

Inle Lake Conservation and Rehabilitation Project – End of Project Evaluation

# December 2015

*Prepared for:* **UNDP Myanmar** Yangon, Myanmar





# INLE LAKE CONSERVATION AND REHABILITATION PROJECT – END OF PROJECT EVALUATION

# **FINAL REPORT**

Prepared for:

UNDP MYANMAR NO. 6 NATMAUK ROAD TAMWE, YANGON MYANMAR

Prepared by:

HATFIELD CONSULTANTS #200 - 850 HARBOURSIDE DRIVE NORTH VANCOUVER, BC CANADA V7P 0A3

**DECEMBER 2015** 

UNDP7402NV VERSION 2

# TABLE OF CONTENTS

LIST	OF TA	BLES	ii
LIST	OF FI	GURES	ii
LIST	OF AF	PPENDICES	ii
LIST	OF AG	CRONYMS	iii
EXEC	UTIV	E SUMMARY	iv
DIST	RIBUT	ION LIST	x
AME	NDME	NT RECORD	x
1.0	INTR	ODUCTION AND BACKGROUND	1
2.0	EVAL	UATION APPROACH AND METHODOLOGY	3
	2.1	DESKTOP REVIEW OF RELEVANT PROJECT DOCUMENTATION	4
	2.2	INTERVIEWS	
	2.3	SITE VISITS AND FOCUS GROUP DISCUSSIONS	4
	2.4	DATA ANALYSIS AND EVALUATION	5
3.0	KEY	FINDINGS	5
	3.1	PROJECT RELEVANCE – ACHIEVING PROJECT PURPOSE: HIGHLY SATISFACTORY	6
	3.2	PROJECT EFFECTIVENESS – MANAGEMENT PROCESS AND APPROPRIATENESS: SATISFACTORY	
	3.3	PROJECT EFFICIENCY: SATISFACTORY	
	3.4	SUSTAINABILITY: SATISFACTORY	12
4.0	CON	CLUSIONS, LESSONS AND RECOMMENDATIONS	13
5.0	REFE	ERENCES	17

i.

# **LIST OF TABLES**

Table 1	Original project funding requirement (UNDP Project TOR).	12
Table 2	Project finances (UNDP 2014).	12

# **LIST OF FIGURES**

Figure 1 Inle Lake W	/atershed and administrative areas,	Shan State,	Myanmar2
----------------------	-------------------------------------	-------------	----------

# LIST OF APPENDICES

- Appendix A1 Terms of Reference
- Appendix A2 End-of-Project Evaluation Work Plan
- Appendix A3 Evaluation Guide and Tools
- Appendix A4 List of Interviews
- Appendix A5 Focus Group Discussions Participant Lists
- Appendix A6 Matrix Output Outcomes, Impacts and Lessons Learned

# LIST OF ACRONYMS

СВО	Community-Based Organization
CSO	Civil Society Organization
EEC	Environmental Education Centre (Nyaungshwe)
EWG	Environmental Working Group
FD	Forest Department (MoECAF)
FFZ	Fishing free zones
GIS	Geographic Information Systems
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IID	Institute for International Development
ILBM	Integrated Lake Basin Management
ILCDA	Intha Literature, Culture and Regional Development Organization
IUCN	International Union for Conservation of Nature
KII	Key informant interviews
MoECAF	Ministry of Environmental Conservation and Forestry
MAB	Man and Biosphere Reserve
M&E	Monitoring and Evaluation
MTE	Mid-term Evaluation
NGO	Non-Government Organization
PM	Project Manager
UN	United Nations
UNDP	United Nations Development Program
UN-HABITAT	United Nations Habitat Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
TOR	Terms of Reference

# **EXECUTIVE SUMMARY**

### Introduction

This report summarizes the results of the End of Project Evaluation for the *Inle Lake Conservation and Rehabilitation Project* (hereafter referred to as 'the Project'), which was launched in 2012 by the United Nations Development Programme (UNDP) with financial assistance from the Government of Norway. In December 2011, the Norwegian government confirmed it would fund US\$2 million towards the implementation of the Project. UNDP agreed to commit US\$0.58 million to support grassroots activities under the Project, which officially commenced operations on January 1<sup>st</sup>, 2012. The initial project design was for a 2-year implementation period.

The overall objective of the Project is to restore the environmental stability of the Inle Lake with the improvement of the quality of life of local communities. The specific objectives (project purpose) were to:

- Contribute to better planning in natural resources and manage systematically the natural resources with the sustainable manner for long run;
- Identify the model villages in all different zones so as to advocate the other organizations and participate in implementing such models in other villages; and
- Promote environmental governance through CBOs with the increased awareness of all stakeholders (UNDP and MOECAF 2013).

The Project applied for and received two no-cost extensions to continue project activities beyond the initial 2-year timeframe, with final completion of Project activities in June 2015.

### **Evaluation Approach and Methodology**

In order to evaluate the progress achieved in meeting the Project's objectives and outcomes and to identify lessons learned, key documents were reviewed and a series of interviews, site visits and focus group discussions were conducted in Taunggyi, Nyaungshwe, Kalaw, Pindaya and Yangon from July 5 to July 15, 2015.

The final evaluation was guided by: the key questions outlined in the ToR; responses to specific questions developed for key informant interview and focus group discussions; direct observation; and professional judgement. Additionally, an Evaluation Design Matrix was prepared in accordance with UNDP guidelines to review the overall relevance, effectiveness, efficiency and sustainability of the Project. For the overall assessment of the Project, a simplified rating scheme was applied, similar to that used in the Mid-term Evaluation (MTE) report (UNDP and MoECAF 2013), to screen key activities and Project achievements based on the following criteria:

- 1. Highly satisfactory.
- 2. Satisfactory.
- 3. Unsatisfactory.
- 4. Highly unsatisfactory.

To the extent possible, quantitative data available in Project documents (supplemented with information obtained during interviews and focus group discussions) was used to provide evidence to support the ranking applied. In cases where supporting data were lacking, professional judgment and experience of the Project team was used to determine the ranking.

## Key Findings/Evaluation Results

### Project Relevance – Achieving Project Purpose: Highly Satisfactory

The Project was successful in meeting specific objectives. The most important accomplishment was in improved environmental planning and governance with respect to Inle Lake conservation. Significant Project achievements to this end included:

- Designation of Inle lake as a Biosphere Reserve under UNESCO's Man and the Biosphere Programme in June 2015;
- Approval by the Government for creation of an Inle Lake Authority; and
- Supported completion of the 5-Year Inle Lake Conservation Action Plan (MoECAF 2015).

Overall intended results from the project were achieved in terms of improved environmental governance for Inle Lake conservation, and significant progress was made towards this end. Much work remains to be done in the coming years to create a functioning Lake Authority which is financially sustainable, can manage conservation activities, monitor change over time, and improve overall environmental conditions in the lake.

The Project was highly relevant to the identified need for improved conservation and management of Inle Lake. There are dramatic transitions taking place in Myanmar, including political and economic changes which are transforming the country. It is essential to merge conflicting interests together in something that unites the country, such as Inle Lake. There is great national pride in Inle Lake, and the Project was successful in obtaining support from the local community level, political leadership in Shan State, and the Union Government. The President has taken great interest in Inle Lake conservation and is following this Project closely. Support from the highest levels of the Union Government, especially MoECAF, is essential to make progress on this issue, and the Project was highly successful in creating linkages between environmental and socio-political issues in Myanmar.

However, a common refrain from those interviewed was that the Project duration was too short (initially 2 years), which is insufficient for long-term conservation measures to be effectively implemented. A long-term programme (minimum 5 years) is required (see MOECAF 2015)

### Project Effectiveness – Management Processes and Appropriateness: Satisfactory

Many advantages for Inle Lake conservation and management resulted from this Project, including awareness raising of local communities, capacity building of NGOs and CSOs, and individual local leaders (village heads). Many local institutions participated in Project activities, however overall budgets were relatively small for these activities, which limited the extent of capacity development and raising awareness. As a result of workshops and training courses, and visits to villages, local people were informed of the environmental deterioration taking place in Inle Lake, and the causes. Educated people from villages knew of the problems, but awareness raising activities are needed for the majority of the local people as well.

However, some of the local implementing partners (NGOs and CSOs) were weak in terms of management capacity and experience in implementing projects on the ground. Inle Lake conservation and rehabilitation programs should also promote economic and social development of the communities; these should go together in parallel. The initial Project design was only 2 years, so activities should have been designed accordingly. With such a short project timeframe, it is difficult to start activities and make gains which need long-term support to be successful.

### **Project Efficiency: Satisfactory**

UNDP played an essential role to evolve the project. UNDP served as project manager and staff established good working relationships with MOECAF, NGOs, CSOs and local communities. UNDP staff had strong drive to implement the activities and were committed to helping improve conservation efforts on Inle Lake. Good collaboration between UNDP, Government agencies and NGOs allowed activities to be conducted successfully.

Linkages with local planning process and integration with Shan State Government or Lake Authority have moved forward. Even though the first 5-year Action Plan (2010-2015) has terminated, activities are still running on the ground. Budget to implement those activities come from State Government budget (from budget allocated from Union level); additional funding is required to implement the 2015-2020 Action Plan.

There was some overlap in Project activities, in terms of conservation planning. There have been a number of conservation action plans created over the past 5 years, including the UN-HABITAT and the MoECAF 2015-2020 Action Plans. UNESCO's MAB application process also included long-term plans for monitoring and management of Inle Lake. It is important that these activities are well coordinated between Union and State Government agencies, in association with the future Lake Authority. UNESCO is presently working to support local government agencies in developing a communication plan for exchanging information, awareness raising and meeting the needs of local communities. Part of this plan includes consolidating gains made by establishing the MAB, and setting up an institutional mechanism to be managed by MOECAF (an educational centre, or MAB biodiversity centre) over the next 6 months. There is need for effective coordination of these planned future activities with other Project initiatives, including the Environmental Education Centre (EEC) developed under the Project.

### Project Sustainability: Satisfactory

Most Project benefits are sustainable in the long-term, and help set the stage for improved environmental governance related to Inle Lake conservation. The MAB designation, establishment of the Lake Authority and completion of the long- and short-term Action Plans provide the basis for future management and technical support needed to implement activities.

The likelihood of continuation and sustainability of Project outcomes and benefits after completion of the Project is high, given the importance of Inle Lake conservation to the Union Government and local stakeholders. However, this is contingent upon future project funding from both the government and international donors.

### **Conclusions, Lessons and Recommendations**

The Project made significant advances in environmental governance related to Inle Lake conservation and rehabilitation; the issue is a high priority for the Government of Myanmar, and is highly relevant to the country as a whole. Establishment of the Lake Authority, and passing of the UN-HABITAT and MOECAF plans, as well as the successful designation of Inle Lake as a Man and Biosphere Reserve by UNESCO, are all critical positive steps towards Inle Lake conservation and restoration. In terms of relevance, the Project results and outcomes may be considered **highly satisfactory**.

In terms of the other key measurement points (effectiveness, efficiency, and sustainability), the project results may be regarded as **satisfactory**. There were some limitations of the project design which impacted implementation during the first year of the project. The Project was outcome-based, and lacked clear statement of the overall objectives, as highlighted in the Mid-Term Evaluation Report (UNDP and MOECAF 2013). Ideally, there should have been an inception and planning phase, followed by subsequent phases for implementation.

The short two-year duration of the Project impacted effective project implementation at the local level, and was a common refrain with many stakeholders. In such a short project timeframe, with no immediate follow-up activities, momentum will be lost and it will take additional time to re-start a number of the most promising activities. Inle Lake conservation and rehabilitation must be regarded as a long-term program, with substantial investment requirements.

For the most part, there was a clear linkage between the community-based Project activities conducted and conservation and restoration of Inle Lake. Community-based agroforestry, forest conservation and provision of electricity to villagers all play important roles in reducing forest loss, especially for fuelwood consumption. Provision of energy-efficient stoves was also urgently needed, as well as water supply and sanitation systems, especially for communities in the core area. However, some of the water supplies installed under the Project had technical issues, including poor design and construction, which limited their utility for some Inle Lake communities.

Long-term funding is essential to meet the goals of the Action Plan (2015-2020), which will be a challenge, and will require budget allocation from both Union and State Governments and international donor support.

Based on the above, our assessment of the overall Project results in a ranking of satisfactory.

### **Recommendations:**

- Conservation is a long-term process; the short duration of the Project (2 years) was a key limiting factor in promoting conservation efforts in the Inle Lake region. Terrestrial and aquatic biodiversity conservation, in particular, require longer-term efforts (5+ years) in order to clearly demonstrate positive benefits to the environment and community livelihoods.
- 2. Education and awareness raising is critical, as well as sharing and dissemination of information. Behavioural change communication strategies and awareness raising programs are needed for Inle Lake and the whole country. These need to be coordinated between different implementing organizations, including Government departments and donor agencies, to reduce potential for overlap and to be more effective in future.
- There is a need to implement activities to be conducted under the Inle Lake Conservation 5-Year Action Plan (2015-2016 to 2019-2020; see MOECAF 2015), according to the following priorities identified by MOECAF and key stakeholders:
  - a) Sustainability of Inle Lake requires a strong institutional framework, with active participation of key stakeholders at the Union, State and local levels. Without a specific

agency to oversee or monitor Inle Lake management and conservation efforts, the situation in Inle Lake will not improve, and will likely deteriorate further. The implementation procedures for the Lake Authority need to be established, with clear roles and responsibilities for key stakeholders clearly defined. Technical support, and training and capacity building, will be required for key stakeholders responsible for overseeing the Lake Authority. Long-term financial and technical support for establishment and operation of the Lake Authority is essential, with support from the Higher Authorities.

- b) Baseline data on the natural and social environment are lacking, and are essential for monitoring changes in Inle Lake over time (e.g., biodiversity, water quality, sedimentation rates, socio-economic information, etc.). Establishment of consistent and comprehensive data and information management systems is needed to store and manage the large volumes of environmental monitoring data collected. Application of remote sensing and GIS data and information should be expanded, and integrated into the data and information management system.
- c) Threats to human health must be reduced, especially related to lack of adequate water supply and sanitation, and use of fertilizers and toxic chemicals (pesticides and herbicides, especially persistent organic pollutants or POPs) in agriculture.
- d) Expansion of organic farming techniques should be promoted, recognizing that this is a long-term initiative which will take time to establish (initiatives undertaken under the Project were of short duration, and there was limited interest by farmers to continue after Project completion). Farmer's field schools and appropriate training techniques should be implemented. Reduction in the extent of floating gardens, and removal of defunct gardens is also needed.
- e) Overall living conditions need to be improved for Inle Lake residents, particularly in terms of provision of water supply and sanitation services. These infrastructure projects need to be developed in close consultation with communities to ensure they meet their requirements, and that they are designed and constructed to the highest possible standards.
- f) Sustainable livelihoods need to be developed for Inle residents, with less reliance on agriculture and wild fisheries, and increased opportunities in small industry and tourism.
- g) Promote sustainable tourism practices, including improvement in infrastructure, training and capacity building for local people.
- h) There is a critical need to reduce deforestation rates and increase reforestation in the watershed. Conservation forestry initiatives started under the Project were successful, and should be expanded to other Inle Lake communities (e.g., linkages with provision of electricity to remote communities, and provision of fuel-efficient stoves, to reduce their reliance on fuelwood).
- i) A reduction in soil erosion and sedimentation rates is needed, particularly in the upper watershed, but also in all major drainages entering Inle Lake. There are clear linkages between deforestation, current agricultural practices, and sedimentation rates, but there are limited data available for monitoring trends over time.

- j) Biodiversity conservation and fisheries resource management plans need to be developed, communicated and implemented, and linked to the MAB process.
- 4. Successful implementation of Inle Lake conservation activities requires the active participation of all key stakeholders for project planning, design and for securing funding. Local authorities need to have a key role in the Lake Authority in order for this to be successful, as they are the main stakeholders on Inle Lake. All relevant stakeholders and departments should be actively involved and be given a chance to participate in all activities not only leaders (e.g., MOECAF Forest Department), but all government departments.
- 5. For local Intha communities, this was their first experience in managing and implementing Project activities, and many lessons were learned. In future, a more transparent and participatory consultation process is required, clearly outlining the overall goals and objectives of the project/programme, so that it is clearly understood at the local level. Future activities should have more involvement of local NGOs and CBOs so that there can be sustainability in the long-term and follow-up by the local communities. Building local capacity in project management skills, including how to write proposals and reports, managing finances, and M&E skills is essential. With improved capacity, local NGOs and CBOs will be able to better implement and manage activities, and they can follow up with the local people. This is important for long-term sustainability at the local level.

