NATIONAL GOVERNMENT AGENCIES’ GUIDE ON SUSTAINABLE UPLAND DEVELOPMENT (SUD) MODEL
Eradicating poverty remains our single biggest challenge, but we are pleased that we are making a significant headway in the uplands of Southern Mindanao, where we have uplifted the socio-economic condition of more than 10,000 farmers, their families, and indigenous peoples through the successful implementation of the seven-year Upland Development Programme (UDP), graciously funded by the European Union.

On behalf of the Department of Agriculture family, I therefore, commend the men and women of the UDP — along with the scores of individuals from the 144 upland barangays and respective local governments, partner-institutions, NGOs, and other concerned government agencies — who painstakingly devoted their time, skills and resources for leaving behind a lasting legacy: empowered communities engaged in various sustainable farming and livelihood projects, and community development activities.

Such transformation is documented in this Sustainable Upland Development (SUD) Documentation Series, consisting of six guidebooks, which we hope will serve as valuable reference or model for community development workers and agencies to follow suit in undertaking similar initiatives in marginal and fragile upland communities in other parts of the country.

Likewise, through the poignant stories in this documentation, we wish to inspire other individuals and institutions to extend assistance to alleviating the plight of our less endowed, poor and hungry countrymen in the uplands — as our mission and work has just begun, and much more remains to be done.

Once again, we express our deepest gratitude to the European Union, for making UDP a successful reality. And similar appreciation goes to the farmers, their families and indigenous peoples in the 144 upland communities, their respective local officials, partner agencies, and NGOs.

*Daghang salamat kaninyong tanan!*

*Mabuhay ang UDP!*

ARTHUR C. YAP
Secretary
“Whatever happens in the uplands has direct consequences to the lowlands, coastal areas and other ecosystems.”

If we open our eyes to the realities in the environment around us, unregulated deforestation opens vast forestlands to unsustainable agriculture. The Philippines, and many countries in Southeast Asia, are familiar with this reality and its devastating effects on land and natural resources, which is now an issue extending beyond local and political boundaries.

The Upland Development Programme in Southern Mindanao (UDP), a special project of the Department of Agriculture, supported by the European Union, thus confirmed the need for massive adoption and application of appropriate land management, soil and water conservation methods and approaches, and farming systems that will enhance existing farms and prevent further encroachment and protect watersheds.

Since 1999, UDP has gone a long way in promoting sustainable upland development. Many sustainable development practices and technologies have been tested since then and have been found to deserve maintenance if not replication in other problematic areas. Highlighting these is the Sustainable Upland Development (SUD) Model, which was developed as a strategy to ensure sustainable management of the upland resource base and improve the living standards of the communities who derive most of their income from upland farming.

To aid in the implementation of the SUD Model, these SUD Series (Books 1 to 5) have been written purposely for farmers, non-government organizations, local government units, national government agencies, and development assistance institutions as their reference guides. The contents of these books are the products of years of experience of the Programme in close coordination with various partners.

May these publications be one of our legacies to further inspire our individual and organizational development partners in the implementation and replication of the SUD Model and to ensure that these environmentally-sound practices are carried through and sustained in the future. Let us take action towards the fulfilment of sustainable agriculture and watershed protection!

DASHIEL P. INDELIBLE  WIEBE VAN RIJ
National Co-Director   European Co-Director
FOREWORD

The Upland Development Programme (UDP) of Southern Mindanao is a special project of the Government of the Philippines, executed by the Department of Agriculture and supported by a grant from the European Union.

Since January 1999, UDP sought to bring sustainable upland development to the fore, not only to create awareness on its profound effect to the environment, but also to mobilize upland communities into action - like coming to a decision to group themselves; to share knowledge, technology and time; to forego personal convenience over collective good; to think ahead in the future; and to work harder and smarter.

UDP did not focus only on subsistence farmers in the region’s uplands. Indigenous Peoples (IPs), women’s groups, youth and cooperatives/peoples organizations were also part of the circle.

