GUIDE TO LOCAL CONSERVATION AREA [LCA] MANAGEMENT PLANNING
Guide to Local Conservation Area (LCA) Management Planning


Published with assistance from Philippine Tropical Forest Conservation Foundation (PTFCF) Month and year of publication: October 2014.

Disclaimer: The views expressed here do not necessarily reflect the views of UNDP and GEF.

Lead Writers: Forester Rodolfo V. Aragon, Floradema C. Eleazar, and Maria Theresa V. Espino-Yap

Technical Contributors:
Dr. Edwino Fernando (UP Los Banos); Minerva Martinez (DENR III); Dr. Perry Ong (UP Institute of Biology); Policarpio Najera and Cora Marie Pugal (DENR I); Arnulfo Hernandez (DENR IV-A); Crisostomo Badeo, Jr., Marissa Solite, Brenda Zamora, and Gamaliel Burgos (DENR VIII); Al Orolfo, Mardione delos Reyes, and Melchor Ruel Samago (DENR VII); May Ybanez, Renato de Rueda, and Justin Briones (CBCFI); Andre Jon Uychiaco (GIZ- PAME Program); Dr. Zita Toribio (USAID- B+WISER Program); Jose Don de Alban, Christian Supsup, and Nevong Puna (FFI); Jim Monge (Haribon Foundation); Errol Gatumbato and Lea-Jim Villanueva (PBCFI); and Atty. Alton Durban
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>MODULE</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Orientation on Local Conservation Areas</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Situational Analysis</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>2a. Biodiversity Assessment</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>2b. Identification, Mapping, and Validation of Conservation Targets</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>2c. Threats and Resources Analysis; Gender Analysis</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>2d. Identification of Conservation Actions</td>
<td>39</td>
</tr>
<tr>
<td>3</td>
<td>LCA Management Plan Formulation</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>3a. Setting Conservation Vision, Goals, Objectives, Performance Target Setting</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>3b. Financial Planning</td>
<td>47</td>
</tr>
<tr>
<td>4</td>
<td>Plan Legitimization</td>
<td>51</td>
</tr>
<tr>
<td>5</td>
<td>Plan Implementation</td>
<td>53</td>
</tr>
</tbody>
</table>
## TABLES

| Table 1. LCA Management Planning Modules | 2 |
| Table 2. Contents of LCA Training Modules | 3 |
| Table 3. Training Schedule for Module 1 | 6 |
| Table 4. Comparison of Critical Habitat and LCAs | 10 |
| Table 5. Suggested Template for Action Planning under Module 1 | 14 |
| Table 6. Suggested Program for Full-blown Biodiversity Assessment | 22 |
| Table 7. Suggested Program for Rapid Biodiversity Assessment | 23 |
| Table 8. Comparative Analysis of Full-blown and Rapid Biodiversity Assessment | 24 |
| Table 9. Suggested Summary Table to Present Findings on Floral Studies | 24 |
| Table 10. Suggested Summary Table to Present Findings on Faunal Studies | 25 |
| Table 11. Suggested Summary Table to Present Ecosystem Services and Resource Users | 25 |
| Table 12. Suggested Summary Table on Identified Biodiversity Threats | 25 |
| Table 13. Workshop 1 Template for Assessing Flora Diversity in Area | 26 |
| Table 14. Workshop 2 Template for Assessing Fauna Diversity in Area | 26 |
| Table 15. FGD-updated Biodiversity Data: Floral Species | 27 |
| Table 16. FGD-updated Biodiversity Data: Fauna Species | 27 |
| Table 17. Training Schedule for Sub-Module 2b: Identification, Mapping, Validation of Conservation Targets | 29 |
| Table 18. Potential LCA Area, Land Area and Forest Cover | 31 |
| Table 19. Potential LCA Area and Land Uses | 31 |
| Table 20. Potential LCA Area and Tenure Types | 32 |
| Table 21. Training Schedule for Sub-Module 2c: Threats and Resources Analysis; Gender Analysis | 34 |
| Table 22. Suggested Template for Threats Analysis | 35 |
| Table 23. SWOT Analysis Table | 37 |
| Table 24. Identifying Observations of Men and Women in Prevailing Practices | 38 |
| Table 25. Identifying Future Interests/Benefits of Men and Women from Use of Natural Resources | 38 |
| Table 26. Training Schedule for Sub-Module 2d: Identification of Conservation Actions | 39 |
| Table 27. Examples of Conservation Actions | 40 |
| Table 28. Training Schedule for Sub-Module 3a: VMGO, Strategic Directions, Performance Target Setting | 42 |
| Table 29. Performance Target Matrix | 46 |
| Table 30. Training Schedule for Sub-Module 3b: Financial Planning | 47 |
| Table 31. Matrix of Activities per Performance Target | 49 |
| Table 32. Budget Plan | 50 |
| Table 33. Potential Revenue Sources for LCA Management Plan Implementation | 50 |
BOXES

Box 1. Target Participants of Module 1 5
Box 2. Conservation Defined in the Context of LCA 8
Box 3. Possible Scenarios: LCA Management Plan and FLUP 9
Box 4. Establishment of Bud Bongao LCA through Municipal Ordinance 11
Box 5. Establishment of Mangatarem Critical Habitat 12
Box 6. Duties and Functions of Dalaguete, Alcoy and Argao BioCon Teams 13
Box 7. Target Participants of Sub-Module 2a: Biodiversity Assessment 21
Box 8. Key Findings of Mt. Nacolod Biodiversity Assessment 25
Box 8. FGD Guide Questions 27
Box 9. List of Maps for LCA Management Plan 30
Box 10. SWOT Analysis 36
Box 11. Gender Analysis 37
Box 12. Sample Vision Statement 43
Box 13. Sample Conservation Goal Statements 43
Box 14. Examples of MOOEs 49
Box 15. Potential Revenue/Funding Sources 49

FIGURES

Figure 1. Process Flow of Module 1 7
Figure 2. LCA Management Planning Process 11
Figure 3. Process for Module 2: Situational Analysis 21
Figure 4. Proposed LCA of Dalaguete 21
Figure 5. Mt. Nacolod LCA 33
Figure 6. Illustrative Threats Analysis 36
Figure 7. Illustrative Diagram of Conservation Actions 36
Figure 8. LCA Management Plan Process 43
Figure 9. Dalaguete LGU Sangguniang Bayan Resolution Legitimizing LCA Management Plan 52

ANNEXES

Annex 1.1: EO organizing LGU LCA Working Group in Alcoy, Cebu 15
Annex 1.2: Bud Bongao, Tawi-Tawi LCA Municipal Ordinance 16
Annex 1.3: Inter-LGU MOA for Mts. Nug-as-Palpinpinon forest-Lantoy 18
Annex 1.4: SB Resolution Adopting Nacolod CMF in Libagon, Southern Leyte 20
The Philippines is one of the 17 megadiverse countries which host 70-80% of the world’s life forms on earth. Because of its size, the country is regarded to harbor more diversity of life than any other country on earth on a per hectare basis. It is one of the only two countries in the world – Madagascar being the other, which are both a megadiversity country and a biodiversity hotspot. The country has more than 52,177 described species, of which more than half are found nowhere else on Earth. Of these, 491 threatened species already are listed in the 2004 IUCN Red List.

Because of this scenario, the Philippine Congress in 1992 enacted the Republic Act 7586, otherwise known as the National Integrated Protected Areas System Act of 1992 (NIPAS Act). The NIPAS Act provides legal framework for the establishment and management of National Integrated Protected Areas System, defining its scope and coverage, and for other purpose. Its main objective is to ensure the perpetual existence of all native plants and animals through the establishment of a comprehensive protected area system that will safeguard these areas from environmental degradation threats. However, the Government alone cannot fully protect these areas from threats and degradation, and therefore needs support from other constituents of the country. At present, there have been several innovations in terms of protected area management. Other modalities are being pilot tested around the world to ensure the protection and conservation of these biodiversity significant areas.

Section 3 (i) of the Local Government Code states that Local Government Units shall share with the national government the responsibility in the management and maintenance of ecological balance within their territorial jurisdiction. The provision clearly states that the LGU has an important role in the protection and conservation of all natural resources of the country and should work hand in hand with the national government. However, it has been observed that LGU cannot fully participate in the protection campaign because of some technical limitations on resources management. The LGUs with its power, authority and local resources can provide the needed assistance of the national government in the protection of the environment. The LGUs only need guidance and technical support to achieve its mandate for an ecologically balanced environment.

Thus, the Department of Environment and Natural Resources (DENR) – Biodiversity Management Bureau (BMB), with support from United Nations Development Programme (UNDP) – Global Environmental Facility (GEF) New Conservation Areas in the Philippines Project (NewCAPP), has taken the initiative to explore alternative governance regimes that can be established to hasten protection coverage of these biodiversity conservation priority areas. Recognizing the mandated roles, available resources, and increasing number of local government units (LGUs) engaging in improved environmental management, the BMB through NewCAPP has demonstrated the establishment of LGU-led Local Conservation Areas (LCAs), to show how collaborative efforts of the national and local government can be an effective means of environmental protection.

To address the technical needs of LGUs, the NewCAPP has developed a Guidebook on Local Conservation Area Management Planning. This Guidebook has been designed to assist DENR field offices and Local Service Providers (LSPs), including non-government organizations (NGOs), which will be engaged in providing help to provincial and municipal LGUs or a cluster of provincial and/or municipal LGUs opting to establish LCAs and prepare management plans for these. It consists of five Modules intended to suggest a step-by-step procedure in LCA establishment and management planning based on NewCAPP’s experiences in its pilot sites. This Guidebook mainly documents how LCAs have been established and how management plans have been prepared following current local situations and government systems. While this Guidebook does not aim to prescribe a certain procedure, it highlights prerequisites or minimum requirements that must be satisfied by the process. Recognizing that there are varying approaches towards biodiversity conservation management regimes, this Guidebook also provides snippets of these emerging trends, i.e., summaries of case studies of LCA demonstration models.

We therefore commend the outstanding efforts and contributions of NewCAP Project staff, field personnel, Local Executives, as well as all others who made this Guidebook an eventual publication possible.
MESSAGE from PTFCF

Good day!

The Philippine Tropical Forest Conservation Foundation Inc. fully supports the publication of this module on Local Conservation Areas management planning. The conduct of the recent National Conference on LCAs is important to key stakeholders in conserving biological diversity, especially to the local government units, their partner civil society organizations and other government institutions. The LCA conference has pooled together rich experiences in implementing locally initiated actions in biodiversity conservation and drawn valuable lessons from them. It is our fervent wish that the initiatives of the local stakeholders in government and civil society will lead the way in establishing LCAs as a national strategy for effective management of high value conservation areas in the country.

As for PTFCF, our Foundation works towards biologically diverse Philippine forests sustainably managed and equitably accessible to responsible stakeholders by working with non-government organizations and community groups in forest protection, natural resource management, capacity building, research, livelihood support, coastal forest resource management, as well as sustainable use of diverse animals and plants. From 2005 to 2014, PTFCF was able to support 383 projects, which effectively improved the management of approximately 1.5 million hectares of forest lands, restored approximately 4,200 hectares of forests through the re-introduction of appropriate native tree species, established over 40 community conserved areas in key biodiversity areas and critical watersheds, instituted over 60 community-level sustainable enterprises that provide additional income to community members, and increased awareness of forest conservation issues particularly the ecosystem services provided by the forests.

A valuable part of these accomplishments from our end are several locally initiated forest protection and rehabilitation initiatives. We hope that the important lessons in the stories of these local governments currently engaged in local conservation efforts will serve as a challenge and inspiration to many other LGUs. For now, we have heard the clamor from many LGUs that have expressed interest and have already pursued initiatives to protect, rehabilitate, and manage the natural resources within their respective area of responsibility.

We will be there to extend our helping hand to these new and upcoming local conservation areas. May these LCAs live long and prosper. Thank you very much.

ATTY. JOSE CANIVEL
Executive Director
Philippine Tropical Forest Conservation Foundation

MESSAGE from UNDP

Mabuhay!

The Philippines should be proud that it is recognized as one of the 17 centers of biological diversity. Unfortunately it is also listed as one of the 25 critical biodiversity “hotspots.” This is a critical challenge. Out of the 128 identified key biodiversity areas in the Philippines only 59 of these are protected under the National Integrated Protected Areas System. Ensuring full coverage of all key biodiversity areas will take years to complete.

The United Nations Development Programme (UNDP) together with the Global Environment Facility (GEF) is privileged to have partnered with the Biodiversity Management Bureau through the New Conservation Areas for the Philippines Project to produce this Guidebook. It is the culmination of an extensive process and provides a key tool to assist Local Government Units (LGUs) to establish local conservation areas (LCAs) and prepare management plans.

Local governments have a critical role to play in conserving biodiversity. They are in essence the ‘front line’ in protecting a global asset. Their motivation should go beyond compliance or altruism. Biodiversity provides the basis for natural sustainability of all life forms. It enables us to better withstand and recover from natural disasters. It provides the basis for growing the economy – at least 40 percent of the world’s economy and 80 percent of the needs of the poor are derived from biological resources. We need to affect a “mind shift” from viewing biodiversity conservation as a cost and view it as a critical asset.

This Guidebook will assist LGUs to transform their biodiversity assets into income that can be used to support their myriad development needs, especially in poverty eradication. We also envisage that this Guidebook will pave the way for more LGUs to establish LCAs in a more systematic and scientific way no matter how small the area is. We look forward for more LGUs in actively pursuing biodiversity conservation and sharing their experiences and best practices in establishing and managing LCAs.

Allow me to commend the Department of Environment and Natural Resources for producing this very timely publication. UNDP will continue to work with you in the pursuit of the sustainable management of the country’s biodiversity resources.
The Housing and Land Use Regulatory Board (HLURB) is mandated to “promulgate zoning and other land use control standards and guidelines, which shall govern land use plans and zoning ordinances of local governments,” pursuant to Section 5 (a) of Executive Order No. 648.

Relative thereto and pursuant to the provisions of the Local Government Code of 1991 (RA7160) and Executive Order No. 72, the HLURB has, over the years, formulated a considerable number of guidelines made available to the Local Government Units (LGUs) and other stakeholders/end-users to serve as a guide in the formulation of Comprehensive Land Use Plans (CLUPs) and Zoning Ordinances (ZOs) of cities and municipalities.

We would like to congratulate the DENR for coming up with a Guide on Local Conservation Area (LCA) Management Planning. The LCA Guide is very timely as the HLURB Enhanced CLUP (ECLUP) which was approved last July 2014 will come out very soon. We see the Guide on LCA as a supplemental tool to the ECLUP. It will be very useful in assisting the LGU understand the technical aspects of environmental conservation and protection. The LCA Guide will provide the basic considerations in identifying LCAs and formulating LCA management plans and the processes and procedures to do this.