Everyone who lives on, works in, or visits Inle Lake and its watershed area needs to be aware of the importance of Inle Lake conservation and rehabilitation. To ensure long-term sustainability of Inle Lake, there is an urgent need to improve awareness of the rich culture and environment in the Inle Lake basin, both in Myanmar and with the international community.

# **DISTRIBUTION LIST**

The following individuals/firms have received this document:

Name	Firm	Hardcopies	CDs	Email
Ms. Lat Lat Aye	UNDP	-	-	$\checkmark$
Mr. Saw Doh Wah	UNDP	-	-	$\checkmark$

# AMENDMENT RECORD

This report has been issued and amended as follows:

Issue	Description	Date	Approved by	
1	Inle Lake Conservation and Rehabilitation Project – End of Project Evaluation – Final Report	20151203	Thomas Bow	
			Thomas G. Boivin	
			Project Director	

# 1.0 INTRODUCTION AND BACKGROUND

Inle Lake, located in Taunggyi District of Shan State is a shallow, high-altitude water body which is the second-largest lake in Myanmar (Figure 1). It is home to many endemic species and is an important staging area for migratory birds. The lake is renowned for a number of traditional cultural and livelihood practices, which have made it one of the main attractions for Myanmar's booming tourism industry. Inle Lake is, however, suffering environmental degradation from the combined effects of unsustainable resource use, increasing population pressures, climate variability and rapid tourism development.

The *Inle Lake Conservation and Rehabilitation Project* (hereafter referred to as 'the Project') was launched in 2012 by the United Nations Development Programme (UNDP) with financial assistance from the Government of Norway (UNDP 2013). UNDP identified the need for the Project based on the Ministry of Environmental Conservation and Forestry's (MOECAF) approved 5-year Conservation Action Plan (MOECAF 2010).

In December 2011, the Norwegian government confirmed it would fund US\$2 million towards the implementation of the Project. UNDP agreed to commit US\$0.58 million to support grassroots activities under the Project, which officially commenced operations on January 1<sup>st</sup>, 2012. The initial project design was for a 2-year implementation period.

The overall objective of the Project is to restore the environmental stability of the Inle Lake with the improvement of the quality of life of local communities. The specific objectives (project purpose) were to:

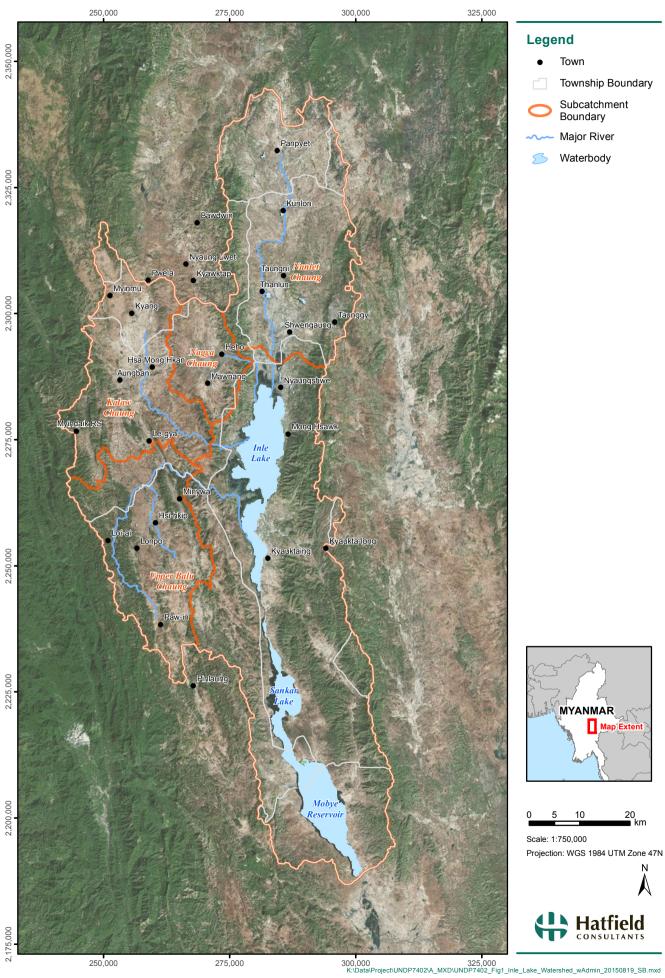
- Contribute to better planning in natural resources and manage systematically the natural resources with the sustainable manner for long run.
- Identify the model villages in all different zones so as to advocate the other organizations and participate in implementing such models in other villages.
- Promote environmental governance through CBOs with the increased awareness of all stakeholders (UNDP and MOECAF 2013).

The Project applied for and received two no-cost extensions to continue project activities beyond the initial 2-year timeframe, with final completion of Project activities in June 2015.

This End of Project Evaluation assessed the relevance, effectiveness, efficiency and level of sustainability of the *Inle Lake Conservation and Rehabilitation Project* (UNDP 2013). The evaluation documented lessons learned and successes/failures from the Project, and outlined recommendations for future environmental conservation initiatives that can be linked with community development activities in the Inle Lake region.

Specifically, the End of Project Evaluation includes an examination of: Project management systems; Project activities conducted; and, progress towards improved environmental governance from the perspective of coordination amongst government, international organizations and communities in environmental conservation activities. It addresses the results achieved, the partnerships established as well as issues of capacity building and sustainability.

The Evaluation focused on the entire Project period of three and a half years (2012-2015). The Terms of Reference (TOR) for this End of Project Evaluation are provided in Appendix A1.



#### Figure 1 Inle Lake Watershed and administrative areas, Shan State, Myanmar.

Ν A

# 2.0 EVALUATION APPROACH AND METHODOLOGY

In order to evaluate the progress achieved in meeting the Project's objectives and outcomes and to identify lessons learned, key documents were reviewed and a series of interviews, site visits and focus group discussions were conducted in Taunggyi, Nyangshwe, Kalaw, Pindaya and Yangon from July 5 to July 15, 2015. The end-of-project evaluation's work plan is located in Appendix A2.

Both qualitative and quantitative information was obtained for the assessment. including information collected from field visits and a semistructured questionnaire for key informant interviews (KII) and focus group discussions (Appendix A3). Our approach was to use existing baseline information obtained from Project reports and historical surveys and compare the additive benefits of Project activities, to determine the degree to which the overall objective of the Project had been met (i.e., "to restore the environmental stability of the Inle Lake with the improvement of the quality of life of local communities").

The final evaluation was guided by: the key questions outlined in the ToR; responses to specific questions developed for key informant interview and focus discussions: group direct observation; and professional judgement. Additionally, an Evaluation Design Matrix was prepared in accordance with UNDP guidelines to review the overall relevance, effectiveness, efficiency and sustainability of the Project (Appendix A3). Included in the Evaluation Matrix were two categories of indicators obtained from the following sources:

#### INLE LAKE MAN AND BIOSPHERE RESERVE:

UNESCO's contribution and technical assistance within the framework of the project, led to improved awareness among communities, media and the general public, which supported MoECAF's efforts in successfully achieving nomination of Inle Lake as a Biosphere Reserve, under UNESCO's MAB Programme. The Project was instrumental in:



- Supporting the delivery of workshops and training related to development of the MAB application;
- Development of awareness raising materials, including a website, posters and pamphlets;
- Developing baseline data for Inle Lake; and
- Conducting research on livelihood activities in relation to the lake ecosystem sustainability.

#### Key Successes:

- In June 2015, Inle Lake was added to the United Nations Educational, Scientific and Cultural Organization's network of MAB reserves;
- A land use change map created by the Project contributed to understanding of the changes that occurred in the biosphere area over a 10-year period from 2000 to 2010;
- Meetings and workshops on the nomination for the MAB helped to improve Inle Lake management and conservation; and
- Inscription into the UNESCO list of MAB Reserves is a notable achievement and represents a concrete example of people working together towards tackling environmental/conservation issues in Myanmar.

#### **Recommendations:**

- Well-coordinated communication strategies are needed to promote positive community action;
- Translating complex concepts such as MAB into Myanmar language needs careful consideration, given the importance of Inle Lake to local livelihoods;
- Critical need for increased information sharing and coordination across donors, scales of governance, across resource sectors and among key stakeholders, particularly among UN agencies; and
- Local leadership and ownership of conservation management is required for efforts to be successful.

- Project logframe: data for these indicators are readily available from Project annual progress reports as they are mostly quantitative in nature and report on outputs.
- <u>Other sources</u>: these guideline indicators are more qualitative in nature and were developed through discussion and consultation with UNDP, Union and State Government or local stakeholders. Some of these specific evaluation questions and their associated indicators were used to help inform/direct questions during key informant interviews and focus group discussions.

The evaluation methods used are described in more detail in the following sections.

# 2.1 DESKTOP REVIEW OF RELEVANT PROJECT DOCUMENTATION

The evaluation started with a systematic review of available Project documentation (see Section 5.0) summarizing activities undertaken under the Project, and previous actions taken to conserve and rehabilitate Inle Lake. This review included documents from previous MoECAF action plans, Project documents, as well as research papers and reference documents. The document review provided information for evaluating Project activities which were successful, and also provided background on those initiatives that may not have been successful for one reason or another.

The desktop review focused on key Project activities, outputs, outcomes and impacts. Key Projectrelated documents reviewed in preparation for the assignment included the Project design document, the Project log-frame included in the Mid-Term Evaluation Report, as well as Annual Progress reports (Section 5.0).

# 2.2 INTERVIEWS

Local communities, as well as Shan State Government and Union Government line agencies and departments, were provided with an opportunity to provide feedback and comments on Project activities through one-on-one meetings or via focus group discussions. Input from implementing partners, non-government organizations (NGO) and civil society organizations (CSO), at the national and local level, were also important to the evaluation, as these organizations assisted with Project activities on the ground in the communities. Interviews with key donors were conducted to assess whether the Project was managed efficiently and met its overall objectives, and to ensure that effective coordination with other ongoing initiatives in the Inle Lake region occurred.

One-on-one interviews were held with the stakeholders including officials from relevant line departments in Shan State involved in Inle Lake conservation and rehabilitation activities, representatives of the Intha community, Union Government representatives from MOECAF and other senior officials. A comprehensive list of interviews are provided in Appendix A5.

# 2.3 SITE VISITS AND FOCUS GROUP DISCUSSIONS

Site visits were conducted to meet with Project beneficiaries, implementing partners and local communities to verify activities undertaken through the Project. A number of meetings, interviews and focus group discussions were conducted in Taunggyi, Nyaungshwe, Kalaw, Pindaya and Yangon as part of the evaluation process. In addition to informing key stakeholders about the End-of Project Evaluation process, these meetings provided a forum for key stakeholders (including local communities) to provide feedback on Project activities conducted, successes/failures of Project

initiatives, and also to provide recommendations for potential future Inle Lake conservation efforts (and, in the case of local communities, to identify additional support needed to further improve livelihoods, so that they can become more involved in conservation activities).

Focus group discussions were conducted in several villages with local leaders and community members. These included:

- Two villages in the transition area on the western end of Inle Lake;
- Three villages on Inle Lake in the core area; and
- Four model villages in Kalaw and Pindaya Townships in the buffer zone.

Participant lists for each focus group discussion are presented in Appendix A6.

# 2.4 DATA ANALYSIS AND EVALUATION

Data collected during the desktop review, meetings, interviews and focus group discussions was compiled and analyzed to determine the overall rating for the Project.

For the overall assessment of the Project, a simplified rating scheme was applied, similar to that used in the Mid-term Evaluation (MTE) report (UNDP and MoECAF 2013), to screen key activities and Project achievements based on the following criteria:

- 1. Highly satisfactory.
- 2. Satisfactory.
- 3. Unsatisfactory.
- 4. Highly unsatisfactory.

To the extent possible, quantitative data available in Project documents (supplemented with information obtained during interviews and focus group discussions) was used to provide evidence to support the ranking applied. In cases where supporting data were lacking, professional judgment and experience of the evaluator was used to determine the ranking.

Recommendations included lessons learned from Project activities (successes and failures), as well as a priority ranking of activities listed in the Inle Lake Conservation 5-Year Action Plan (MOECAF 2015). These recommendations will assist in the development of future Inle Lake conservation and rehabilitation priority activities to be potentially supported by the Union Government, State Government, and international donor agencies.

# 3.0 KEY FINDINGS

The End of Project Evaluation results are presented in the following sections. Information on selected Project activities are presented in accompanying inset boxes, to provide background on initiatives undertaken in communities in the Inle Lake region. Specific details of activities completed are presented in Annex 6.

# 3.1 PROJECT RELEVANCE – ACHIEVING PROJECT PURPOSE: HIGHLY SATISFACTORY

The overall objective (or goal) of the Project is to restore the environmental stability of the Inle Lake with the improvement of the quality of life of local communities. The specific objectives (project

purpose) as outlined in the Project document (UNDP and MOECAF 2013) were:

- Contribute to better planning in natural resources and manage systematically the natural resources with the sustainable manner for long run.
- Identify the model villages in all different zones so as to advocate the other organizations and participate in implementing such models in other villages.
- Promote environmental governance through CBOs with the increased awareness of all stakeholders.

The Project was successful in meeting specific objectives. The most important accomplishment was with respect to Point 1 above, specifically improved environmental planning and governance for Inle Lake conservation. Significant Project achievements to this end included:

#### TAUNGKYA VILLAGE – ELECTRIFYING INLE LAKE VILLAGES:

In 2000, only seven villages had electricity in the Inle Lake region. Now, 220 villages have electricity, including 4 villages provided through UNDP support. Improved electrical supply contributes to a reduction use of fuelwood for cooking and for small industries. Time saved in collection of firewood also helps provide opportunities for exploring



alternative livelihoods. This activity was linked with conservation forestry activities, whereby villagers participated in preservation of forest lands in their communities in exchange for seed funding for transmission line construction. Villages received official certification from the Forest Department for their forest conservation efforts. However, not all villagers could afford electricity fees. Those who lacked funds (\$3-6 per month) did not benefit from electricity.

#### **Key Successes:**

- Electricity is now being used by households for cooking which decreases the pressure on surrounding forests for firewood; and
- Electricity is also used for provision of lights after sunset, enhancing children's educational advancement or opportunity for engaging in supplemental livelihoods.

#### **Recommendation:**

- Linking forest conservation with provision of electricity is an initiative which should be expanded to other communities;
- Not all villagers could afford electrical fees. Those who lacked funds (\$3-6 per month) did not benefit from electricity; and
- Project planners should conduct ability to pay/willingness to pay (ATP/WTP) studies prior to installing electricity services.
- Designation of the Man and Biosphere Reserve in June 2015;
- Approval by the Government for creation of an Inle Lake Authority; and
- Supported completion of the 5-Year Inle Lake Conservation Action Plan (MoECAF 2015).

Significant progress was made in achieving a key result and outcome of the project, evidenced by the MAB designation and conservation action plans completed.

A review of Project documents (progress updates for example) revealed numerous changes to Project outputs and activities during the course of the Project. Keeping in mind that some amount of adaptation is to be expected, future conservation projects in Myanmar should undergo an inception period where the following deliverables are finalized before a project moves ahead with implementation:

- Project logic model (including a set of indicators);
- Project monitoring and evaluation plan (including baseline data); and
- Stakeholder validation of logic model and monitoring and evaluation plan.

Ensuring that these deliverables are finalized prior to implementation will contribute to preventing unnecessary scope-creep and to ensuring that stakeholders understand and have contributed to the development of the Project. Evaluating Project progress will also be facilitated by predefined indicators and baseline values.

More work is needed to ensure effective coordination both within different UN agencies (UNDP and UNESCO) related to the MAB follow-up activities, and between the UN agencies and Government of Myanmar. Most Project activities were coordinated through UNDP and the Watershed Management Division of the Forest Department. Under the project, UNESCO activities related to the MAB were also coordinated through the Nature and Wildlife Conservation Division, Forest Department. There is a need for improved coordination and communication between all parties in future, to avoid confusion and duplication of efforts in terms of awareness-raising at the local level.

Overall intended results from the Project were achieved in terms of improved environmental governance for Inle Lake conservation, and significant progress was made towards this end. Much work remains to be done in the coming years to create a functioning Lake Authority which is financially sustainable, can manage conservation activities, monitor change over time, and improve overall environmental conditions in the lake.

A common refrain from those interviewed was that the Project duration was too short (initially 2 years), which is insufficient for long-term conservation measures to be effectively implemented. For example, community forestry activities take several years to bear fruit, and it is challenging to measure progress on measures taken to reduce sedimentation in the short-term. Finding sustainable alternative livelihood activities for Inle residents will take years, and will require extensive consultations and significant financial resources for training and capacity building.