In the same manner, UDP did not work alone. It could never carry the weight of such mission all by itself. Thus, UDP tapped into the network, expertise and resources of the Local Government Units in more than thirty (30) municipalities, dozens of non-government organizations (NGOs) and micro-financing institutions (MFIs), a few donor institutions and of course, the following government agencies:

- Department of Agriculture and its attached agencies
- Department of Environment and Natural Resources
- National Economic and Development Authority
- Housing and Land Use Regulatory Board
- National Commission on Indigenous Peoples
- Department of Trade and Industry

These agencies share the mandate and commitment to improve the quality of life and protect the environment in the country’s uplands.

With their support, a model which is now called the Sustainable Upland Development (SUD) Model took shape. The SUD model intends to illustrate that sustainable resource management and income generation for upland farmers is possible and replicable.

And with the recent adoption of the SUD Model by the League of Municipalities of the Philippines (LMP) through its “Sagip Bundok, Sagip Buhay”, there is a wider venue for collaboration between national and local government.

*How Can I Help? A Guide for National Government Agencies on the Sustainable Upland Development Model* captures the step-by-step process as well as the insights, success stories and innovations resulting from the implementation of the SUD model. But more importantly, it pinpoints potential areas for assistance and collaboration between the upland farmer, local government and national government agencies.

It is written in a manner that makes the six (6) schemes of the model easy to replicate, empower local people and inspire partner organizations to do the same.
May this book encourage your institution to save the uplands for our future generations.
ACKNOWLEDGEMENTS

The Upland Development Programme (UDP) in Southern Mindanao would like to thank the following for making the Sustainable Upland Development Model (SUD) and this Book Series possible:

- **The League of Municipalities of the Philippines (LMP)** – the active participation of your local government units in replicating the SUD Model gave us learning, inspiration and encouragement. Your “Sagip Bundok, Sagip Buhay” reassures us that the SUD Model is in safe hands;

- **The participating local government units and communities in Compostela Valley, Davao Oriental, Davao del Sur, Sarangani Province, South Cotabato and Davao del Norte** – in particular the Provincial and Municipal Planning and Development Offices, Provincial and Municipal Agriculturist’s Offices, Provincial and Municipal Environment and Natural Resources Offices, Provincial and Municipal Engineer’s Offices, the Barangay Captains and Barangay Officials. You made sustainable upland development a reality in your communities by investing your time, your resources and yourselves in the entire process. Because of you, these books have a story to tell;

- **The participating National Government Agencies and their Regional and Local Offices** – namely the Department of Agriculture, Department of Environment and Natural Resources, the Housing and Land Use Regulatory Board, the National Economic and Development Authority and the Department of Trade and Industry. We realized early on that the task of making the SUD Model could not be ours alone. Your contributions amidst limited resources enriched the implementation of every scheme;

- **The Technical Service Providers** – who so generously shared all your knowledge; who so humbly learned and embraced the many lessons from the SUD Model; and whose passion for the SUD Model so clearly demonstrated that replicating the SUD Model was not a job but a vocation. You are the custodians of the technology to replicate SUD and the programme is counting on you to make this happen;

- **To the women and men of UDP** – as you leave the programme that became your second home for many years, consider this not an end but a transition. You worked tirelessly and passionately so that one day, you could pass on the torch of sustainable development, and this book series is part of your legacy; and

- **And finally, to the upland farmers** – when we taught you how to plan, you inspired us to hope and dream; when we taught you how to till and sow, you kept us focused on the reaping and harvest; when we asked you to take care of your forests, you promised to guard them with your life and the generations after, thank you for saving our future.

To all of you, our sincere and humble gratitude.
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<td>CEFE</td>
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<td>Farmers Training Group</td>
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<td>Government Organization</td>
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<td>GOP</td>
<td>Government of the Philippines</td>
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<td>IB</td>
<td>Institution Building</td>
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AGENCY LOGOS

Agriculture Training Institute

Bangko Sentral ng Pilipinas

Bureau of Agricultural Research

Bureau of Plant Industry

Bureau of Soil and Water Management

Department of Agrarian Reform

Department of Agriculture

Department of Budget and Management
Housing and Land Use Regulatory Board

Land Bank of the Philippines

National Commission on Indigenous Peoples

National Economic and Development Authority

National Irrigation Authority

National Livelihood Support Fund

Philippine Credit and Finance Corporation

Philippine Information Agency
INTRODUCTION

If we travel to space and cast a backward glance to earth, what we would see is the swirling and swelling blue expanse, intermittently spotted by brown blotches and the thinning greens. It is often said and repeated, but remains largely ignored - that earth as we know it, may not be able to support all living creatures in the future to come. At the rate it is being ravaged, protecting and preserving earth becomes a matter of utmost urgency.