We are confident that the LCA Guide will be of great help to LGUs in coming up with comprehensive plans that reflect the dynamic interaction between the rural/urban and upland-coastal landscape, thus we are assured that there will be better understanding and appreciation of the importance of biodiversity conservation.

We encourage all LGUs located in critical landscapes and areas identified as high conservation values to use the LCA Guide as support tool for the ECLUP.

The rapid growth of cities and municipalities, coupled with the increase in demand for natural resources as raw materials, and the threat of global warming, calls for a stronger commitment among stakeholders for improved environmental management and ecologically balanced ecosystem.

Being at the forefront of government efforts to promote the general welfare of their constituents, including the right to a balanced ecology, local government units (LGUs) are expected to ensure that environmental development and conservation programs and initiatives are prioritized. On the other hand, the national government, development organizations and other concerned groups should ably support local governments in planning, developing, and implementing local biodiversity conservation actions.

During the National Local Conservation Areas Conference held last year, some pioneering LGUs that have successfully established LCAs have, in fact, shared their experiences and the interesting journey that they took with the help of DENR field offices and other non-government organizations.

To motivate other LGUs to embark on the same journey, this Guide on LCA Management Planning developed by the DENR Biodiversity Management Bureau will serve as a valuable reference guide and an important tool for LGUs in their efforts to protect the remaining biodiversity jewels of the country, and ensure that these provide the valuable ecosystem services for the benefit of current and future generations.

The Department of the Interior and Local Government (DILG) highly recommends the use of this LCA Guide in complementation with the Department’s existing policies on local development planning by LGUs located in identified key biodiversity areas to ensure sustainable management of local ecosystems. More importantly, the DILG expresses its commitment of support to the DENR-BMB in the roll-out of this LCA Guide to the LGUs as a definitive strategy for biodiversity conservation and protected area management.
The Philippines is one of the 17 countries considered as the centers of biological diversity. Recorded as one with the highest rates of mammalian endemism globally, its unique species on a per unit area remains incomparable, much like those of Brazil and Madagascar. Its marine diversity also cannot be underestimated as it is recognized as the “center of the center” of world marine biodiversity. Part of the Coral Triangle, the Philippine seas are called the “Amazon of the Seas.” While this is so, the Philippines is also listed as one of the 25 critical biodiversity “hotspots” or those whose human activities in the area have adversely affected its terrestrial biodiversity.

Indeed, with 128 terrestrial Key Biodiversity Areas (KBAs) identified in the country, only 59 (46%) of these are covered by official protection under Republic Act 7586 or the National Integrated Protected Areas System (NIPAS). Placing an area under the NIPAS takes years. Thus, the Department of Environment and Natural Resources (DENR)–Biodiversity Management Bureau (BMB), with support from United Nations Development Programme (UNDP)–Global Environmental Facility (GEF) New Conservation Areas in the Philippines Project (NewCAPP), has taken the initiative to explore alternative governance regimes that can be established to hasten protection coverage of these biodiversity conservation priority areas. Recognizing the mandated roles, available resources, and increasing number of local government units (LGUs) engaging in improved environmental management, BMB through NewCAPP has demonstrated the establishment of LGU-led Local Conservation Areas (LCAs).

This Guide has been designed to assist DENR field offices and Local Service Providers (LSPs), including non-government organizations (NGOs), which will be potentially involved in providing help to provincial and municipal LGUs or a cluster of provincial and/or municipal LGUs opting to establish LCAs and prepare management plans for these. It consists of five Modules intended to suggest a step-by-step procedure in LCA establishment and management planning based on NewCAPP’s experiences in its pilot sites.

This Guide mainly documents how LCAs have been established and how management plans have been prepared following current local situations and government systems. While this Guide does not aim to prescribe a certain procedure, it recommends the minimum requirements that must be satisfied by the process. Recognizing that there are varying approaches towards biodiversity conservation management regimes, this Guide also provides snippets of these emerging trends, i.e., summaries of case studies of LCA demonstration models.

1 USAID, 2008 Philippines F118-119 Report
The table below presents the steps involved in the identification and establishment of LCAs and the preparation of management plans. The Modules of this Guide have been crafted to enable a more systematic and process-oriented way of putting together the different sections of the LCA Management Plan.

Modules have been prepared such that these serve as building blocks to enable LGUs to learn from the process i.e., outputs of a Module feed into succeeding Modules.

<table>
<thead>
<tr>
<th>LCA Management Planning Process</th>
<th>LCA Training Modules</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1. Organize the Planning Team</td>
<td>MODULE 1. Orientation on Local Conservation Areas</td>
<td>• Composition of Technical Working Group (TWG); TWG working protocols through Executive Order</td>
</tr>
</tbody>
</table>
| Step 2. Conduct situational analysis | MODULE 2. Situational Analysis  
    MODULE 2a. Biodiversity Assessment  
    MODULE 2b. Identification, Mapping, and Validation of Conservation Targets  
    MODULE 2c. Threats and Resources Analysis; Gender Analysis  
    MODULE 2d. Identification of Conservation Actions | • Key flora and fauna species and their conservation status  
• Habitats and their conditions  
• LCA coverage: biodiversity conservation priority areas and conservation targets  
• Threats to the area’s biodiversity resources  
• Existing resources (financial, manpower, programs/projects, policy and institutional support) contributing to biodiversity conservation  
• Management interventions or conservation actions |
| Step 3. Set objectives and targets; formulate components of LCA Management Plan | MODULE 3. LCA Mgmt Plan Formulation  
    MODULE 3a. Setting Conservation Vision, Goals, Objectives, and Performance Target Setting | • Doable objectives and targets  
• Timeline in achieving objectives and targets |
| Step 4. Develop financing arrangements | MODULE 3b. Financial Planning | • Estimates of required resources to implement LCA Management Plan and potential revenue sources to support Plan implementation |
| Step 5. Develop Monitoring and Evaluation (M and E) mechanism | MODULE 3c. Monitoring and Evaluation | • Monitoring and evaluation mechanism versus performance targets |
| Step 6. Finalize and package plan | | Writesops to consolidate different parts of the Plan |
| Step 7. Present LCA Plan for legitimization | MODULE 4. Plan Legitimization | • Sangguniang Bayan (SIB) Resolution legitimizing LCA Management Plan; two-year action plan and budget |
| Step 8. Draw initial implementation activities | MODULE 5. Plan Implementation | • Institutional and policy support for Plan implementation |
Using the Guide

This Guide has been prepared for the establishment of LCAs by LGUs within terrestrial KBAs that are outside the NIPAS system. Each Module is organized as a coaching tool to assist DENR field offices, the technical assistance provider and the LGUs on the theoretical and practical aspects of LCA establishment and management plan preparation.

The Training Design of each module contains the following:

<table>
<thead>
<tr>
<th>Table 2. Contents of LCA Training Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coverage</strong></td>
</tr>
<tr>
<td><strong>Learning Objectives</strong></td>
</tr>
<tr>
<td><strong>Target Participants</strong></td>
</tr>
<tr>
<td><strong>Training Schedule</strong></td>
</tr>
<tr>
<td><strong>Expected Outputs</strong></td>
</tr>
</tbody>
</table>

The Process details the step-by-step process, including lecture inputs needed for each, and the facilitation tools and templates that can assist the technical service provider and/or LGUs in achieving the expected outputs.

The Modules

**Module 1 – Orientation on LCAs:** This Module introduces the WHAT, WHY, WHEN, and HOW of LCAs. It introduces the participants to the concepts, benefits, and process involved in designating part of its jurisdiction for biodiversity conservation, i.e., the LCA. It is also through this Module that institutional and financial resource arrangements are firmed-up to undertake the planning and implementation processes.
Module 2 – Situational Analysis: This Module guides the participants in defining the primary LCA boundaries based on the conservation targets map. It also helps them determine the current socio-economic activities posing threats to the potential LCA and identify appropriate conservation goals to address these threats.

Module 2a – Biodiversity Assessment: Towards biodiversity conservation, this sub-module provides an opportunity for the LGUs to gain knowledge and/or be appraised on the biodiversity richness of their area, including areas where key habitats are located and their status, i.e., different ecosystems harboring wildlife resources as well as significant flora and fauna species inhabiting the area.

Module 2b – Identification, Mapping, and Validation of Conservation Targets: This is a venue for the LGUs to draw their conservation targets map as reference in determining LCA boundaries – barangays covered, ecosystem type, and land classification.

Module 2c – Threats and Resources Analysis: This sub-module assists the participants in identifying 1) current problems and issues threatening conservation targets; and 2) resources, e.g., financial, manpower, and program support, that can be tapped in the LCA planning and implementation activities.

Module 2d – Identification of Conservation Actions: Taking off from the results of Module 2c, key actions to address the threats are identified in this sub-module.

Module 3 – LCA Management Plan Formulation: This Module builds the major components of the LCA Management Plan, including goals and objectives, strategies to achieve these, and conservation targets involving both the bio-physical component and the management arrangements.

Module 3a – Setting Conservation Vision, Goals, Objectives, and Performance Target Setting: This sub-module looks at the overall vision of the LGU and assists the participants in crafting a vision related to biodiversity conservation, which should not be stand-alone but should contribute to the overall vision of the LGU. This sub-module also attempts to build a consensus on conservation goals at a landscape and/or KBA level and on conservation objectives, i.e., bio-physical ones. Bio-physical and management targets are identified in this sub-module.

Module 3b – Financial Planning: This sub-module assists the LGUs in estimating necessary costs for Plan implementation. Potential resources that can be tapped to support Plan implementation are also identified in this sub-module.

Module 3c – Monitoring and Evaluation (M and E): Users are referred to the existing Biodiversity Monitoring System (BMS) of NIPAS in performing M and E of LCAs. Under UNDP-GEF NewCAPP, there was no opportunity to develop LCA-specific tools and methods for M and E.

Module 4 – Plan Legitimization: This covers preparation for the formal adoption of the Plan through the issuance of an SB Resolution. A two-year action plan with budget can also be formulated in this Module.

Module 5 – Plan Implementation: This module explains initial implementation activities that the LGU can execute to strengthen its LCA Plan implementation.
MODULE 1.
Orientation on Local Conservation Areas

Coverage

The call for biodiversity conservation is an urgent demand as climate change and disaster risk impacts are likely to be significantly experienced by the environment and by communities. However, for LGUs to invest its resources, it is essential that they appreciate and understand the benefits that they will derive from doing so and the process in which they will be involved. This Module introduces the participants to the fundamental concepts, the institutional context, and the policy environment behind LCA establishment and how this relates to other local environmental and development objectives of the LGU. It provides a brief snapshot of the whole LCA planning steps and the key activities that will be undertaken by the LGU. It is hoped that this will enable the LGU to commit resources to LCA planning based on informed decision-making and prepare them for the succeeding Modules.

Learning Objectives

By the end of the Module, participants should be able to:

• Discuss the technical basis of LCA, its supporting policies and process in the formulation of a Management Plan;
• Explain why an LGU needs to prioritize biodiversity conservation through LCA establishment and harmonize this with its development objectives;
• Agree on LCA planning working arrangements and composition of TWG, which will be assigned to take the lead in LCA planning;
• Draw a Work Plan on LCA planning, including key activities, responsible LGU staff/office, and budget requirements; and
• Allocate budget for the establishment of LCA and preparation of management plan.

Target Participants

Participants will be DENR field officers assigned to provide technical assistance on biodiversity conservation, SB Committee Chair on Environment, Provincial and Municipal Environment and Natural Resource Officers (P/MENROs), barangay officials, Provincial and Municipal Planning and Development Officers (P/MPDOs), and key environment-related non-government organizations (NGOs) and local academic institutions involved in environment or biodiversity research. In cases when the DENR or the LGU has an FLUP Technical Assistance Team, they should also be invited to participate in this Module.
Training Schedule

Table 3. Training Schedule for Module 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 – 8:30 AM</td>
<td>Registration</td>
</tr>
<tr>
<td>8:30 – 9:00</td>
<td>Opening Ceremonies</td>
</tr>
<tr>
<td></td>
<td>• Invocation</td>
</tr>
<tr>
<td></td>
<td>• National Anthem</td>
</tr>
<tr>
<td></td>
<td>• Overview of the Module</td>
</tr>
<tr>
<td>9:00 – 9:30</td>
<td>Lecture 1. Overview of Protected Areas System and Key Biodiversity Areas in the Philippines; Issues and Challenges</td>
</tr>
<tr>
<td>9:30 – 10:30</td>
<td>Lecture 2. Fundamentals of LGU-led Conservation Areas: Definition, Rationale, Policy support, and Benefits</td>
</tr>
<tr>
<td>10:30 – 11:00</td>
<td>Open Forum</td>
</tr>
<tr>
<td>11:00 – 11:45</td>
<td>Lecture 3. Overview of LCA Management Planning Process</td>
</tr>
<tr>
<td>11:45 – 12:00 N</td>
<td>Open Forum</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 2:00</td>
<td>Workshop: Identification of LCA TWG Members and Working Protocols</td>
</tr>
<tr>
<td>2:00 – 3:00</td>
<td>Action Planning (for LCA Management Plan Formulation)</td>
</tr>
<tr>
<td>3:00 – 3:30</td>
<td>Plenary Presentation</td>
</tr>
<tr>
<td>3:30 – 4:00</td>
<td>Closing Ceremony</td>
</tr>
</tbody>
</table>

Expected Outputs

By the end of the Module, the following shall have been produced:
• Agreement on final composition of LCA TWG
• Draft LCA TWG working protocols
• Draft Action Plan, including required budget, for succeeding modules and activities

Before Module 2, the following should have been issued:
• Multi-sectoral support for LCA management planning through the Municipal Development Council (MDC) or the City Development Council (CDC)
• SB/Sangguniang Panlalawigan (SP) resolution authorizing the Municipal/City Mayor to enter into agreement with the DENR for the planning and establishment of an LCA
• Executive Order organizing the LGU LCA Working Group
• LGU budget for the planning process
Process

Three lecture inputs will be provided to broaden the understanding of the participants on why LCAs should be established and how this can be done. Following this, minimum requirements, including the TWG that will lead the LCA management planning process and budget, will be set-up.

Lecture 1. Overview of Protected Areas System and Key Biodiversity Areas in the Philippines; Issues and Challenges

This input session highlights three major points, including:

A. The Philippines currently has 240 protected areas (PAs): 4.06 million hectares terrestrial and 1.38 million hectares marine.
   - The existing PAs cover only 59 (46%) of the 128 identified KBAs; the remaining 69 lack government protection
   - The NIPAS approach to establishing a PA takes years – it is influenced by the level of awareness of lawmakers and the parochial interest of some legislators.

