, the budget was revised and reduced. Consultations were held at different levels- with senior state officials, technical experts, local communities and village council leaders to prepare a more comprehensive implementation plan.</p>	<ul style="list-style-type: none"> <li>▪ 1.1: Revision of annual work plan: In view of the suggested hiatus of some of the activities, the AWP has been revised and the budget reduced. Activities to be undertaken for the year have also been revised accordingly. <b>[August 2012]</b></li> <li>▪ 1.2 Commence the process of activities under Output 1.2: an expert consultation was held on 11 September 12 to review the work done so far and to chart out a roadmap of activities to be carried out. Several recommendations were made which will help to strengthen the ongoing activities.</li> <li>▪ Output 1.3 the project team is currently preparing a village level land use report through sustained interaction with the village council and local communities. <b>[October 2012]</b></li> <li>▪ Output 2.3 This is an ongoing process</li> <li>▪ Output 3.2: Though this is also an ongoing process, better quality reports to capture case studies will be prepared. A process documentation report is also currently being drafted.</li> </ul>	CO & PMU	<ul style="list-style-type: none"> <li>▪ The project has successfully undergone strategic course correction.</li> <li>▪ Project villages revised to 40.</li> <li>▪ The project team has successfully completed participatory village level land use plans.</li> <li>▪ Independent documentation of the market assessment, legal and policy studies and socio-economic and ecological impact studies have been successfully completed to ensure good documentation and capturing of best practices and good case studies.</li> </ul> <p><b><i>Evaluation comments:</i></b> <i>Outputs 1.2, 1.3, 3.2 completed – note that only village (not landscape) level planning initiated for 1.3. Output 2.3 is an on-going process.</i></p>
<p><b>Recommendation 2:</b> <i>Request a no-cost extension. . . . of at least one-year and possibly two.</i></p>	<p>Action to be taken by the Government of Nagaland.</p>	<ul style="list-style-type: none"> <li>▪ 2.1. A letter will be drafted by the Government of Nagaland requesting extension of the project till 2014. <b>[November]</b></li> </ul>	Govt of Nagaland	<ul style="list-style-type: none"> <li>▪ The project was successful in getting a no cost extension till December 2015.</li> </ul> <p><b><i>Evaluation comments:</i></b> <i>Achieved and paved the way for securing financial support as originally provided for in Project Document.</i></p>



MTE Recommendations (August 2012)	Management Response (October 2012)	Key Actions* [Timeframe]	Responsible Party	End of Project Status (November 2015)
<p><b>Recommendation 3:</b> Create a strategic work plan to guide project implementation, including:</p> <ul style="list-style-type: none"> <li>▪ The creation of watershed based land use planning models in each of the three pilot districts should be paramount to the strategic planning process.</li> <li>▪ These models should integrate water, land, agriculture, and biodiversity conservation with appropriate indicators and monitoring protocols for each of these sectors.</li> <li>▪ They should be designed to respect and bolster the ability of local residents to address emerging and pending challenges to food security and traditional cultural values (e.g., sustainable land tenure systems) ... [using] a land use planning process that is adaptable, grows in sophistication as capacities increase, and empowers and includes a broad base of community members.</li> </ul>	<p>Consultations are being held with the local communities and stakeholders to prepare a strategic and simple work plan or road map till project completion.</p>	<ul style="list-style-type: none"> <li>▪ 3.1. Preparation of land use plan: The project officers in each of the three districts are conducting a land use study of the project villages, in consultation with the local communities. This will help in strategic planning and implementation of the project in the villages. <b>[November]</b></li> <li>▪ 3.2. International best practices: A technical expert with experience on shifting cultivation will be hired to support the team in sustainable land management practices. <b>[Feb 2013]</b></li> <li>▪ 3.3. <b>Setting up a centre of excellence:</b> The project will support the existing Research Centre managed by the Soil and Water Conservation Department in incorporating best practices on SLM into their curricula. At present, the institute has limited infrastructure and other facilities. On ground, field based learning in the project sites for the students will be supported. Similarly, the research centre will be used as a training facility for farmers on SLM. <b>[March 2013]</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ PMU/CO</li> <li>▪ CO/RBAP</li> <li>▪ CO/PMU/ Govt of Nagaland</li> </ul>	<ul style="list-style-type: none"> <li>▪ The project got an international expert to help with the land use planning at the village level.</li> <li>▪ Village level participatory land use planning has been completed in almost all project villages. These include formation of village level land use committees.</li> </ul> <p><b>Evaluation comments:</b> Land Use Plans completed in 37/40 villages. Note that integrated watershed-based approach to land use planning adopted at individual LUP but not watershed level. Also Centre of Excellence initiative limited to curriculum development within SWCD Research Centre.</p>

MTE Recommendations (August 2012)	Management Response (October 2012)	Key Actions* [Timeframe]	Responsible Party	End of Project Status (November 2015)
<p><b>Recommendation 4:</b> Increase project implementation oversight and technical support. This should include:</p> <ol style="list-style-type: none"> <li>1. monthly reporting by the PMU to UNDP/CO regarding progress made towards outcomes/outputs;</li> <li>2. increased and extended visits by UNDP/CO program officers to Nagaland (at least six times per year);</li> <li>3. increased and more formalized use of the PSC; and,</li> <li>4. recruitment of an SLM programming expert with extensive international experience to provide regular technical assistance.</li> </ol>	<p>A new management has taken over in the PMU and a number of changes have been initiated in terms of implementation oversight. There will be stronger linkages and coordination with agriculture and allied departments both at the district and state level. This will help to support the planning process at the state level and strengthen the potential for replication.</p>	<p>3.1 Project management and monitoring at the state level: A new directive has been issued by the new Project Director that supports stronger implementation and accountability at the state and the district levels. These include a) deputation of one staff from the soil and water conservation (SWC) department solely to support implementation of the project in each of the three districts; b) a supervisory team of four members from UNDP and SWC to monitor field activities monthly; c) meeting of project team once a month to present and discuss progress; d) the same monthly report to be submitted to UNDP. <b>[October]</b></p> <p>3.2 Linkages with other state and district level initiatives and schemes: At the state level, the project will be represented at the State Level Planning that is convened monthly by the Agricultural Produce Commissioner. The district project officer will represent the project in the district level planning committees headed by the District Collector. This will help ensure coordination and also reduce duplication of different initiatives. <b>[1<sup>st</sup> quarter 2013]</b></p>		<ol style="list-style-type: none"> <li>1. Staff from the S&amp;WC department have been deputed in each district to work on the project</li> <li>2. A system of monthly reporting has been set up at the PMU and the Project Coordinator regularly reports to the UNDP CO.</li> <li>3. Increased field missions of UNDP CO to field sites have been ensured to provide regular technical support and assistance.</li> <li>4. The project has been anchored under the umbrella of the APC to ensure the successful linkages and coordination of all the line departments.</li> </ol> <p><b>Evaluation comments:</b> Much improved ownership and oversight of project implementation at state level, and lines of communication to support and monitor progress. Coordination of support at district level between line agencies and Land Use Committees remains weak.</p>

\*Status of key actions at end of project is colour-coded as follows: *Not Initiated*, *Initiated*, *Completed*, and *No Longer Applicable*

**Annex 4: Itinerary, Meetings Schedule and Stakeholders**

**Map showing itinerary (blue road) between Kohima and Mon (red marker), via Wokha and Mokokchung.**



### **Terminal Evaluation Schedule of Meetings**

1. Arrived in Delhi of the Evaluation team on the 3<sup>rd</sup> of November and briefing on the project at the UNDP Office.
2. Traveled to Nagaland on the 4<sup>th</sup> of November from Delhi and arrival in Kohima. Briefing on the project by the Agricultural Production Commissioner and the project team.
3. Travelled to Mon district on the 5<sup>th</sup> of November.
4. Visited Leangyu, Hongphoi and Yuching villages in Mon district on the 6<sup>th</sup> of November.
5. Visited Lamongsheanghah, and Tuimei villages in Mon district, traveled to Mokokchung district on the 7<sup>th</sup> of November.
6. Visited Chuchuimlying village in Mokokchung district on the 8<sup>th</sup> of November and conducted a consultation meeting in Mokokchung town with the villagers from Mongsenyimti, Akhoya, Mokokchung village, Aliba and Khar villages along with personnel from line agencies like Krishi Vikas Kendra and the District Agriculture and Animal Husbandry departments.
7. Visited Sungratsu, Longjang and Longpa villages in Mokokchung district on the 9<sup>th</sup> of November.
8. Travelled to Wokha district on the 10<sup>th</sup> of November , visited field sites and met beneficiaries from Tsungiki, Koio and New Wokha villages. Visited Longsa village to meet the community.
9. Visited SHG's and the farm school at Longsa village on the 11<sup>th</sup> of November along with visits to Jhum plots and had an interaction with farmers of Pongidong village, this was followed by a briefing at the district soil conservation office.
10. Arrived in Kohima on 12<sup>th</sup> of November. Debriefed the UNDP project personnel and prepared for presentation to the Government of Nagaland.
11. Initial findings shared through a presentation on the 13<sup>th</sup> of the November with the Chief Secretary and the heads of all the line agencies of the Government of Nagaland and all the project personnel.
12. Traveled to Delhi from Kohima on the 14<sup>th</sup> of November.
13. National consultant arrived in Delhi on the 16<sup>th</sup> of November and briefed the GEF Focal point of the Ministry of Environment, Forests and Climate change.