The Earth Summit in Rio de Janeiro in 1992 (Agenda 21) was one of the momentous manifestations of such call. A global agenda toward sustainable development was asked. Countries were called to establish national mechanisms to formulate and implement their own agenda of action on sustainable development.

As one of the first to comply, the Philippines, through Memorandum Order 288 integrated the principle of sustainable development in the country’s overall development strategies. Several government agencies were given mandate to translate that principle into specific laws, programs, reforms and activities.

In February 2007, Executive Order No. 606 entitled “Pursuing Sustainable Upland Development Anchoring on Food, Wood, Non-wood Security and Economic Productivity and Providing the Mechanisms for its Implementation and for Other Purposes” expounded on the roles and coordinative relationship of the national government and local governments in the sustainable development of the country’s uplands.

This Guide is written for national government agencies (NGAs), particularly the smaller units within the bureaucracy that are:

- Involved in improving the lives and protecting the forests in the uplands
- Committed to devoting time and resources to introducing, implementing, monitoring and evaluating the Sustainable Upland Development (SUD) model, as it is being replicated in different parts of the country

This Guide contains the six (6) schemes of the SUD Model:

a) Land Use Based - Barangay Development Planning

This scheme is the lynchpin of the entire Sustainable Upland Development Model. It builds on the current Barangay Development Plan, but brings it one step further by incorporating: 1) genuinely participatory planning processes, where the community is the true author of the Plan, from profiling and situational analysis to development planning and organizational management; and 2) land use planning, whereby the conflict

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1 The full text of Executive Order No. 606 is provided in Appendix A.
between environmental sustainability and economic development is settled through an effective delineation of areas by their appropriate land uses, which then becomes the basis of all development interventions. In a sense, the scheme allows the stakeholders to chart their own collective destiny and requires them to be more participative in safeguarding their upland resources.

b) Upland Agricultural Extension

Upland areas are characterized by very steep slopes and their soils are described as infertile, shallow and highly-erodible, making farming arduous and at worst, an unsustainable activity. The scheme calls for the introduction of the Diversified Farming System (DFS) and fielding of agricultural technicians who have extensive understanding and knowledge on the system as well as commitment to share knowledge. For maximum appreciation of the technology and practice being introduced, the scheme also calls for the farmers’ exposure to model farms, cross-visits, information exchange and access to reading materials and radio programs. In time, the farmers develop essential competencies, host learning sites and transfer their knowledge to other upland farmers, in a way that ripple effect can do.

c) Barangay Forest Protection and Management

Massive farming altered what used to be an expansive forest cover in the region. Left in its wake are pockets of small to medium-sized patches of natural and second-growth forests. To protect these pockets from further incursion, the scheme recommends incorporating the function of forest protection and management at the barangay level. This entails a solid partnership between the barangay officials and the community, diligence of a barangay forest management committee and presence of dedicated forest guards.

d) Labor-Based Routine Road Maintenance

Roads are more than links to the lowland communities. The state and length of available roads also affect the income of upland farmers. This particular scheme emphasizes the value of voluntary and regular maintenance of the road network by people within the barangay. Trained crew, appropriate road technology and proper tools are essential in ensuring that roads to and from upland communities are kept in serviceable condition.

e) Rural Financial Services

Distance, perception of high risk and limited market are what stand in between upland farmers and their access to financial services. This scheme is implemented by two Government Financial Institutions (GFIs): the Landbank of the Philippines
(LBP) for agri-lending and the Peoples Credit and Finance Corporation (PCFC) for micro-finance service delivery. The GFIs wholesale loans and provide institution-building support to rural banks, cooperatives and micro-finance institutions (MFIs) that are interested to reach out to upland farming households. Potential borrowers are encouraged to save and to use the savings as capital build up. Coaching and marketing support are integral to ensuring that each financial venture will attain a degree of success.