B. There are barriers to effective PA management for biodiversity conservation, including:
   - Bio-geographical representativeness.
     - Only 59 of 117 terrestrial KBAs are PAs; not all PA boundaries cover KBAs
     - Expanding the existing PAs through NIPAS only is impractical given the enormous areas in need of protection
   - Limited capacity of DENR, PAWB, and PAMB to manage the national PA system
   - Inadequate systems for financial planning, budgetary management, and revenue generation

C. There is the need to expand and strengthen the terrestrial PA system in the Philippines by developing new conservation models and building capacity for effective management of the system, supported by improved systemic and institutional capacities.
   - No new PAs, as prescribed under the NIPAS. However, if stakeholders so desire, the LCA can become a PA under the NIPAS in the future following specific steps
   - Conservation areas will be established and recognized and made part of the “National PA System”
   - Conservation areas refer to those within important KBAs, defined in the same way as PAs, under diverse governance regimes

Figure 1. Process Flow of Module 1

Lecture 1. Overview of PA System and KBAs in the Philippines; Issues and Challenges

Lecture 2. Fundamentals of LGU-Led Conservation Areas: Definition, Rationale, Policy Support, and Benefits

Workshop. Identification of LCA TWG Members and Working Protocols
This lecture provides a thorough description of what an LCA is, its objectives, and its relationship with other LGU thrusts and "buy-ins." Basic concepts underlying LCAs include:

A. An LCA is an area, network of areas, or areas straddling adjacent local governments within a KBA outside of the PA system. It is established mainly for conservation purposes and under the management of LGUs. It can also refer to critical habitats managed by LGUs under the Wildlife Act.

B. The main objective of the LCA is to maintain the habitat of important species, listed or not. LCA objectives also include biodiversity conservation, closure of open access areas, climate change adaptation, and disaster risk management. Conservation targets or biodiversity conservation priority areas are all natural areas.

The term “conservation” (in LCA) is used in this Guide to mean:

1) Strict protection – in the maintenance of old growth and second growth forests in government-owned forest lands, outside the coverage of NIPAS. Conservation means locking up with as little human interference as possible to preserve examples of individual species, forest associations and/or wildlife habitats, unique and/or important ecosystems, because of their ecological (e.g. slope stabilization, hydrological regulation), carbon sequestration and scientific values.

2) Sustainable use – in the production of fiber (e.g., wood, rattan) and other products for commercial use, production of water and soil conservation, provision of recreational facilities (e.g., ecotourism), maintenance of wildlife habitats and scientific values, and preservation of scenic landscapes, conservation also means "wise utilization" or "preservation through wise use" or "sustained yield in perpetuity" and is applicable to forests on tenured forest lands (e.g., CBFMA, IFMA, SIFMA, FLAGT areas), grass/brush lands, and other areas as provided by law.

Local conservation areas may include:

1) Areas of high biological diversity
2) Areas vulnerable to climate change (sea level rise, rise in temperature, increasing precipitation)
3) Geologically hazardous areas
4) Other locally significant areas, e.g., historical sites, unique/charismatic landscapes or areas with ecotourism potential such as the Chocolate Hills in Bohol Province

C. Key conservation action recommended is not population monitoring but retention of natural areas. The aim of biodiversity management in LCAs is to retain, recover, restore, and protect natural area conditions within the framework of ecological networks or corridors as a response to fragmentation. Habitat fragmentation severely threatens biodiversity and ecosystem functioning (ELI, 2003). In highly fragmented landscapes, ecological coherence may be achieved if intensively used areas are balanced by natural zones that function as a coherent, self-regulating whole (Bennett and Mulongoy, 2006).
Fragmented landscapes may yet be stabilized when appropriately buffered fragments are linked to each other by means of physical or biological connectors called corridors. Such a system may be referred to as an ecological network or ecological corridor. Ecological networks may be confined within a municipal boundary or span vast expanses of fragmented landscapes across several municipalities, provinces, or regions.

D. Key performance indicator is number of hectares of natural areas conserved/retained or recovered.

E. Land uses: do not adversely modify critical habitat to the point that it will no longer aid in the species’ recovery.

F. LCA Management Plan of an LGU is inter-related with other local environmental and development plans, including:

- **FLUPs.** It should be emphasized that the LCA management plan is *NOT* the same as FLUP. The former responds chiefly to conservation of biological diversity and, to some extent, maintenance of ecosystem services. In some cases, the LCA may not be limited to classified forestlands. The FLUP deals mainly with closure of open access regimes and quite recently, in response to new national legislations related with climate change mitigation and adaptation as well as disaster risk reduction and management (DRRM). The FLUP can also address biodiversity conservation if the objective specifies so. There are three possible scenarios where the LCA Management Plan comes into play with FLUP.

**Box 3. Possible Scenarios: LCA Management Plan and FLUP**

- **LGU with existing FLUP.** LCA Management Plan should provide more details on biodiversity conservation objectives and areas designated in FLUP. If these are not identified, the LCA can serve as the refinements of FLUP.

- **LGU without FLUP and whose FLU Planning is ongoing.** LCA Management Plan can also be used in conjunction with the preparation of FLUPs, especially when planning includes biodiversity conservation. LCA management planning can be part of the FLU Planning process. FLUP should identify, if applicable, the extent of forestland that will be designated as LCA, including the appropriate management interventions and institutional arrangements for this.

- **LGU without FLUP and whose FLU Planning is yet to be determined.** LCA Management Plan data will serve as inputs to FLU Planning since the minimum data requirements for the LCA Management Plan match with those needed for FLUP. The identified LCA and management measures formulated should therefore form part of the FLUP.

**Case in Point:** The municipality of Argao in Cebu, covered by Mts. N suggested Palipin Lantoy forest, opted to undertake the FLU Planning and LCA planning process simultaneously. Argao LGU is one of the three LGUs, including Dalaguete and Alcoy, situated in the said KBA. Dalaguete and Alcoy had already formulated their FLUPs before the concept of LCA was introduced to them.
In the case of Palauig municipality in Mt. Tapulao, the LCA or critical habitat management planning was undertaken simultaneously with the FLUP. The LCA covers the entire forest land, with identified protection zones within the forest lands.

- **Comprehensive Land Use Plans (CLUPs).** With enhanced CLUP guidelines where biodiversity is targeted to be mainstreamed into the process, LCA management planning can provide inputs to the biodiversity profile of a city or municipality, which is now a major section of CLUP. With FLUP as one major section of CLUP, LCA coverage should be indicated in this section. In cases when a city or municipality still does not have an FLUP but is into CLUP planning, the LCA can be one land use zone specified in the CLUP.

- **Comprehensive Development Plan (CDP).** LCA management strategies should be highlighted in the LGU’s CDP to ensure that biodiversity conservation objectives are considered in the overall development thrusts of the LGU. This will also have to translate into budget allocation for LCA in their Annual Investment Plans (AIPs)

- **Provincial Physical and Development Plan (PPDP).** Since biodiversity conservation puts a premium on the interconnectivity of habitats, the role of the Provincial LGU becomes crucial in supporting individual and/or cluster of LGUs deciding to establish and manage an LCA. Provincial LGUs can provide support to LGU-led LCAs through the designation of areas in the Province for biodiversity conservation amidst the long-term economic development plans, annual budget allocation, and provision of policy and institutional support. The LCA can also be eventually integrated in the provincial physical framework plan.

**Main policy support for LCAs is DENR-DILG JMC2003-01 (Strengthening the DENR-DILG-LGU Partnership on Devolved and Other Forest Management Functions).** Under this joint policy, the LGUs shall share with DENR the responsibility in the sustainable management and development of the forest resources within their territorial jurisdiction. Toward this end, the DENR and the LGUs shall endeavor to strengthen their collaboration and partnership in forest management.

**The benefits that LGUs can derive from establishing and sustaining management of LCAs are the ff:**

- Sustained ecosystem services, e.g., water, are ensured
- Through LCAs, LGUs and local communities are better involved in conservation actions,
- LCAs strengthen on the ground management of areas important for conservation purposes

**Critical habitat establishment is always compared with LCA establishment. The table below presents a comparative analysis between the two.**

<table>
<thead>
<tr>
<th>Critical Habitat</th>
<th>Local Conservation Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legal basis:</strong> RA 9147</td>
<td><strong>Legal basis:</strong> DENR-DILG JMC2003-01</td>
</tr>
<tr>
<td><strong>Objectives:</strong> Conservation of listed species to ensure survival in the wild (of threatened species) and avoid population extinction (of endangered species)</td>
<td><strong>Objectives:</strong> To maintain habitat of all species, listed or not, and maintenance of ecosystem functions. Includes biodiversity conservation, closure of open access areas, climate change adaptation, disaster risk management</td>
</tr>
<tr>
<td><strong>Conservation targets:</strong> Listed species and their habitat. Habitat description is clear (based on physical and biological characters)</td>
<td><strong>Conservation targets:</strong> All natural areas. Habitat description not required.</td>
</tr>
<tr>
<td><strong>Key conservation actions:</strong> Population monitoring, management of population threats</td>
<td><strong>Key conservation actions:</strong> No population monitoring, retention of natural areas</td>
</tr>
<tr>
<td><strong>Key performance indicators:</strong> Population health (population assessments)</td>
<td><strong>Key performance indicators:</strong> Hectares of natural areas conserved/retained or recovered</td>
</tr>
<tr>
<td><strong>Land uses:</strong> Do not adversely modify critical habitat to the point that it will no longer aid in the species’ recovery.</td>
<td><strong>Land uses:</strong> Same</td>
</tr>
</tbody>
</table>
Lecture 3. Overview of LCA Management Planning Process

This session should provide a brief background on the LCA Management Planning process. While this lecture intends to provide participants on what to expect in the whole planning process, details of each module will be explained during the actual conduct of the activity. It is important, however, that LGUs understand that the process is a participatory one, i.e., strategies that will be identified in the Plan should fit in the overall LGU development priorities and objectives, available and potential resources, and desired behavior changes among concerned stakeholders.

At the onset, this lecture should provide participants a discussion of the different emerging models through which an LCA can be established. These include:

A. Through the passage of a local Ordinance by an individual LGU. After the LCA Management Plan formulation, the Plan is legitimized by the LGU through an SB Resolution. A local Ordinance is drafted and enacted to support the establishment of the LCA, including its coverage, management strategies, designation or creation of institutional support, and budget allocation for its implementation.

   **Box 4. Establishment of Bud Bongao LCA through Municipal Ordinance**

   **Case in Point:** Municipal Ordinance No. 202, Series of 2013 declared Bud Bongao as an LGU-managed LCA in the Philippines and the first in the Autonomous Region in Muslim Mindanao (ARMM). It specifies the areas covered by LCA, including size of conservation areas per barangay. It also outlines regulations which will help in enhancing biodiversity conservation in the said area, creation of a management council, enforcement team and annual budget allocation for Bud Bongao’s LCA Management Plan implementation.

B. Through inter-LGU alliance. This is applicable to several LGUs that decide to collaborate in maintaining inter-connectivity of habitats and wildlife resources. Inter-LGU alliance can be done at two levels: a) for LCA planning such that duties and responsibilities, committed resources – both financial and manpower – of LGUs in relation with planning activities are defined; and b) for implementation of LCA Management Plan. At this point, LGUs involved may create a Management Council that will serve as oversight to Plan implementation, formulate working protocols, and establish a common fund to support certain implementation activities that can be more effectively and efficiently carried out at an inter-LGU level.
LGUs adopting this management arrangement may opt to collaboratively work on a Conservation Management Framework at the initial stage, which will be individually adopted by involved LGUs. LGUs can then support this Framework by developing their individual LCA Management Plans, which they can annually support with financial allocation through their AIPs.

**Case in Point:**

**Mt. Lantoy-Palinpinon range-Nug-as forest**

Recognizing the urgent need to address the threats in Mt. Lantoy-Palinpinon range-Nug-as forest, the municipalities of Argao, Dalaguete and Alcoy entered into an inter-LGU collaboration to establish LCA. A Joint Memorandum of Agreement (MOA) among the three LGUs and DENR VII was signed last May 15, 2012. The agreement was intended to: a) establish LGU-led LCA in the three municipalities (Argao – 3,058 has; Dalaguete: 3,087 has; and Alcoy: 3,504 has); and b) strengthen conservation initiatives and protect the key biodiversity resources in Mt. Lantoy-Palinpinon range-Nug-as forest which are currently under various threats. The same agreement mandated the three LGUs to provide manpower and financial resources for LCA Management Planning and support an inter-LGU alliance to harmonize implementation of management plans.

**Case in Point:** **Mt. Nacolod KBA**

To complement and operationalize Southern Leyte Provincial Government’s initiative in declaring Mt. Nacolod as a protected area, the municipalities of Sogod, Silago, St. Bernard, Libagon and Hinunangan as well as Leyte Province’s Mahaplag and Abuyog municipalities decided to collaborate in developing a Conservation Management Framework (CMF) for Mt. Nacolod. Overall, the CMF is envisioned to guide and consolidate conservation efforts of all concerned stakeholders by increasing community awareness, enforcing socially acceptable land use plans and zoning ordinances, securing sustainable financing and implementing an effective monitoring and evaluation mechanism.

**C. Through critical habitat following the Wildlife Act.**

**Box 5. Establishment of Mangatarem Critical Habitat**

The Mangatarem Critical Habitat in Mangatarem, Pangasinan was declared by the municipal LGU as a wildlife critical habitat through Sangguniing Bayan Resolution No. 49-2013 on August 28, 2013. It is an expansion of the existing protected area in the municipality, the Manleluag Springs Protected Landscape (MSPL). Directly managing the critical habitat is the Critical Habitat Management Board created under the FLUP Steering Committee, which was mandated through the co-management agreement signed between Mangatarem LGU and DENR.
Workshop 1. Identification of LCA TWG members and working protocols

This Workshop aims to provide an opportunity for the creation of an LCA TWG. The TWG has to be formed to ensure that a group of LGU staff will be accountable for completing the LCA Management Plan and leading initial implementation activities. Recommended composition of LCA TWG includes the following:

- DENR Regional Office technical services staff
- DENR Community Environment and Natural Resource Officer (CENRO)
- MENRO
- MPDO
- Municipal Budget Officer (MBO)
- Municipal Tourism Officer (MTO)
- SB Chair – Committee on Environment
- Barangay Captains
- Representatives from environment-related NGOs
- Representatives from academic institutions

On working protocols, the TWG should discuss among themselves duties and functions, regularity of meetings, internal structure, e.g., if different Committees need to be created, and fund sources for the activities. On the composition of TWG, assess balanced participation of men and women in the Team. An LGU staff trained on gender can be invited to join the TWG to ensure that gender is mainstreamed in the planning process.

Workshop 2. Action Planning

For this Workshop, the group has to agree on timeline, accountable TWG members, and required budget for 1) completion of outputs of Module 1; 2) preparatory activities for Module 2; and 3) activities for the remaining Modules of LCA management planning.