**List of Stakeholders Met or Interviewed**

City/District	Date	Site	Persons	Institutional affiliation
Delhi	3/11/2015	UNDP Country Office.	3	UNDP, India Environment Law Organization
Kohima	4/11/2015	Hotel Oriental de Grand.	7	UNDP-CO/Agricultural Production Commissioner, National Project Director, National Project Co-Ordinator, District Project Support Officer for Mokokchung and Mon
Mon	6/11/2015	Leangyu Village	47.	Village Development Board, Village Council, Land Use Committee, Self-Help Group, Church, Gaon Bura, Soil Conservation Dept, District Project Support Officer, Project Assistants
Mon	6/11/2015	Hongpoi Village	34	Land Use Committee, Self-Help Group, Church, Gaon Bura
Mon	6/11/2015	Yuching Village	30	Village Council, Land Use Committee, Self-Help Group, Church
Mon	7/11/2015	Lamongsheah Village.	26	Village Council, Land Use Committee, Self-Help Group, Church, Gaon Bura, Youth Organization
Mon	7/11/2015	Tuimei Village	16	Village Council, Land Use Committee, Self-Help Group, Gaon Bura, village women
Mokokchung	8/11/2015	Chuchuimlying Village.	24	Farmers, Village Councils, Land Use Committee, Village Development Board, District Project Support Officer, Project Assistants
Mokokchung	8/11/2015	Hotel Metsuben, Mokokchung	27	Farmers, Village Councils, Land Use Committees and Self Help Groups of 5 project villages (Mongsenyimti, Akhoya, Mokokchung, Aliba, Khar), Krishi Vikas Kendra, District Veterinary Dept
Mokokchung	9/11/2015	Sungratsu Village	24	Farmers, Village Council, Land Use Committee, Youth Organization, Self Help Group
Mokokchung	9/11/2015	Longjang Village	31	Farmers, Village Council, Land Use Committee, Village Development Board, Church, Self-Help Group
Mokokchung	9/11/2015	Longpa Village	12	Farmers, Village Council
Wokha	10/11/2015	New Wokha Village	7	Village Council, farmers
Wokha	10/11/2015	Longsa Village	17	Gaon Bura, farmers, Village Council, Youth Organization
Wokha	11/11/2015	Koio/Humtso Village	12	Self-Help Groups, Farmers, District Project Support Officer, Project Assistants
Wokha	11/11/2015	Pongidong Village	14	Farmers, Village Council, Land Use Committee, Gaon Bura, Church Leader
Wokha	11/11/2015	District soil conservation office.Wokha town.	10	District Soil Conservation Officer, District Project Officer , Department Of Soil Conservation, District Project Support Officer, Project Assistants.
Kohima	13/11/2015	State Secretariat.	18	Chief Secretary, Agricultural Production Commissioner, Directors of Departments of Agriculture, Animal Husbandry, Veterinary Services, Soil & Water Conservation, Conservator of Forests. National Project Director, Research Associate and Programme Analyst (UNDP Country Office)
Delhi	16/11/2015	Ministry of Environment, Forests and Climate Change	7	Country Director, Programme Manager, Research Associate, Programme Analyst (UNDP Country Office). National Consultant, GEF Focal Point (Ministry of Environment, Forests & Climate Change, Government of India)

**Annex 5: List of Documents Reviewed**

Project Document

Inception Report of UNDP-GEF Project “Sustainable Land And Ecosystem Management In Shifting Cultivation Areas of Nagaland for Ecological and Livelihood Security”, 2010 (not dated), 4 pp + annexes.

Mid-term Evaluation report of project

Nagaland Project Fact sheet

Annual Project Report/ Project Implementation Review till 2014

Minutes of the Project Steering Committee Meetings

Quarterly Reports

Annual financial audit reports

Back to office reports of UNDP staff (if any)

Study reports/conference proceedings/government guidelines, etc.

Other publications prepared under the Nagaland Project

**NB** Other literature consulted is referenced in the footnotes.

## Annex 6:

## Evaluation Questions

EVALUATION CRITERIA / SUB-CRITERIA	MAIN QUESTIONS TO BE ADDRESSED BY THE EVALUATION	WHAT TO LOOK FOR (INDICATORS)	DATA SOURCES	DATA COLLECTION METHODS
<b>RELEVANCE TO GLOBAL, NATIONAL AND LOCAL ENVIRONMENT AND SUSTAINABLE DEVELOPMENT PRIORITIES</b>				
<b>1. Alignment of project with GEF global priorities</b>	<ul style="list-style-type: none"> <li>Is the project in line with the GEF Operational Programme 15 and its strategic priorities/ focal area?               <ul style="list-style-type: none"> <li>LD SP1: Supporting Sustainable Agriculture and Rangeland Management;</li> <li>SP 2: Supporting Sustainable Forest Management in Production Landscapes.</li> <li>BD SP4: Strengthening the Policy and Regulatory Framework for Mainstreaming Biodiversity</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Degree of alignment between project outputs and the relevant GEF strategic objectives</li> </ul>	<ul style="list-style-type: none"> <li>Relevant documents</li> <li>UNDP-GEF RTA</li> </ul>	<ul style="list-style-type: none"> <li>Review documents</li> <li>Consult with RTA</li> </ul>
<b>2. Project design (SRF) addresses identified threats and barriers</b>	<ul style="list-style-type: none"> <li>How does the project reflect the needs of India at national, state (Nagarland) and local (commune and community) levels?</li> </ul>	<ul style="list-style-type: none"> <li>Project design in response to identified threats and barriers clearly reflected in SRF</li> </ul>	<ul style="list-style-type: none"> <li>Relevant documents, including Project Document and policy provisions (lack of) for community engagement in SLEM.</li> <li>Stakeholders, including project partners</li> </ul>	<ul style="list-style-type: none"> <li>Review documents</li> <li>Consult with Programme Board and Project Steering Committee, other stakeholders</li> </ul>
<b>EFFECTIVENESS – EXTENT TOWARDS ACHIEVING PROJECT OUTCOMES AND OBJECTIVE, AND OVERALL IMPACT IN REDUCING ENVIRONMENTAL STRESS AND/OR IMPROVING ECOLOGICAL STATUS</b>				
<b>3. Progress towards achievement of Objective, Outcomes and significance of impact</b>	<ul style="list-style-type: none"> <li>To what extent did implementation of project activities meet the planned outcomes and objective?</li> <li>What is (likely to be) impact of project on ecological status of biodiversity (ecosystem services) and sustainable livelihoods?</li> </ul>	<ul style="list-style-type: none"> <li>Extent of achievement of targets specified in SRF in accordance with SMART indicators</li> <li>Results (quantitative, qualitative) of pilot studies and individual HH case studies</li> </ul>	<ul style="list-style-type: none"> <li>PIRs</li> <li>MTE and Management Responses</li> <li>Beneficiaries: line agencies, communities</li> </ul>	<ul style="list-style-type: none"> <li>Review documents</li> <li>Consultations in the full range of stakeholders (Programme Board, Project Steering Committee, line agencies, village councils, women</li> </ul>
<b>EFFICIENCY OF IMPLEMENTATION, IN LINE WITH INTERNATIONAL AND NATIONAL NORMS AND STANDARDS</b>				
<b>4. Execution efficiency</b>	<ul style="list-style-type: none"> <li>To what extent has the EA enabled the project to meet its SRF targets on time and within budget?</li> <li>What have been the key challenges to efficient execution and to what extent have these been addressed through adaptive management?</li> </ul>	<ul style="list-style-type: none"> <li>Project extensions, cost over-runs</li> <li>Risk management strategy</li> <li>Accountability and ownership among partners</li> </ul>	<ul style="list-style-type: none"> <li>Programme Board, Project Steering Committee minutes</li> <li>Other sources as listed below for IA</li> </ul>	<ul style="list-style-type: none"> <li>Review documents</li> <li>Consultations with Programme Board (includes UNDP), Project Steering Committee</li> </ul>
<b>5. Implementation efficiency</b>	<ul style="list-style-type: none"> <li>To what extent has the IA implemented the project in line with the annual work plan and met its SRF targets on time and within budget.</li> <li>What have been the key challenges to efficient implementation and to what extent have these been addressed through adaptive management?</li> <li>How have risks been avoided or mitigated?</li> </ul>	<ul style="list-style-type: none"> <li>Annual work plan</li> <li>Rate of disbursement and liquidation of project funds</li> <li>Timeliness of procurement; capacity and commitment of service providers</li> <li>Coordinating mechanisms at provincial, district and village levels</li> </ul>	<ul style="list-style-type: none"> <li>ProDoc, PIRs, Annual Work Plans</li> <li>UNDP CO, PMU, Dept Soil &amp; Water Conservation</li> <li>UNDP/GEF RTA</li> </ul>	<ul style="list-style-type: none"> <li>Review documents</li> <li>Consultations with PMU, UNDP, RTA, beneficiaries</li> </ul>
<b>SUSTAINABILITY – LIKELIHOOD OF FINANCIAL, INSTITUTIONAL, SOCIO-ECONOMIC AND/OR ENVIRONMENTAL RISKS TO SUSTAINING LONG-TERM PROJECT BENEFITS</b>				
<b>6. Design for Sustainability</b>	<ul style="list-style-type: none"> <li>Were interventions designed to have sustainable results that take into account identifiable risks, and did they include an exit strategy?</li> </ul>	<ul style="list-style-type: none"> <li>Sustainability Plan/Exit Strategy</li> <li>SRF and changes arising from MTR</li> <li>Examples of adaptive management</li> <li>Arrangements in place for the transition</li> </ul>	<ul style="list-style-type: none"> <li>ProDoc and project design (SRF)</li> <li>PIRs, MTR</li> <li>Programme Board, Project Steering Committee, PMU</li> <li>Prospective heirs</li> </ul>	<ul style="list-style-type: none"> <li>Review documents</li> </ul>
<b>7. Issues at implementation and corrective measures</b>	<ul style="list-style-type: none"> <li>What issues emerged during implementation as threats to sustainability and how were they addressed?</li> </ul>			<ul style="list-style-type: none"> <li>Review documents</li> <li>Consultations with Programme Board, Project Steering Committee, Project Manager, PMU, RTA, 'inheriting' parties</li> </ul>
<b>8. Sustainability strategy</b>	<ul style="list-style-type: none"> <li>Have heirs to project been identified and prepared?</li> </ul>			

## Annex 7: Summary of Feedback from Visits to Target Villages

### Scope

The key methodological tools utilized to generate information regarding the successes and failures of the project were a combination of interviews with key informants, such as government officials and members of organisations, and focus group discussions with villagers in all 13 of the project villages visited by the Evaluation Team (Mon - 5 villages, Mokokchung - 4 villages and interactions with villagers from 6 other villages, Wokha - 4 villages). Focus group discussions were held with participants from the village LUCs, SHG's, village council and from traditional institutions such as the *Gaon Bura* and *Putu Menden*. Focus groups numbered about 20 persons and included women participants, with the exception of one at New Wokha Village. The discussions revolved around three key questions: what were the key successes, key challenges and key lessons learned from the project. This was Communities were also asked about their approximate increase (or decrease) in income resulting from project interventions.