f) Village Enterprise Development

Every farmer can be an entrepreneur. The essence of this scheme is to veer from subsistence farming and engage in a more commercially-rewarding activity is the essence of this scheme. Farmers initially receive key concepts on entrepreneurship and avail of business development services from business development service providers. Products that are produced abundantly in a particularly upland area are then consolidated and offered to an institutional buyer for a possibility of medium-to-long term arrangements. Transparency, sound management practices, adherence to quality and clear delineation of responsibilities likely sustain and expand such village enterprises. Support for VED is private sector led.

This Guide was developed over a thirteen-month period, and the process was characterized by the following:

a. Participatory Approach - from conception to publication, all stakeholders were consulted in both formal and informal settings, in order to capture their knowledge, experiences and lessons in implementing the SUD Model. Upland farmers and organizations, local government units, non-government organizations, national government agencies, development assistance institutions, and the development workers of the UDP - all of them are authors of this book.

b. Iterative Process - in each of the development phases of this book - Preparatory, Technical Design, Document Preparation, Prototyping, Field Testing, Printing and Packaging - there was a repetitive process of input development, validation through consultation, revision and finalization. This investment in time, effort and resources for this book was made with only one goal in mind: YOU, the reader.

This Guide proposes how each NGA can come into the picture and contribute to keeping the upland resources protected, conserved and developed. It suggests the possible areas for assistance through a set of Pink Arrows or Pink Boxes. If a specific NGA is mentioned in the box, then its logo appears, as seen below. Otherwise, the note applies to all NGAs.

Note to the NGAs: (Area or Concern)
To some extent, the chapters build on each other, but this Guide can be read selectively. At the end of each chapter is a *Summary of Required Interventions from NGAs in Implementing the Scheme*. The summary tabulates tasks within the scheme where specific NGAs could be of assistance.

Lastly, this Guide is organized by scheme rather than by agency, to emphasize the need for collaboration among the different agencies, local government units (LGUs), non-government organizations (NGOs), microfinancing institutions (MFIs), and development organizations.
CHAPTER 1: Land Use-based Barangay Development Planning

1.1 THE CONVENTIONAL WAY OF DOING THE BARANGAY DEVELOPMENT PLAN

The Land Use Based Barangay Development Planning (LUB-BDP) was not familiar or popular prior to the introduction of the SUD Model.

_The barangay plan was and initiative and handiwork of the Barangay Captain._ In the past, Barangay Captains had the sole hand in crafting their own BDP, sometimes aided only by their Barangay Treasurer. Other barangay officials, _Purok_ leaders and sectoral organizations existing in the community were not called in to contribute in the plan. Identification of projects and their respective prioritization was not supported by situational analysis, much less a land-use study. What surfaced was a document that mirrored the personal perceptions and the political preferences of the Barangay Captain.

_The BDP was a “for compliance” document to release the barangay budget._ BDPs such as these did not awaken collective ownership nor accountability. Its existence was primarily to comply with the government’s administrative requirement prior to the release of annual barangay budget.

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#1 Note to the NGAs: PRESENCE IN LUB-BDP

The Housing Land Use and Regulatory Board (HLURB) has gone down to the barangay level as the LUB-BDP was being operationalized. As mandated, they are to assist the LGUs in preparing their respective Comprehensive Land Use Plans (CLUPs) and through it, they have close coordination with the Barangay Development Councils (BDCs) in gathering socio-economic data and economic development priorities.

HLURB has provided technical advice to the LGUs in preparing the LUB-BDP and they emphasized that the Plan must be consistent with the Municipal CLUP, in form and in content. While this may require considerable time and manpower among the concerned NGAs, what is worth exploring is how the different NGAs can provide technical advise in a unified manner, down to the barangay level.