It should be reiterated that the items below are needed as solid bases for the LCA TWG to move forward:

Box 6. Duties and Functions of Dalaguete, Alcoy and Argao BioCon Teams

Case in Point: In the LCA Management Plan preparation for Mts. Nug-as-Palipinon-Lantoy, the LGUs of Dalaguete, Alcoy, and Argao formed Biodiversity Conservation (BioCon) Teams or their LCA TWG. Among their duties and functions are the following:

- Work with DENR and technical assistance provider on actual conduct of biodiversity assessment
- Coordinate with other government agencies and NGOs for data sourcing
- Coordinate with barangays for activities involving Information, Education and Communication (IEC), consultations, validation, and endorsements
- Provide constant written reports and feedback to Local Chief Executive (LCE) and the legislative body on progress, opportunities, and challenges of planning activities
- Facilitate the legitimization of the LCA Management Plan
- Perform other activities that will support the planning and execution of agreed work plans
- Multi-sectoral support for LCA management planning through MDC or CDC
- SB/SP resolution authorizing the Municipal/City Mayor to enter into an agreement with the DENR for the planning and establishment of an LCA
- Executive Order organizing the LGU LCA TWG
- LGU budget for the planning process.

The Module will culminate in a plenary presentation of outputs.
Table 5. Suggested Template for Action Planning under Module 1

<table>
<thead>
<tr>
<th>Activities</th>
<th>Timeline</th>
<th>Responsibility Center</th>
<th>Estimated Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
<td>M2</td>
<td>M3</td>
</tr>
<tr>
<td>1) Completion of Module 1 Outputs</td>
<td>W1</td>
<td>W2</td>
<td>W3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Preparatory Activities for Module 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Remaining LCA Management Planning Modules</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Module 1 Annexes
Annex 1.1 Executive Order
Organizing LGU LCA Working Group, Alcoy, Cebu

Executive Order No. 15

SECTION 1. SUBJECT: The Integrated LGU LCA Working Group (Alcoy, Cebu)

The Integrated LGU LCA Working Group (Alcoy, Cebu) is hereby directed to organize a working group to conduct an integrated assessment of the local government areas (LGAs) in Alcoy, Cebu. The working group will be comprised of representatives from the local government units (LGUs), the private sector, and non-governmental organizations (NGOs).

SECTION 2. UTILITY AND FUNCTION: The Integrated LGU LCA Working Group will perform the following functions:

1. Conduct an integrated assessment of the LGAs in Alcoy, Cebu.
2. Identify areas for improvement in the LGAs' environmental performance.
3. Develop strategies for improving the environmental performance of the LGAs.
4. Coordinate with relevant stakeholders to implement the strategies.
5. Monitor the progress of the integrated assessment and implementation of the strategies.

This Executive Order is issued on May 30, 2023.

Signed:

[Signature]
Office of the Municipal Mayor
Annex 1.2
Bud Bongao,
Tawi-Tawi LCA
Municipal Ordinance
<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value 1</td>
<td>Value 2</td>
<td>Value 3</td>
<td>Value 4</td>
</tr>
<tr>
<td>Value 5</td>
<td>Value 6</td>
<td>Value 7</td>
<td>Value 8</td>
</tr>
<tr>
<td>Value 9</td>
<td>Value 10</td>
<td>Value 11</td>
<td>Value 12</td>
</tr>
</tbody>
</table>

*Note: The table above is a placeholder for the actual content of the page.*
Annex 1.3 Inter-LGU MOA for Mts. Nug-as-Palipinnon forest-Lantoy
Annex 1.4 SB Resolution Adopting Nacolod CMF and Supporting Its Implementation, Libagon, Southern Leyte
MODULE 2.
Situational Analysis

Coverage

This Module provides the LCA TWG a walkthrough on the processes for the assessment of their biodiversity conservation priority areas and the current socio-economic threats to these areas. These shall form the bases for determining the extent of coverage of the LGU’s area that will be established as an LCA (the CONSERVATION TARGETS) and for identifying key actions that will address the threats (the CONSERVATION ACTIONS). This Module also gives an opportunity for the LCA TWG to reflect on their current situation and evaluate their internal capacity (STRENGTHS) and areas for improvement (WEAKNESSES) as an organization that will pursue biodiversity conservation. Furthermore, this Module also guides the TWG members in evaluating risks (THREATS) and enabling environments (OPPORTUNITIES) that will contribute to the failure or success of the LCA Management Plan implementation.

Three sub-modules comprise Module 2, namely:
• Sub-Module 2a. Biodiversity Assessment
• Sub-Module 2b. Identification, Mapping, and Validation of Conservation Targets
• Sub-Module 2c. Resources and Threats Analysis; Gender Analysis
• Sub-Module 2d. Identification of Conservation Actions

Outputs of sub-modules 2a and 2b will be used in setting the LCA Management Plan’s vision, goals, objectives, and targets. Information on biodiversity conservation priority areas will be useful in designing conservation actions towards retention, recovery, protection, and/or restoration of conservation targets. These will also assist the LGU in evaluating the bio-physical impacts of LCA-related management interventions. The Resources and Threats Analysis as well as Gender Analysis, on the other hand, will be inputs in selecting appropriate conservation actions vis-à-vis issues and threats which need to be addressed.

The Module 2 process is summarized in the diagram below.
Learning Objectives

By the end of this Module, the participants should be able to:

- Understand the biodiversity significance of their area and appreciate its relationship with sustained provision of ecosystem services that are crucial to local economic development
- Use the information on status and significance of biodiversity of their area in developing their LCA Management Plan strategies.

Training Schedule

The training schedule of this sub-module is reliant on the biodiversity assessment method that will be adopted by the LGU as discussed in the Process below.

Methodology For Full-blown Biodiversity Assessment

Specific schedule of a full-blown Biodiversity Assessment will depend on the methodology that will be adopted. This varies from one approach to another.

In areas where no prior assessment has been undertaken, it is recommended that this method be adopted to establish the baseline and the status and significance of biodiversity.

<table>
<thead>
<tr>
<th>Day</th>
<th>Topics/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
</tr>
<tr>
<td>8:00 – 9:00 AM</td>
<td>Opening Ceremony</td>
</tr>
<tr>
<td>9:00 – 9:30</td>
<td>Rationale/Overview of the Activity</td>
</tr>
<tr>
<td>9:30 – 12:00 N</td>
<td>Lecture: Biodiversity Assessment Methodology</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 2:30 PM</td>
<td>Workshop 1: Action Planning</td>
</tr>
<tr>
<td>2:30 – 3:00</td>
<td>Plenary Presentation of Action Plan</td>
</tr>
<tr>
<td>Day 2 – Day 4</td>
<td>Field Work: Reconnaissance Survey</td>
</tr>
<tr>
<td>Day 5</td>
<td>Workshop 2: Refining Action Planning for Actual Biodiversity Assessment/Survey</td>
</tr>
<tr>
<td>Day 6 – X</td>
<td>• Actual biodiversity assessment/survey</td>
</tr>
<tr>
<td></td>
<td>• Interviews and conduct of FGDs with local people on threats to biodiversity resources of the area.</td>
</tr>
<tr>
<td></td>
<td>By the end of the survey period, Action Planning for Module 2b</td>
</tr>
</tbody>
</table>

Table 6. Suggested Program for Full-blown Biodiversity Assessment
Methodology For Rapid Biodiversity Assessment

Two days are allocated for conduct of a Rapid Biodiversity Assessment.

<table>
<thead>
<tr>
<th>Day</th>
<th>Topics/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Opening Ceremony</td>
</tr>
<tr>
<td>8:00 – 9:00 AM</td>
<td>Rationale/Overview of the Activity</td>
</tr>
<tr>
<td>9:00 – 9:30</td>
<td>Lecture 1: Recap of LCA Management Planning Process</td>
</tr>
<tr>
<td>9:30 – 10:00</td>
<td>Workshop 1: Assessment of Flora Diversity in the Area</td>
</tr>
<tr>
<td>10:00 – 12:00 N</td>
<td>Workshop 1: Assessment of Flora Diversity in the Area</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 1:30 PM</td>
<td>Plenary Presentation of Workshop 1 Outputs</td>
</tr>
<tr>
<td>1:30 – 3:30</td>
<td>Workshop 2: Assessment of Fauna Diversity in the Area</td>
</tr>
<tr>
<td>3:30 – 4:00</td>
<td>Plenary Presentation of Workshop 2 Outputs</td>
</tr>
<tr>
<td>4:00 – 5:00</td>
<td>Action Planning for Day 2</td>
</tr>
</tbody>
</table>

Day 2

| 8:00AM–12:00N | On-site FGDs |
| 8:00AM–12:00N | Identification of key fauna and flora species in the area |
| 8:00AM–12:00N | Discussion on issues and problems threatening key fauna and flora species |
| 12:00 – 1:00 PM | Back to training venue; lunch |
| 1:00 – 3:00 | Workshop 3: Consolidation of FGD Results |
| 3:00 – 4:30 | Plenary Presentation of FGD Results; Processing of FGD Results with Day 1 Workshop Outputs |
| 4:30 – 5:00 | Action Planning Sub-Module 2b |

Table 7. Suggested Program for Rapid Biodiversity Assessment

Expected Outputs

By the end of the Module, participants shall have completed the following:

- List of threatened and economically important species of flora and fauna or potential key species in case there have been no prior studies
- Status of forest ecosystem, habitat, and vegetation types in the area, including those where there are sightings of threatened and economically important species or potential key species
- Assessment of ecosystem services and resource users
- Initial list of current and potential threats to biodiversity

Process

Before Sub-module 2a, a roundtable discussion with LCA TWG members should be conducted. This discussion should give TWG members an overview of the biodiversity assessment methodology options. This should lead to a decision on which methodology to adopt. Emphasis should be given on retention of natural areas as the main conservation action. This is in relation to the conservation of natural areas as the primary conservation target versus the species conservation planning.
Below is a comparative analysis of full-blown and rapid Biodiversity Assessment methodologies.

<table>
<thead>
<tr>
<th>Biodiversity Assessment Methodology Option</th>
<th>Full-Blown Biodiversity Assessment</th>
<th>Rapid Biodiversity Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of detail of data gathering</td>
<td>Very detailed; can be customized to LGU needs and available resources. Full-blown Biodiversity Assessment methodologies vary according to proponents/institutions providing technical assistance to LGUs.</td>
<td>Dependent on level of detail of existing studies and literature and knowledge of local people who will participate in FGDs.</td>
</tr>
<tr>
<td>Relevance and reliability</td>
<td>Data are recent as the assessment will be conducted during the time the LCA management planning process is being conducted. Reliability is high since this utilizes scientific methods, e.g., transect routes, detailed habitat plots, and broad habitat points, among others. However, there are arguments on the size of sample areas and the different survey methods used among scientists and/or institutions.</td>
<td>Dependent on the period when existing studies and literature were conducted and the memory of local people who will participate in the discussions.</td>
</tr>
<tr>
<td>Required costs</td>
<td>Very costly. Based on site experience, cost ranges from P2-4M, depending on the size of the area under study.</td>
<td>Not too costly. Costs will include retrieval of existing studies and related literature as well as meeting costs.</td>
</tr>
<tr>
<td>Applicability</td>
<td>Applicable to areas where biodiversity assessments have not yet been conducted.</td>
<td>Applicable to areas where there are existing biodiversity-related studies.</td>
</tr>
</tbody>
</table>

For Full-blowed Biodiversity Assessment, in case the LGU opts to conduct a full-blown biodiversity assessment, this Guide does not prescribe a specific methodology to be used as approaches vary from one research institution to another.

For Rapid Biodiversity Assessment, the two-day activity starts with a review of the LCA Management Planning process. The discussion should provide a synthesis of preparatory activities completed and where these shall be incorporated in the current Module. The overview should be able to relate the importance of biodiversity assessment in formulating the LCA Management Plan objectives and targets. It should be noted, however, that this is only the first step towards putting together a picture of biodiversity conservation-related issues and problems besetting the area.

This Rapid Biodiversity Assessment heavily relies on existing biodiversity studies and literature about the area and the local knowledge of stakeholders. Thus, three Workshops and one FGD with on-site community stakeholders have been designed to gather information from these sources. Prior to this two-day Workshop, however, it is important that the LCA TWG have completed the inventory and initial review of all available studies about the area. Some members of the LCA TWG shall be assigned to take the lead in the review of related materials. Before the Workshop, a summary of findings of the inventory should have been prepared.

The following are suggested summary tables on the findings of review of existing studies.

<table>
<thead>
<tr>
<th>Flora Species (put photos if available)</th>
<th>Conservation Status</th>
<th>Location of Sighting/Recorded/Observed Habitat</th>
<th>Year of Conduct of Study</th>
<th>Organization that Conducted Study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9. Suggested Summary Table to Present Findings on Floral Studies
Case in Point: Mt. Nacolod Biodiversity Assessment

A wet season biodiversity assessment was conducted in 2011 and a follow-up dry season biodiversity assessment was undertaken in 2013. Both assessments were implemented by Fauna and Flora International (FFI) Philippines on behalf of the German Development Cooperation – Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in collaboration with the Provincial Government of Southern Leyte, Department of Environment and Natural Resources, with co-financing by the UNDP-GEF funded New Conservation Areas in the Philippines Project (NewCAPP), and the Foundation for the Philippine Environment (FPE) funded by United States Agency for International Development (USAID).

Since this is the first full-blown biodiversity assessment conducted for the area, several interesting findings have been noted, including:

- **65 families and 229 species of flora identified in the area.** Of the 229 flora species, 14% are endemic to the Philippines, 9% are classified as vulnerable, and 4% are critically endangered.
- **Discovery of Cebu cinnamon (Cinnamomum cebuense).** This is a new find since the species was previously recorded in Cebu Island only.
- **212 terrestrial vertebrates recorded in the area.** These comprise 112 avian, 36 mammalian, and 94 herpetofauna species.
- **High endemism in the area.** 60 species (41 birds, 17 mammals, and 2 herpetofauna) are found only in the landscape. Of the 41 bird species, 14 are endemic to the Greater Mindanao faunal region and 11 are under the IUCN threatened category.
- **Identification of new island records as follows:** 8 species of birds, including the endemic and threatened little slaty flycatcher (Ficedula basilinca), 3 volant mammals (Pipistrellus tenuis, Tylonycteris robustula, and Murina suilla), two amphibians (Philautus poecilus and P. surdus), and 2 new species of frog of the genus Platymantis.

Results of the full biodiversity assessment conducted for Mt. Nacolod include:

- **Revision of the old KBAs based on the nine High Conservation Values (HCVAs) for Leyte Island that were identified for the 23 trigger species of trees, birds, and frogs.** Four of these HCVAs are found in Southern Leyte;
- **Expansion of protected areas to cover suitable habitats of key biodiversity in the Island;**
- **Need for restoration or reforestation activities to be undertaken as there is a minor overlap with the hotspots;**
- **Use of Biodiversity Monitoring System (BMS) for protected areas of DENR-BMB as monitoring protocol for species sensitive to forest degradation and species tolerant to land use change;**
- **Implementation of comprehensive biodiversity inventories for Measurement, Reporting and Verification (MRV);** and
- **Implementation of comprehensive biodiversity inventories for MRV following the before/after/control/intervention (BACI) approach.**

Source: Final Technical Report, GIZ 2014
The LCA TWG presents the summary of review of existing studies. The group is then divided into two or three – by cluster of barangays. Adjacent barangays should be grouped together. Each group is given a copy of the summary of findings of related materials. The main purpose of this Workshop is to update/validate results of previous studies. Plant species (flora) not listed in existing studies but have recorded sightings among local people shall be reflected in the summary table. In addition, information on whether plant species recorded in previous studies are still observed in the area as well as current threats to these flora biodiversity resources should also be provided. Summary table data will then be overlaid on barangay maps. Outputs of this Workshop are presented in a plenary session to provide an opportunity for group validation.