### Findings from Focus Group Discussions

Village communities across all three districts assessed the success of the project through the lens of livelihood provision and income generation, with cash crop introduction programs, especially Tea and Cardamom, considered to be among the major successes. In fact, all interventions within the rubric of livelihood/ jhum replacement /jhum improvement were considered to be successes in all three districts. These interventions included the development of horticultural crops such as Oranges, Pineapple and Bananas, development of contour bunding and promotion of piggeries. Other major successes were deemed to be the formation of LUCs and the consequent emphasis on land use planning, along with forest conservation and management. Although participants from all three districts strongly emphasized the livelihood/income generation aspects of the project, there were degrees of difference. While villagers from Mon District emphasized the economic benefits of the project, those from Mokokchung District attached more importance to land use interventions, a good example being Longjang Village. Villagers from Wokha District were somewhere in between and referred to the importance of both sets of interventions.

Key challenges across the three districts were primarily economic, ranging from lack of agricultural link roads to the absence of storage facilities for their agricultural produce. Pest infestation was also reported to be a significant problem, especially for paddy and introduced crops such as Tea, Cardamom and Oranges.

Lessons learnt and future aspirations primarily focused on livelihoods and employment generation, ranging from the need to address the problems of agricultural marketing to the promotion of pisciculture and replacement of Jhum with cash crops. Village communities from Mokokchung differed somewhat, emphasizing the need to strengthen LUCs, promote forest conservation, improve land use planning and at the same time involve youth in land use management.

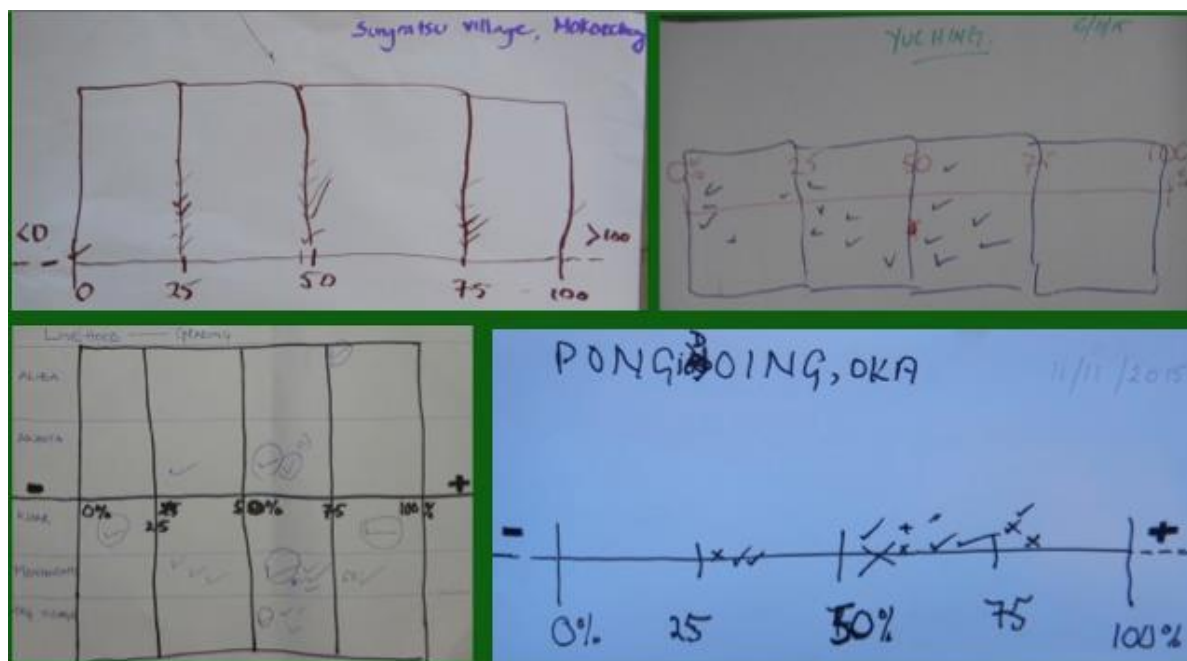
Levels of improvement in income status as a result of project interventions by and large reflected the "25% increase" target in the Project Document. Most participants (80%) indicated an increase of 25-50% in their income. Some examples are shown in **Figure 1**.



**Key observations:** Project documentation highlights the fact that the primary thrust to bring the project back on track post MTE has been the promotion of village-based participatory land use planning. LUCs were created in 40 villages; and participatory land use plans have been completed in all but 3 of them.

Given this background, it is somewhat surprising and concerning that village communities do not emphasize this as a major success of the project; rather they focus on the economic impact of the project.

In terms of the key challenges and future vision, the narrative is also overwhelmingly economic, with little mention of institutional and environmental aspects of the project. These observations are in many ways similar to the findings of the MTE that the project continues to be perceived by many community stakeholders as being about jhum replacement rather than jhum improvement.



**Figure 1** Sample of surveys of village communities with respect to perceived percentage increase in household income due to project interventions. Each tick/cross denotes a household.

### Findings from Key Informants

Discussions with district project teams and representatives of the line agencies such as DSWC, Krishi Vikas Kendras and the Agriculture Department focused on different aspects of the project and also on land use and land tenure systems. Mon and Mokokchung districts follow primarily a communal land tenure system whereby the village council decides the area and location of jhum cultivation. By contrast, Wokha District follows an individual-based land tenure system whereby an individual farmer makes such decisions and the village council has little or no role to play.

The jhum cycle varies considerably between all three districts, with Mon having the shortest Jhum cycle of 5-6 years, Mokokchung 10-14 years and a maximum fallow period of up to 20 years, and Wokha dle with a jhum cycle of approximately 9 years. In Mokokchung District, agro-biodiversity conservation is being carried out in a few of the project villages, for example in ChuchuyimLang and Longsa villages. Interactions with the district Soil Conservation Officers in Wokha and Mon focused on the measurement of soil erosion and run off, which the Evaluators learnt is not part of the Department's mandate. The role of district level platforms, such as farm schools and their linkages with the project demonstration plots, was also

understood. There was also much discussion about what might be an appropriate platform at the block level for show-casing key achievements of the project and replicating them in the other non project villages.

**Key observations:** The increase in jhum cycle and lengthening of the fallow period has been projected as a major success of the project. The fact remains that while this process is taking place in all project districts to some extent and in Mokokchung district to a larger extent, the role played by the project is not very clear nor is it well documented. The question of land tenure will influence the interventions planned by the project and it may be more of a challenge to implement land use changes in Wokha District, due to the individual nature of its land tenure system.

The need to understand the implications of contour bunding and other soil and water conservation measures remains an area of concern, as there appears to be no effective monitoring mechanism in this regard. In fact, there is only one study of soil erosion rates carried out by project staff in Mokokchung District. There has also been mention of the project-based learning incorporated into the curriculum of DSWC's Zubra Training Centre (Centre for Excellence) but the impact of that remains to be seen.

In terms of platforms, it is felt that district platforms chaired by the District Collector, coordinated by ATMA/DSWC/other agency, and comprising Block representatives could be the way forward. At the block level, LUCs could be represented on Block level platforms.

**In conclusion,** the project has made a significant corrections to its course and is carrying out extremely important and relevant land use planning and management related activities that are being institutionalised at village level. However, the challenge remains to address the perceptions of the village communities that the project will support alternatives to jhum. The project must single-mindedly focus on jhum improvement if it is to have a major impact over the long term.

### Annex 8: Progress in delivering project outputs as reported by PMU

Outputs	Achievements Reported by PMU	Terminal Evaluation Comments
<b>Project Objective:</b> To develop, demonstrate and upscale sustainable land management practices for the conservation of jhum (shifting cultivation) lands in Nagaland through an ecosystem approach.		
<b>Outcome 1 - The policy, regulatory and institutional environment supports the integration of sustainable land management practices on jhum lands.</b>		
<b>1.1:</b> Establishment of an inter-sectoral coordination platform on jhum policies and programs	<ul style="list-style-type: none"> <li>▪ The establishment of the intersectoral platform has been delayed due to frequent changes in the government at both the state and district levels. Learning from this experience, since 2015, the project has been anchored under the office of the Agriculture Production Commissioner (APC), who is the head of all agri and allied departments in the state. This has ensured convergence within all the said departments. In the 6<sup>th</sup> Project Steering Committee (PSC) meeting (31<sup>st</sup> August, 2015) the APC proposed setting up district level committees on jhum, with the District Collector (DC) as head of the committee and heads of departments (HODs) of all line department as members. This will ensure the fulfilment and sustainability of the inter-sectoral coordination platform on jhum policies and programs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Recent anchoring of project within office of APC places SWCD in much stronger position to engage with other line departments and coordinate their inputs into LUPs and associated Action Plans.</li> <li>▪ Principle of establishing district level jhum committees agreed is fundamentally important for the future, albeit of limited value in securing relevant support during last few months of project implementation.</li> <li>▪ Jhum committees likely to prove necessary at District Block levels. This also builds collaboration among LUCs.</li> </ul>