1.2 BRIEF DESCRIPTION OF THE SCHEME

An area’s (in this case, a municipal or barangay) development journey begins with a plan - a plan that has to be deliberated on by the community, consider the resources and potentials of the area, with responsibilities explicitly delineated. The entire process of preparing the Land Use Based - Barangay Development Plan (LUB - BDP) demands devoted staff, time, consensus gathering and cost.

BLUE BOX NO. 1: EXACTLY WHAT IS AN LUB-BDP?

► A Barangay Development Plan (BDP) is a centerpiece document that identifies the development priorities, needs and interests of the local community. The BDP, even without the Land Use Plan, is required under the Local Government Code and is the basis of the internal revenue allotment of the barangay.

► A Land Use Based Barangay Development Plan (LUB-BDP) is an enhanced BDP that is anchored on the physical plan of the lands and its natural resources within the barangay. It provides a clear visualization of locally-delineated forest lands, agricultural land and other land use classifications to ensure appropriate use of the lands within the territory of the barangay. It is a workable, cohesive and rational plan that serves as the basis for the sustainable uses of limited upland resources within the barangay.

► The LUB-BDP becomes the core guide of the Barangay LGU in regulating the lands and its natural resources within the community and ensures that continued denudation and degradation of upland areas and forestlands are not further sustained by an expanded use of upland areas for agricultural purposes. LUB-BDP is the “lynchpin” of the entire sustainable upland development strategy.

Source: UDP Pre-Completion Report, October 2005.

1.2.1 Rationale of the Scheme

LUB-BDP is the basis for all interventions in the SUD Model. The LUB-BDP is included in the SUD Model because it serves as the cornerstone of all the activities that are going to be implemented in the barangay. With the LUB-BDP clearly detailing the strategies, priorities and concerns of the local community, the government and other development partners are able to plan and provide their interventions in a manner which they are required and expected.

LUB-BDP is Participatory Governance in Action. Secondly, the LUB-BDP process promotes people empowerment, good governance and sustainable development. The community is involved in the decision making process, in mobilizing their area’s resources and strengthening social ties. The barangay officials on the other hand can exhibit their transparency, accountability and management skills in handling conflicts (of interests, priorities, etc.).
LUB-BDP is a Barangay’s Contribution to Sustainable Development. Lastly, the plan pays close attention to land use, forest protection and rehabilitation - issues of increasing importance and urgency these days.

1.2.2 Objectives of the Scheme

From the perspective of the NGAs, undertaking the LUP-BDP process falls right within the government approach of:

- Promoting participatory approach wherein all sectors in the community are involved in the decision making process;
- Supporting LGU-led implementation of activities since it is the barangay and municipal officials who will initiate the planning process;
- Using area-based approach because the plan uses the results of a situational analysis and land-use survey (the specific characteristics and comparative advantage are taken into consideration);
- Upgrading the capability of the local people in policymaking, resource mobilization, project implementation, and monitoring and evaluation;
- Advocating productivity-improvement schemes by choosing only those activities that are environmentally-sound, economically viable and culturally-correct (in relation to the IPs belief and values);
- Implementing focused interventions as response to the expressed need of the local communities; and
- Endorsing counterpart approach whereby local communities are to identify and volunteer their contribution to achieving the plan; which in turn, promotes ownership and slowly do away with the dole-out mentality.

1.2.3 Pre-requisites for Implementing the Scheme

a) Geographic Pre-requisite

None. LUB-BDP can be implemented in any upland as well as lowland area.

b) Community Pre-requisites

At the Barangay Level

Literacy. Limited literacy poses no restriction as to which community can undergo the planning process. What is important is to make the PRA tools and the community planning writeshop more understandable to those who cannot read and write. At least two (2) persons (Barangay Secretary and a
Sangguniang Kabataan) in the barangay must be assigned to document the outputs and other highlights of the activities.

**Openness to Change.** It is also important to encourage the atmosphere of openness where the planning process is to take place. Those who will participate must be receptive to change from the traditional mode of planning to the more participatory and land-use oriented scheme.