**Workshop 1. Assessment of Flora Diversity in the Area**

The main purpose of this Workshop is to update/validate results of previous studies. Plant species (flora) not listed in existing studies but have recorded sightings among local people shall be reflected in the summary table. In addition, information on whether plant species recorded in previous studies are still observed in the area as well as current threats to these flora biodiversity resources should also be provided. Summary table data will then be overlaid on barangay maps. Outputs of this Workshop are presented in a plenary session to provide an opportunity for group validation.

<table>
<thead>
<tr>
<th>Flora Species (put photos if available)</th>
<th>Conservation Status</th>
<th>Location of Sighting/Recorded/Observed Habitat Note: Specify site, barangay location</th>
<th>Recorded Abundance Description</th>
<th>Indicate if these Species are Still Present/Being Sighted in the Area</th>
<th>Current Abundance Description</th>
<th>Current Threats Note: These can be a socio-economic activity or a specific stakeholder resource use practice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Workshop 2. Assessment of Fauna Diversity in the Area**

In a plenary session, the LCA TWG presents findings from existing studies. The same process undertaken in the assessment of flora diversity, i.e., update fauna species listed and the current threats to these species, is adopted in this Workshop. Summary table data and biodiversity data on barangay maps are also presented in plenary for validation.

<table>
<thead>
<tr>
<th>Fauna Species (put photos if available)</th>
<th>Conservation Status</th>
<th>Location of Sighting/Recorded/Observed Habitat Note: Specify site, barangay location</th>
<th>Recorded Abundance Description</th>
<th>Indicate if these Species are Still Present/Being Sighted in the Area</th>
<th>Current Abundance Description</th>
<th>Current Threats Note: These can be a socio-economic activity or a specific stakeholder resource use practice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Day 1 ends with an Action Planning session where the group discusses how FGDs in Day 2 will be managed – areas where FGDs will be conducted, facilitators, documenters, and FGD guide questions.
These FGDs are meant to be facilitated by respective barangay LGU officials and backed-up by other LCA TWG members, so that FGDs in all barangays can be simultaneously conducted. These are intended to validate and enhance Day 1 Workshop outputs such that community knowledge and experiences are incorporated in the analysis. These FGDs are also intended to serve as a tool to inform communities about the LCA management planning.

As a start-up activity, FGD participants are appraised on the LCA management planning process being undertaken in the area. The facilitator should be able to explain the objectives of LCA establishment and the community roles in the scope of management planning and implementation process. Objectives of the FGD are then explained to participants.

Following the introduction of the activity, Workshop 1 and 2 outputs (summary data table and biodiversity data map) are shown to the participants. By the end of the FGDs, participants should reach a consensus on validated flora and fauna data.

### Box 8. FGD Guide Questions

#### 1) Assessment of Floral (Plant) Diversity
- Are these plants found in your area? If yes, in which sitios of your barangays?
- Are there other flora species not listed here that you have seen?
- When was the earliest/oldest sighting of these flora species recorded in your area?
- Are they still found in this area?
- What are the local names of these species?
- What are the current threats to these flora species?
- Update biodiversity map based on biodiversity data table

#### 2) Assessment of Fauna Diversity
- Are these fauna species found in your area? If yes, in which sitios of your barangays?
- Are there other fauna species not listed here that you have seen?
- When was the first sighting of these fauna species recorded in your area?
- Are they still found in this area?
- What are the local names of these species?
- What are the current threats to these fauna species?
- Update biodiversity map based on biodiversity data table

### Table 15. FGD-updated Biodiversity Data: Floral Species

<table>
<thead>
<tr>
<th>Flora Species (put photos if available)</th>
<th>Local Names</th>
<th>Yr. of First Sighting of Specific Species</th>
<th>Recorded Abundance Description</th>
<th>Location of Sighting/Recorded/Observed Habitat Note: Specify sitio, barangay location</th>
<th>Indicate if these Species are Still Present/Being Sighted in the Area</th>
<th>Current Abundance Description</th>
<th>Current Threats Note: These can be a socioeconomic activity or a specific stakeholder resource use practice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: FGD, Brgy.____________, as of (indicate date)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 16. FGD-updated Biodiversity Data: Fauna Species

<table>
<thead>
<tr>
<th>Fauna Species (put photos if available)</th>
<th>Local Names</th>
<th>Yr. of First Sighting of Specific Species</th>
<th>Recorded Abundance Description</th>
<th>Location of Sighting/Recorded/Observed Habitat Note: Specify sitio, barangay location</th>
<th>Indicate if these Species are Still Present/Being Sighted in the Area</th>
<th>Current Abundance Description</th>
<th>Current Threats Note: These can be a socioeconomic activity or a specific stakeholder resource use practice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: FGD, Brgy.____________, as of (indicate date)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
At the training venue, participants can be grouped into two – one group to work on the updating of the flora biodiversity data and the other one on the fauna biodiversity data based on the FGD results. The FGD results (biodiversity data tables and biodiversity map) are then consolidated towards developing a municipal-wide biodiversity information. Outputs of the two groups are reported in a plenary session.

Finally, the LCA TWG will work on the Action Plan in preparation for Sub-Module 2b. The list of thematic maps to be prepared for Sub-Module 2b is found in Page 30.

Figure 4. Proposed LCA of Dalaguete
Sub-Module 2b. Identification, Mapping, and Validation of Conservation Targets

Learning Objectives

By the end of the sub-module, the participants should be able to:

- Construct the conservation targets map and identify initial LCA coverage. It is not required that this map should be completed during the 2-day workshop. What matters is that the group is able to learn the know-how in order to prepare the map after the workshop.
- Explain the biodiversity and economic significance of identified conservation targets
- Validate the conservation targets map at the barangays

Expected Outputs

By the end of the sub-module, the following should have been produced:

- Preliminary conservation targets map of the municipality. Annex 1 is a checklist of thematic, composite, and derived maps (Scale 1:200,000- to vary depending on size of area; basic is 1:10) to be prepared using GIS or similar software. The maps are then printed in tarpaulin (at least 4 feet x 4 feet) to be used in community validation.
- Next steps action plan as agreed upon by members of the municipal LCA working group.

Training Schedule

This workshop entails two days. Two days are also allotted for community validation.

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
</tr>
<tr>
<td>8:00 – 8:30 AM</td>
<td>Opening Ceremony</td>
</tr>
<tr>
<td>8:30 – 9:00</td>
<td>Overview of the Activity</td>
</tr>
<tr>
<td>9:00 – 11:00</td>
<td>Lecture: Basic Guidelines on Conservation Target Mapping</td>
</tr>
<tr>
<td>11:00 – 12:00 N</td>
<td>Workshop: Conservation Target Mapping</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 5:00</td>
<td>Workshop, continuation</td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
</tr>
<tr>
<td>8:00 AM – 12:00 N</td>
<td>Workshop, continuation</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 3:00</td>
<td>Workshop, continuation</td>
</tr>
<tr>
<td>3:00 – 5:00</td>
<td>Action Planning for Community Validation</td>
</tr>
<tr>
<td>Days 3 and 4</td>
<td>Community Validation (can be scheduled once outputs of this sub-module are completed)</td>
</tr>
</tbody>
</table>

Table 17. Training Schedule for Sub-Module 2b: Identification, Mapping, and Validation of Conservation Targets

Target Participants

Target participants of this sub-module are LCA TWG members. For community validation activities, other barangay officials, PO members, and other community members should be invited.
Process

**Lecture. Basic Guidelines on Conservation Target Mapping**

This lecture should give participants basic mapping concepts and introduce the relevance of conservation target mapping with focus on basic guidelines as outlined below.

1) The conservation targets map shows the natural areas or natural area conditions. Altogether, the map shows the following: (a) core conservation areas, (b) buffers, (c) stepping stones, and/or (d) corridors. Core conservation areas with their buffers drawn are connected to each other by corridors and/or stepping stones.

- The aggregate geographic space of natural areas when connected to each other by means of corridors and/or stepping stones constitute the local conservation area. The figure in the previous page is an illustration of a local conservation area.
- The core conservation areas (that are drawn on the map) and table of their corresponding areas include:
  - Contiguous and fragmented stands of natural forests
  - Contiguous and fragmented stands of secondary forests
  - Water channels including lakes, estuaries, waterfalls
  - All native/natural grasslands (cogon, talahib), brushlands (shrubs and small trees), and bare lands (if any)
  - Geologically hazardous areas and other high-risk areas
  - Other outstanding natural and locally significant features, e.g., cliffs, ravines, waterfalls, canons, caves, volcanoes, rocky outcrops, historical sites, sacred grounds, scenic/charismatic sites and potential ecotourism sites
- Buffers are areas set aside to protect the core areas, stepping stones, and corridors from external pressures. Buffers along water channels especially in cultivated areas should also be drawn
- Small patches of remnant forest or any native vegetation may be set up as “stepping stones” to allow movement of small species between patches. The smaller the target species or its capacity to move over distances (e.g., turtles, rats, snakes, small birds), the shorter should be the gap between stepping stones. The loss of a stepping stone can inhibit movement, increase patch isolation (Bentrup, 2008), and increase vulnerability of the target species. For certain species, there is a threshold in which they would be unwilling to cross or are incapable of crossing the gap between stepping stones. In other words, a large gap becomes a barrier to movement of certain species
- Corridors are physical or vegetative devices established to provide connectivity between buffered conservation targets and stepping stones

2) Biodiversity-related thematic, composite, and derived maps have to be produced to draw the preliminary conservation target map. Participants are referred to list of related studies, literature, and knowledge materials for guidance.

3) In preparing the conservation targets map, the latest forest cover map should be obtained from DENR and/or NAMRIA. If these are not available, Google Maps may be used. Otherwise, the LCA working group must go into community mapping at each of the target barangays.

**Box 9. List of Maps for LCA Management Plan**

Maps which have to be prepared for the LCA Management Plan are the following:

- Land classification map
- LCA slope map
- LCA elevation map
- LCA land use map
- LCA forest cover map
- LCA tenure map
- LCA vulnerable area map
- LCA watershed map
- LCA watershed and drainage map
4) Except when prior written consent is obtained from the cognizant owners/tenure holders/claimants, exclude areas of private (A&D) lands, tenured forestlands, and where present, CADT areas and ancestral domain claims. It is important to secure prior written consent for inclusion of tenured lands especially when riparian corridors/easements are needed to establish connectivity between fragmented habitats. However, it is essential to identify these so that the management measures in these lands, if deemed part of the LCA target, can be incorporated in the land use plan.

5) Overlay biodiversity data map (Sub-Module 2a outputs) on the conservation area target map.

6) Once the maps are completed, the next step is to prepare for community validation activities.

- Two sets of conservation targets map, including the data table, should be prepared and presented for community validation: one showing the conservation targets of the municipality and one for each barangay where the conservation targets are located. Tables below are suggested to be useful in facilitating community validation activities.

### Table 18. Potential LCA Area, Land Area and Forest Cover

<table>
<thead>
<tr>
<th>Barangays (Column 1)</th>
<th>Land Area (ha) (Column 2)</th>
<th>Local Conservation Area (ha) (Column 3)</th>
<th>Forest Cover in LCA (ha) (Column 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A &amp; D (ha) (Col 2.1)</td>
<td>FL (ha) (Col 2.2)</td>
<td>Total (ha) (Col 2.3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table Description.** This table intends to present forest cover of target LCA, per land classification per barangay vis-à-vis total forest cover of the whole municipality or city, per land classification per barangay.

**Notes:**

- **Step 1. Column 1.** List all barangays targeted to be covered by LCA within the concerned municipality or city.

- **Step 2.** Fill-up columns 2.1 to 2.3.
  - **Column 2.1** For each barangay, indicate land area of A and D within the barangay.
  - **Column 2.2** For each barangay, indicate land area of forestland within the barangay.
  - **Column 2.3** For each barangay, indicate total land area.

- **Step 3.** Fill-up columns 3.1-3.3
  - **Column 3.1** For each barangay, indicate land area of A and D within target LCA.
  - **Column 3.2** For each barangay, indicate land area of forestland within target LCA.
  - **Column 3.3** For each barangay, indicate total land area of A and D, and forestland within target LCA.

- **Step 4.** Fill-up columns 4.1-4.3
  - **Column 4.1** For each barangay, indicate forest cover of A and D in target LCA.
  - **Column 4.2** For each barangay, indicate forest cover of forestland in target LCA.
  - **Column 4.3** For each barangay, indicate total forest cover of A and D, and forestland in target LCA.

### Table 19. Potential LCA Area and Land Uses

<table>
<thead>
<tr>
<th>Barangays (Column 1)</th>
<th>Local Conservation Areas (ha) (Column 2)</th>
<th>Existing Forest (ha) (Column 3)</th>
<th>Agri-Cultivations (ha) (Column 4)</th>
<th>Agro-forestry (ha) (Column 5)</th>
<th>Open Lands (ha) (Column 6)</th>
<th>Brush Lands (ha) (Column 7)</th>
<th>Grasslands (ha) (Column 8)</th>
<th>Total (ha) (Column 9)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A &amp; D (ha) (Col 2.1)</td>
<td>FL (ha) (Col 2.2)</td>
<td>Total (ha) (Col 2.3)</td>
<td>Natural (ha) (Col 3.1)</td>
<td>Plantations (ha) (Col 3.2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table Description.** This table highlights land uses in target LCA.
Step 1. Column 1. List all barangays targeted to be covered by LCA within the concerned municipality or city.

Step 2. Fill-up columns 2.1 to 2.3
- Column 2.1 For each barangay, indicate size (in has) of A and D land within target LCA.
- Column 2.2 For each barangay, indicate size (in has) of forestland within target LCA.
- Column 2.3 For each barangay, indicate total size (in has) of A and D, and forestland within target LCA.

Step 3. Fill-up columns 3.1 to 3.2
- Column 3.1 For each barangay, indicate size (in has) of natural forest within target LCA.
- Column 3.2 For each barangay, indicate size (in has) of forest plantations within target LCA.

Step 4. Fill-up Column 4. For each barangay, indicate size (in has) of areas used for agricultural cultivations within target LCA.

Step 5. Fill-up Column 5. For each barangay, indicate size (in has) of areas used for agroforestry within target LCA.