Outputs	Achievements Reported by PMU	Terminal Evaluation Comments
<p><b>1.2:</b> Recommendations for strengthening the policy and regulatory environment affecting jhum lands</p>	<p><b>Legal and Policy analysis by Indian Environment Law Offices (IELO):</b></p> <ul style="list-style-type: none"> <li>▪ In 2014, the project commissioned a study on legal and policy framework analysis of Nagaland by legal firm IELO to mainstream sustainable jhum practices and PLUP into the States policies.</li> <li>▪ As a follow up to this, IELO is now reviewing the Land Use policy and Water policy of the state, which will strengthen the policy and regulatory environment considerably. Both these policy drafting is being undertaken under the stewardship of the APC. Review of the Jhum Act is also under discussion with the state.</li> </ul>	<p>Excellent legal undertaking in early 2015<sup>44</sup>. on: “how do we institutionalize participatory land use planning towards improving fallow management in Nagaland?” concludes:</p> <ul style="list-style-type: none"> <li>✓ Jhum is a way of life that is to stay in Nagaland.</li> <li>✓ Legal institutional framework re: jhum land not utilised.</li> <li>✓ PLUP and ‘fallow management’ acceptable to Jhumias and essential for ecological sustainability of jhum land.</li> <li>✓ Monoculture schemes promoted by government are commercially attractive but market linkages are weak.</li> <li>✓ Cadastral maps/records re: area under jhum cultivation absent from departments and Village Councils (VCs).</li> <li>✓ Agrobiodiverse jhumland ensures farmers’ food security.</li> </ul> <p>Study supports jhum improvement, not jhum control, approach and recommends adoption of PLUP and its convergence with JFM initiatives. It advocates a uniform approach to jhum management that is formulated within a state Land Use Policy under the direction of State Land Use Board; and identifies three legal options for institutionalizing PLUP:</p> <ol style="list-style-type: none"> <li>1. Create Sustainable LUCs (SLUCs) under VCs.</li> <li>2. Co-opt Village Development Boards to formulate LUPs under purview of VCs. (VDBs include women.)</li> <li>3. Create SLUCs under Nagaland Communitization of Public Institutions &amp; Services Act, 2002.</li> </ol> <p>Inputs from state level workshop of 10 March 2015 indicate concurrence on need for state Land Use Policy that embraces jhum cultivation and associated traditional knowledge; and identified most viable option to be to create LUCs under Village Councils by means of 1978 Nagaland Village &amp; Tribal Councils Act, given that local governance revolves around them.</p>
<p><b>1.3:</b> Guidelines for integrated land-use planning at the landscape/ village level</p>	<ul style="list-style-type: none"> <li>▪ PLUP and 3D models were carried out in the project districts involving the Soil &amp; Water Conservation (S&amp;WC) officials, who were trained in the same during the exercise by the project. Manual on PLUP has been prepared and disseminated to all stakeholders in the State. Farmers training manual and trainers’ manual have also been prepared. Process Document on conducting PLUP 3 D model, formation of LUCs and codified land use action, was also prepared and disseminated to all stakeholders (Communities and line departments). All of these documents will now be translated into local language for ease of</li> </ul>	<ul style="list-style-type: none"> <li>▪ International consultant hired to lead, design and facilitate participatory land use planning approach. Model Land Use Plan produced for Tuimei Village and published in 2014 in English and Konyak for widespread distribution among LUCs and others as guidance for land use planning.</li> <li>▪ Landscape considerations not integrated across jhum lands of adjacent villages.</li> <li>▪ Other training documents not seen but there has been hiatus in translating LUPs into local language due to demise of translator. Alternative sourcing is outstanding priority.</li> </ul>

<sup>44</sup>Siddiqui, S. and Chohan, S. (2015), Legal response to institutionalizing participatory land use planning in Nagaland: Developing strategies for mainstreaming sustainable jhum practices into existing policy and legal framework of Nagaland. UNDP, New Delhi, India. 59 pp.

Outputs	Achievements Reported by PMU	Terminal Evaluation Comments
	dissemination. <ul style="list-style-type: none"> <li>▪ LUPs already translated to Konyak.</li> </ul>	
<b>Outcome 2 - Options for improving the sustainability of jhum agroforestry systems are developed and demonstrated in selected project sites.</b>		
<b>2.1:</b> Agri-silvi-pastoral models developed for enhancing alternative sources of livelihoods, mainstreaming biodiversity considerations and promoting greater ecological and cultural security	<ul style="list-style-type: none"> <li>▪ Soil and water management measures implemented in all project districts.</li> <li>▪ Demo farm plots set up in Wokha and Mokokchung</li> <li>▪ Documentation of agro-biodiversity being implemented in the project areas.</li> <li>▪ 37 PLUPs completed with documentation and codified land use plans. All 40 will be completed by December, 2015.</li> </ul>	<ul style="list-style-type: none"> <li>▪ PLUPs reflect variety of agri-silvicultural models with wide range of planned interventions but inadequate mechanisms to facilitate relevant technical support.</li> <li>▪ Visited school farm in Wokha, which promotes agro-forestry/mixed cropping systems. Well managed, appears underutilised as receives only 1-2 visitors per month.</li> <li>▪ Plantation activities, soil (contour bunding and trenches) and water conservation measures initiated in all villages.</li> <li>▪ Agro-biodiversity inventorying initiated in Wokha and Mokokchung.</li> <li>▪ No evidence of pastoral models being developed, such as for grazing livestock.</li> <li>▪ Very little of this experience and lessons have been documented. Compendium of best SLM principles and practices highlighted in MTE report has yet to be produced.</li> </ul>
<b>2.2:</b> Linkages established for alternate agri-silvi-pastoral practices	<ul style="list-style-type: none"> <li>▪ IFD introduced in project areas, linkages established with other departments like horticulture, fisheries, animal husbandry and land resources departments.</li> <li>▪ Marketing sheds established in the project villages.</li> <li>▪ Linkages established with ATMA, KVK etc.</li> <li>▪ Micro credit facilities established in the project areas</li> <li>▪ Market assessment study of agro-horticultural produce was carried out under the project in 2014. The recommendations from the study will be implemented in the next phase of the project.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Alternate IGAs developed with district agencies (e.g. plantations – DFEEW, fish ponds – Fishery Dept, beekeeping / medicinal plants – Land Resources). Linkages to overall SLEM strategy/framework unclear, as raised in MTE report.</li> <li>▪ Micro-credit facilities made available to SHGs in target villages to enhance generation of marketable surplus from production systems.</li> <li>▪ Good, comprehensive <i>Market Development Assessment for Organic Agri-Horticulture Produce</i> completed in 2014. Contains valuable survey information that is not being used and applied by project. Unclear why activities proposed until end of 2015 not being followed up and strategically aligned with implementation of LUC action plans. It is recognised that Future Road Map is best addressed in next phase.</li> </ul>
<b>2.3:</b> Capacity building of farmers, government extension workers, and Village Councils	<ul style="list-style-type: none"> <li>▪ Training manual developed for trainers and farmers as well as LUC &amp; VC for improved land management practices</li> <li>▪ Line department extension workers trained on PLUP and SLEM principles</li> <li>▪ District Soil extension workers trained on PLUP and 3D Models</li> <li>▪ Capacity building of farmers, beneficiaries, LUCs, and line department officials enhanced through farmer schools along with KVKs and ATMAs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Much capacity building of farmers, extension workers, VCs and LUCs undertaken but appears to be poorly documented and unclear how it aligns with SLEM framework and actions identified in LUPs.</li> <li>▪ No means of monitoring effectiveness of capacity building developed by project, such as through feedback questionnaire surveys completed by trainees/participants.</li> <li>▪ MTE raised concerns that project has not generated formal SLEM training for producers, extension officers, and village level decision makers. Uncertain if this has been addressed as training manual not shared with evaluators.</li> </ul>
<b>2.4:</b> Development and implementation of integrated land use plans on a watershed basis that improve delivery of ecosystem	<ul style="list-style-type: none"> <li>▪ 37 PLUP action plans and by laws prepared for 37 villages</li> <li>▪ 37 PLUP developed and 10 P3D models developed</li> <li>▪ 37 Action plans and bylaws formulated</li> <li>▪ Implementation of action plans and bylaws by the land Use committees formed in 37 villages</li> </ul>	<ul style="list-style-type: none"> <li>▪ LUCs created in 40 villages; PLUPs (including bye laws and and action plans) completed in 11/14 project villages of Mon, 15/15 of Mokokchung and 7/11 of Wokha districts.</li> <li>▪ Watershed-based approach limited to jhum land of village; not applied across landscape of adjacent villages.</li> </ul>