The Project was highly relevant to the identified need for improved conservation and management of Inle Lake. There are dramatic transitions taking place in Myanmar, including political and economic changes which are transforming the country. It is essential to merge conflicting interests together in something that unites the country, such as Inle Lake. There is great national pride in Inle Lake, and the Project was successful in obtaining support from the local community level, political leadership in Shan State, and the Union Government. Support from the highest levels of the Union Government, especially MoECAF, is essential to make progress on this issue, and the Project was highly successful in creating linkages between environmental and socio-political issues in Myanmar.

It is clear that conservation of Inle Lake is a key issue and priority for the Myanmar Government, as well as for local residents. As a major tourist destination, there has been extensive and unfettered expansion of hotels, restaurants, and other tourist facilities in the past 5 years. The declining quality of the lake over time is evident from previous research studies, and local residents are aware of the potential impacts of a degraded environment on their livelihoods and human health. Increased awareness of environmental issues in Inle Lake is essential at all levels (national, state, local and international) to help protect the local culture and to preserve the unique biodiversity at the site.

# 3.2 PROJECT EFFECTIVENESS – MANAGEMENT PROCESS AND APPROPRIATENESS: SATISFACTORY

#### KHAUNG DAING VILLAGE – EFFICIENT STOVES FOR WATERSHED PROTECTION:



#### **Key Successes:**

- The 8 households that received a mega-stove have saved over 2,300,000 Kyats per year in fuel costs;
- Demand for better fuel efficiency is increasing, contributing to easing of the demand for firewood from local forests;
- Villagers report an increase of production due to the efficiency of the mega-stoves from three bags of product per day to seven; and
- Villagers report an improvement to air quality since the mega-stoves were installed.

A significant number of people in Myay Ni Gone and Pwe Hla Villages earn their livelihoods from roasting and selling lablab bean, soybean and sunflower seeds at local markets. Roasting is an activity that has traditionally required significant amounts of firewood for fuel. Through the Danu Literature, Cultural and Regional Development Association (DLCDA), UNDP provided cost-share funding for the construction of fuel efficient megastoves. Two training workshops and eight (8) mega-stoves were constructed in 2013 on a pilot basis; resulting in an estimated 7,600 trees saved per year. Local demand for fuel efficient stoves is increasing and pressure on the surrounding forests for fuel is expected to decline.

#### **Recommendations:**

- Local villagers requested more input on design and selection of masons for stove construction;
- Scaled or phased payment structures, which considered poor households' ability to pay for fuel efficient mega-stoves, should be considered; and
- Expansion of fuel-efficient stoves to other communities in the Inle region, including the upper watershed.

Many advantages for Inle Lake conservation and management resulted from this Project, including awareness raising of local communities, capacity building of NGOs and CSOs, and individual local leaders (village heads). Many local institutions participated in project activities, however overall budgets were relatively small for these activities, which limited the extent of capacity development and raising awareness. As a result of workshops and training courses, and visits to villages, local people were informed of the environmental deterioration taking place in Inle Lake, and the causes. Educated people from villages knew of the problems, but more awareness raising activities are needed for the majority of the local people.

A number of activities were conducted at the community level which provided significant benefits to Inle region residents. For example, the Nature and Wildlife Conservation Division, Forest Department fulfilled the role of lead implementing agency for biodiversity conservation activities conducted under the Project. Some of the local implementing partners (NGOs and CSOs) were weak in terms of management capacity and experience in implementing projects on the ground. In future, it is important that implementing partners not only understand the specific activities to be conducted, but also how these activities need to contribute to and meet the overall project goal. Sites chosen for biodiversity conservation activities (e.g., fishing free zones, FFZ), for example, should have been selected according to pre-determined criteria and based on more community consultation, in order to

be successful in the long-term. Inle Lake conservation and rehabilitation programs should also promote economic development of the communities; these should go together in parallel.

There were few Project activities conducted which were directly related to aquatic biodiversity conservation (especially fisheries), except establishment of the FFZ; the timeframe for the work was limited, and more awareness raising activities are required. Conservation of fisheries is not deeply ingrained in the local people as a result of the UNDP Project – more work is needed to ensure the FFZ is sustainable in the long-term. Project duration was the issue, not the NGOs who implemented the work. Project design was only 2 years, so activities should have been implemented accordingly. With such a short project timeframe, it is difficult to start activities and make gains which need long-term support to be successful.

# 3.3 **PROJECT EFFICIENCY: SATISFACTORY**

UNDP played an essential role to evolve the project. UNDP served as project manager (PM) and UNDP staff established good relations with MOECAF, NGOs, CBOs and local communities. UNDP

staff had strong drive to implement the activities and were committed to helping improve conservation efforts on Inle Lake. Good relations between UNDP, Government agencies and NGOs allowed activities to be implemented successfully and efficiently.

Linkages with local planning process and integration with Shan State government or Lake Authority have moved forward. Even though the first 5-year plan has terminated, activities are still running on the ground. Budget to implement those activities is from State Government budget (allocated from the Union level). The next 5-year action plan needs to submit requests for funding to the Union Government for implementing projects. MOECAF representatives from Forest Department also work at the District level for example,

# PWE SA GONE VILLAGE IN NYAUNGSHWE TOWNSHIP – IMPROVED SANITATION AND WATER SUPPLY:

UNDP was instrumental in providing improved latrine toilets and piped water supply in a number of villages. Septic tanks were also installed in 20 households in Kyae Sa Gone Village. Water storage tanks and water filters were also provided in a number of villages for gravityfed potable water supply. The Project contributed to dam



rehabilitation at Kyune Village. The dam was raised and lengthened in order to increase water holding capacity.

#### Key Successes:

- Twenty-five (25) households now have improved sanitation after receiving toilets and piped water supply;
- Water supply filter tanks have proven useful, particularly during the summer when water supplies decline; and
- Irrigation potential during summer months have improved. Villagers are now able to grow potatoes in the summer and can hire additional labourers. They are now able to produce their own seed, which they were not able to do previously.

#### Lessons Learned:

- Engineering design and feasibility studies should be conducted and the options discussed with villagers before any construction commences;
- A septic system for those households which dispose their wastes directly into the lake is needed to reduce the environmental impact to the lake; and
- Appropriate technology and locally-available water filters should be considered to enable maintenance and available replacement parts.

Taunggyi District develops its own forest management plan, which will need to integrate activities proposed under the 5-year Action Plan. The Department of Agriculture n Taunggyi also provided input into the 5-year Action Plan in terms of the activities they wanted to implement. Local Forest Departments at the District level must report to the head office of Forest Department, who report back to the Union Government Inle Lake Coordination Committee on the activities conducted. Consultation with international donors, including Norway, is in process. For example, a baseline water quality data program is being planned – this will fulfill some of the activities in the new 5-year Action Plan. Japan is also interested; and, potentially, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) will also contribute (e.g., climate-smart agricultural activities).

There was some overlap in Project activities, in terms of conservation planning. There have been a number of conservation action plans created over the past 5 years, including the UN-HABITAT, Institute for International Development - IID (2012) and the MoECAF 2015-2020 action plans. UNESCO's MAB application process also included long-term plans for monitoring and management of Inle Lake. It is important that these various planned activities are well coordinated between Union and State Government agencies, in association with the future Lake Authority.

#### **ENVIRONMENTAL EDUCATION CENTRE:**

The newly established Inle Lake Environmental Education Centre (EEC) seeks to promote awareness on the importance of environmental conservation in sustainable development of the lake. Cooperation amongst various stakeholders is also promoted through networking between government, civil society and non-government organizations. Displays in the centre educate visitors on: global warming and climate change; Inle Lake conservation activities; wild flora and fauna of the region; historical and cultural sites; traditional livelihoods and agriculture; and traditional dance and music.



#### **Key Successes:**

- The EEC was successfully constructed under the project, and is run by local Intha people;
- The facility is utilized approximately 20 days per month for meetings and workshops; and
- The centre is visited by between 40 and 400 tourists per month.

#### **Recommendations:**

- Expansion of EEC displays, and translation of some into English language, will be valuable for raising awareness of both local and the international visitors;
- Coordination of awareness raising activities is needed at the local level, given the large number of stakeholders involved in education and conservation issues in Inle Lake; and
- The EEC and local Intha organizations can play a key role in assisting with stakeholder consultation prior, during and post-project implementation. Local communities expressed a desire to have more information on Project goals and to take greater ownership on environmental conservation activities taking place in their region.

Technical assessments conducted for the MAB nomination were complex; UNESCO provided technical support to MOECAF through the Forest Department. The MAB process also included development of an education program in local language order to raise awareness amongst local communities regarding the need for conservation in the lake. A Workshop was organized in March 2015 as part of this awareness raising process, which included multiple stakeholders involved in Inle Lake conservation activities.

UNESCO is presently working to support local government agencies in developing a communication plan for exchanging information, awareness raising and meeting the needs of local communities. Part of this plan includes consolidating gains made by establishing the MAB, and setting up an institutional mechanism to be managed by MOECAF (an educational centre, or MAB biodiversity centre) over the next 6 months.

Community consultation and involvement is essential for long-term success of Inle Lake conservation measures, particularly with respect to raising awareness of the environmental issues facing Inle Lake. For local Intha representatives, this was their first experience in managing and implementing Project activities, and many lessons were learned. In future, a more transparent and participatory consultation process is required, clearly outlining the overall goals and objectives of the project/programme, so that it is clearly understood at the local level. Some of the key lessons learned included:

- Need transparency in terms of project budgets and selection processes for implementing partners, so local communities can make informed decisions on in-kind contributions required;
- Project timeframe was too short, and many NGOs were only on the ground for short periods of time;
- Successful project implementation requires NGOs from outside of the Inle region to stay longer in the communities, not only for short-term inputs. Some NGOs conducted many diverse activities as part of their TOR, and there was duplication in effort in some cases. This resulted in some confusion at the local level, and lack of retention of information and skills;
- Sharing of information collected from communities, and reporting back to local villages when activities are completed. Follow-up activities are required;
- For raising awareness, it is challenging to assess how much information people actually retained, given the short-term nature of the activities conducted;
- Future activities should have more involvement of local NGOs and CBOs so that there can be sustainability in the long-term and follow-up by the local communities; and
- Building local capacity in project management skills, including how to write proposals and reports, managing finances, and M&E skills is essential. With improved capacity, local NGOs and CBOs will be able to better implement and manage activities, and they can follow up with the local people. This is essential for long-term sustainability.

UNDP Myanmar was responsible for overall project financial and technical management under the Project. Overall, the project management systems were adequate for a project of this size and duration, and they followed standard UNDP procedures. Two no-cost extensions were granted under the Project, primarily to account for delays in the MAB application process.

UNDP hired technical specialists to develop a list of activities to be undertaken in the communities, as well as develop TORs for projects. Proposals submitted by NGOs/CBOs were sent to a technical advisory group, who provided recommendations based on technical merits of the bids. Separate financial bids were opened following review of the technical proposals.

Key stakeholders interviewed as part of the evaluation mission indicated that they were satisfied with the overall financial and technical management of the Project. UNDP involved local people in the activities conducted, and made an important contribution to building capacity in a number of areas. It took time for Project activities to be designed and implemented, and there were delays at the onset of the Project, but stakeholders indicated that this improved significantly as the project evolved. This is understandable, given the nature of working at the various levels of government, with NGOs and CBOs, and in the communities as part of this Project. Working relationships with the communities also improved significantly over time.

The Project has spent most of its funds, with the exception of remaining activities to be conducted by UNESCO related to technical support to MoECAF, capacity-building initiatives, communication strategy and setting-up an institutional mechanism to further objectives of the MAB programme. The original project funding is presented in Table 1, and Project finances as of June 2014 are presented in Table 2.

## Table 1 Original project funding requirement (UNDP Project TOR).

Text	USD
Output 1: Technical assessment for Inle Lake to prepare a conservation and management plan	\$180,000
<b>Output 2:</b> Small Grant Facility for CBOs and NGOs established with relevant partners to form a "trust fund" for implementation of environmental activities.	\$1,400,000
Output 3: Knowledge sharing platform established and information and disseminated among relevant stakeholders.	\$320,000
TOTAL	\$2,000,000

## Table 2Project finances (UNDP 2014).

Activities	Balance at End of Project	Total Expenditure End of June 2014	Balance End of June 2014
UNESCO Programme	186,916	119,594	67,322
UNESCO GMS	13,084		13,084
UNESCO Sub Total	200,000	119,594	13,084
Technical Assessment for Inle Lake Conservation and Management Plan	29,784	29,784	
Small Grants Facilities	1,564,733	1,366,884	197,849
Knowledge Sharing Platform	76,141	79,830	1,311
Mainstreaming in National and Regional Development Plan	47,449	39,172	8,277
UNDP GMS	120,268	101,890	18,378
UNDP Sub Total	1,838,375	1,612,560	225,815
TOTAL	2,038,375	1,732,154	306,221

# 3.4 SUSTAINABILITY: SATISFACTORY

Most Project benefits are sustainable in the long-term, and help set the stage for improved environmental governance related to Inle Lake conservation. The MAB designation, establishment of the Lake Authority and completion of the 5 Year Inle Lake Conservation Action Plans provide the basis for future management and technical support needed to implement activities.

The likelihood of continuation and sustainability of Project outcomes and benefits after completion of the Project is high, given the importance of Inle Lake conservation to the Union Government and local stakeholders. However, this is contingent upon future project funding from both the government and international donors.

The Union Government needs to take the lead on coordination of Inle Lake conservation efforts, other than UN agencies or donor organizations. A coordination mechanism has been established through the Environmental Working Group (EWG) in MOECAF (which includes all development partners), which can bring all stakeholders together to help formulate policies and priorities for future conservation efforts. The EWG can also help support governance of Inle activities at the national and local level, and ensure effective coordination mechanisms are in place between donors and the government.

An implementing agency is essential to oversee and review all future project proposals, and ensure that proposed conservation activities meet the needs as identified in the Action Plans. At present, there is limited capacity or awareness of the overall broad framework highlighted in the Action Plans within the government to do this. The future Lake Authority will play an essential role in this, but it will require time, capacity development and sufficient funding before it will be able to oversee management or Inle Lake conservation activities.

Inle Lake conservation and preservation is a long-term process, which will require assistance from all levels of government and the international donor community in order to be successful. Throughout the Project implementation period (note that UNESCO communication activities are ongoing), UNDP worked closely with the Forest Department of MOECAF and other ministries at the Union and state level, as well as with local communities, to explore longer-term support following Project completion. The Action Plan (2015-2020) was funded under separate UNDP funding, but was a key MoECAF document which outlines priorities and plans for future conservation and remediation activities. The Action Plan provides a roadmap for MOECAF and other government agencies to follow in future, but requires funding commitments from the government and international donors. Coordination of future Inle conservation efforts between government agencies at the Union, State and local level is essential to avoid overlap and duplication.

# 4.0 CONCLUSIONS, LESSONS AND RECOMMENDATIONS

The Project made significant advances in environmental governance related to Inle Lake conservation and rehabilitation; the issue is a high priority for the Government of Myanmar, and is highly relevant to the country as a whole. Establishment of the Lake Authority, and passing of the UN-HABITAT and MOECAF Conservation Action Plans, as well as the successful designation of Inle Lake as a Man and Biosphere Reserve by UNESCO, are all critical positive steps towards Inle Lake conservation and restoration. In terms of relevance, the Project results and outcomes may be considered **highly satisfactory**.

In terms of the other key measurement points (effectiveness, efficiency, and sustainability), the project results may be regarded as **satisfactory**. There were some limitations of the project design which impacted implementation during the first year of the project. The Project was outcome-based, and lacked clear statement of the overall objectives, as highlighted in the Mid-Term Evaluation Report (UNDP and MOECAF 2013). Ideally, there should have been an inception and planning phase, followed by subsequent phases for implementation.

The short two-year duration of the Project impacted effective project implementation at the local level, and was a common refrain with many stakeholders. In such a short project timeframe, with no immediate follow-up activities, momentum will be lost and it will take additional time to re-start a number of the most promising activities. Inle Lake conservation and rehabilitation must be regarded as a long-term program, with substantial investment requirements.

There needs to be a clear linkage between the community-based actions conducted and conservation and restoration of Inle Lake. Some are clear - communitybased agroforestry, forest conservation and provision of electricity to villagers all play important roles in reducing forest loss, especially for fuelwood consumption. Provision of energy-efficient stoves was also urgently especially needed. for communities in the core area. However, provision of safe water supplies had some issues, including poor design and distribution systems for Inle Lake communities, as well provision of home water tanks for which replaceable filters are not available locally (Korean model, filters available only in Yangon).