Step 6. Fill-up Column 6. For each barangay, indicate size (in has) of open lands within target LCA.

Step 7. Fill-up Column 7. For each barangay, indicate size (in has) of brush lands within target LCA.

Step 8. Fill-up Column 8. For each barangay, indicate size (in has) of grasslands within target LCA.

Step 9. Fill-up Column 9. For each barangay, indicate total areas, including all land uses, within target LCA.

Table Description. This table presents tenure types within target LCA.

Table 20. Potential LCA Area and Tenure Types

<table>
<thead>
<tr>
<th>Barangays (Column 1)</th>
<th>Local Conservation Area (ha)</th>
<th>Tenure type (ha)</th>
<th>Total (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A &amp; D (ha) (Col 2.1)</td>
<td>FL (ha) (Col 2.2)</td>
<td>Total (ha) (Col 2.3)</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

Step 1. Column 1. List all barangays targeted to be covered by LCA within the concerned municipality or city.

Step 2. Fill-up columns 2.1 to 2.3
- Column 2.1 For each barangay, indicate size (in has) of A and D land within target LCA.
- Column 2.2 For each barangay, indicate size (in has) of forestland within target LCA.
- Column 2.3 For each barangay, indicate total size of target LCA.

Step 3. Fill-up columns 3.1 to 3.6
- Column 3.1 For each barangay, indicate size (in has) of areas under co-management agreements within target LCA.
- Column 3.2 For each barangay, indicate size (in has) of areas under Community-Based Forest Management Agreements (CBFMAs).
- Column 3.3 For each barangay, indicate size (in has) of areas under Community Stewardship Certificate (CSC).
- Column 3.4 For each barangay, indicate size (in has) of areas under Industrial Tree Plantations or Industrial Forest Management Agreements (IFMAs).
- Column 3.5 For each barangay, indicate size (in has) of areas under mining lease.
- Column 3.6 For each barangay, indicate size (in has) of areas under other tenure types, e.g., Joint Venture Agreement (JVA).

Step 4. Fill-up Column 4. For each barangay, indicate size (in has) of all tenure types.

Notes:

- In the case of an inter-municipality conservation area, three (3) maps are prepared for validation: one for the entire (inter-municipal) landscape, one per municipality, and one for each of the barangays where the conservation targets are located.

32
Once the preliminary conservation targets map have been drawn, the LCA TWG should develop the action plan. In the minimum, the action plan should set the timetable for completion of the municipal and barangay conservation targets map, community validation, written resolution adopting the conservation targets of the barangays, and updated conservation targets map (municipal and barangay). The DENR-BMB will also use this action plan in developing its schedule for extending further technical assistance to the working group.

**Conservation Targets Map Community Validation**

The Working Group should assign and train barangay leaders to provide on-the-spot guidance during the community mapping exercises in order to ensure that the potential LCAs are indicated on the community maps. Users are encouraged to refer to Section on Related References, Studies, Literature, and Knowledge Materials. The outputs of community validation activities are:

- Written resolution of the barangay council adopting the conservation targets in the barangay. To achieve this result, the consultation activities should be aimed at determining the feasibility of the barangay conservation targets in consideration of existing conditions of land tenure, traditional land uses (e.g., pasture lands, wood gathering areas), land claims, and land conflicts
- Updated map of conservation targets of the barangay

**Related References, Studies, Literature, and Knowledge Materials**

- Annex 2 (DENR Memorandum Circular No. 2005-005, “Adopting forestry definitions concerning forest cover/land use”)
- Community Mapping for Cultural Resource Management
- Annex 3, Guidelines in Preparing FLUP Thematic Maps
- Annex 4, Recommended buffer width for waterways

**Figure 5. Mt. Nacolod LCA**
Sub-Module 2c. Threats and Resources Analysis; Gender Analysis

Learning Objectives

By the end of this sub-module, participants shall have:

• Described and evaluated the threats to the natural forests as the primary conservation target
• Identified their strengths, weaknesses, opportunities, and threats as an organization that will implement a biodiversity conservation program; and
• Understood gender-related issues and problems concerning biodiversity conservation.

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
</tr>
<tr>
<td>8:00 – 8:30 AM</td>
<td>Opening Ceremony</td>
</tr>
<tr>
<td>8:30 – 9:00</td>
<td>Plenary Discussion: Presentation/Review of Final Conservation Targets Map</td>
</tr>
<tr>
<td>9:00 – 9:30</td>
<td>Lecture: Threats Analysis</td>
</tr>
<tr>
<td>9:30 – 12:00 N</td>
<td>Workshop 1: Identification of Threats Hotspots</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 2:00</td>
<td>Plenary Presentation of Workshop 1 Outputs</td>
</tr>
<tr>
<td>2:00 – 4:30</td>
<td>Workshop 2: Threats Ranking</td>
</tr>
<tr>
<td>4:30 – 5:00</td>
<td>Plenary Presentation of Workshop 2 Outputs</td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
</tr>
<tr>
<td>8:00 – 8:30 AM</td>
<td>Recap of Day 1</td>
</tr>
<tr>
<td>8:30 – 11:00</td>
<td>Workshop 3: Direct and Indirect Threats Analysis</td>
</tr>
<tr>
<td>11:00 – 11:30</td>
<td>Plenary Presentation of Workshop 3 Outputs</td>
</tr>
<tr>
<td>11:30 – 12:00 N</td>
<td>Lecture: SWOT Analysis</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 3:00</td>
<td>Workshop 4: SWOT Analysis</td>
</tr>
<tr>
<td>3:00 – 3:15</td>
<td>Lecture. Gender Analysis</td>
</tr>
<tr>
<td>3:15 – 4:00</td>
<td>Workshop 5. Gender Analysis</td>
</tr>
<tr>
<td>4:00 – 5:00</td>
<td>Plenary Presentation of Workshop 4 Outputs</td>
</tr>
<tr>
<td>5:00 – 5:30</td>
<td>Action Planning</td>
</tr>
<tr>
<td>5:30 – 6:00</td>
<td>Plenary Presentation of Action Plan</td>
</tr>
</tbody>
</table>

Target Participants

In addition to the municipal LCA working group, this workshop should be attended by at least two (2) officials of each barangay included in the conservation targets map.

Expected Outputs

By the end of the sub-module, the following should have been produced:

• Threats hotspots table and map
• List of priority threats to be addressed
• SWOT analysis matrix
Plenary Discussion. Conservation Targets Map

Before Sub-Module 2c, the conservation targets map should have been finalized. Sub-Module 2c starts with the presentation of the conservation targets map and a review of the process undertaken by the group in completing the said map. It is important to note in the discussion how a participatory approach was emphasized through the community validation activity. The discussion should then lead to an explanation on how the conservation targets map will be used as basis for identifying current biodiversity threats in the area – the main agenda of this sub-module.

Lecture. Threats Analysis

Key messages that should be given focus in this lecture are the following:

- **Biodiversity conservation** is chiefly about threats management.
- Basically, the threats analysis process examines the various threats against the identified conservation targets. An illustrative flow diagram is shown at left.
- **Direct threats** are primarily human activities (e.g., kaingin, hunting, destructive mining, timber poaching, construction of roads, pollution, or introduction of exotic invasive species) that immediately and negatively affect a target. They can be natural phenomena altered by human activities like an increase in water temperature caused by global warming.

The three Workshops can be facilitated by grouping the participants into clusters of adjacent barangays.

Workshop 1. Identification of Threats Hotspots

The main objective of this Workshop is to identify the hotspots. The workshop will list the barangays affected by the threat (scope), severity of the threat on the targets, and permanence or irreversibility of the threat. An illustrative template is given at right. This table is then translated into a threats map showing specific barangays identified as hotspots.

Table 22. Suggested Template for Threats Analysis

<table>
<thead>
<tr>
<th>Municipality:</th>
<th>T H R E A T S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Province:</td>
<td></td>
</tr>
<tr>
<td>BARANGAY</td>
<td>Kaingin</td>
</tr>
<tr>
<td></td>
<td>Firewood/Charcoal gathering</td>
</tr>
<tr>
<td></td>
<td>Illegal mining</td>
</tr>
<tr>
<td></td>
<td>Forest fires</td>
</tr>
<tr>
<td></td>
<td>Timber poaching</td>
</tr>
<tr>
<td></td>
<td>Others ( pls. specify)</td>
</tr>
<tr>
<td></td>
<td>BRGY. SCORE</td>
</tr>
</tbody>
</table>

**THREATS ANALYSIS: Hotspots, 6 Barangays (As of MM-DD-YYYY)**

<table>
<thead>
<tr>
<th>BARANGAY</th>
<th>Kaingin</th>
<th>Firewood/Charcoal gathering</th>
<th>Illegal mining</th>
<th>Forest fires</th>
<th>Timber poaching</th>
<th>Others (pls. specify)</th>
<th>BRGY. SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angbud</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anghoy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bahaw</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dukot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pan-os</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taklom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**THREAT SCORE**

**SCORING:** Rate the threats as High = 3, Medium = 2, and Low = 1
Here, threats are ranked so that activities can be focused where they are most needed, especially when there are several direct threats. Determine which are critical threats, i.e., the ones that are most important to address.

**Workshop 3. Direct and Indirect Threats Analysis**

This Workshop will assist the participants in distinguishing between direct and indirect threats against the conservation targets, e.g., natural forests, and then prepare a diagram of their cause-and-effect relationships. This diagram will aid the participants in selecting conservation actions. Direct threats are primarily human activities that immediately affect a target (Salafsky et al., 2008). Examples of direct threats are kaingin, destructive mining, wildlife hunting, road construction, timber poaching, pollution, or introduction of exotic invasive species.

Tenurial insecurity or low household incomes are not considered direct but are instead indirect threats as shown in the illustrative diagram at right.

By the end of the three Workshops, the LCA TWG should have reached a consensus on priority threats that need to be addressed for improved biodiversity conservation.

**Lecture. SWOT Analysis**

A short introduction to SWOT Analysis will be given to participants. Major points to be given attention in this lecture will cover the following:

- SWOT analysis will assist the participants in assessing factors that will effectively and efficiently facilitate achievement of the LCA Management Plan objectives and those that will limit or hinder success of implementation activities.
- The SWOT matrix
  
<table>
<thead>
<tr>
<th>Strengths (Internal)</th>
<th>Opportunities (External)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weaknesses (Internal)</td>
<td>Threats (External)</td>
</tr>
</tbody>
</table>

- Elements of SWOT are:
  - Strengths: internal capacity, system, procedure, or practices of the LGU that are favorable to the program
  - Weaknesses: gaps in existing capacity, system, procedure, or practices of the LGU that are not favorable to the program
  - Opportunities: external conditions or stakeholders that can prove beneficial to the program
  - Threats: external risks, conditions, or stakeholders that can potentially hinder biodiversity conservation program implementation
Workshop. SWOT Analysis

Participants can be grouped into two to discuss internal (strengths and weaknesses) and external factors (opportunities and threats). SWOT analysis can be facilitated using the template at right.

<table>
<thead>
<tr>
<th>Areas of Concern</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Arrangement/Institutional Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enforcement System</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder Participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEC/Advocacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M and E</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others, if any</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Mun TWG, as of (indicate date)

Lecture: Gender Analysis

This lecture will highlight the points below.

- Gender is mandated to be mainstreamed in planning processes, policies, programs and projects. The Magna Carta for Women (MCW) and the General Appropriations Act provide for such mainstreaming.
  - Gender and Development Planning shall be integrated in the regular activities where at least 5% of the agency’s total budget will be utilized for implementation in accordance with specific guidelines provided in JMC 2012-01.
  - In the Joint Memo Circular (2012-01) by Philippine Commission on Women, National Economic Development Authority and Department Budget and Management, the utilization of GAD funds will be audited by the Commission on Audit annually.
- Gender analysis is about separately looking at how men and women use and affect natural resources.
  - It will allow one to see how a conservation intervention will be received by men and women and how it will impact the interests and roles of both sexes.
  - When doing gender analysis, it is important that both men and women in the community are given equal opportunity to participate.
  - It is about reaching a better understanding of how communities work from the perspective of relationships between men and women.

- Gender analysis explores to understand the ff.: 2
  - Who does what? Look for differences in how men and women use and manage natural resources. Is it men or women who exploit threatened resources?
  - Who benefits? Look for differences in how men and women benefit from using these resources?
  - What are the constraints? What are the practical and cultural constraints that men and women face in relation to natural resource use and conservation?
  - Who has access? Identify differences between men and women in access, ownership, and control of natural resources. Who controls tenure rights? Who is more likely to use those rights to conserve natural resources?
  - Who has decision-making control? Explore the extent to which men and women decide how resources are used.
  - Do men and women have different decision-making roles within organizations or communities? How do these roles influence the kind of management decisions they are likely to make?
  - What are the views of men and women on the trade-offs they are prepared to make between conservation, livelihood, and daily routine.

Group the participants into two, i.e., men and women. Coach the group in filling-up the tables below.

**Table 24. Identifying Observations of Men and Women in Prevailing Practices**

<table>
<thead>
<tr>
<th>What are their observed social and environmental impact (+ or -) of the prevailing practices?</th>
</tr>
</thead>
<tbody>
<tr>
<td>As observed by men</td>
</tr>
</tbody>
</table>

**Table 25. Identifying Future Interests/Benefits of Men and Women from Use of Natural Resources**

<table>
<thead>
<tr>
<th>Future interest /benefit expected from the use of natural resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How ready and willing are they (men/women) to participate in and contribute to the management in the area so that benefits from the resources are sustained?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
</tr>
</tbody>
</table>

Identify opportunities that can be harnessed from the direct stakeholders identified above.

This Workshop ends with a plenary presentation of outputs and group validation.
Sub-Module 2d. Identification of Conservation Actions

Learning Objectives

By the end of this sub-module, participants shall have identified key conservation actions that will address priority threats.

Training Schedule

This is a two-day Workshop with the schedule presented at right.

Target Participants

Target participants are the LCA TWG members.

Expected Outputs

Expected outputs are the list and brief descriptions of the identified conservation actions.

Process

Table 26. Training Schedule for Sub-Module 2d: Identification of Conservation Actions

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
</tr>
<tr>
<td>8:00 – 8:30 AM</td>
<td>Opening Ceremony</td>
</tr>
<tr>
<td>8:30 – 9:00</td>
<td>Review of Results of Sub-Module 2c: Threats and Resources Analysis</td>
</tr>
<tr>
<td>9:00 – 9:30</td>
<td>Lecture: Defining Conservation Actions</td>
</tr>
<tr>
<td>9:30 – 12:00 N</td>
<td>Workshop</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 5:00</td>
<td>Workshop, continuation</td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
</tr>
<tr>
<td>8:00 AM – 12:00 N</td>
<td>Workshop, continuation</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 3:00</td>
<td>Workshop, continuation</td>
</tr>
<tr>
<td>3:00 – 4:00</td>
<td>Plenary Presentation of Outputs</td>
</tr>
<tr>
<td>4:00 – 5:00</td>
<td>Action Planning</td>
</tr>
</tbody>
</table>

Lecture. Defining Conservation Actions

Principles behind conservation actions are discussed with participants as below.