Outputs	Achievements Reported by PMU	Terminal Evaluation Comments
services and livelihood benefits	<ul style="list-style-type: none"> <li>▪ All of the above well documented and disseminated to all stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>▪ Hiatus in translation of PLUPs (see Output 1.3 comments).</li> <li>▪ Too early to assess ecosystem and livelihood benefits as plans only recently realised and many actions to implement.</li> </ul>
2.5: Establishment of community biodiversity conservation sites	<ul style="list-style-type: none"> <li>▪ Yes in all the project villages</li> </ul>	<p>Community-owned forests to protect biodiversity identified and incorporated in PLUPs. Limited documented evidence of follow up actions, which should include systematic participatory monitoring and reporting on status – supported by State DFEW.</p> <p>Other conservation provisions in PLUPs include any/all of following:</p> <ul style="list-style-type: none"> <li>▪ Protection of (natural) vegetation along ridges, on hill tops and either side of rivers/ rivers from slash and burn practice.</li> <li>▪ Closed seasons for hunting and fishing</li> <li>▪ Provide bunds/trenches along contours of jhum cultivations.</li> <li>▪ Minimum density of trees must be left in jhum cultivations.</li> <li>▪ Chemical fertilisers and pesticides to be avoided.</li> <li>▪ Establish seed banks of crop varieties, as underway in Chuchimlying Village, Mokokchung District.</li> <li>▪ Land above 65o slope should be reserved as forest land and not be available for Jhum cultivation.</li> </ul>
<b>Outcome 3 -Enhanced capacity to replicate the project’s experiences in other parts of Nagaland, as well as in other States of India, where shifting cultivation agro-forestry systems are prevalent</b>		
3.1: Community-based system for monitoring change realized by the project at the farm/village level and in terms of policies in support of jhum	<ul style="list-style-type: none"> <li>▪ Formation of Land Use Committees in project villages</li> <li>▪ Community based monitoring system initiated through all LUCs</li> </ul>	<p>Project has made some significant progress in systematically monitoring impact/results of project investments now that LUPs are in place.</p> <ul style="list-style-type: none"> <li>▪ Land Use Action Plans developed for most of 40 target villages as part of PLUPs. M&amp;E procedures spelt out in LUPs and focus on (i) implementation of actions and (ii) adherence to bye-laws. However, little evidence provided to TE team of systematic monitoring and reporting in place, nor any comprehensive overview maintained by PMU.</li> <li>▪ ProDoc specifies that annual ecological performance audits will be carried out by independent organisation – no evidence of this being done annually. However, InsPIRE Network for Environment assessed impact of project on fallow management, soil productivity, soil erosion, agriculture pattern and productivity and livelihoods scenarios of communities in project area in Sept. 2014 – Jan. 2015. Best practices documented and policy/legal bottlenecks identified for upscaling and replicating lessons learnt from project<sup>45</sup>.</li> </ul>

<sup>45</sup>Jayahari, K.M. and Sen, Monalisa (2015), Socio-Economic and Ecological Impact Study of GEF-UNDP-Government of Nagaland Project, Final Report. InsPIRE Network for Environment, 38 pp.

Outputs	Achievements Reported by PMU	Terminal Evaluation Comments
		<ul style="list-style-type: none"> <li>DSWC supervised some limited Community-Based Impact Assessment (CBIA) of impacts of improved land use practices on jhum undertaken with respect to monitoring soil erosion and crop productivity: control areas compared with slopes subject to contour bunding and trenching<sup>46</sup>.</li> </ul>
<p><b>3.2:</b> Documentation of project experiences with improved land management techniques and approaches at the village level</p>	<ul style="list-style-type: none"> <li>PLUP manual/ Socio-economic studies/ market studies/ legal and policy studies all documented and disseminated to all stakeholders</li> <li>The Land Use Plan documented in all PLUP villages</li> <li>LUP translated in Konyak local dialect</li> <li>Process documentation of LUPs completed by Consultant, printed and disseminated</li> </ul>	<ul style="list-style-type: none"> <li>Documentation for disseminating guidance and experience in improving jhum currently limited to LUP guidelines. A considerable amount of experience, best practice, models of improved jhum etc has yet to be thoroughly documented, shared within the State and fed into the SLEM Programme for scaling up elsewhere in India.</li> <li>Legal, market and socio-economic studies are less relevant as they are assessments rather than the experience from which lessons can be learned.</li> <li>MTE reports that fliers on alternative production methods (e.g. broom grass, mushroom, piggery, fish &amp; paddy, <i>Azolla</i>) have been produced, while noting that these do not relate to the intended core project activities.</li> </ul>
<p><b>3.3:</b> Assessment of the potential (carbon storage, benefit sharing possibilities) of these improved shifting cultivation agroforestry systems to be replicated and upscaled</p>	<ul style="list-style-type: none"> <li>Midterm evaluators in consultation with the line department has dropped the output 3.3</li> </ul>	<p>The MTE report makes reference in Section 7.2(3) to the likelihood of having to forgo Output 3.3 due to lack of resources. This was discussed and agreed with the PSC and the RTA informed accordingly. However, the log frame was not be updated, which was an oversight.</p>
<p><b>3.4:</b> Center of Excellence is established comprising a consortium of different institutions in Nagaland</p>	<ul style="list-style-type: none"> <li>The project has introduced and incorporated the principles of SLEM &amp; PLUP in the pre service curriculum of the Zubza Training Centre of the Department of Soil and Water Conservation, Kohima, Nagaland.</li> <li>The project has also worked in close collaboration with the Nagaland University, ATMA and KVKs.</li> <li>With the APC now having the stewardship of the project, the next phase of the project can focus on forming and strengthening a consortium of different institutions in Nagaland.</li> </ul>	<p>MTE report makes reference in Section 7.2(3) to the likelihood of having to scale back on Output 3.4 due to lack of resources. Moreover, it is understood that the intention to establish a Centre of Excellence on Sustainable Jhum involving like-minded research groups and individuals changed to one of incorporating the concept, experience and practice of improved jhum within the pre-service curriculum of the Zubza Training Centre in DSWC. This has now been done and awaits delivery to the next batch of students/trainees.</p> <p><b>Note:</b> Course content has not been shared with evaluators so unable to comment of quality of output.</p>

<sup>46</sup>UNDP Mokokchung DSWC (June 2015), Impact of Soil Conservation Measures – Contour Bund / Mechanical Barriers / Biomass in the 1<sup>st</sup> Year Jhum on the Yield / Production of Jhum Crops. 9 pp.

## Annex 9: Evaluation of Performance Indicators and Status of Delivery of Project Objective, Outcomes, Outputs

#Status of delivery colour codes: **Green** – completed – indicator shows successful achievement  
**Yellow** – indicator shows expected completion by the end of the project (or shortly thereafter)  
**Tan** – indicator shows poor achievement – unlikely to be complete by end of Project  
**Grey** – unable to evaluate based on data provided

\*Satisfaction rating scale: **Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory**

**Note:** Status information at mid-term and term end is provided by UNDP CO/PMU. Colour coding and ratings are applied by the Evaluation Team, along with their TE comments.

Strategy	Indicator	Baseline	Target	Status at mid-term (June 2012)*	Status at term end (November 2015)#	TE Comments	Rating*
<b>Objective:</b> To develop, demonstrate and upscale sustainable land management practices for the conservation of <i>jhum</i> (shifting cultivation) lands in Nagaland through an ecosystem approach							
Objective: To develop, demonstrate and upscale sustainable land management practices for the conservation of <i>jhum</i> (shifting cultivation) lands in Nagaland through an ecosystem approach	No change in primary forest cover in project sites	Baseline measured in Y1	In Y4, improved forest cover or remains the same as in baseline	The project area comprises of 70 villages spread over the 3 districts of Mon, Mokokchung and Wokha in Nagaland. As per the baseline, the total reserved forest area in project districts is: a) 23,102.4ha - Mokokchung b) 495ha Mon, and c) 7,280ha - Wokha. Introduction of activities under the project such as <i>jhum</i> fallow management, promotion of local tree species and promotion of commercially viable plantations such as rubber, agar, tea and tapioca are helping to stabilise forest cover across 10,500 ha. Project implementation strategy for these activities include participatory planning, awareness creation, institution building, integrated farm development for sustainable land and ecological management.	Active community involvement and sensitization ahead of the <i>jhum</i> slashing season has helped to create massive awareness amongst the <i>jhum</i> cultivators. Overall, the project has led to improved forest cover in 35472.7 ha through measures such as improved fallow management, maintenance of buffer zones along major streams, rivers and in the <i>jhum</i> areas and creation of new forest areas as proposed in the land use action plans prepared through the participatory land use plans. The Land Use Committees have followed up on the proposed activities and decisions documented in the participatory village action plans and bylaws.	Indicator concerns <u>primary</u> forest cover (for which no baseline given); evidence presented does not relate specifically to primary forest and most of it is presumption, rather than based on quantitative survey data of actual forest cover. Monitoring method is not fit for required purpose. Caution needed as rate of decline in forest cover in Nagaland (4%) is highest in India (see Section 2.2.2).	<b>MS</b>
	Land area where improved <i>jhum</i> agroforestry systems are in place	0	90,000 hectares of land covering approximately 70 villages in 3 districts by Y4	Through an integrated approach to improve <i>jhum</i> agro forestry systems, 11,478 ha have been covered in three project districts with plantations of horticultural and agronomic crops such as rubber, agar, tea, tapioca, <i>gmelia arborea</i> , tree bean, alder and broom grass. Improved agro-forestry practices such as soil and water conservation measures and vermi-composting have been supported. The aim is to promote an integrated farm development model project for sustainable land and agricultural practices and contribute in achieving MDG goals.	Further to the land use action plans developed in each of the project villages the project has extended direct support to <i>jhum</i> agro-forestry systems across 27661.3 hectares during the project period through adoption of fallow management practices and replication of soil and water conservation measures. Additionally, during 2015, 15 water sources have been identified, conserved and protected by the community under the support of the project.	Target of 90,000 ha has not been met based on data provided (27,661 ha of improved <i>jhum</i> agro-forestry). Not surprising as target villages reduced from 70 to 40 post-MTE but this change is not reflected in log frame. Opportunity to reduce land cover area of 90,000 ha during MTE lost; insufficient attention given to revising targets in line with management response to MTE	<b>MS</b>