Long-term funding is essential to meet the goals of the 5-year Conservation Action Plan (2015-2020), which will be a challenge, and will require budget allocation from both Union and State Governments and international donor support.

Based on the above, our assessment of the overall Project results in a ranking of **satisfactory**.

# PWE HLA AND SHAUKPIN VILLAGES, PINDAYA TOWNSHIP – COMMUNITY BASED FOREST MANAGEMENT:

The project enhanced communitybased forest management activities with the collaboration of implementing partners. Agroforestry, enrichment planting, windbreak planting, natural forest conservation and public tree planting covered 2,068 acres under the Project. A number of species that are in demand from local communities



were selected after a participatory assessment by the Ecology and Economic Development Co., Ltd (EcoDev) and upon recommendation by technical specialists and the Forest Department. Species that are planted contribute to local livelihoods or are important species for forest biodiversity and habitat.

#### Key Successes:

- Villagers were provided with training on forest management, including maintenance, pruning methods and forest fire protection;
- Villagers from 15 villages in the area surrounding Pwe Hla and Shaukpin Villages have become members of an NGO aimed at forest conservation and management. Membership includes all ethnic groups living in the upper areas of the Inle Lake watershed;
- Funds that some villagers received for forest enrichment activities were used to contribute toward the purchase of hydro-electric transmission lines to the community – a direct benefit from the Project which helps reduce reliance on scarce wood resources in the Inle watershed; and
- Contour bunds are reducing erosion which is lessening the sediment accumulation in the upper watershed.

#### **Recommendations:**

- A longer-term vision is required, as 2 years is insufficient to develop an effective forest conservation program;
- Several trials and crop cycles are needed to determine the effectiveness of composting and organic farming initiatives;
- Providing materials (e.g., seedlings, compost) should be linked with capacity development activities and follow-up;
- Participatory approaches which engage local communities in biodiversity conservation dialogue should be employed to build trust; and
- Maintenance of existing contour bunds and construction of additional sediment control structures will require government or donor support, as local villagers do not have the time nor resources to undertake these activities on their own.

### **Recommendations:**

- Conservation is a long-term process; the short duration of the Project (2 years) was a key limiting factor in promoting conservation efforts in the Inle Lake region. Terrestrial and aquatic biodiversity conservation, in particular, require longer-term efforts (5+ years) in order to clearly demonstrate positive benefits to the environment and community livelihoods.
- 2. Education and awareness raising is critical, as well as sharing and dissemination of information. Behavioural change communication strategies and awareness raising programs are needed for Inle Lake and the whole country. These need to be coordinated between different implementing organizations, including Government departments and donor agencies, to reduce potential for overlap and to be more effective in future.
- There is a need to implement activities to be conducted under the Inle Lake Conservation 5-Year Action Plan (2015-2016 to 2019-2020; see MOECAF 2015), according to the following priorities identified by MOECAF and key stakeholders:
  - a) Sustainability of Inle Lake requires a strong institutional framework, with active participation of key stakeholders at the Union, State and local levels. Without a specific agency to oversee or monitor Inle Lake management and conservation efforts, the situation in Inle Lake will not improve, and will likely deteriorate further. The implementation procedures for the Lake Authority need to be established, with clear roles and responsibilities for key stakeholders clearly defined. Technical support, and training and capacity building, will be required for key stakeholders responsible for overseeing the Lake Authority. Long-term financial and technical support for establishment and operation of the Lake Authority is essential, with support from the Higher Authorities.
  - b) Baseline data on the natural and social environment are lacking, and are essential for monitoring changes in Inle Lake over time (e.g., biodiversity, water quality, sedimentation rates, socio-economic information, etc.). Establishment of consistent and comprehensive data and information management systems is needed to store and manage the large volumes of environmental monitoring data collected. Application of remote sensing and GIS data and information should be expanded, and integrated into the data and information management system.
  - c) Threats to human health must be reduced, especially related to lack of adequate water supply and sanitation, and use of fertilizers and toxic chemicals (pesticides and herbicides, especially persistent organic pollutants or POPs) in agriculture.
  - d) Expansion of organic farming techniques should be promoted, recognizing that this is a long-term initiative which will take time to establish (initiatives undertaken under the Project were of short duration, and there was limited interest by farmers to continue after Project completion). Farmer's field schools and appropriate training techniques should be implemented. Reduction in the extent of floating gardens, and removal of defunct gardens is also needed.
  - e) Overall living conditions need to be improved for Inle Lake residents, particularly in terms of provision of water supply and sanitation services. These infrastructure projects need to be developed in close consultation with communities to ensure they meet their

requirements, and that they are designed and constructed to the highest possible standards.

- f) Sustainable livelihoods need to be developed for Inle residents, with less reliance on agriculture and wild fisheries, and increased opportunities in small industry and tourism.
- g) Promote sustainable tourism practices, including improvement in infrastructure, training and capacity building for local people.
- h) There is a critical need to reduce deforestation rates and increase reforestation in the watershed. Conservation forestry initiatives started under the Project were successful, and should be expanded to other Inle Lake communities (e.g., linkages with provision of electricity to remote communities, and provision of fuel-efficient stoves, to reduce their reliance on fuelwood).
- i) A reduction in soil erosion and sedimentation rates is needed, particularly in the upper watershed, but also in all major drainages entering Inle Lake. There are clear linkages between deforestation, current agricultural practices, and sedimentation rates, but there are limited data available for monitoring trends over time.
- j) Biodiversity conservation and fisheries resource management plans need to be developed, communicated and implemented, and linked to the MAB process.
- 4. Successful implementation of Inle Lake conservation activities requires the active participation of all key stakeholders for project planning, design and for securing funding. Local authorities need to have a key role in the Lake Authority in order for this to be successful, as they are the main stakeholders on Inle Lake. All relevant stakeholders and departments should be actively involved and be given a chance to participate in all activities not only leaders (e.g., MOECAF Forest Department), but all government departments.
- 5. For local Intha communities, this was their first experience in managing and implementing Project activities, and many lessons were learned. In future, a more transparent and participatory consultation process is required, clearly outlining the overall goals and objectives of the project/programme, so that it is clearly understood at the local level. Future activities should have more involvement of local NGOs and CBOs so that there can be sustainability in the long-term and follow-up by the local communities. Building local capacity in project management skills, including how to write proposals and reports, managing finances, and M&E skills is essential. With improved capacity, local NGOs and CBOs will be able to better implement and manage activities, and they can follow up with the local people. This is important for long-term sustainability at the local level.
- 6. Everyone who lives on, works in, or visits Inle Lake and its watershed area needs to be aware of the importance of Inle Lake conservation and rehabilitation. To ensure long-term sustainability of Inle Lake, there is an urgent need to improve awareness of the rich culture and environment in the Inle Lake basin, both in Myanmar and with the international community.

16

# 5.0 **REFERENCES**

- Butkus S, Myint S. 2001. Pesticide Use Limits for Protection of Human Health in Inle Lake (Myanmar) Watershed. Living Earth Institute, Washington D.C., USA.
- The Institute for International Development [IID]. 2012. Inlay Lake: A Plan for the Future. Inlay Lake Conservation Project. In: Jensen A, Leake J, Kristensen J, editors. Yangon (Myanmar): IID. 111 p.
- Ministry of Environmental Conservation and Forestry [MoECAF]. 2010. Action Plan for Environmental Conservation and Sustainable Management of Inlay Lake (2010-11 to 2014-15). The Government of the Republic of the Union of Myanmar. 21 p.
- MoECAF. 2013. Inlay Lake Biosphere Reserve Nomination Form. Submitted by MoECAF, Republic of the Union of Myanmar. 132 p.
- MoECAF. 2015. Inle Lake Conservation 5-Year Action Plan (2015-2016 to 2019-2020). MOECAF, Nay Pyi Taw, Union of Myanmar. 30 p + Appendices.
- MOECAF, Norwegian Ministry of Foreign Affairs, and United Nations Development Program (UNDP). 2015. The proposal on the formation of Institutional Framework for Inle Lake Authority and its duties and responsibility for sustainability and development of Inle Lake region. 9 p.
- Ministry of Hotels and Tourism [MoHT]. 2014. Destination Management Plan for the Inlay Lake Region 2014 2019. The Republic of the Union of Myanmar.
- Myanmar Country Profile [Internet]. n.d. Montreal (Canada): Secretariat of the Convention on Biological Diversity (SCBD); [cited 2014 October 21]. Available from: http://www.cbd.int/countries/profile/default.shtml?country=mm#facts
- Nakamura M, Rast W. 2014. Development of ILBM Platform Process Evolving Guidelines through Participatory Improvement (2nd ed.). International Lake Environment Committee Foundation and Research Center for Sustainability and Environment, Shiga University, Japan. 30 p.
- UNDP. 2011. Inle Lake Conservation and Rehabilitation Project (Project Document). UNDP-Myanmar. 10 p.
- UNDP and Ministry of Environmental Conservation and Forestry (MoECAF). 2013. Mid-Term Evaluation of the Inle Lake Conservation and Rehabilitation Project. Government of the Republic or the Union of Myanmar. Final Report. 85 p.
- UNDP. 2012. Annual Report of Inle Lake Conservation and Rehabilitation Project (2012). UNDP-Myanmar. December 2012. 40 p.
- UNDP. 2014. Annual Report of Inle Lake Conservation and Rehabilitation Project (2013). UNDP-Myanmar. May 2014. 41 p.
- UNDP Memo. 2013. Justification for No-Cost Extension for Inle Lake Conservation and Rehabilitation Project. 2 p.
- UNDP Memo. 2014. Proposal for No-Cost Extension for Inle Lake Conservation and Rehabilitation Project. 5 p.

- UNDP. 2015. Terms of Reference International Consultant for End-of-Project Evaluation of the Inle Lake Conservation and Rehabilitation Project. 5 p.
- UNDP and MoECAF. 2013. Mid-Term Evaluation of the Inle Lake Conservation and Rehabilitation Project. Government of the Republic or the Union of Myanmar. Final Report. 85 p.
- United Nations Human Settlements Programme [UN-HABITAT] and MOECAF. 2013. The Long Term Restoration and Conservation Plan for Inle Lake, Southern Shan State. The Government of the Republic of the Union of Myanmar. 132 p.

**APPENDICES** 

Appendix A1

**Terms of Reference** 



### UNITED NATIONS DEVELOPMENT PROGRAMME TERMS OF REFERENCE

I. Post Information	
Job Title:	Short Term International Consultant for End of Project Evaluation for
	"Inle Lake Conservation and Rehabilitation Project"
Duty Station:	Yangon with travel to Nay Pyi Taw and Southern Shan State (Project
	Area)
Type of Contract:	Individual Contract
Duration:	(15) working days; June 2015
Reporting	Programme Analyst, Climate Change Mitigation

### II. Background and Context

Inle Lake, located in Taunggyi District of Shan State is a shallow, high-altitude water body which is the second-largest lake in Myanmar. The lake is renowned for a number of traditional cultural and livelihood practices and regarded as one of the natural and cultural assets of Myanmar. It is in the ASEAN heritage site. The Lake becomes one of the primary destinations for Myanmar's booming tourism industry.

However, Inle Lake is suffering environmental degradation from the combined effects of unsustainable resource use, increasing population pressures, climate variability and rapid tourism development. The original Lake area 271 km<sup>2</sup> in 1934 has decreased to 163.2 km<sup>2</sup> in 2007 out of which only 62.2 km<sup>2</sup> remained as open water surface area<sup>1</sup>. Inle Lake degradation was caused by a range of sources both on the lake itself and in its surrounding watershed arising from the economic sectors (agriculture, tourism) as well as the livelihood activities and day-to-day living practices of many surrounding communities.

Having realized the urgent need for rehabilitation and conservation of the Lake and its watershed area, Inle Lake Conservation and Rehabilitation Project was launched in 2012 by the United Nations Development Programme (UNDP) with financial assistance from the Government of Norway. The project is based on the five-year Action Plan of Environmental Conservation and Sustainable Management of Inle Lake (2010-2015) of the Ministry of Environmental Conservation and Forestry (MoECAF). The original project duration was from January 2012 till Dec. 2013, and continued till June 2015 with no-cost extension. The project aims to restore the environmental stability and to improve the quality of life of local communities in and around the area of Inle Lake. The community-based project activities are focused on five major sectors, namely Agriculture, Soil and Water Conservation, Environmental Conservation and Forestry, Fishery and Livestock and Socio Economic Sectors. The project covers 71 villages in Nyaungshwe, Kalaw and Pindaya Townships and targeting 9500 households to be benefited through environmental friendly community-based development activities, and environmental conservation practices.

UNDP has been supporting and encouraging local Non Government Organization (NGOs) and Community Based Organizations (CBOs) to participate in Inle Lake Conservation and Rehabilitation Activities with the aim to promote institutional capacities of communities for conservation and development activities in the long term and to improve the quality of life of local communities.

<sup>&</sup>lt;sup>1</sup> Land Records and Settlement Department (2007)

UNDP is looking for an international consultant to conduct an end of project evaluation for the Inle Lake Conservation and Rehabilitation Project to generate knowledge, document lessons learnt and success from the project experience in demonstrating environmental conservation activities that can go with community development.

### III. Purpose of the evaluation

The Project has been implemented for three and a half years. This evaluation is to be conducted at the end of the project and will focus on the entire implementation period. The key stakeholders of this evaluation are relevant line departments, Shan State government, local partner NGOs, UNDP and communities (beneficiaries).

The overall objective of this Final Evaluation is to review progress towards the project's objectives and outcomes and to identify the result of the project that will inform and support the development of the next project or programme whether it is developed by government or communities themselves. In particular, the emphasis on documenting lessons learned mentions the issue of understanding what has and what has not worked as a guide for future planning.

## IV. Scope and Focus of Evaluation

The evaluation will look at the following areas: Project management; project activities; reflection of environmental governance from the aspect of coordination among government, international organizations and communities in environmental conservation activities. It will address the results achieved, the partnerships established, as well as issues of capacity and approach.

### a) The Evaluation Questions

The following key questions will guide the end of project evaluation:

### *i.* Relevance – Assess design and focus of the project

- To what extent did the Project achieve its overall objectives?
- What and how much progress has been made towards achieving the overall outputs and outcomes of the project;
- To what extent were the results (impacts, outcomes and outputs) achieved?
- Were the inputs and strategies identified, and were they realistic, appropriate and adequate to achieve the results?
- Was the project relevant to the identified needs?
- *ii.* Effectiveness- Describe the management processes and their appropriateness in supporting delivery
  - Was the project effective in delivering desired/planned results?
  - How effective were the strategies used in the implementation of the project?
  - How effective has the project been in responding to the needs of the beneficiaries, and what results were achieved?
  - What are the future intervention strategies and issues?

## iii. Efficiency – Of Project Implementation

- Was the process of achieving results efficient? Specifically did the actual or expected results (outputs and outcomes) justify the costs incurred? Were the resources effectively utilized?
- Did project activities overlap and duplicate other similar interventions (funded nationally and/or by other donors? Are there more efficient ways and means of delivering more and better results (outputs and outcomes) with the available inputs?
- Could a different approach have produced better results?
- How efficient were the management and accountability structures of the project?
- How did the project financial management processes and procedures affect project implementation?
- What are the strengths, weaknesses, opportunities and threats of the project's implementation process?

## iv. Sustainability

- To what extent are the benefits of the project likely to be sustained after the completion of this project?
- What is the likelihood of continuation and sustainability of project outcomes and benefits after completion of the project?
- How effective were the exit strategies, and approaches to phase out assistance provided by the project including contributing factors and constraints
- Does it describe key factors that will require attention in order to improve prospects of sustainability of Project outcomes and the potential for replication of the approach?
- How were capacities strengthened at the individual and organizational level (including contributing factors and constraints)?
- Does it describe the main lessons that have emerged?
- What are the recommendations for similar support in future?

(The recommendations should provide comprehensive proposals for future interventions based on the current evaluation findings).

### V. Methodology of Evaluation

The evaluation will provide quantitative and/or qualitative data through the following methods:

- Desk study and review of all relevant project documentation including project documents, annual work-plans, project progress reports and annual project reports.
- Focus Group discussions with project beneficiaries and other stakeholders.
- Interviews with relevant key informants
- Observations (field visits using checklist)

### VI. Duration of Evaluation

The evaluation is expected to start in June 2015 for an estimated duration of 15 working days. This will include desk reviews, field work - interviews, and report writing.

### VII. Expected Deliverables

The following deliverables are expected.