- The conservation of biological diversity implies maintenance of ecological processes, e.g., nutrient cycling, soil formation, gene dispersal, species survival and extinction, groundwater recharge, soil/slope stabilization, climate regulation, carbon sequestration. Apart from the conservation of species of flora and fauna, biodiversity conservation is also about the maintenance of ecosystem functions.

- The most common and desirable ecosystem services associated with effective biodiversity conservation include sustained availability of water quality and quantity and freedom from flooding.

- Also, because it is usually difficult to justify biodiversity conservation projects in simple economic and political sense, it is advisable to prepare the conservation actions diagram in the context of a river watershed, as illustrated for Bancal River Watershed at left.
There are four types of conservation actions promoted in this Guide, namely: a) Retention, b) Recovery, c) Protection, and d) Restoration of conservation targets. Examples of conservation actions leading to these are presented in the table below.

<table>
<thead>
<tr>
<th>Conservation Action Types</th>
<th>Examples of Specific Conservation Actions</th>
</tr>
</thead>
</table>
| Retention                 | • Even without FLUP: Ordinance declaring and establishing all (or certain) natural areas in the municipality as municipal protected areas and prescribing penalties therefor  
                           | • Forest land use plan allocating all or certain natural areas as protection areas  
                           | • Even without FLUP: Ordinance prohibiting wildlife hunting, gathering, etc., and prescribing penalties therefor  
                           | • Even without FLUP: Ordinance prohibiting entry, wood gathering, settlements, farming, etc., and prescribing penalties thereof |
| Recovery                  | • Municipal forest land use plan allocating certain areas (indicated in the LCA Management Plan) for natural regeneration for forest conservation purposes and providing mechanisms for its implementation  
                           | • Even without FLUP: Ordinance declaring and establishing certain areas (indicated in the LCA Management Plan) for forest conservation purposes and providing the mechanisms for reversion from current land uses |
| Protection                | • Municipal FLUP allocating those areas specified in LCA Management Plan as protection forests  
                           | • Even without FLUP: Ordinance declaring certain areas (specified in the LCA Management Plan) as protection/sanctuary forests (e.g., habitat of species XYZ, sacred grounds, historical monument/site), and providing the mechanisms for their establishment and implementation |
| Restoration               | • FLUP allocating certain areas for forest restoration and providing the mechanisms for implementation  
                           | • Without FLUP: Ordinance setting aside certain areas (indicated in the LCA Management Plan) for restoration by natural regeneration, ANR, and reforestation for purposes of e.g., wildlife habitats, soil/slope stabilization, water recharge areas, easements, preservation/maintenance of landform/historical significance, and/or aesthetic values, etc.  
                           | • Without FLUP: Ordinance, as above. |

Workshop. Identification of Conservation Actions

Participants are provided with the results of Sub-Module 2c, including threats hotspots, threats ranking, and direct and indirect threats analysis. Using these, they are coached on preparing at least three conservation action diagrams such as presented above, i.e., one for each of the three threats with the highest overall score in threats ranking.
MODULE 3. LCA Management Plan Formulation

Coverage

At this stage, the LCA working group already shares a certain degree of familiarity about the municipal LCA – its location, area, targets of conservation, ecosystem values, economic benefits, and threats. Module 3 deals with the preparation of the LCA Management Plan. The tasks include:

Sub-Module 3a
- Vision setting
- Goals and objectives setting
- Strategic directions setting
- Performance target setting

Sub-Module 3b
- Financial Planning

Sub-Module 3c
- Developing M and E mechanism

LCA in Polillo Group of Islands, Quezon
Sub-Module 3a. VMGO, Strategic Directions, and Performance Target Setting

Learning Objectives

By the end of the Sub-Module, participants should be able to:

- Discuss key concepts in strategic planning and define differences among vision, goals, objectives, strategic directions, and performance targets
- Discuss relevant information in the Situation Analysis that have to be considered in this strategic planning process
- Identify components of the LCA Management Plan for the achievement of indicated conservation actions
- Draft the LCA Management Plan

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
</tr>
<tr>
<td>8:00 – 8:30 AM</td>
<td>Opening Ceremony</td>
</tr>
<tr>
<td>8:30 – 9:00</td>
<td>Review of LCA Management Planning Process</td>
</tr>
<tr>
<td></td>
<td>Rationale of the Activity</td>
</tr>
<tr>
<td>9:00 – 10:30</td>
<td>Lecture:</td>
</tr>
<tr>
<td></td>
<td>- Strategic Planning Concepts and Tools</td>
</tr>
<tr>
<td></td>
<td>- LCA Management Plan Annotated Outline</td>
</tr>
<tr>
<td>10:30 – 12:00 N</td>
<td>Workshop 1: Vision and Mission Setting</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 3:00</td>
<td>Workshop 2: Goals and Objective Setting</td>
</tr>
<tr>
<td>3:00 – 5:00</td>
<td>Workshop 3: Strategic Direction Setting</td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
</tr>
<tr>
<td>8:00 – 9:00 AM</td>
<td>Review of Day 1 Outputs</td>
</tr>
<tr>
<td>9:00 – 10:00</td>
<td>Lecture:</td>
</tr>
<tr>
<td></td>
<td>Performance Target Setting</td>
</tr>
<tr>
<td>10:00 – 12:00 N</td>
<td>Workshop 4: Performance Target Setting</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 3:00</td>
<td>Workshop 4, continuation</td>
</tr>
<tr>
<td>3:00 – 4:00</td>
<td>Plenary Presentation of Workshop 4 Outputs</td>
</tr>
<tr>
<td>4:00 – 5:00</td>
<td>Action Planning</td>
</tr>
</tbody>
</table>

Table 28. Training Schedule for Sub-Module 3a: VMGO, Strategic Directions, and Performance Target Setting

Target Participants

Participants of this Sub-Module are LCA TWG members.

Expected Outputs

Expected outputs are:

- Vision and missions statements
- Goals and objectives
- Strategic directions
- Performance targets
- Five-year implementation (work and financial) plan
- Draft LCA Management Plan
Process

Sub-Module 3a involves a series of workshops. Input sessions on setting the vision, conservation goals, conservation objectives, and strategic directions—in that order—are first given. After this, an annotated outline of the LCA Management Plan is discussed. Afterwards, the LCA TWG proceeds into workshops. These are aimed chiefly to familiarize the group about the needed work. Lecture and workshop on performance target setting follow. Participants in plenary are then tasked to write the portions of the outline of their choice and a timetable for completion of a draft LCA Management Plan is agreed upon. The necessary works to complete the outputs for Module 3 are actually carried out after the 2-day workshop.

Lecture. Strategic Planning Concepts and Tools; Annotated LCA Management Plan Outline

This lecture focuses on the basic guidelines for setting the LCA Management Plan vision, mission, goals, objectives, and strategic directions.

1) Vision setting lays down the shared practical vision of what the municipality desires to see within the next 5 or 10 years in terms of biodiversity conservation in the LCA. The focus question to be answered in plenary by the LCA TWG is: “What would you like to see in place in the proposed LCA 5 (or 10) years from now?”

2) Terrestrial biodiversity management goals are normally set at the landscape level at the KBA level because biodiversity and its associated ecological processes are characteristic of landscapes. This situation involves several municipalities within the KBA landscape abiding by a common goal. According to Noss (1999), without such a unification of goals, biodiversity is unlikely to be conserved, except by accident.

Figure 8. LCA Management Plan Process

Conservation Vision, Goal, and Objective Setting

Financial Planning

Performance Target Setting

Monitoring and Evaluation

Box 12. Sample Vision Statement

“Mount Nacolod conservation area is protected, conserved and sustainably managed by empowered communities to ensure its life support system through Local Government Unit Alliance.”

Box 13. Sample Conservation Goal Statements

“By year 2020, inter-LGU (landscape level) biodiversity management is realized as a means to better achieve municipal biodiversity conservation objectives”; “by year 2020, X percent of forestlands and watersheds in the municipality are planned and zonified as a means to better manage biodiversity targets”; “by year 2020, the direct and indirect threats to the conservation targets are reduced”; “by year 2020, municipal residents are actively participating in municipal biodiversity conservation efforts”; “by year 2020 there is sustained availability of abundant ecosystem services, particularly water, and freedom from geological disasters (e.g., landslides) for the residents of the municipality.”
3) Basic guidelines in setting conservation objectives are:

- Biodiversity conservation objectives are bio-physical objectives; they are not management objectives like enactment of policies, establishment of ENRO, or linking/networking. This matter will be dealt with in setting management and bio-physical performance targets (in work and financial planning).
- Objectives are quantified statements about what needs to be done to address the direct threats. They deal with the scope and magnitude of the threats being addressed. Objectives can be set by directly addressing the direct threats. In the case of rampant timber poaching, for instance, a good objective would be to stop forest loss and recover X hectares of natural forests by mobilizing a vigorous forest protection and law enforcement campaign directed against violators.
- Alternatively, objectives can be established by dealing with the indirect threats. Rural poverty, for instance, may be indicated by extensive conversion of forests into agricultural croplands (kaingin). A good objective here would be to implement agroforestry in X hectares suitable to long-term cropping or to recover X hectares of unsuitable farmlands for habitat expansion or water production. If there is a need to include certain farmlands or grasslands to allow them to revert to natural conditions, a good objective would be: “to expand the natural system from the existing aggregate of 10,000 hectares consisting of 50 fragments to the original contiguous 20,000 hectares connected by corridors.”
- Always use the results of threat ranking in prioritizing objectives. Avoid desirable but impractical objectives.

Another conservation objective may be stated as: “to retain, protect, and manage x/y hectares (or %) of natural areas, itemized as hectares of open-access natural areas and hectares of tenured natural areas.”

Example: illegal cutting/timber poaching/illegal mining in X hectares (or X barangays) reduced; established connectivity of X hectares of fragmented forests; increased livelihood assistance in X hectares of upland farms to increase farm yields and thereby reduce kaingin expansion; X hectares of firewood production areas established to reduce unauthorized wood gathering in natural forests.

In setting conservation objectives, consider the constraints and opportunities associated with zoning, changes in land uses due to population growth, land tenure, land claims, economic growth, climate change, and geo-hazards.

4) Like vision setting, strategic directions statements rely upon the familiarity of the LCA TWG about the municipal LCA – its location, coverage, targets of conservation, ecosystem values, economic benefits, and threats. Since LGUs in most cases possess little tradition for forest management, particularly biodiversity conservation, it is important to develop an innovative approach that galvanizes action towards achievement of the vision.

**Workshops 1 to 3. Vision, Goals, Objectives, and Strategic Directions Setting**

LCA TWG members are guided to work in a plenary on vision, goals, and objective statements as well as strategic directions.

**Lecture. Performance Target Setting**

Fundamental concepts of performance target setting are provided to participants, which include:

1) Conservation objectives are achieved with the attainment of performance targets. There are two types of performance targets: bio-physical targets and management targets.

2) The biophysical targets are the measurable quantities of work corresponding to the four (4) conservation actions: *retention, protection, recovery, and restoration*. For example, activities that correspond to retention (of, say, remaining second growth forests) may include locking up certain target areas by a mix of physical barriers (e.g., closure of roads, destruction of bridges), legislation (e.g., total ban on permits/licenses, ban on human entry, resettlement/relocation of population), and prevention of leakage (e.g., establishment of wood production areas, resettlement areas, agroforestry areas).

3) Management targets, on the other hand, include provision of conducive policy, periodic plan reviews and updating, monitoring and evaluation, establishment of linkages, and development of cooperative networks, financing strategies (e.g., business plan) and, to some extent, scientific research.

4) Specify gender-sensitive indicators. The latter allow measurement of benefits to women and men. Depending on the policy/project, and referring to the results of the situation analysis, these might include: the impact/effectiveness of activities targeted to address women’s or men’s practical and strategic gender needs i.e. new skills, knowledge, resources, opportunities or services in the context of their existing gender roles/practices that they identified as needed in the conservation management. Examples of indicators are:

- Targeted actions to increase women’s role in decision-making; opening up new opportunities for women/men in non-traditional skill areas that are appropriate.
- Establishment of joint initiative conservation management structure involving men and women resource users and other stakeholders;
- Rules of resource use and access are clearly defined and socially acceptable for both men and women in the community.

Gender-sensitive indicators need to capture quantitative and qualitative aspects of change.

---

Quantitative indicators refer to the significant numbers and percentages of women and men or organizations involved in or affected by any particular group or activity. Quantitative indicators draw on the sex disaggregated data systems and records that have been examined during processes of policy or project planning. The availability of quantitative baseline data means that indicators usually include some element of target setting.

**Workshop 4. Performance Target Setting**

Performance targets are identified through consensus-building using the matrix below.

<table>
<thead>
<tr>
<th>Conservation Goals</th>
<th>Conservation Objectives</th>
<th>Performance Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOAL 1. By year 2020, the direct and indirect threats to the conservation targets are reduced by 50%</td>
<td>Illegally mining in all brgy.s completely reduced • Xx barangays • Xx hectares of mine tailings restored</td>
<td>Enacted and enforced anti-illegal mining ordinance • Ordinance enacted and enforced • Apprehended timber confiscated</td>
</tr>
<tr>
<td></td>
<td>Timber poaching reduced • Xx barangays • Xx km. roads destroyed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Siltation of Tapul River reduced • Xx kms. of easements rehabilitated • Xx hectares of farmlands placed under agroforestry etc.</td>
<td>Enacted municipal ordinance requiring establishment and restoration of river easements • Public-private sector partnership agreements signed • Joint venture/production agreements signed</td>
</tr>
<tr>
<td>GOAL 2: By year 2020, X percent of forestlands and watersheds in the municipality are planned and zonified as a means to better manage biodiversity targets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOAL 3:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This Sub-Module ends with an action planning session to set the timetable and to assign the TWG members who will complete the outputs of the Sub-Modules and draft sections of the Plan following the annotated outline.
Learning Objectives

By the end of this Sub-Module, participants shall be able to:

- Explain why a Financial Plan is needed for implementation of the LCA Management Plan
- Define cost categories – Investment Costs and Maintenance, Operating and Other Expenses (MOOE) – and identify activities belonging to these cost categories
- Identify potential funding sources to close financing gap, thereby achieving financial sustainability

Training Schedule

Table 30. Training Schedule for Sub-Module 3b: Financial Planning

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
</tr>
<tr>
<td>8:00 – 8:30 AM</td>
<td>Opening Ceremony</td>
</tr>
<tr>
<td>8:30 – 9:00</td>
<td>Review of Sub-Module 2a Outputs</td>
</tr>
<tr>
<td></td>
<td>Rationale of the Activity</td>
</tr>
<tr>
<td>9:00 – 10:00</td>
<td>Lecture: Financial Planning for Biodiversity Conservation</td>
</tr>
<tr>
<td>10:00 – 12:00 N</td>
<td>Workshop 1: Estimating Costs for LCA Management Plan Implementation</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 3:00</td>
<td>Workshop 1, continuation</td>
</tr>
<tr>
<td>3:00 – 5:00</td>
<td>Workshop 2: Determining Financing Gap</td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
</tr>
<tr>
<td>8:00 – 10:00 AM</td>
<td>Workshop 2, continuation</td>
</tr>
<tr>
<td>10:00 – 12:00 N</td>
<td>Workshop 3: Determining Financing Gap</td>
</tr>
<tr>
<td>12:00 – 1:00 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00 – 3:00</td>
<td>Workshop 4: Identifying Potential Revenue/Funding Sources</td>
</tr>
<tr>
<td>3:00 – 4:00</td>
<td>Synthesis of Outputs</td>
</tr>
<tr>
<td>4:00 – 5:00</td>
<td>Action Planning</td>
</tr>
</tbody>
</table>

Target Participants

For this Sub-Module, the LCA TWG members are needed. It should be emphasized that the Municipal Budget Officer and Municipal Accountant of the concerned LGUs should be present since it is the aim of the process to lobby for LCE provision of annual budget allocation for the LCA Management Plan implementation in the LGU’s Annual Investment Plan (AIP).