Strategy	Indicator	Baseline	Target	Status at mid-term (June 2012)*	Status at term end (November 2015)#	TE Comments	Rating*
	Decrease in rates of soil erosion in project sites	Baseline for project sites to be measured in Y1; erosion rates for the target districts are estimated as: Mokokchung: 60 mt/ha/year Mon: 40-50 mt/ha/year Wokha: 40-50 mt/ha/year	Same or less than baseline	Mokokchung: 50 mt/ha/year Mon: 40-50 mt/ha/year Wokha: 40-50 mt/ha/yr	Community sensitization on the importance of soil and water conservation in jhum areas by the LUC through different platforms has led to increased replication of measures such as carrying out timely plantations and placing biomass along the slopes. Rate of soil erosion: Mokokchung-30mt/ha/year Mon- 20 mt/ha/yr Wokha- 20 mt/ha/year	recommendations. Erosion reduction rates exceeded for each district. Other evidence from DSWC participatory study in Chuchuyimlang Village (Mokokchung): soil loss in contour banded and trenched slopes was 11-13 MT/ha/year compared with 30MT/ha/year for controls. Crop yields were 13-60% higher for treated slopes.	HS
	Increase in incomes of target communities	Baseline to be measured during the project inception phase	10% improved income	As per the baseline conducted in the first year of the project, the average annual household income in the project districts is as follows: a) Mokukchung: INR 54,308 b) Mon: Rs. 15,020 and c) Wokha: Rs 20,018. It has been observed that the annual income has increased by atleast 20% in comparison with the baseline for 28% of the 4000 targeted households. A more detailed study will be conducted in 2012 to assess the larger socio-economic impacts of the project.	A 25% increase in jhum production rate has been recorded in 1710 households during the reporting period. As part of the project, a study on market assessment of jhum produce was conducted in the project area during the reporting period. The findings of the study demonstrated that the average annual sale from jhum produce per family in the project villages is INR 10,723 per annum. The study also revealed that while 63% of the surveyed farmers felt that there had been an increase in production, 78% felt income from agriculture had increased. Of the surveyed farmers, 83% had increased production of cash crops in the last five years, indicating enhanced linkages with the market economy. The increase is attributed to various sustained livelihood interventions of the project, improved Jhum practices, IFD, livestock activities by the community, credit facilities, and promotion of women SHGs through Agriculture Revolving Funds, among others.	Not clear from 2015 status data provided whether target of 10% improvement in income has been met or not. There is sufficient evidence reviewed elsewhere to conclude that target has been met.	S
<b>Outcome 1:</b> The policy, regulatory and institutional environment supports the integration of sustainable land management practices on <i>jhum</i> lands.							S

Strategy	Indicator	Baseline	Target	Status at mid-term (June 2012)*	Status at term end (November 2015)#	TE Comments	Rating*
<b>Outcome 1:</b> The policy, regulatory and institutional environment in supports the integration of sustainable land management practices on <i>jhum</i> lands.	Strengthened Agriculture frameworks that explicitly support enhancing sustainability of <i>jhum</i> systems	Policy does not support enhancing sustainability of <i>jhum</i> systems	Policy explicitly supports enhancing sustainability of <i>jhum</i> systems by Y4	Since the project is only in its 2nd year, there are no concrete results in terms of policy change or influence yet. These results are expected to be more evident by the 3rd or 4th year. The project is attempting to strengthen coordination with line departments to support linkages and networking with farmers. So far, significant support has been extended by line departments to the project. Project experiences and best practices are being shared and disseminated in different forums like the Project Steering Committee, districts and regional level workshops to reach target audiences such as Village Councils, Village Development Boards, Farmer Associations and relevant policy makers. Sharing of project experiences in the above mentioned fora with strategic target audience as well as focussed discussions/dialogues with policymakers would help in linking/influencing the relevant regulations at a later stage.	During the project period, Participatory Land Use Planning (PLUP) exercises were completed in 37 villages. Dedicated Land Use Committees (LUC) was formed to act as a platform for management and conservation of <i>jhum</i> lands. A field based legal and policy study was completed during the reporting period by Indian Environment Law Offices (IELO). The findings of the study identified Participatory Land Use Planning as a critical tool for ensuring long term ecological sustainability of <i>jhum</i> land management in the state and recommended that for ensuring the long term sustainability of LUCs established under the project, they should be institutionalized under the umbrella of the Village Council/Village Development Board/Communitization Act. A consultative workshop was conducted with multi-level stakeholders in the state on mainstreaming sustainable <i>jhum</i> practices into existing legal and policy frameworks of Nagaland, where the findings of the study were presented. After considerable deliberations, the stakeholders felt that the Land Use Committees would function best under the Village Councils.	Jhum policy target has not yet been met but project's assessment of institutionalizing PLUP in Nagaland and legal options to mainstream sustainable <i>jhum</i> practices into existing policy and legislation has been welcomed by government and is informing the development of a uniform land use policy that will include provisions for <i>jhum</i> . Development of framework and guidelines for PLUP and evolving plans to institutionalize	<b>MS</b>
					Based on the findings of the study and the recommendations, the state government stakeholders have drawn up the following way forward: -The need to have land use policy instead of <i>Jhum</i> land Policy. -The Village Council Act to be considered and moved forward to Home department for review. -Land Use Committees brought under the umbrella of Village Councils or village development board. -To initiate next round of consultative meetings with the NGOs, Land Owners, Local Institutions by the state government. As a follow up to the legal and policy study, the state has issued a review of the water policy as well as a drafting of the land use policy of the state. This will strengthen the policy framework within the state towards sustainable <i>jhum</i> practices.	LUPs under the State Land Use Board, with LUCs created under VCs, are also contributing to achievement of policy target. [More details provided in Annex 8 under Output 1.2.]	

Strategy	Indicator	Baseline	Target	Status at mid-term (June 2012)*	Status at term end (November 2015)#	TE Comments	Rating*
	Creating enabling environment in Forest regulations that explicitly recognize and support improved <i>jhum</i> systems as sustainable agroforestry systems that improve forest health	Stresses adverse environmental impact of <i>jhum</i>	Explicit recognition and support for improved <i>jhum</i> systems as sustainable agroforestry systems that improve forest health by Y4	In two years, the project activities have helped in reducing the pressure of <i>jhum</i> cultivation on environment both directly (through field level interventions) as well as indirectly through the following - (i) Sharing of project experiences in the above mentioned fora with strategic target audience as well as focussed discussions/dialogues with policymakers which would help in linking and influencing the relevant regulations at a later stage; (ii) Organisation of a North East Regional workshop in Nagaland to share experiences and best practices on livelihoods, ecology and socio cultural aspects of <i>Jhum</i> cultivation. In addition, since the PSC membership comprises of very senior government officials (at the Secretary level) from agriculture and allied departments (rural development, horticulture, sericulture, forest, soil and water and animal husbandry), the project benefits from high quality strategic inputs from them. This high profile PSC membership will also be very useful in creating an enabling regulatory environment for improved <i>jhum</i> cultivation over the remaining project period.	Indian Environment Law Offices (IELO) were commissioned to conduct a study for developing a legal and policy framework for the state to support improved sustainable <i>jhum</i> practices integrating the principle of sustainable land and ecosystem management. The IELO team has reported great success of the LUC and PLUP model in the project area. The study has found PLUP and LUC to be enabling tools to support improved <i>jhum</i> systems as sustainable agroforestry systems that improve forest health. The study reported lack of legal status to be a significant weakness of LUC as an institution. Institutionalizing the LUCs as empowered institutions with legal or statutory validity is required. A consultative workshop conducted with multi-stakeholders in the state recommended institutionalizing the LUCs through the state home department by reviewing the Village Council Act. In connection with this, consultative meetings with NGOs, land owners, and local institutions are also to be initiated by the state. As a follow up to the legal and policy study, the state has issued a review of the water policy as well as a drafting of the land use policy of the state. This will strengthen the policy framework within the state towards improved <i>jhum</i> practices.	No specific progress with respect to explicit recognition within Forest regulations of improved <i>jhum</i> systems as sustainable agroforestry.	MU
	Credit provisioning systems enabled for farmers who work on communally owned lands	No support for extending credit to farmers who work on communally owned lands	Provisions for extending credit to such farmers are integrated into the policy by Y4	30 women farmers groups have selected in three districts and provide agriculture revolving fund for timely credit availability to <i>Jhumias</i> .	An additional 130 households were assisted with credit facilities during the reporting period. The newly initiated credit in livestock scheme that was introduced during the previous reporting period has now been extended to benefit 40 self help groups. The self help groups formed in previous years have demonstrated marked improvement in not only credit management but also book keeping skills through regular monitoring and training. Their concept of SHG and their functioning has also expanded.	Good progress – uncertain as to what policy the target refers.	S
	Integrated land-use planning at landscape level encouraged and strengthened.	No guidelines	Draft guidelines approved by Y2	The project is promoting an integrated land use system by supporting the development of 16 integrated farms covering approximately 1000 hectares in the three districts in partnership with line departments. These Integrated Farm Development (IFD) model projects will include community farmlands and plantations. The benefits and learnings from these IFD models will be shared and disseminated among policy makers and stakeholders. Discussions on developing guidelines will be held in the next PSC to get views of the various stakeholders	Overall, the project has completed preparation of PLUP in 37 villages. These have been further strengthened through follow up meetings. Action plans have been formed in consultation with the village community. Further, the action plans of the villages have been shared with other stakeholders and agriculture and allied departments to ensure synergic convergence. The project has also started supporting some of the villages in the implementation of the action plans. Action has also been taken to institutionalize the PLUPs and LUCs under the umbrella of the Village Councils.	LUP guidelines produced in English and Konyak and distributed widely in year 5. 'Landscape level' land use planning does not feature – no particular consideration given to integrating land use regimes across neighbouring <i>jhum</i> lands.	S