- i. An inception report, outlining the key scope of the work and intended work plan of the analysis, and evaluation questions, shall be submitted after 5 days of commencing the consultancy. The evaluator will prepare an inception report which will outline the scope of work, intended work plan and analysis. The inception report will provide UNDP the opportunity to verify that they share the same understanding about the evaluation objectives. The inception report should detail the evaluators' understanding of what is being evaluated and why, showing how each evaluation question will be answered. The inception report should include a proposed schedule of tasks, activities and deliverables. The inception report will be discussed and agreed upon with UNDP.
- ii. A draft comprehensive report that will have to be reviewed by UNDP for comments.
- iii. **The Final Report**: This will be submitted 10 days after receiving comments from UNDP. The content and structure of the final analytical report with findings, recommendations and lessons learnt covering the scope of the evaluation should meet the requirements of the UNDP M&E Policy.

### VIII. Payment Arrangements

20% of consultancy fees upon completion of the first deliverable, 50% upon completion of the second deliverable, and 30% upon completion of the third and final deliverable will be paid upon the certification of team leader of Environmental Governance and Disaster Risk Resilience (Pillar II) on the above-mentioned deliverables.

IX. Recruitment Qualifications			
Education:	<ul> <li>Advanced degree in natural resource management, development studies, public administration or related fields;</li> </ul>		
Experience:	<ul> <li>development studies, public administration or related fields;</li> <li>At least 10 year international experience in project formulation, project design, implementation, appraisal and evaluation;</li> <li>At least 5 year experience in the field of environmental conservation, natural resource management and community development activities and conducting output- and outcomebased evaluations, both assessment and learning aspects, experience in Myanmar is an asset;</li> <li>Expertise in Evaluation process, familiarity with UN and/or World Bank M&amp;E procedures is an asset; and</li> <li>Experience in working with UN or international organizations or government agencies.</li> </ul>		
Language Requirements:	Excellent ability to work in English, effective oral and written communication skills		

#### X. Criteria for Selection of the Best Offer

Combined Scoring method – where the qualifications and technical proposal will be weighted 70% and combined with the price offer which will be weighted 30%. The criteria for technical evaluation and obtainable score: (100 points)

Relevant education - 20 points

At least 10 year international experience in project formulation, project design, implementation, appraisal and evaluation- 30 points

At least 5 year experience in the field of environmental conservation, natural resource management and community development activities and conducting output- and outcomebased evaluations, experience in Myanmar is an asset – 20 points

Expertise in Evaluation process, familiarity with UN and/or World Bank M&E procedures is an asset – 15 points

Experience of working with government, UN agencies and International Organizations – 15 points

Only candidates obtaining a minimum 70 points would be considered for the financial evaluation.

Appendix A2

End-of-Project Evaluation Work Plan

## A2.0 WORK PLAN

Date	Activity	Description						
July 4-5, 2015	<ul> <li>Travel from Vientiane to Yangon</li> </ul>	Thomas Boivin arrived in Yangon late evening on July 5						
July 6, 2015	<ul> <li>Travel to Heho and Khaung Daing, Nyaungshwe Township</li> <li>Overnight in Khaung Daing</li> </ul>	Meetings with U Saw Doh Wah and Daw Lat Lat Aye to discuss the purpose and scope of the End-or Project Evaluation.						
July 7, 2015	<ul> <li>Participated in Workshop in Khaung Daing</li> <li>Meeting with project partners</li> <li>Overnight in Khaung Daing</li> </ul>	<ul> <li>Attend workshop on <i>Inle Lake Conservation: Plan, Implementation and Management</i> in Khaung Daing</li> <li>Meet with H.E. Ms. Ann Ollestad, Ambassador, the Royal Norwegian Embassy, Myanmar</li> </ul>						
July 8, 2015	<ul> <li>Meetings in Khaung Daing with Forest Department, MOECAF</li> <li>Travel from Khaung Daing to Taunggyi.</li> <li>Meetings in Taunggyi with Shan State officials</li> <li>Overnight in Nyaungshwe</li> </ul>	<ul> <li>Meeting with: U Bo Ni, Director, Watershed Management Division, Forest Department, MOECAF</li> <li>Visit to UNDP office, Taunggyi. Meeting with Lucas Chin Khan Kham</li> <li>One-on-one meetings with Shan State Government officials:         <ul> <li>H.E. U Sai Aike Paung, Minister for Ministry of Forestry and Mining</li> <li>U Maung Maung Win, Director, Forest Department</li> <li>Daw Sein Ma Ma, Director, Environmental Conservation Department</li> <li>U Tun Tun Oo, Director, Irrigation Department</li> <li>U Kyaw Kyaw Oo, Deputy Director, Irrigation Department</li> <li>U Win Hlaing, Director, Department of Agriculture</li> </ul> </li> </ul>						
July 9, 2015	<ul> <li>Travel from Nyaungshwe to Taung Kyar and Khaung Daing villages, Nyaungshwe Township</li> <li>Focus Group Discussion with two villages</li> <li>Meeting with government officials</li> <li>Overnight in Nyaungshwe</li> </ul>	<ul> <li>Focus group discussions with Project beneficiaries in 2 villages regarding the following initiatives         <ul> <li>Improved access to rural electrification</li> <li>Community forestry and agroforestry</li> <li>Improved sanitation and water supply</li> <li>Energy-efficient stove investments</li> </ul> </li> <li>One-on-one meeting with U Win Myint, Minister for Intha Affairs, Nyaungshwe, Shan State</li> </ul>						

Date	Activity		De	scription
July 10, 2015		Meetings in Nyaungshwe, Shan State Travel by boat to Inle communities of Pwe Sar Gone, Kyi Sar Gone and Myae Nyi Gone Focus Group with project beneficiary groups Travel to, and overnight in, Kalaw	•	One-on-one meeting with U Sein Htun, Park Warden, Inle Lake Wildlife Sanctuary, Nature and Wildlife Conservation Division, Forest Department, Nyuangshwe, Shan State         Focus group discussion with Intha Literature, Culture and Regional Development Organization (ILCDA) and Environmental Education Centre (EEC), Nyuangshwe, regarding the following initiatives: <ul> <li>Construction and operation of the EEC</li> <li>Improved access to rural electrification</li> <li>Community forestry and agroforestry</li> <li>Improved sanitation and water supply</li> <li>Livelihood improvement</li> <li>Organic farming</li> </ul> Focus group discussions with Project beneficiaries in 3 villages regarding the following initiatives <ul> <li>Improved sanitation and water supply</li> <li>Organic farming</li> </ul> <ul> <li>Organic farming</li> </ul> <ul> <li>Organic farming</li> <li>Provision of livestock</li> <li>Energy-efficient stove investments</li> <li>Ecotourism developments (Myae Nyi Gone only)</li> </ul>
July 11, 2015	•	Travel to Kyone, Pwe Hla and Shaukpin villages, Pindaya Township Focus Group with project beneficiary groups	•	<ul> <li>Focus group discussions with Project beneficiaries in 3 villages regarding the following initiatives</li> <li>Dam construction and rehabilitation</li> <li>Soil and water conservation</li> <li>Organic farming</li> <li>Community forestry and agroforestry</li> <li>Provision of livestock and poultry</li> </ul>
July 12, 2015	•	Travel to Zagone and Mwedaw villages, Kalaw Township Focus Group with project beneficiary groups	•	<ul> <li>Focus group discussions with Project beneficiaries in 2 villages regarding the following initiatives</li> <li>Soil and water conservation (including contour bunds)</li> <li>Gully control</li> <li>Organic farming</li> <li>Community forestry and agroforestry</li> <li>Provision of livestock and poultry</li> </ul>

Date	Activity			Description					
July 13, 2015	÷	Prepared draft inception report Meetings with partners in Yangon	÷.	Meeting with U Saw Do Wah, UNDP to discuss draft report					
July 14, 2015	•	Meetings with partners in Yangon	•	Meeting with partners: <ul> <li>UNESCO</li> <li>UN-HABITAT</li> <li>JICA</li> </ul> Meeting with U Htun Paw Oo, Yangon					
July 15, 2015	•	Meetings with partners in Yangon	÷	Meeting with Embassy of Canada Debriefing meeting at UNDP with Daw Lat Lat Aye and U Saw Do Wah					
July 16, 2015	•	Depart Yangon for Vancouver, Canada at 01:00	•	Returned to Canada via Hong Kong.					

Appendix A3

**Evaluation Guide and Tools** 

## A3.0 EVALUATION GUIDELINES AND TOOLS

This Appendix includes the following guides and tools created for the evaluation:

- A1.1 Key Questions from the ToR
- A1.2 Interview Question Guide
- A1.3 Focus Group Discussion Guide
- A1.4 Evaluation Matrix
  - A1.4.1 Relevance
  - A1.4.2 Effectiveness
  - A1.4.3 Efficiency
  - A1.4.4 Sustainability

#### A3.1 KEY QUESTIONS FROM TOR

The final evaluation was guided by the following key questions stated in the ToR:

- Relevance assess design and focus of the project:
  - o To what extent did the Project achieve its overall objectives?
  - What and how much progress has been made towards achieving the overall outputs and outcomes of the project?
  - o To what extent were the results (impacts, outcomes and outputs) achieved?
  - Were the inputs and strategies identified, and were they realistic, appropriate and adequate to achieve the results?
  - Was the project relevant to the identified needs?
- Effectiveness describe the management processes and their appropriateness in supporting delivery:
  - Was the project effective in delivering desired/planned results?
  - How effective were the strategies used in the implementation of the project?
  - How effective has the project been in responding to the needs of the beneficiaries, and what results were achieved?
  - What are the future intervention strategies and issues?
- Efficiency of project implementation:
  - Was the process of achieving results efficient? Specifically did the actual or expected results (outputs and outcomes) justify the cost incurred? Were the resources effectively utilized?
  - Did project activities overlap and duplicate other similar interventions (funded nationally and/or by other donors? Are there more efficient ways and means of delivering more and better results (outputs and outcomes) with the available inputs?

- Could a different approach have produced better results?
- How efficient were the management and accountability structures of the project?
- How did the project financial management processes and procedures affect project implementation?
- What are the strengths, weaknesses, opportunities and threats of the project's implementation process?
- Sustainability:
  - To what extent are the benefits of the project likely to be sustained after the completion of this project?
  - What is the likelihood of continuation and sustainability of project outcomes and benefits after completion of the project?
  - How effective were the exit strategies, and approaches to phase out assistance provided by the project including contributing factors and constraints?
  - Does it describe key factors that will require attention in order to improve prospects of sustainability of Project outcomes and the potential for replication of the approach?
  - How were capacities strengthened at the individual and organizational level (including contributing factors and constraints)?
  - Does it describe the main lessons that have emerged?
  - What are the recommendations for similar support in future?

#### A3.2 INTERVIEW QUESTION GUIDE

Key informant interviews were guided by the following specific questions:

- What was your involvement in the UNDP project? In Inle Lake Conservation Activities in general?
- What will be your future involvement in Inle Lake Conservation Activities, now that the project is completed?
- What are your overall impressions of the UNDP project?
- What were the successes or failures of the Project activities for which you were involved in?
- How was UNDP's performance (management and oversight)?
- Were project funds used efficiently?
- What could have been improved or done better?
- In your opinion, is the Project sustainable in the long-term?
- How will the Action Plan activities be implemented / linked with the Union and Shan State Government planning process?
- How were capacities strengthened at the individual and organizational level (including contributing factors and constraints)?

• What are the recommendations for future priority Inle Lake conservation activities?

Depending upon the respondent's response to the above general questions, possible additional probing questions may be asked

### A3.3 FOCUS GROUP DISCUSSION GUIDE

For the focus group discussions with villagers, questions were more general in nature and included the following:

- Please describe the activities which your community was involved in under the UNDP Project.
- What were the successes or failures of the Project activities for which you were involved in?
- What are your overall impressions of the UNDP project?
- What could have been improved or done better?
- Will these activities continue in your village now that the Project is completed?
- What are your recommendations for future priority Inle Lake conservation activities?
- What are the priorities for your community, and in what areas would you like to receive support under a future potential project?

## A3.4 EVALUATION DESIGN MATRIX

#### A3.4.1 Relevance

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Method of Data Analysis	Limitation/Risk
To what extent did the Project achieve its overall objectives?	<ul> <li>Was the project relevant to the needs and priorities of the Government, communities, and donors?</li> </ul>	<ul> <li>Inle Lake Biosphere Reserve Formed</li> <li>Lake Authority formed</li> <li>5-Year and Long-term Action Plans for Inle Lake Conservation completed</li> </ul>	<ul> <li>Annual progress reports</li> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Thematic experts</li> <li>Country/program/project level documents</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Professional judgment</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>
What and how much progress has been made towards achieving the overall outputs and outcomes of the project?	<ul> <li>Did the project address the felt needs and priorities of the NGO/CBOs and communities at the time of the start of project?</li> <li>And, has the situation changed over time?</li> <li>To what extent did actual results contribute to planned, targeted results?</li> <li>What intended results, if any, were attributable to UNDP/Norway's investment (both positive and negative)?</li> </ul>	<ul> <li>From Logframe</li> <li>Area of land covered by community- based forest and conservation forest</li> <li># HH benefitted from environmentally- friendly community development activities</li> <li>From Other Source</li> <li>Governance: evidence of improved capabilities of public service institutions to deliver quality services</li> <li>Human Resource Development: evidence of contributions to environmental conservation and environmental friendly community development activities (e.g., policy making, service delivery), improved standards, equitable access by all levels of society</li> <li>Civil Society: evidence of capacity building, empowerment and improved sustainability of NGO/CSOs, number of organizations strengthened</li> <li>Environmental Friendly Community Development Activities: evidence of enhancements of skills and technology development attributed to program</li> <li>Gender Equality: evidence of advancements in women's equal participation as decision-makers, women's rights, women's access and control over resources/ benefits</li> </ul>	<ul> <li>Annual progress reports</li> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Thematic experts</li> <li>Country/program/project level documents</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Tabulation and summation</li> <li>Professional judgment</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Method of Data Analysis	Limitation/Risk
To what extent were the results (impacts, outcomes and outputs) achieved?	<ul> <li>How were villages and households identified for implementing activities?</li> <li>Were beneficiaries clearly identified and targeted for benefits throughout implementation?</li> <li>How was the quality of life of beneficiaries enhanced?</li> <li>What contributions were made to equitable and environmental friendly community-based development activities?</li> <li>Have there been any changes, deviations in the projects compared to original plans to accommodate changing needs and priorities?</li> </ul>	<ul> <li>From Logframe</li> <li># HH benefitted from environmentally- friendly community development activities</li> <li># HH with access to improved sanitation and safe drinking water</li> <li>From Other Source</li> <li>Evidence of improved economic means and prospects, capacities for being self-sustaining, empowerment, self-awareness</li> <li>Evidence of investments attributable to program, contributions to environmental friendly community- based development activities, focus on sustainability</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012(any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Tabulation and summation</li> <li>Professional judgment</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>
How were the inputs and strategies identified, and were they realistic, appropriate and adequate to achieve the results?	<ul> <li>What were the basis/criteria for the identification and selection of specific NGO/CBOs?</li> <li>How open and transparent was the process of identifying key specific partner NGO/CBOs?</li> <li>What was the concept of "community buy-in"? How was this ensured and balanced?</li> <li>Did UNDP/Norway's investment(s) make sense in terms of meeting challenges taken?</li> </ul>	<ul> <li>From Logframe</li> <li>Area of land covered by community- based forest and conservation forest</li> <li># HH benefitted from environmentally- friendly community development activities</li> <li>From Other Source</li> <li>Ability to address the real needs of targeted beneficiaries</li> <li>Degree to which UNDP/Norway's programming is aligned with priorities of the Government of Myanmar</li> <li>Consistency with UNDP/Norway's policies and priorities</li> </ul>	<ul> <li>Annual progress reports</li> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Thematic experts</li> <li>Country/program/project level documents</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Tabulation and summation</li> <li>Professional judgment</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>
Was the project relevant to the identified needs?	<ul> <li>How relevant and appropriate is the overall design of the project and approaches and methodologies to the achievement of outcomes?</li> <li>How has the on-ground situation/climate changed over the course of the project implementation</li> <li>What are limitations of capacity building for inclusive and participatory development at broader levels (NGO/CSOs, community and institutional levels)?</li> </ul>	<ul> <li>From Logframe</li> <li># HH with access to improved sanitation and safe drinking water</li> <li>Area of land covered by community-based forest and conservation forest</li> <li>From Other Source</li> <li>Governance: evidence of improved capabilities of public service institutions to deliver quality services</li> <li>Human Resource Development: evidence of contributions to environmental conservation and environmental friendly community development activities (e.g. policy making, service delivery), improved standards, equitable access by all levels of society</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012( (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Tabulation and summation</li> <li>Professional judgment</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>