Expected Outputs

Expected outputs of this Sub-Module are the following:

- Estimated costs for LCA Management Plan implementation
- Potential funding sources for LCA Management Plan implementation
- Potential financing mechanisms to close financing gap
A lecture on key concepts and tools in financial planning are provided to participants. Topics to be covered include the following:

1) A Financial Plan is needed to determine:
   • For which activities these resources are needed
   • Amount needed to ensure a timely, effective, and efficient implementation
   • When these resources are needed
   • From whom/which offices the needed resources can be solicited
   • To monitor and evaluate financial sustainability in terms of LCA Management Plan implementation

2) The benefits of doing an LGU-based Financial Plan include:
   • Primary funding source is regular LGU budget allocation
   • Main objective is to have the LCA Management Plan activities included in the AIPs of LGUs
   • LGU needs to tap revenue or funding sources (other than regular LGU subsidy)
   • Transparent and accountable financing mechanisms have to be established

3) Financial planning has two components:
   • Estimating required financing resources to fund the identified implementation activities (COSTS)
   • Determining fund sources that can be tapped to support the implementation activities (BUDGET and REVENUES)

4) Activity-based cost accounting is a useful tool for financial planning.
   • It addresses two critical points:
     – What activities need to be done?
     – How much will it cost for these activities to be done?
   • It is useful in estimating overhead expenses or COMMON COSTS – in which activities are these spent?
   • It recognizes two basic activity cost centers:
     – Production cost center: activity-driven cost with unit of outputs, e.g., reforestation, alternative livelihood activities
     – Overhead cost center: cost-driven activity with no unit cost of outputs, e.g., administration (MENRO), IEC, enforcement

5) Steps in ABC Accounting
   • Identify costs for implementation activities per performance target
   • Identify activities under two types of costs:
     – Investment costs/capital outlays (land, vehicles, equipment, buildings and structures, furniture and fixtures)
     – Annual recurring costs (personnel services, MOOE)

6) Financing Gap is Current Revenue Sources less Required Costs.

7) There is a need to identify potential revenue sources for the following reasons:
   • Subsidies from national/local government units have to be reduced so resources freed up can be used to finance other equally important socio-economic projects
   • Additional financing sources mean increased buy-in of stakeholders, e.g., private sector participation
   • User fees have to accrue to achieve conservation actions
Box 14. Examples of MOOEs

Vehicle and equipment operating expenses
- Maintenance parts and supplies
- Fuel, oil and tires, fluids and lubricants
- Minor repairs

Maintenance expenses
- Cleaning, upkeep and minor repairs, and painting of buildings
- Road maintenance/repairs
- Maintenance of utilities (light, water)
- Landscaping
- Regular maintenance and minor repair of office equipment

Payments for utilities
- Electricity and water
- Telephone, telegrams, communications

Purchase of non-capital goods (consumables)

Other operational and administrative costs
- Training and conferences
- Printing and publications

Box 15. Potential Revenue/Funding Sources

Traditional Sources
- DENR budget
- LGU AIP
  - (20% of Annual Internal Revenue Allotment for Development Projects)
  - DRRM Fund
- Foreign-assisted projects

Market-Based Sources
- Resource extraction fees
- Tourism charges
- Carbon offsets
- Bio-prospecting fees
- Payments for ecosystem services

Changing Behavior
- Community-managed facilities
- Damage payments

External Sources
- Revolving Fund, e.g., pooling of resources of LGUs within alliance
- Grants and donations

Source: REECS, 2013

Workshop 1. Estimating Costs for LCA Management Plan Implementation

Worksheets⁴ to be used in this Workshop are introduced. Participants are guided in the process of estimating required costs for LCA Management Plan implementation.

1) Identify activities under each performance target.
2) For each activity identified, identify sub-activities, persons responsible, and target period for activities.

Table 31. Matrix of Activities per Performance Target (adopted from DENR/BMB-REECS Sustainable Financing of Protected Areas Project)

Source: REECS, Business Planning, 2013

---

⁴ REECS, Business Planning, 2013
3) Identify necessary costs for each activity identified, indicating period when these costs will be incurred.

Table 32. Budget Plan (matrix adopted from DENR/BMB-REECS Sustainable Financing of Protected Areas Project

<table>
<thead>
<tr>
<th>Management Expense</th>
<th>Project Management (Administrative and Operating Costs)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total for 2018-2019</td>
<td>Total for 2020-2021</td>
</tr>
<tr>
<td>Add:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Workshop 2. Estimating Financing Gap for LCA Management Plan Implementation

Procedure for estimating financing gap:
1) Identify current funding sources and estimated project amount within Plan period.
2) Estimate gap between project funds sourced and estimated required costs for LCA Management Plan implementation.

Workshop 3. Identifying Potential Revenue/Funding Sources for LCA Management Plan Implementation

Participants are assisted on:
1) Listing potential CMF fund sources.
2) Projecting when these potential fund sources can be realized.

Table 33. Potential Revenue Sources for LCA Management Plan Implementation

In case the outputs of this Sub-Module are not completed by the end of the two-day Workshop, an Action Plan among the LCA TWG on completion of these outputs is agreed upon among themselves.
MODULE 4. Plan Legitimization

Coverage

Module 4 is about legitimization of the LGU’s Management Plan. It is not actually a training but a process that will push the formal adoption of the Plan by concerned LGUs following the usual procedure of the SB/SP of local governments.

Learning Objectives

By the end of this Module, the LCA TWG shall have facilitated the formal adoption of the Plan by the SB.

Target Participants

Main actors in this Module are the LCA TWG members.

Training Schedule

The plan legitimization process is expected to be completed in about 1-2 months.

Expected Outputs

The Module 4 outputs are:

- Electronic and hardcopies of the draft plan
- Powerpoint presentation
- Documentation report on the stakeholder consultation
- Written MDC endorsement to the SB
- SB resolution endorsing the plan to the DENR for approval
- Hardcopy of the DENR-approved LCA management plan, including letters of transmittal
- Signed Joint DENR-BMB-LGU LCA Implementation Agreement

Process

1) The following is the process involved in Plan legitimization:

- **Step 1.** Conduct of consultations to inform key stakeholders and invite their comments and suggestions regarding the draft LCA
- **Step 2.** Submission of the draft Plan to the MDC to solicit further improvements on the plan
- **Step 3.** Official endorsement of draft Plan by MDC to the SB
- **Step 4.** Once duly endorsed by the SB, the plan is submitted to the DENR for affirmation or concurrence
2) To facilitate the said legitimization process in a participatory manner and ensure support of key decision makers, the guidelines below are provided to the LCA TWG.

- For this legitimization process to succeed at all levels, several small pre-event meetings of the LCA working group will be convened. These meetings will resolve issues related to, among others, the preparation of presentation materials, conduct of rehearsals to improve discussions and anticipate responses to clarifications, and assignation of competent members who will respond to particular issues and undertake post-event follow-through actions, e.g., obtaining copies of endorsements and resolutions.
- It should be ensured that there is balance and meaningful participation of men and women in public hearings. The following questions will have to be considered:
  - Does it meet men’s and women’s needs?
  - Does it improve gender equality?
  - Does it worsen gender inequality?
  - Does it address specific gender issues identified during the planning stage?
  - Does it provide enough resources to implement gender components?

- To facilitate the SB endorsement of the plan to the DENR for approval, it is important to ensure active attendance of the SB representatives in all LCA modules
- To improve opportunities for securing LGU budgetary allocation during plan implementation, it is important to ensure active participation of the Office of the MBO in the LCA planning process
- To facilitate DENR approval of the LCA management plan, it is important to invite the attendance and participation of the Regional Director and cognizant staff during the stakeholder consultations
- The LCA working group will require close DENR-BMB guidance and coaching in carrying out the plan legitimization process

Dalaguete LGU Sangguniang Bayan Resolution
Legitimizing its LCA Management Plan

Resolution No. 03-2014
Page 2

WHEREAS, the Municipality of Dalaguete has an existing Forest Land Use Plan (FLUP) outlining the forest preservation measures to minimize forestland encroachment such as illegal cutting of trees;

WHEREAS, a conservation plan was developed identifying key biodiversity areas, nominating the protection of forest covers, to meet the bio-essential requirement goals of the municipality and at the same time preserving the balance between agricultural production and exportable stability;

WHEREAS, the identified areas (9) key biodiversity areas that are also hosting the watersheds of the different recipient barangays, shall be reserved as permanent protection forest covers of Dalaguete which intersects with the conservation areas of Alocy and Tengo;

WHEREAS, the 9 Key Biodiversity Areas are the following:

1. Parangnayan Range – (Babayengan, Babuy, Tupa, Pata, Mantos)
2. Paya Suara River Strip – (Babuyengan, Langgan, Ole, Calumigan, Sabac, Balayangan, Tepon, Polkawin)
3. Lupsongon-Densing-Pangangi (Capo, Cherkhan)
4. Carurca Peak Natural Landscape – (Montalban)
5. Tarbesen-Labon Forest Patch – (Alaynay, Malaya, Montalban)
6. Cabugang Forest Patch – (Calumigan)
7. Taboc-Collie Forest Patch – (Olang)
8. Mac-Abatan Forest Reserve – (Montalban, Ubo, Dumata)
9. Canaymengro Forest (Caungin)

RESOLVED, as it is hereby RESOLVED, to adopt the Local Conservation Areas (LCA) Plan for CY 2014 of the Municipality of Dalaguete.

UNANIMOUSLY APPROVED.

I HEREBY CERTIFY to the correctness of the aforesaid resolution.

VICTORIA R. MATUGAS
Sec. Secretary

ATTESTED:
JEFREDO B. BERTIN
Pres. Mayor

APPROVED
RONALD ALLAN S. CESARETE
Municipal Planning and Ordinance Formulation

5 Philippine Environmental Governance Project, Integrating Gender into LGU Environment and Natural Resources Planning and Ordinance Formulation
Coverage

The aim of this module is to provide guidance to the LCA working group so that, in turn, the LGU organizes a team or creates an office to implement the approved LCA Management Plan. Once so organized, the LCA working group will also receive DENR-BMB guidance so that, in turn, it can help the appointed implementing team or the newly establish LCA management office prepare the Year 1 implementation plan.

Learning Objectives

By the end of the Module, participants shall be able to:
- Discuss duties, responsibilities, and mechanisms involving institutional support to LCA Management Plan implementation
- Establish local policy support for LCA Management Plan implementation and facilitate execution of the said policy
- Carry out Year 1 implementation plan

Target Participants

LCA TWG members are the ones involved in this process.

Training Schedule

About three months of continuing DENR-BMB technical assistance will be needed to organize the implementing team or office and another 1 month to prepare and obtain approval of the Year 1 implementation plan.

Expected Outputs

The outputs of this module include: (a) Executive Order establishing the LCA implementation team; and (b) approved Year 1 implementation plan and budget.

Process

- Ensure completion of the 5-year implementation schedule and the 5-year work and financial plan before the annual budget call
- Ensure that the Year 1 budget in the 5-year work and financial plan is included in the budget call
- In establishing the implementing team, include the appointment of barangay-level working groups in the organizational structure
- The year 1 implementation plan usually involves work and budget prioritization. Include the barangay-level working groups in the prioritization process
GLOSSARY

ARMM  Autonomous Region in Muslim Mindanao
BACI  Before/After-Control/Intervention
BioCon  Biodiversity Conservation
BMB  Biodiversity Management Bureau
BMS  Biodiversity Monitoring System
CADT  Certificate of Ancestral Domain Title
CBFMA  Community-Based Forest Management Agreement
CDC  City Development Council
CDP  Comprehensive Development Plan
CENRO  Community Environment and Natural Resource Officer
CLUP  Comprehensive Land Use Plan
CMF  Conservation Management Framework
CSC  Community Stewardship Certificate
DENR  Department of Environment and Natural Resources
DILG  Department of Interior and Local Government
FFI  Fauna and Flora International
FGD  Focus Group Discussion
FLUP  Forest Land Use Plan
FPE  Foundation for the Philippine Environment
GEF  Global Environmental Facility
GIZ  Gesellschaft für Internationale Zusammenarbeit
HCVA  High Conservation Value
IFMA  Industrial Forest Management Agreement
IUCN  International Union for the Conservation of Nature
JVA  Joint Venture Agreement
KBA  Key Biodiversity Area
LCA  Local Conservation Areas
LGU  Local Government Unit
LSP  Local Service Provider
M and E  Monitoring and Evaluation
MBO  Municipal Budget Officer
MDC  Municipal Development Council
MENRO  Municipal Environment and Natural Resource Officer
MOA  Memorandum of Agreement
MOOE  Maintenance, Operating and Other Expenses
MPDO  Municipal Planning and Development Officer
MRV  Measurement, Reporting and Verification
MSPL  Manleluag Springs Protected Landscape
MTO  Municipal Tourism Officer
NewCAPP  New Conservation Areas in the Philippines Project
NGO  Non-Government Organization
NIPAS  National Integrated Protected Areas System
PENRO  Provincial Environment and Natural Resource Officer
PBFCFI  Philippine Biodiversity Conservation Foundation Inc.
PPDO  Provincial Planning and Development Officer
PPDP  Provincial Physical and Development Plan
PTFCF  Philippine Tropical Forest Conservation Foundation
REECS  Resources, Environment, and Economics Center for Studies
SB  Sangguniang Bayan
SP  Sangguniang Panlalawigan
SWOT  Strengths-Weaknesses-Opportunities-Threats
TWG  Technical Working Group
UNDP  United Nations Development Programme
USAID  United States Agency for International Development