Strategy	Indicator	Baseline	Target	Status at mid-term (June 2012)*	Status at term end (November 2015)#	TE Comments	Rating*
	Increase in joint extension activities by different departments (agriculture, horticulture, S&WC, land resource development, forest, animal husbandry)	Extension activities are undertaken separately	In target villages all extension services are coordinated according to an integrated plan by Y2	Convergence and coordination with agri and allied departments is being carried out successfully at the state level where a structured approach for extension activities is in place. From there the funds flow to the respective departments in the project districts and the villages. This is being achieved by regular coordination meetings with the allied departments through regular and timely planning, assessment, implementation, monitoring and evaluation. The IFD concept which was introduced recently is also being implemented with technical and financial contribution from line departments. This coordination activity is one of the few smoothly implemented inter departmental initiatives in Nagaland. In addition, the Village Councils and Village Development Boards play a key role in the planning and need assessment, selection of project areas and beneficiaries and ensuring smooth implementation of the project in their respective villages.	The joint extension work has been carried out in all project districts involving all the line departments under the state co-financing programme initiated by the Agriculture Production Commissioner. The village land-use action plans have helped the line departments to work in close coordination with the Village Land Use Committees and has resulted in increased convergence in the target project villages. Reports of consultative meeting, market assessment surveys etc. conducted by the project have been shared with the line departments, NGOs and various stakeholders to initiate increased joint extension services in marketing of agricultural crops from the state. Under the Agriculture Production Commissioner, the planned activities of market initiatives in the state have been pursued through the agriculture department. Cross learning and farmer exposure field visits from non project areas to project areas have increased joint extension support to the farmers. Japanese International Corporation Agency (JICA), KVK, ATMA, many government stakeholders, soil conservation trainees, students, institutions, farmers, etc have availed of the best practices documented and demonstrated by the project.	Target not met as there is no integrated plan by which all extension services are coordinated.	MU
<b>Outcome 2:</b> Options for improving the sustainability of <i>jhum</i> agroforestry systems are developed and demonstrated in selected project sites.							S
<b>Outcome 2:</b> Options for improving the sustainability of <i>jhum</i> agroforestry systems are developed and demonstrated in selected project sites (70 villages spread over the 3 districts of Mon, Mokokchung and Wokha in Nagaland)	Land productivity indicator (measure of returns from farming calculated as outputs minus inputs, e.g. yield minus inputs)	Baseline measured in Y1	Productivity improved by 5% over the baseline	A separate baseline has not been established for the land productivity indicator. As the main source of income is agriculture, increase in income is being used to gauge the increase in land productivity for the time being. However, a detailed land productivity assessment is planned for 2012, during the same that the soil sampling survey will be conducted. In the 3 project districts, the project has implemented different land based activities in an integrated manner. 11,478 ha have been developed with different agroforestry and horticultural systems. Integration of scientific and indigenous soil conservation measures were implemented leading to improved land productivity. These measures include contour bunding and cropping, terracing, half moon terracing, mulching plantation of leguminous and non leguminous crops and nitrogen fixing trees in agro-forestry systems; and crop rotation and inter cropping. In addition vermicompost, organic manure, integrated fish and paddy farming are supported. Approximately 4000 households have been supported for land based activities and the average annual household income has increased by atleast 20% for 28% of the households.	The project interventions to improve <i>jhum</i> practices like soil conservation activities (contour bunding, bench terracing, contour trenching, etc), improved irrigation facilities, improved fallow management, and better crop management have improved soil fertility in managed <i>jhum</i> cultivation and fallow areas, thereby resulting in demonstrated high productivity levels. The market assessment study on <i>jhum</i> produce indicated that cash crops were contributing significantly to the village economy and that a majority of small farmers in the project districts were growing small quantities of each of the different types of cash crops in order to diversify and reduce risks. The average annual sale from <i>jhum</i> produce per family in the project area was INR 10723 and 63% of the farmers felt an increase in production while 83% said that they had increased the production of cash crops in the last five years. 78% of surveyed farmers felt income from agriculture had increased in the last five years. The socioeconomic impact assessment study carried out by InSPIRE also reported a 17.6% increase per annum in the annual household incomes of the project villages from the year 2011 to 2014, which was mainly attributed to the successful project interventions.	There is a variety of evidence (e.g. InSPIRE socio-economic impacts studies, market development assessment of organic produce and DSWC impacts of soil conservation measures) indicating that productivity exceeds target of 5% by large margins.	HS

Strategy	Indicator	Baseline	Target	Status at mid-term (June 2012)*	Status at term end (November 2015)#	TE Comments	Rating*
	Lengthening of <i>jhum</i> cropping phase	2 years	3 years by Y4	The targeted farmers are still continuing in their existing agricultural lands. No shifting has occurred as such in the working areas indicating increase in <i>jhum</i> cycle.	The socioeconomic and ecological study carried out by InSPIRE during the reporting period has found that the scientific and appropriate intervention measures undertaken for improving soil fertility have significantly lengthened the <i>jhum</i> cropping phase from one to four years in the project areas. These successful interventions have also been replicated in other non-project villages.	Studies and feedback from interviews indicate that <i>jhum</i> cropping phase field commonly ranges from at least 2 years to 3 or 4 years. To conclude that 3 years target has been met is not entirely consistent with 10 years average <i>jhum</i> cycle (see below).	MS
	Lengthening of <i>jhum</i> fallow phase	8 years	9 years	The targeted farmers are still continuing in their existing agricultural lands. No shifting has occurred as such in the working areas indicating increase in <i>jhum</i> cycle.	Increase in the cropping phase from one to four years in the project areas will also have a spillover positive impact on further lengthening of the fallow phase. The socioeconomic and ecological impact study carried out during the reporting period indicated that the target communities in the project area are willing to increase the <i>jhum</i> fallow phase even though it maybe too early to assess the impact of the project on the <i>jhum</i> cycle. The willingness to increase the fallow phase may be attributed to a number of factors: pro-active land use committees for improved <i>jhum</i> management practices, improved and judicious management of <i>jhum</i> areas encouraged by the project, labour shortage, other gainful employment opportunities, permanent cultivation etc.	It is likely that target of 9 years fallow will be met if present trends persist. Market development assessment of organic produce, based on survey of 10,436 households in target districts, shows that <i>jhum</i> cycle is 10 years on average for project area (12.6 for Mokokchung, 8.7 for Wokha and 8.4 years for Mon District).	MS
	Contribution of income from sale of (organically grown) produce to local economy increases	Baseline measured in Y1	Increase of 5% over baseline. Effort will be made to include as much as women beneficiaries as possible (say 50%)	In the project area, about 95% of farmers traditionally practice organic agriculture and chemical fertilisers and pesticides are not used. The project beneficiaries, mainly women, are involved in organic cultivation and selling of their farm produce. In addition, since the main source of income is agriculture, the income baseline established earlier is being used here as well. As per the baseline conducted in the first year of the project, the average income per household is as follows: a) Mokokchung: INR 54,308 b) Mon: Rs. 15,020 and c) Wokha: Rs 20,018. Most of the income is obtained from the <i>jhum</i> farms. Approximately 4000 households have been supported and the average annual household income has increased by atleast 20% for 28% of the households. While organic farming is a traditional practice, the concept of certification is not commonly known and is an area of intervention the project may wish to consider.	Overall, the annual income of the target communities of 6,582 households have increased by 20-25 per cent. The market assessment of <i>jhum</i> produce study reported a profit margin of 30-35% from sale of organic produce in the project areas. The study interviewed 101 local traders across the three project districts and found out that the local traders were responsible for more than 50% of the sale of organic produces. The total sale per annum by the 101 traders amounted to approximately INR 30.4 million and the average sale per trader was about INR 300,000.	Target of 5% exceeded by large margins. Market development assessment shows that only 3% of households (10,436) in project area buy chemical fertilizers or pesticides, so reasonable to assume that most produce is organic.	HS

Strategy	Indicator	Baseline	Target	Status at mid-term (June 2012)*	Status at term end (November 2015)#	TE Comments	Rating*
	Number of women benefiting from marketing of produce from <i>jhum</i> fields	Baseline measured in target villages in Y1	300 women beneficiaries (100 from each district)	Under the project, more than 3000 women beneficiaries are actively involved in daily or seasonal selling of produce from <i>jhum</i> fields. Therefore, while a baseline had not been formally established, the project has exceeded the target of 300 beneficiaries. A study will be conducted in 2012 to assess the larger socio-economic benefits.	During the entire project period, the income of 4294 women has increased by 25 per cent. During the reporting period, 480 women have directly benefited through successful project interventions such as credit facilities, marketing of organic produce, sale of livestock etc. in this reporting period. Almost 95% of the traders are women who sell either from market sheds near their village or travel to markets of nearby towns. The average monthly income of women has doubled from INR 1000 to INR 2000 in the project villages. During this reporting period, the project interventions have built on enhancing the marketing capacity of women as well as on creating better market linkages. The women traders in addition to selling <i>jhum</i> produce from their own fields or even their own village, have also started buying <i>jhum</i> produce from the nearby villages for selling through marketing sheds. This has provided livelihood support to the neighbouring villages through enhanced and expanded market for their produce. While sitting in the marketing sheds during the day, majority of the women also carry out additional activities such as weaving baskets, knitting, jewelry making etc. Sale of this handicraft items also contribute to an additional income of at least INR 200 per month. Several of the women also utilize the time spent in the marketing shed to look after young children.	Target of 300 women beneficiaries exceeded by large margins. There is plenty of anecdotal evidence that women have benefitted in numerous ways from interventions, perhaps most significantly in their access to membership of LUCs, leading to other opportunities. Members of women's SHG interviewed in Zuvotong Colony (Wokha) indicated their incomes had increased by 40-50% from wide range of activities.	HS
<b>Outcome 3:</b> Enhanced capacity to replicate the project's policy reform and field-level experiences.							MS
<b>Outcome 3:</b> Enhanced capacity to replicate the project's policy reform and field-level experiences	Number of requests from other districts and states to visit project sites and obtain assistance from the Center of Excellence	0	At least 5-6 requests by Y4	Received request from Kohima District Village Development Board to extend the SLEM project programme in their district.	The project in close coordination with the various government line departments, universities, NGOs, and research institutions has been widely disseminating and demonstrating the SLEM principles in the project districts. The best practices demonstrated by the project have been availed by many government stakeholders, soil conservation trainees, students, institutions like JICA, farmer beneficiaries, etc. Continuous requests for replication and upscaling of learnings from the UNDP-GEF SLEM project from different villages and districts across the state have been received. The state has approved co-financing to upscale the project activities across the state. During this reporting period, an international consultative workshop on mountain ecosystems with a session emphasizing solely on livelihoods and another on sustainable <i>jhum</i> cultivation practices was organized. This facilitated cross-learning and sharing of best practices from across the globe. The multi stakeholder consultative workshop on developing strategies for mainstreaming sustainable <i>jhum</i> practices into existing legal and policy frameworks of Nagaland was also organized in the state during this reporting period. This has facilitated enhanced capacity of the line departments to replicate the project policy reform and field level experiences.	Unclear from evidence provided whether or not target has been met. This highlights the importance of monitoring visitors to project sites and requests for support in mainstreaming, up scaling etc. Demonstration farm in Wokha seems to be underutilized by visitors, only 1-2 per month reportedly.	N/A