Hatfield

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Metho Analy
Was the project relevant to the identified needs? (Cont'd.)		<ul> <li>Civil Society: evidence of capacity building, empowerment and improved sustainability of NGO/CSOs, number of organizations strengthened</li> </ul>				
		<ul> <li>Environmental Friendly Community Development Activities: evidence of enhancements of skills and technology development attributed to program</li> </ul>	,			
		<ul> <li>Gender Equality: evidence of advancements in women's equal participation as decision-makers, women's rights, women's access and control over resources/ benefits</li> </ul>				
		<ul> <li>Evidence of improved environmental friendly community development activities, capacities for being self- sustaining, empowerment, self- awareness</li> </ul>				
		<ul> <li>Evidence of investments attributable to program, focus on sustainability</li> </ul>	)			

#### Limitation/Risk

## A3.4.2 Effectiveness

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Method of Data Analysis	Limitation/Risk
Was the project effective in delivering desired/planned results?	<ul> <li>To what extent did the project achieve planned outcomes?</li> <li>Increased organizational capacity of NGO/CSOs</li> <li>Increased programming capacity of NGO/CBOs</li> <li>Improved links and increased collaboration, coordination and proactive dialogue between villages, NGO/CBOs and government institutions</li> </ul>	<ul> <li>From Logframe</li> <li>Inle Lake Biosphere Reserve Formed</li> <li># HH benefitted from environmental friendly community development activities</li> <li>From Other Source</li> <li>Evidence of effective partnership relationships, results-based management, effective risk management</li> <li>Evidence of sensitivity to local contexts</li> <li>Degree of stakeholder participation</li> <li>Application of lessons</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Professional judgment</li> <li>Tabulation and summation</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>
How effective were the strategies used in the implementation of the project?	<ul> <li>How effective was the capacity building in achieving overall outcomes? Especially in relation to organizational capacity (human resource management, organizational structure and responsibilities of NGO boards, organizational culture, leadership and empowerment) and general programming capacity (results-based management, strategic program planning, programming policies, procedures, methods, activities and services, monitoring and evaluation) and networking and collaboration capacity (ICT, IMS, networking strategies and forums, documentation and information exchange, agreements and MOUs, etc.)</li> <li>Did UNDP/Norway's investments make sense in terms of meeting the challenges taken?</li> </ul>	<ul> <li>From Logframe</li> <li>Area of land covered by community- based forest and conservation forests</li> <li># HH benefitted from environmental friendly community development activities</li> <li># HH with access to improved sanitation and safe drinking water</li> <li>From Other Source</li> <li>Ability to address the real needs of targeted villages and household beneficiaries</li> <li>Evidence of investments attributable to program, contributions to environmental conservation activities, focus on sustainability</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Professional judgment</li> <li>Tabulation and summation</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Method of Data Analysis	Limitation/Risk
How effective has the project been in responding to the needs of the beneficiaries, and what results were achieved?	<ul> <li>What was the level of participation of women in the project and were gender issues mainstreamed in all initiatives and activities</li> <li>Did project baseline information and progress reports present gender-disaggregated data and qualitative information so that gender gaps and inequalities could be monitored?</li> <li>How inclusive are the various community-based institutions (NGO/CBOs) in terms of reaching out to the ultra-poor, marginalized and vulnerable groups and women?</li> </ul>	<ul> <li>From Logframe</li> <li># different types of land use change map for project area (2000-2010)</li> <li># community-based proposed land use plan map</li> <li># community-based natural resources management plan (CBNRM)</li> <li># acres community forest transferred to local community</li> <li># people trained in organic farming/IPM training</li> <li># acres applied for organic farming and IPM</li> <li>From Other Source</li> <li>Ability to address the real needs of villages and targeted households</li> <li>Extent of local ownership to environmental conservation issues and activities</li> <li>Evidence of improved environmental friendly community-based development activities</li> <li>Evidence of investments attributable to program, contributions to improved environmental conservation, focus on sustainability</li> </ul>	<ul> <li>Completion report on Participatory GIS mapping and Land cover change detection</li> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Tabulation and summation</li> <li>Professional judgment</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>
What are the future intervention strategies and issues?	<ul> <li>What are the major contributing factors towards achievement of results?</li> <li>What was the role and contribution of the government line agencies towards achieving project objectives? (What were the key services and benefits achieved from them?)</li> <li>Any other factors and processes (intended and unintended) that contributed towards achievement of outcomes?</li> <li>Were there appropriate mechanisms and resources assigned for partnerships, networking and communication?</li> <li>What types of institutional relationships and partnerships have worked well to date? Why?</li> </ul>	<ul> <li>From Logframe</li> <li>Community "buy-in" for environmental friendly community-based development activities</li> <li>Inle Lake conservation website development</li> <li># awareness campaign(s)</li> <li># IEC material produced</li> <li># trainings for improved media sectors and communication strategies and management</li> <li># manuals and technical guidelines</li> <li>Research and publication</li> <li># environment and education center(s)</li> <li># national and regional level</li> </ul>	<ul> <li>detection</li> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> <li>Special diagnostic reports from Technical Specialist</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Tabulation and summation</li> <li>Professional judgment</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>

## A3.4.3 Efficiency

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Method of Data Analysis	Limitation/Risk
Was the process of achieving results efficient? Specifically did the actual or expected results (outputs and outcomes) justify the cost incurred? Were the resources effectively utilized?	<ul> <li>Were all of the activities completed as planned? If not, which ones were delayed and abandoned?</li> <li>Were inputs and services made in a timely manner?</li> <li>What was the quality, frequency and usefulness of the technical assistance received from UNDP throughout project implementation? What were the main issues/ problems?</li> <li>Were resource levels adequate?</li> </ul>	<ul> <li>From Logframe</li> <li>Inle Lake Biosphere Reserve formed</li> <li>Area of land covered by community- based forest and conservation forest</li> <li>Projected rate of sedimentation to Inle Lake that can be saved</li> <li>Acres of community forest transferred to local community</li> <li>From Other Source</li> <li>Evidence of resource adequacy at the project level to meet the requirements set out in planning</li> <li>Evidence of prudence and probity being appropriately exercised</li> </ul>	<ul> <li>Completion report on Participatory GIS mapping and Land cover change detection</li> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Professional judgment</li> <li>Tabulation and summation</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>
Did project activities overlap and duplicate other similar interventions (funded nationally and/or by other donors? Are there more efficient ways and means of delivering more and better results (outputs and outcomes) with the available inputs?	<ul> <li>What was the quality support, decision-making and timeliness from management? How did this impact efficiency?</li> <li>Did the project avoid duplication, build synergy with government, donors and other partners?</li> <li>Were there any major deviations in project implementation as compared to design?</li> <li>Did UNDP/Norway's investments make sense in terms of meeting the challenges taken on?</li> </ul>	<ul> <li>From Logframe</li> <li># different types of land use change map for project area (2000-2010)</li> <li># community based proposed land use plan map</li> <li># community based CBNRM plans</li> <li>From Other Source</li> <li>Ability to address the real needs of targeted beneficiaries</li> <li>Degree to which UNDP/Norway programming is aligned with priorities of the Government of Myanmar</li> </ul>	<ul> <li>Completion report on Participatory GIS mapping and land cover change detection 2012 (and, any subsequent validation reports)</li> <li>Completion report on Participatory GIS mapping and Land cover change detection</li> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Professional judgment</li> <li>Tabulation and summation</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Method of Data Analysis	Limitation/Risk
Could a different approach have produced better results?	<ul> <li>Elaborate on how the project was able to adapt and employ different tools (results matrix, performance measurement framework, gender analysis, MIS, M&amp;E systems, capacity building, CBNRM, etc.)</li> <li>What were the key problems and bottlenecks in implementation and what mitigation strategies were employed?</li> <li>Were there any major deviations in project implementation as compared to design?</li> </ul>	<ul> <li>From Logframe</li> <li># people trained in: (i) organic farming/IPM; (ii) participatory forest management; (iii) livestock and fishery resource management and production activities; (iv) soil and water conservation activities</li> <li># community based proposed land use plan map</li> <li>From Other Source</li> <li>Ability to address the real needs of targeted beneficiaries</li> <li>Degree to which UNDP/Norway programming is aligned with priorities of Government of Myanmar</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> <li>Special diagnostic reports from Technical Specialist</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Tabulation and summation</li> <li>Professional judgment</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>
How efficient were the management and accountability structures of the project?	<ul> <li>Was the monitoring system adequate and how did this help in providing timely and relevant feedback for course/project correction(s)?</li> <li>How effective and efficient were the evaluation matrix (logframe) as monitoring tools?</li> <li>Comment on the adequacy of organizational aspects, governance mechanisms, administration and other systems?</li> <li>What were the strengths / weaknesses of management structures?</li> <li>To what extent did UNDP/ Norway develop, encourage and support new approaches and practices?</li> </ul>	<ul> <li>From Logframe</li> <li># HH benefitted from environmentally- friendly community development activities</li> <li>Number of manuals and technical guidelines</li> <li>Area of land covered by community- based forest and conservation forests</li> <li># HH benefitted from environmental friendly community development activities</li> <li>From Other Source</li> <li>Evidence of resource adequacy at the project level to meet the requirements set out in planning</li> <li>Evidence of sound financial management practices, contracting management</li> <li>Evidence of prudence and probity being appropriately exercised</li> <li>Evidence of effective partnership relationships, results-based management</li> <li>Evidence of sensitivity to local contexts</li> <li>Evidence of clearly understood management accountabilities and responsibilities</li> <li>Degree of stakeholder participation</li> <li>Success of systems in responding to change</li> <li>Application of lessons</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Tabulation and summation</li> <li>Professional judgment</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Method of Data Analysis	Limitation/Risk
How did the project financial management processes and procedures affect project mplementation?	<ul> <li>Were funds received, disbursed and utilized in time? If any delays were experienced, how did the delay in release of funds impact project performance and achievement of results?</li> <li>Were the accounting and financial systems adequate for effective program management?</li> <li>What was the quality support, decision-making and timeliness from management? How did this impact efficiency?</li> <li>Were resource levels adequate?</li> </ul>	<ul> <li>From Other Source</li> <li>Evidence of resource adequacy at the project level to meet the requirements set out in planning</li> <li>Timeliness and rate of disbursement</li> <li>Evidence of sound financial management practices, contracting management</li> </ul>	<ul> <li>Financial progress reports</li> <li>Completion report on Participatory GIS mapping and Land cover change detection</li> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Tabulation and summation</li> <li>Professional judgment</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>
What are the strengths, weaknesses, opportunities and threats of the project's implementation process?	<ul> <li>Was the staff equipped with the required knowledge, skills and competencies? Was gender balance ensured in recruitment and were they provided with adequate training opportunities?</li> <li>What are some of the identified training needs for project staff and other key stakeholders that were not addressed completely or adequately under the project?</li> <li>How did the use of NGO/CBOs and other participating communities improve efficiency?</li> </ul>	<ul> <li>From Logframe</li> <li># people trained in organic farming/IPM</li> <li># people trained in participatory forest management</li> <li># people trained in livestock and fishery resource management and production activities</li> <li># people trained in soil and water conservation activities</li> <li>From Other Source</li> <li>Evidence of partnerships, networks, shared initiatives, regional meetings, web-based platforms</li> <li>Evidence of project collaboration</li> <li>Evidence of working groups</li> <li>Evidence of leveraging ODA funding</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>		<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>

## A3.4.4 Sustainability

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Method of Data Analysis	Limitation/Risk
To what extent are the benefits of the project likely to be sustained after the completion of this project?	<ul> <li>What steps have the NGO/CBOs or communities taken or are likely to take for continuing the activities/ interventions of the project without further assistance?</li> <li>What is the extent to which project services, approaches, strategies and methodologies are replicable and are likely to continue?</li> <li>What is the sustainability of impacts (e.g. changes on beneficiaries, practices introduced, social capital formed and assets created)?</li> <li>How did UNDP programming contribute to the sustainability of results?</li> <li>Has the project influenced or brought about changes in existing policies, procedures, approaches or methodologies employed by the government? If any, give examples</li> <li>What is the likelihood of government support to the project outcomes in the future</li> </ul>	<ul> <li># CBNRM plan(s)</li> <li># community ecotourism site developed</li> <li># visitors to the community based ecotourism site</li> <li>Inle Lake conservation web site development# national and regional level workshop/ advocacy meetings/trainings in mainstreaming CCA measures and environment activities</li> <li><u>From Other Source</u></li> <li>Extent of local ownership</li> <li>Institutional capacity building</li> <li>Conduciveness of international/national environment (e.g. domestic policies)</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>		<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>
What is the likelihood of continuation and sustainability of project outcomes and benefits after completion of the project?	<ul> <li>What are the sustainability prospects of the project interventions in terms of their effect at different levels and likelihood of sustainability of outcomes at project termination?</li> <li>How successful was the project in promoting partnerships, networking and linkages with others that could enhance sustainability (including donors, government, NGOs and CBOs?</li> <li>What are some of the good practices (applicable across similar settings) that this project may have introduced/ established</li> </ul>	<ul> <li>Inle Lake Biosphere Reserve Formed</li> <li># CBNRM plan(s)</li> <li># community ecotourism site developed</li> <li># visitors to the community based ecotourism site</li> <li>Inle Lake conservation web site development# national and regional level workshop/ advocacy meetings/trainings in mainstreaming CCA measures and environment activities</li> <li># environment and education center(s)</li> <li>From Other Source</li> <li>Extent of local ownership</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>		<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Methoo Analys
What is the likelihood of continuation and sustainability of project outcomes and benefits after completion of the project? (Cont'd.)		<ul> <li>Evidence of improved environmental conservation, capacities for being self-sustaining, empowerment, self-awareness</li> <li>Evidence of investments attributable to program, contributions to improved environmental conservation, focus on sustainability</li> </ul>				
How effective were the exit strategies, and approaches to phase out assistance provided by the project including contributing factors and constraints?	<ul> <li>Give examples of how the project has in any planned or unplanned way influenced/ challenged/ changes in gender relations, gender norms and why?</li> <li>What is the extent to which practices/ products introduced under the project been adopted by the beneficiaries and what are the key challenges to adoption?</li> </ul>	<ul> <li>From Logframe</li> <li># HH benefitted from environmental friendly community development activities</li> <li># HH with access to improved sanitation and safe drinking water</li> <li># CBNRM plan(s)</li> <li># acres applied for organic farming and IPM</li> <li># HH involved in participatory forest management activities</li> <li># HH participate in livestock and fishery resource management and production</li> <li># acres for soil conservation and water harvesting activities</li> <li># acre access to small scale irrigation (SSI)</li> <li>From Other Source</li> <li>Extent of local ownership</li> <li>Commitment of adequate resources</li> <li>Institutional capacity building</li> <li>Conduciveness of international/national environment (e.g., domestic policies)</li> <li>Evidence of improved environmental conservation, capacities for being self-sustaining, empowerment, self-awareness</li> <li>Evidence of investments attributable to program, contributions to improved environmental conservation, focus on sustainability</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	Purp (Prog gove key s bene

#### hod of Data Iysis

#### Limitation/Risk

urposively selected Program unit, donor, overnment officials, ey stakeholders, eneficiaries)

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Method of Data Analysis	Limitation/Risk
Does it describe key factors that will require attention in order to improve prospects of sustainability of Project outcomes and the potential for replication of the approach?	<ul> <li>Have any innovations or best practices been introduced in the project that could be replicated amongst NGO/ CBOs or others in government or donors?</li> <li>What were the innovative features of the project and why?</li> <li>Did any of the project interventions and activities lead to local level conflicts and disruption amongst communities and other stakeholders? If any, explain.</li> <li>What were some of the major risks involved in a project of this nature and how were they addressed?</li> <li>What changes to present strategies and practices are recommended?</li> <li>What areas offer the strongest potential for longer-term institutional relationships and partnerships that would benefit from utilizing complementary UNDP/Norway donor strengths?</li> <li>What types of institutional relationships and partnerships have worked well to data? Why?</li> </ul>	<ul> <li>From Logframe</li> <li># HH benefitted from environmental friendly community development activities</li> <li># HH with access to improved sanitation and safe drinking water</li> <li># CBNRM plan(s)</li> <li># acres applied for organic farming and IPM</li> <li># HH involved in participatory forest management activities</li> <li># HH participate in livestock and fishery resource management and production</li> <li># acres for soil conservation and water harvesting activities</li> <li># acre access to SSI</li> <li>From Other Source</li> <li>Extent of local ownership</li> <li>Commitment of adequate resources</li> <li>Institutional capacity building</li> <li>Conduciveness of international/national environment (e.g., domestic policies)</li> <li>Evidence of improved environmental conservation, capacities for being self-sustaining, empowerment, self-awareness</li> <li>Evidence of investments attributable to program, contributions to improved environmental conservation, focus on sustainability</li> </ul>	<ul> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>
How were capacities strengthened at the individual and organizational level (including contributing factors and constraints)?	<ul> <li>How did UNDP investment help to strengthen NGO/CSOs through capacity building? Improve the sustainability of NGO/CSOs? Produced any other targeted results?</li> <li>Were any unintended results, either positive or negative experienced? What were they?</li> <li>At the Beneficiary Level</li> <li>How did the beneficiary participate in the project?</li> <li>What difference has this project made in your life? What do you feel are the short and longer term benefits for you?</li> </ul>	<ul> <li>From Logframe</li> <li># people trained in organic farming/IPM</li> <li># people trained in participatory forest management</li> <li># people trained in livestock and fishery resource management and production activities</li> <li># people trained in soil and water conservation activities</li> <li># awareness campaign conducted</li> <li># trainings for improved media sectors and communication strategies and management</li> <li># manuals and technical guidelines</li> <li># research and publications</li> <li># environment and education center(s)</li> </ul>	<ul><li>Donor officials</li><li>Experts from other</li></ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Dependent upon availability and access to recorded/ validation data</li> <li>Dependent upon active participation of key stakeholders</li> <li>Availability of key informants</li> </ul>

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Method Analysi
How were capacities strengthened at the individual and organizational level (including contributing factors	<ul> <li>Do you think that these benefits will continue after you stop participating in this project?</li> </ul>	<ul> <li># national and regional level workshops/advocacy meetings/training in mainstreaming CCA measures and environment activities</li> </ul>				
and constraints)? (Cont'd.)	<ul> <li>If you were going to participate in this project</li> </ul>	<ul> <li># coordination meetings in township and regional levels</li> </ul>				
	again, what would you like to do, or have done	From Other Source				
	differently?	<ul> <li>Extent of local ownership</li> </ul>				
		<ul> <li>Commitment of adequate resources</li> </ul>				
		<ul> <li>Institutional capacity building</li> </ul>				
		<ul> <li>Conduciveness of international/national environment (e.g. domestic policies)</li> </ul>				
		<ul> <li>Evidence of improved environmental conservation, capacities for being self- sustaining, empowerment, self- awareness</li> </ul>				
		<ul> <li>Evidence of investments attributable to program, contributions to improved environmental conservation, focus on sustainability</li> </ul>				
Does it describe the main lessons that have emerged?	<ul> <li>What are the key challenges in working with the government? How did the project overcome them? What lessons can be learnt for future?</li> <li>What were some of the missed opportunities and how could they be addressed in a future project such as this one?</li> <li>What are the major lessons learnt?</li> </ul>	<ul> <li>From Logframe</li> <li># HH benefitted from environmental friendly community development activities</li> <li># different types of land use change map for project area (2000-2010)</li> <li># community based proposed land use plan map</li> <li># CBNRM plan(s)</li> <li>Acres of community forest transferred to local community</li> <li># water supply systems developed</li> <li># acre access to SSI</li> <li># community ecotourism site developed</li> <li>Inle Lake conservation web site development</li> <li># awareness campaign</li> <li># national and regional level workshops/advocacy meetings/training in mainstreaming CCA measures and environment activities</li> <li>Erom Other Source</li> <li>Evidence of effective partnership relationships, results-based management</li> <li>Evidence of sensitivity to local contexts</li> <li>Evidence of clearly understood management accountabilities and responsibilities</li> <li>Degree of stakeholder participation</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Purpo (Prog gover key s benet</li> </ul>

urposively selected Program unit, donor, overnment officials, ey stakeholders, eneficiaries)

- Dependent upon availability and access to recorded/ validation data
- Dependent upon active participation of key stakeholders
- Availability of key informants

Main Evaluation Question	Specific Evaluation Question	Indicator	Data Source	Data Collection Method	Sampling	Method o Analysis
What are the recommendations for similar support in future?	<ul> <li>What were the strengths and weaknesses of management structures?</li> <li>To what extent did UNDP/Norway donor develop, encourage and support new approaches and practices?</li> </ul>	<ul> <li>From Logframe</li> <li>Inle Lake Biosphere Reserve Formed</li> <li>Area of land covered by community based forest and conservation forest</li> <li># HH benefitted from environmental friendly community development activities</li> <li># national and regional level workshops/advocacy meetings/training in mainstreaming CCA measures and environment activities</li> <li>From Other Source</li> <li>Evidence of effective partnership relationships, results-based management, effective risk management</li> <li>Evidence of sensitivity to local contexts</li> <li>Evidence of clearly understood management accountabilities and responsibilities</li> <li>Degree of stakeholder participation</li> <li>Success of systems in responding to change</li> <li>Application of lessons</li> </ul>	<ul> <li>Government officials</li> <li>NGO/CSOs</li> <li>Donor officials</li> <li>Experts from other agencies</li> <li>Country/program/project level documents</li> <li>Annual progress reports</li> <li>Output tables of HH Socioeconomic Questionnaire Survey 2012 (any subsequent validation surveys)</li> </ul>	<ul> <li>Desk document review</li> <li>Project interviews</li> <li>Key informant interviews</li> <li>Site visit(s)</li> </ul>	<ul> <li>Purposively selected (Program unit, donor, government officials, key stakeholders, beneficiaries)</li> </ul>	<ul> <li>Purpos (Progra govern key sta benefic</li> </ul>

#### od of Data ysis

#### Limitation/Risk

urposively selected rogram unit, donor, overnment officials, sy stakeholders, eneficiaries)

Appendix A4

List of Interviews

# A4.0 LIST OF INTERVIEWS

No.	Name	Position	Date	Location
1.	Ms. Ann Ollestad	Ambassador, the Royal Norwegian Embassy	July 07, 2015	Khaung Daing
2.	Mr. Bo Ni	Director, Watershed Management Division, MOECAF	July 08, 2015	Khaung Daing
3.	U. Maung Maung Win	Director – Shan State Forest Department	July 08, 2015	Taunggyi
4.	Daw Sein Ma Ma	Director – Shan State Environment Conservation Department	July 08, 2015	Taunggyi
5.	U Tun Tun Oo	Director- Irrigation Department	July 08, 2015	Taunggyi
6.	U Kyaw Kyaw Oo	Deputy Director - Irrigation Department	July 08, 2015	Taunggyi
7.	U Sai Aik Paung	Minister, Ministry of Forestry and Mining	July 08, 2015	Taunggyi
8.	U Win Hlaing	Director- Agriculture Department	July 08, 2015	Taunggyi
9.	U Win Myint	Minister for Intha Affairs	July 09, 2015	Nyaungshwe
10.	U Sein Tun	Park Warden, Inle Lake Wildlife Sanctuary, Nature and Wildlife Conservation Division, Shan State Forest Department	July 10. 2015	Nyaungshwe
11.	U Saw Do Wah	UNDP	July 13, 2015	Yangon
12.	Mr. Sriharsha Masabathula	UNESCO	July 14, 2015	Yangon
13.	Mr. Laxman Perera and Mr. Srinivasa Popuri	Deputy Country Programme Manager; Senior Human Settlements Officer, UN-Habitat	July 14, 2015	Yangon
14.	Ms. Noriko Sakurai	JICA	July 14, 2015	Yangon
15.	U Htun Paw OO	Independent Consultant – Team Leader on first phase of the UNDP project	July 14, 2015	Yangon
16.	Ms. Laurenne Garneau, Mia Yen, and Mr. Mark McDowell	Canadian Embassy, Yangon	July 15, 2015	Yangon
17.	Daw Lat Lat Aye and U Saw Doh Wah	UNDP	July 15, 2015	Yangon

Appendix A5

Focus Group Discussions – Participant Lists

## A5.0 FOCUS GROUP DISCUSSION LIST OF PARTICIPANTS

## A5.1 TAUNG KYA VILLAGE – JULY 09, 2015; 10:30 – 12:00 PM

No.	Name
1.	U Win Aung, village administrator, Taungkya Lei
2.	U Kyaw Sein
3.	U Pya, Taungkya Lei
4.	U Htun Ngwe
5.	U Sein Myint
6.	U Tin Oo
7.	U Than Hlaing
8.	U Aye
9.	U Ohn Kyaw
10.	U Kyaw Myint, Phaya Nyi

## A5.2 KHAUNG DAING VILLAGE – JULY 09, 2015; 13:00 – 15:00 PM

No.	Name
1.	U Zaw Win Htun
2.	U Win Htaik Hmon
3.	U win Naing
4.	U Khin Maung Htwe
5.	U Khin Maung Htwe (Ma Moe Swe)
6.	U Kala O
7.	U Myo Minn Htun
8.	U Myo Lwin
9.	Daw Kyi Aung
10.	U Htun Naing

#### A5.3 INTHA ORGANIZATION (IRDC) AND ENVIRONMENTAL EDUCATION CENTRE – JULY 10, 2015; 9:00 – 12:00 PM

No.	Name
1.	U Thet Htun, chairman of ILCD
2.	U Tin Aung Kyaw, vice chairman, ILCD
3.	U Tin Soe, Secretary
4.	U Thar Doe, Project manager
5.	U Aung Moe Oo, member
6.	U Kyaw Min Htwe, member
7.	Daw Tin Moe New, member

## A5.4 PWAYSA KONE VILLAGE – JULY 10, 2015

No.	Name
1.	U Ohn Paw
2.	U Win Ko
3.	U Min Zaw Oo
4.	U Kyaw Naing Tint
5.	U Ngwe Soe
6.	U Kyaw Ngein
7.	U Kyaw Naing Tint
8.	U Than Swe Oo
9.	U Than Naing
10.	Daw Ngein Aye
11.	Daw Nu Win
12.	Daw Than Shwe
13.	Daw Myint Than
14.	Daw Khin Myo Wai
15.	Daw San Win
16.	Daw Aye Toke
17.	Daw Yee Mon

#### A5.5 KYISA KONE VILLAGE – JULY 10, 2015 14:00 – 15:15 PM

No.	Name
1.	U Than Lwin Soe
2.	U Thein Han
3.	U Win Ko
4.	U Poe Toe
5.	U Myint Aung
6.	U Than Lay
7.	U Soe Win
8.	U Min Zaw Oo
9.	U Than Pe
10.	U Tun Hla
11.	U San Khin
12.	U Ohn Paw
13.	U Thiha
14.	U Minn Lwin
15.	U Than Htay Aung
16.	Daw Kyin Shwe
17.	Daw Mi Mi Soe
18.	Daw Khin Win Shwe
19.	Daw Moe Hnin Phyu
20.	Daw Aye Aye Khaing
21.	U Thant Zin Oo

## A5.6 MYAY NYI GONE VILLAGE – JULY10, 2015; 15:45 – 16:30 PM

No.	Name
1.	U Hla Htun
2.	U Thein Win
3.	U Win Naing
4.	U Myo Win Tun
5.	U Than Myo Win
6.	U Tin Maung Myint
7.	U Kyaw Than
8.	U Zaw Min Oo
9.	U Nay Myo Aung
10.	U Tun Naing Win
11.	U Aung Khin
12.	U Than Aung
13.	Daw May Kay Thi Oo
14.	Daw Mya Pan War
15.	Daw Nu Nu Htwe
16.	Daw Thein Thein Aye
17.	Daw Mya Ngwe
18.	Daw Moe Wai
19.	Daw Win Aye
20.	Daw Khin Aye
21.	Daw May Win
22.	Daw Myint Htay
23.	Daw Tin Mar Phyu
24.	Daw Than Than Win
25.	Daw Win Yee
26.	Daw Aye Aye Phyu
27.	Daw Ohnmar Lwin
28.	Daw Kyi Mon
29.	Daw Cho Thet Mon
30.	Daw Nan Khaing
31.	Daw Chaw Su Win
32.	Daw Myint Kyi
33.	Daw Tin Moe Kyi
34.	Daw Aye Tin
35.	Daw Ngwe Soe
36.	Daw Shwe Zin Phyu
37.	Daw Kyi Win
38.	Daw May Thida
39.	Daw Thida Myae
40.	Daw Thesu Mon
41.	Daw Yin Yin Htay

### A5.7 KYUNE VILLAGE – JULY 11, 2015; 09:30 – 11:00 AM

No.	Name
1.	U Than Ngunt, chairman - water resource management committee
2.	U Win Maung, secretary
3.	U Thein Zaw, treasurer
4.	U Tun Lwei, member
5.	U Maung Maung, member
6.	U Tin Win, member
7.	U Pyay Aye, member
8.	U Than Win, member
9.	U Maung, member
10.	U Zaw Lin Htun, member
11.	U Soe Than, member
12.	U Chit Sein, member
13.	U Myint Aung, head of 100 households - Myoma

# A5.8 PWE HLA AND SHAUKPIN VILLAGES – JULY 11, 2015; 12:00 – 13:00 PM

1.U Than Aung, chairman - PHECAD2.U Khin Maung Oo, secretary3.U Than Win, agroforestry beneficiary4.Daw Than New, livestock beneficiary5.U Nyi nyi Latt, deputy-secretary6.U Thadoe Aung, executive member7.U Po Nyo, Shaukpin Village head8.U Pwah Tae, Shaukpin Village leader	No.	Name
3.       U Than Win, agroforestry beneficiary         4.       Daw Than New, livestock beneficiary         5.       U Nyi nyi Latt, deputy-secretary         6.       U Thadoe Aung, executive member         7.       U Po Nyo, Shaukpin Village head	1.	U Than Aung, chairman - PHECAD
<ol> <li>Daw Than New, livestock beneficiary</li> <li>U Nyi nyi Latt, deputy-secretary</li> <li>U Thadoe Aung, executive member</li> <li>U Po Nyo, Shaukpin Village head</li> </ol>	2.	U Khin Maung Oo, secretary
5.       U Nyi nyi Latt, deputy-secretary         6.       U Thadoe Aung, executive member         7.       U Po Nyo, Shaukpin Village head	3.	U Than Win, agroforestry beneficiary
<ol> <li>U Thadoe Aung, executive member</li> <li>U Po Nyo, Shaukpin Village head</li> </ol>	4.	Daw Than New, livestock beneficiary
7.     U Po Nyo, Shaukpin Village head	5.	U Nyi nyi Latt, deputy-secretary
	6.	U Thadoe Aung, executive member
8. U Pwah Tae, Shaukpin Village leader	7.	U Po Nyo, Shaukpin Village head
	8.	U Pwah Tae, Shaukpin Village leader

# A5.9 ZAY GONE VILLAGE, KALAW TOWNSHIP – JULY 12, 2015 9:00 – 10:45 AM

No.	Name
1.	U Nyi Aung
2.	U Kyar Aung
3.	U Ohn Saung

# A5.10 PIN MI AND HMWE DAW VILLAGE, KALAW TOWNSHIP – JULY 12, 2015; 11:15 – 12:45 PM

No.	Name
1.	U Win Oo
2.	No name provided
3.	No name provided
4.	No name provided
5.	No name provided
6.	No name provided
7.	No name provided

Appendix A6

Matrix Output Outcomes, Impacts and Lessons Learned

Inle Catchment Indicators		Targets	Results/Outcome	Lessons Learned
Expected Outcome: Strengt	thened institu	utions for Inle Lake Management and for i	improvement of quality of life for local communities	
a) Inle Lake Authority fo	ormed	<ul> <li>Inle Lake Authority is formed</li> </ul>	<ul> <li>Inle Lake Authority is formed</li> <li>The Inle Lake Authority is approved by the Union government and will be run by the Shan State government.</li> </ul>	<ul> <li>There is a critical need for increased scales of governance, across resource among UN agencies. Effective coordiensure that critical needs are treated</li> <li>Improved Project transparency with ce and reach of Project benefits. This ca consultation prior to, during and follow</li> </ul>
<ul> <li>b) Area of Land Covere Community Based For Conservation Forest</li> </ul>	orest and	<ul> <li>1200 acres</li> </ul>	<ul> <li>2068 acres of land covered by community based forest and conservation forest</li> <li>2086 acres benefited from agroforestry, enrichment planting, wind break planting, natural forest conservation and public tree planting.</li> </ul>	<ul> <li>Provision of resources needs to coinc capacity to use those resources. For have been higher with a nursery to al</li> <li>Community participation in forest con project resources and project timing a</li> </ul>
c) Number of household benefitted from envir friendly community development activitie	ronmentally	<ul> <li>1123 households</li> </ul>	<ul> <li>1744 households benefiting from environmentally friendly community development</li> </ul>	<ul> <li>Scaled or phased payment structures for electricity or fuel efficient mega-ste economic gaps.</li> <li>Efforts to improve alternative livelihoor consultation to ensure relevance. Cor demand locally and social transfers o subsequently sold.</li> </ul>
d) Projected rate of sed to Inle Lake that can		<ul> <li>33 plots of soil conservation measures with estimated rates of improvement in erosion and sedimentation</li> </ul>		<ul> <li>Maintenance of existing contour bunch structures will require government or involved in subsistence farming, do n activities on their own.</li> </ul>
<ul> <li>e) Number of household access to improved s and safe drinking wa</li> </ul>	sanitation	<ul> <li>100 households with improved access to sanitation</li> <li>4300 households with improved access to safe drinking water</li> </ul>	<ul> <li>137 households with improved access to sanitation</li> <li>4376 households with improved access to safe drinking water</li> </ul>	<ul> <li>Communities reported maintenance is requirements for piped water systems order to ensure sustainability of bene</li> <li>A septic system for those households needed to reduce the environmental it</li> <li>Appropriate technology and locally-av maintenance and available replaceme</li> <li>Engineering design and feasibility studiscussed with villagers before any complexity of the system of the sys</li></ul>

## A6.0 RESULTS /OUTCOME AND LESSONS LEARNED

ed information sharing and coordination across donors, urce sectors and among key stakeholders, particularly ordination will help reduce duplication of effort and will ed as priorities.

h community members contributes to the sustainability can be facilitated by improved stakeholder llowing the Project.

bincide with provision, or assurance of, relevant for example, seedling survivability rates would likely a allow for seasonal variability of planting times.

conservation planning contributes to ensuring that ag are appropriate for local conditions.

res, which considered poor households' ability to pay -stoves, may accommodate any perceived or actual

noods need to be preceded by extensive community Community members reported that tailoring is not in s of livestock (particularly heifer calf) were

unds and construction of additional sediment control or donor support. Local villagers, particularly those o not have the time nor resources to undertake these

e issues with water pipes. Operation and maintenance ems should be part and parcel of Project plans in enefits.

lds which dispose their wastes directly into the lake is al impact to the lake.