Strategy	Indicator	Baseline	Target	Status at mid-term (June 2012)*	Status at term end (November 2015)#	TE Comments	Rating*
	Plan for extending project strategy to additional villages and districts with associated resource commitments from government	0	By Y4, at least 3 more districts have a budgeted plan for replicating	By 2012 subject to finalize for extending the project to other district.	Government has sanctioned co-financing for replication and scaling up of the project interventions in the state. The funds have been transferred to the project account in July 2015. Project activities will be planned and implemented during the rest of the year.	Target not met with respect to 3 districts producing a budgeted plan. Government's sanctioning of funds to scale up is timely signal of its continuing commitment.	MU

## Annex 10

## UNDP-GEF TE Report Audit Trail

## Consolidated comments and feedback on draft TE Report of the SLEM project by Nagaland State Government, PMU and UNDP CO (February 2016)

Section/Page No	By	Feedback	Response from Consultants	Remarks
Executive Summary Page viii	PMU	Point 2 re: establishment of Land Use Committee - Add 'as a sub-committee under the Village Council'	Agreed	
Page viii	PMU	Re: Establishment of Land Use Committees – change 33 to 37 till date	Corrected	
Page ix	UNDP CO	Re: Little or no documentation and dissemination of the project's wealth of experience – there have been documentation of project learnings and the reports have been shared at both state and district levels. These are now being translated into local languages for better dissemination.	Original observation remains valid; additional info appreciated and incorporated.	
Page ix	UNDP CO	Re: There is no Exit Strategy for the project – The sustainability/exit strategy focuses on the replication and scaling up of PLUP throughout the state. The State Land Use Policy that is currently being drafted under the project will also recommend the institutionalisation of the PLUP. This will be the key focus in the phase two of the project with state funding	Original observation remains valid; additional info appreciated and incorporated.	
Page x	UNDP CO	Re: Executing Agency Execution – more focus and prioritisation on documenting the project's extensive, prolonged and invaluable experience. There have been several studies documenting the project learnings. These will soon be translated into local dialects for better dissemination.	Original observation remains valid; additional info appreciated and incorporated.	
Page xii	UNDP CO	Re: SWOT Table – Under Strengths >37 LUPs prepared to date.	Updated	
Page xiv	UNDP CO	Under 4) Comprehensively document the project's experience: change translate them into relevant local dialects instead of local tribal languages	Agreed	
Page xiv	UNDP CO	Re: 9) Collaborate with other projects to develop synergies, such as KfW-funded biodiversity project. Implementation of kfw project is yet to start due to some procedural delays in the central government. Nevertheless, UNDP is in discussion with the concerned KfW officials to work out possible synergies. UNDP is supporting the state government to access funds from IFAD to scale up the best practices of the project's and other related programmes in the state.	Additional info appreciated and incorporated.	
Page xv	PMU	Partnership with ATMA and KVKs already exist and will be strengthened further in the next phase	Feedback incorporated.	
Page xvi	UNDP CO	Second line appears to end abruptly.	Amended	
Page xvi	UNDP CO	Re: 7) Establish Farmer Producer Organisations (FPOs) with support from the Ministry of Horticulture and not Agriculture	Corrected	



Table 2.1 Project milestones Page 6	UNDP CO	Details attached to this page separately.	Missing milestone details requested by Evaluators and provided by UNDP. Table 2.1 completed.	
Table 2.3: Stakeholders Page 14	UNDP CO	Land Use Committees are not existing institutions and were set up under the project post-MTR.	Corrected	
Table 2.4: Project outcomes and outputs Page 15	PMU	The correct outcome 1 is - The Policy, regulatory and institutional environment supports the integration of sustainable land management practises on Jhum lands.	Inconsistent citing of Outcome 1 in ProDoc noted by Evaluators. Correct version adopted in TE report.	
Page 15	PMU	The correct outcome 3 is - Enhanced capacity to replicate the project's policy reform and field-level experiences	Inconsistent citing of Outcome 3 in ProDoc noted by Evaluators. Correct version adopted in TE report.	
Figure 3.1 Page 24	UNDP CO	Field assistant for Mokokchung – word 'assistant' is missing	Fig. 3.1 copied from ProDoc in which Word 'assistant' missing – corrected.	
First paragraph Page 31	PMU	A total of 37 LUCs were formed as of December 2015 (of the total 40 target villages)	Corrected	
Line 16 Page 33	PMU	Establishment of Land Use Committees: Change 33 to 37	Corrected	
Last few lines Page 33	UNDP CO	Re: ... little or no documentation. There have been documentation of project learnings and the reports have been shared at both state and district levels. These are now being translated into local languages for better dissemination. The legal and policy option study, as well as the socio-ecological assessments done under the project have been cited in government reports. In addition, the agriculture market surveys/assessment data has formed an important baseline report for the agriculture department. The funds from the next tranche (to be released soon) will also dedicate a large component on the project's extensive experience, as recommended.	Findings modified from "Little or no documentation" to "Limited documentation"; and additional information incorporated in text and as footnote.	
Last few lines Page 33	UNDP CO	Re: no exit strategy. The sustainability/exit strategy focuses on the replication and scaling up of PLUP throughout the state. The State Land Use Policy that is currently being drafted under the project will also recommend the institutionalisation of the PLUP. This will be the key focus in the phase two of the project with state funding.	Original observation remains valid; additional info appreciated and incorporated.	
Evaluator Comment Page 36	UNDP CO	Yes, the InsPIRE report was equivalent to the planned annual ecological performance audits. Additionally, it was a socio-economic and ecological impact assessment.	Clarification requested by Evaluators and provided; additional info added.	
Page 36	UNDP CO	Re: Very little has been achieved by way of documenting and disseminating the project's experience with jhum improvement, other than the guidance on PLUP. The PMU has documented several of the project activities under integrated farming development practices, including, Azolla farming, vermicomposting, pig breeding and livestock rearing, etc. also.	Original observation remains valid as many project interventions pre-MTR were not directly related to jhum improvement; additional info appreciated and incorporated.	

Annex 3 Page 69	PMU	37 LUCs established, not 33	Corrected	
Annex 3 Page 33		Line 11- Change 26 LUC to 37 LUC	Corrected	
Annexure 4 Page 74	PMU	Point 6 - Change Deptt of veterinary to deptt of Agriculture. Point 8 - Add Koio village Point 9 - Change Humtsoe to Longsa village	Corrected	
Annex 7, Key results Page 80	PMU	Line 12 - Add paddy. Pest infestation is also majorly reported in paddy crops.	Additional info incorporated.	
Key observations Page 81	PMU	The objective of the project is to optimise the productivity of jhum lands through different approaches, including soil and water conservation measures. In no way is the project attempting to replacement jhum. A lot of effort has been put into for jhum focus and improvement keeping in mind the challenges faced by other similar programmes with different mandate. Given the limited time, the project has worked on to improve jhum trickling down to the bylaws and the subsequent amendments for improving jhum by the village community in itself shows the community perceptions and acceptance on the project that its true intentions is on jhum improvement.	Original observations remain valid but the narrative has been modified to an extent to reflect PMU's feedback. Much more detailed survey and interviews would be necessary to fully sample and assess individual and community perceptions.	
Page 81 - Interactions with key informants	PMU	Line 2 - change veterinary and animal husbandary departments to agriculture department. Line 10 - correct spelling- Chuchuyimlang village Line 11 - Change Mokokchung to Mon	Corrected	
Key observations Page 81	PMU	Through its interventions, the project anticipates an increase in jhum cycle and lengthening of the fallow period with the increase in cropping phase. As also mentioned in the socio economic ecological impact study, the interventions increased the cropping phase that may directly or indirectly have an impact on the jhum cycle, but it is too early to assess the impact of the project on jhum cycle. Line 5 - as cited 'The need to understand the implications of contour bunding and other soil and water conservation measures remains an area of concern'- the area of concern is not very clear to us as contour bunding is an established form of soil conservation measure, especially in hilly terrain as it holds the top soil from erosion.	The area of concern relates to the limited scientific monitoring and evaluation in the field that this 'established soil conservation measure' is effective in reducing soil erosion (i.e. using the demonstraton sites to sample and qunatify the reduction in soil loss).	
Annex 8 Page 86	UNDP CO	Re: The MTE report makes reference in Section 7.2(3) to the likelihood of having to forgo Output 3.3 due to lack of resources. This was discussed with the state government and approved. The RTA is also aware of the same. The logframe not being revised in view of this recommended change is an oversight.	Evaluators requested clarification as to whether or not due approvals had been followed before dropping Output 3.3 as this was not reflected in any update to the logframe.	
Annex 8 Page 87	PMU	Re: Output 3.1/1st point – Monitoring and reporting of the progress of the LUPs are up-to date. Communication with the concerned LUCs and Village council is strong. LUCs are actively monitoring on the implemented programmes, updating on the progress made and further follow up on the community action plans with other line departments. The project unit in each district is actively keeping	Evaluators requested further clarification about systematic monitoring by communities and concluded that it is limited and	

		track of this development. Re: Output 3.2 - No other publications.	inadequately overviewed by project. Likewise, Evaluators concluded that documentation of improved land management techniques is limited.	
Annex 9 Page 89	PMU	Analysis of the income generated by 104 farmers during 2014-15 before and after interventions indicated an increase of income by 25%.	Further clarification/evidence was provided to Evaluators re: 25% increase in livelihood incomes.	