-available water filters should be considered to enable ement parts.

Engineering design and feasibility studies should be conducted and the options discussed with villagers before any construction commences



Inle Ca	tchment Indicators	Targets	Results/Outcome	Lessons Learned
Expect	ted Output 1: Technical Assessr	nent for Inle Lake to prepare a conservatio	n and management plan	
a)	Land use and land cover change in and around area of Inle Lake determined and mapped for making it into a biosphere reserve	<ul> <li>1 Land use change map for project area developed</li> </ul>	<ul> <li>Production of Land use change map for project area from 2000 to 2010</li> </ul>	<ul> <li>Stakeholders report a need for time-se</li> </ul>
b)	Community-based land use maps for villages in three townships	<ul> <li>23 Proposed community based land use plan maps</li> </ul>	<ul> <li>Production of 23 community-based proposed land use planning maps developed by participatory resource mapping and Gmap.</li> </ul>	
c)	Community-based NRM plans (CBNRM) establishing officially recognized as community forest reserves	<ul> <li>10 CBNRM plans developed</li> <li>1.3 acres of community forest transferred to local community</li> </ul>	<ul> <li>Guidelines for CBNRM developed</li> <li>CBNRM training provided to 27 beneficiaries in Nyaungshwe in June 2014</li> <li>12 Community Forests initiated, covering approx. 1200 acres (Certificates from Forest Department Pending as of July 2014)</li> </ul>	
d)	Climate change vulnerability analysis			
e)	Environmental monitoring of water quality and sedimentation of the lake and surrounding streams			
Expect	ted Output 2: Terms of Referenc	e for Inle Lake Management Mechanism es	stablished	
a)	Terms of reference for Inle Lake Authority developed	<ul> <li>1 terms of reference developed</li> </ul>	<ul> <li>A Terms of Reference for the Inle Lake Authority is finalized</li> </ul>	
b)	Number of acres applied for organic farming and integrated pest management	<ul> <li>44 acres cultivated organically and using integrated pest management</li> </ul>	<ul> <li>65.45 acres cultivated organically and using integrated pest management</li> <li>Training provided to 471 participants on organic farming and integrated pest management and use of organic inputs</li> <li>Demonstration plots for groundnut (7) and vegetable (5) established</li> <li>Water hyacinth cutters for water hyacinth compost-making provided to villages in Nwar Da Ma South, Nwar Da Ma North, Kyun Gyi North, Kyun Gyin South, Ya Mae Pin, Myay Ni Gone, Nga Phae Chaung</li> <li>Vermiculture tanks provided to 172 beneficiaries in Kyun Gyi North, Shan Ywar Le Pyin, Shan Ywar Ywa Ma, Kyun Gyi South, Ya Mae Pin, Min Chaung, Min Chaun West, and Pwe Hla Villages</li> </ul>	<ul> <li>Community members reported a lack organic farming (compost, vermiculture improve understanding of the benefits use/overuse of pesticides and chemical</li> </ul>

	-series	mapping	of the	lake.
--	---------	---------	--------	-------

ck of interest in the effort and odors associated with ture). Awareness raising efforts are needed to fits of organic farming and the issues associated with nical fertilizers.

Hatfield

Inle Catchment Indicato	ors	Targets	Results/Outcome	Lessons Learned
c) Number of house participate in pa forest manageme	articipatory	60 households participate in forest management activities	<ul> <li>1375 households participate in forest management activities</li> <li>Training on nursery practice, plantation and natural forest management provided</li> <li>Community forestry and agroforestry training provided to 321 beneficiaries</li> <li>Training on efficient stoves for rice cracker making was completed in Myay Ni Kon Villages and Pwe Hla Village</li> <li>8 mega-stoves were constructed for demonstration in Myay Ni Gon Village – resulting in an estimated firewood saving of 7600 trees per year and a saving of 2,300,000 Kyats per year for 8 households through reduced fuel wood consumption</li> </ul>	<ul> <li>A longer-term vision is required, as 2 conservation program.</li> <li>Scaled or phased payment structures for fuel efficient mega-stoves, should</li> <li>Community members expressed inter particularly with respect to timing and</li> <li>Providing materials (e.g., seedlings, or development activities and follow-up, have been higher with a nursery to all</li> <li>Community participation in forest comproject supplies and project timing are several trials and crop cycles are need and organic farming initiatives.</li> <li>Community awareness of the benefits improvement.</li> </ul>
d) Community-base Resources Mana completed and ir	agement Plan	<ul> <li>40 Community-based Natural Resources Management Plans prepared</li> <li>700 acres of community forest transferred to local community</li> </ul>	<ul> <li>40 Community-based Natural Resources Management Plans prepared by communities</li> <li>2 certificates have been issued, the other 5 certificates were to be issued in July 2015</li> </ul>	
e) Participation in li fishery resource and production ir	management	<ul> <li>218 households participated in livestock and fishery resource management and production</li> </ul>	<ul> <li>165 beneficiaries of livestock and fisheries</li> <li>352 households involved in livestock and fisheries resource management and production</li> </ul>	<ul> <li>Communities reported that livestock p time, effort and resources required to heat and food not locally available. Co Consultation with community member some of the potential issues and help</li> </ul>
<ul> <li>f) Number of water systems develop water collection t filtration pots pro pipe line system Number of Hous to safe drinking v</li> </ul>	bed i) rain tank; ii) water bvided and iii) seholds access	<ul> <li>105 tanks installed</li> <li>350 pots installed</li> <li>2 pipeline systems installed</li> <li>4300 households have access to safe drinking water</li> </ul>	<ul> <li>135 tanks installed</li> <li>350 water filtration pots installed</li> <li>2 gravity flow pipeline water systems fitted in collaboration with Rural Development Department and local communities</li> <li>4376 households have access to safe drinking water</li> <li>Pipeline water systems are being managed by water supply management committees established at village level</li> <li>Existing water pipeline system renovated in 4 villages in Nyaungshwe Township</li> </ul>	<ul> <li>Communities reported maintenance is infrastructure provided by the Project to ensure sustainability of Project ben</li> <li>A septic system for those households needed to reduce the environmental i</li> <li>Appropriate technology and locally-av maintenance and available replacement</li> </ul>
g) Number of acre a small scale irriga Percentage of yie increased	ation	<ul> <li>50 acres have access to small scale irrigation</li> <li>20% yield per acre achieved</li> </ul>	<ul> <li>86 acres have access to small scale irrigation</li> <li>20-25% yield increase realized as a results of small scale irrigation</li> </ul>	

s 2 years is insufficient to develop an effective forest

- res, which considered poor households' ability to pay uld be considered.
- nterest in contributing to planning of the stoves, and the hiring of skilled masons.
- s, compost) should be linked with capacity up. Seedling survivability rates for example, would a allow for seasonal variability of planting times.
- conservation planning contributes to ensuring that are appropriate for local conditions.
- needed to determine the effectiveness of composting

efits of biodiversity in community forests needs

ck provided by the Project have been sold due to the to maintain livestock. Chickens for example require . Cows a significant investment before producing milk. bers as part of Project planning should help reveal elp to inform Project mitigation plans.

e issues with water pipes. Maintenance of ect needs to be worked into the Project plans in order benefits.

- lds which dispose their wastes directly into the lake is al impact to the lake.
- -available water filters should be considered to enable ement parts.

Inle Cat	tchment Indicators	Targets	Results/Outcome	Lessons Learned
h)	Number of community ecotourism site developed Number of visitors visited to the community-based ecotourism site	<ul> <li>2 ecotourism sites developed and implemented</li> </ul>	<ul> <li>3 sites (Myay Ni Gone, Taung Gyar Le, Taung Gyar Htet and Then Taung villages) with new ecotourism's sites established</li> <li>Total of 1261 visitors recorded to newly established community based ecotourism sites (as of July 2014)</li> </ul>	<ul> <li>Expansion of EEC displays, and tran valuable for raising awareness of both</li> </ul>
i)	Number of households access to rural electrification	<ul> <li>650 households have access to rural electrification</li> </ul>	<ul><li>609 households have access to rural electrification</li><li>4 transformers provided to communities</li></ul>	<ul> <li>Scaled or phased payment structures for electricity would be expected to lin economic gaps.</li> </ul>
Expecte	ed Output 3: Knowledge of nation	onal and local stakeholders enhanced for	maintaining Inle Lake as Biosphere Reserve	
a)	Inle lake conservation website developed Number of awareness campaigns Number of IEC material produced	<ul> <li>1 website developed</li> <li>15 awareness raising campaigns</li> <li>5000 IEC posters</li> <li>5000 IEC pamphlets</li> </ul>	<ul> <li>UNDP Myanmar Website Developed</li> <li>56 campaigns had been completed as of July 2014</li> <li>7390 IEC pamphlets were produced</li> <li>Support provided to essay writing context on 'Wetland and Agriculture: Partners for Growth" held in high school in Nyaungshwe. 131 students participated</li> <li>UNDP in collaboration with the Shan State Forest Department</li> </ul>	<ul> <li>Improved awareness among the con conservation areas is critical for ensu</li> </ul>
b)	Number of trainings for improved media sectors and communication strategies and management	<ul> <li>2 trainings conducted</li> </ul>	<ul> <li>disseminated pamphlets on Shan Nation Day</li> <li>1 training session was provided to media sectors</li> </ul>	
C)	Number of manuals and technical guidelines	<ul> <li>3 manuals and technical guidelines developed</li> </ul>	<ul> <li>1 technical and policy guideline covering all sectors was produced</li> </ul>	
d)	Research and Publication	5 papers produced	<ul> <li>Engaged Professional Research Consultancy (PRC) to conduct research on the <i>interaction of the livelihood activities and lake</i> <i>ecosystem for sustainability of Inle Lake.</i> Research was conducted in December 2013 and paper was prepared in July 2014</li> </ul>	
e)	Number of environment and education centre	1 education centre	<ul> <li>Environmental Education Centre (EEC) was constructed in 2013</li> <li>National Expert assigned in March 2014 for facilitation and improvement of EEC displays</li> <li>EEC Management Committee was formed in May 2014 with the participation of Government Line Departments from Nyaungshwe and representatives from ILCDA</li> </ul>	<ul> <li>Expansion of EEC displays, and tranvaluable for raising awareness of bot</li> <li>Possible overlap with a planned MAE raising activities is needed.</li> <li>The EEC and local Intha organization consultation prior, during and post-prade a desire to have more information on environmental conservation activities</li> </ul>
Expecte	ed Output 4: Environmental acti	vities mainstreamed into the national and	d regional development plans	
a)	National and regional workshops	<ul> <li>2 national level and regional workshops or meetings</li> </ul>	<ul> <li>Knowledge Sharing Workshop on Lake Management Practices</li> <li>Regional meeting on the nomination for a 'Man and Biosphere Reserve'</li> <li>National Committee Level Meeting</li> <li>Launching ceremony</li> <li>Inception Workshop</li> </ul>	
b)	Coordination meetings in township and regional levels	<ul> <li>20 coordination meetings</li> </ul>	<ul> <li>10 coordination meetings in township and regional level</li> </ul>	<ul> <li>Local leadership and ownership of co successful</li> </ul>

anslation of some into English language, will be both local and the international visitors.

res, which considered poor households' ability to pay b limit the potential for exacerbating any existing

ommunities of Inle Lake on the benefits of neuring the sustainability of conservation efforts.

anslation of some into English language, will be both local and the international visitors AB biodiversity centre, so coordination of awareness

tions can play a key role in assisting with stakeholder -project implementation. Local communities expressed on Project goals and to take greater ownership on ies taking place in their region.

conservation management is required for efforts to be

Hatfield

Inle Cat	tchment Indicators	Targets	Results/Outcome	Lessons Learned
c)	Environment and climate change activities included in township and regional development plan	<ul> <li>2 plans to be developed</li> </ul>	<ul> <li>1 consultation meeting and 1 consultation workshop</li> </ul>	
Expect	ed Output 5 (no cost extension)	): Nomination Dossier for Inle Lake as Bios	phere Reserve re-submitted by the Government of Myanmar	
a)	Technical Assistance for the development of Inle Lake Man and Biosphere Reserve	<ul> <li>Baseline data developed for Inle Lake</li> <li>Management Plan developed for Inle Lake Biosphere Reserve</li> <li>Action Plan developed for the Inle Lake Biosphere Reserve core zone</li> </ul>		
b)	World Heritage and culture site formulation (man and biosphere reserve)	<ul> <li>Workshops held with stakeholders on the Man and Biosphere Reserve</li> <li>I Biosphere Reserve created</li> </ul>	<ul> <li>1 Man and Biosphere Reserve created</li> </ul>	
Expect	ed Output 6 (no cost extension)	: Terms of Reference for Inle Lake Manage	ment mechanisms established	
a)	Facilitation for institutionalizing of Inle Lake Management		<ul> <li>Knowledge Sharing Workshop on Lake Management Practices held ir June 2014 (experts from International Lake Environment Committee and from the Natural Lakes of other countries to share experiences ar lessons on developing mechanisms for trust funds)</li> </ul>	
b)	Ongoing support in the form of small grants to community- based organizations for Inle Lake conservation activities in coordination with trust fund and Inle Lake management mechanisms	<ul> <li>Guidelines and procedures for management of the Trust Fund developed</li> <li>Small grants provided to community- based organizations for Inle Lake conservation activities</li> </ul>	<ul> <li>Guidelines and procedures for the development of the Trust Fund developed</li> <li>30 grants awarded to community-based organizations</li> </ul>	<ul> <li>There is a critical need for increased scales of governance, across resourc among UN agencies. Effective coordi will ensure that critical needs are treat</li> </ul>
C)	Project monitoring and end of project evaluation		<ul> <li>Participatory monitoring conducted with the Community Based Organizations, Local NGOs, Forest Department, UNDP and project team</li> </ul>	
d)	End of project audit		In process	
Expect	ed Output 7 (no cost extension)	: Knowledge of national and local stakehol	ders enhanced for maintaining Inle Lake as a Biosphere Reserve	
a)	Development of networking and training of MAB National Focal Points for Myanmar	<ul> <li>Networking and training developed for MAB National Focal Points of Myanmar</li> </ul>		<ul> <li>Careful attention is required when tra language. For example, when transla means 'reserve' in terms that you car</li> </ul>

ed information sharing and coordination across donors, urce sectors and among key stakeholders, particularly ordination will help to reduce duplication of efforts and reated as priorities.

translating complex concepts into the Myanmar slating Biosphere reserve into Myanmar language, it cannot access the area.

Hatfield