**Time and Effort.** LUB-BDP is not a one-shot deal. It must be emphasized that the people’s involvement is for the long haul - it may be necessary to call for several meetings (for the Barangay Council only, the BDC session, the entire general assembly, the Purok Leaders for the perimeter survey). Refining and finally having the plan endorsed may take weeks, if not months, to complete. However, once the LUB-BDP is completed and the processes mainstreamed into the regular planning process at the barangay level, updating the plan would require considerably less time and effort on the part of the community.

**At the Municipal Level**

**Deployment of staff.** LGUs are to extend full support to the staff who will be deployed as members of the LUB-BDP Team. But once the scheme has been mainstreamed to the planning process, it becomes part of the regular duties and responsibilities of the municipal staff.

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**#2 Note to the NGAs: CAPACITY OF LGUs**

LGUs are to initiate activities related to the LUB-BDP process. Some LGUs may not be ready to immediately undertake the scheme, citing the lack of human resources, technical expertise and even funds. They may need varying forms and levels of assistance - to prepare them for the LUB-BDP.

**Funds.** Lastly, the availability of funds puts the icing on the cake. Getting people together, visiting other barangays or municipalities, securing equipment and materials, building up people’s skills and assessing the progress and impact of the planning process involve expenses.
BLUE BOX NO. 2: INITIAL FRUITS OF LUB-BDP

People in Barangay Datu Danwata, Malita, Davao del Sur had been clamoring for decades for a road that would connect them to the poblacion. They inundated local and national officials with barangay resolutions, seeking to have that nine (9) kilometers stretch finally paved. Their request fell on deaf ears - not until they specifically included it in their LUB-BDP. Approved and funded, the people now enjoy a road that reduces the cost of transportation by half and the travel time reduced from one whole day to half day.

Other barangays were just as happy. By putting on record their exact and realistic requirements, more support began pouring in, their appropriations increased to as much as 5 to 10 times the total costs of funds compared to the previous years. Barangay Naga in Laak, Compostela Valley had 6 times more than the previous years and Barangay Ibo in Malita, Davao del Sur received as much as Php 30 million (and that was just for a barangay!).

Source: UDP Pre-Completion Report, October 2005.

c) Legal, Institutional and Other Documentary Pre-requisites

No documentary or legal criteria required. However, documents, resolutions, maps and committees will be produced/created in the process of doing the LUB-BDP scheme.

1.3 THE SCHEME: STEP-BY-STEP

1.3.1 Summary of Steps

LUB-BDP has a total of fifteen (18) chronological steps as illustrated below:
Figure 1.1 19 Steps in LUB-BDP

- **STEP 1:** Orientation to Barangay Councils, Sangguniang Bayan and Association of Barangay Captains
- **STEP 2:** Formation of the Municipal LUB-BDP Team
- **STEP 3:** Formation of Technical Advisory Group
- **STEP 4:** Barangay Orientation and Action Planning
- **STEP 5:** Barangay LGU Consultation on Barangay Boundaries
- **STEP 6:** Actual Perimeter Survey
- **STEP 7:** Processing and Production of Barangay Perimeter Map
- **STEP 8:** Barangay Census/Secondary Data Gathering
- **STEP 9:** Barangay Profiling: Participatory Rapid Appraisal (PRA) Workshop and Thematic Mapping
- **STEP 10:** Situational Analysis (Land Use and Sectoral)
- **STEP 11:** Barangay Planning
- **STEP 12:** General Assembly/Public Hearing: Validation and Approval of Barangay Ordinance
- **STEP 13:** Digitization of Thematic Maps
- **STEP 14:** LUB-BDP/AIP MIS Data Encoding
- **STEP 15:** Writeshop on LUB-BDP
- **STEP 16:** Cross-Sectoral Technical Validation
- **STEP 17:** Presentation to MDC and SB and Formulation of Resolution Approving the LUB-BDP
- **STEP 18:** Integration to the Municipal CLUP, Municipal CDP and Municipal AIP
- **STEP 19:** Implementation, Monitoring and Evaluation of the LUB-BDP
### 1.3.2 Detailed Description of Each Step

**STEP 1: ORIENTATION TO BARANGAY COUNCILS (BC), SANGGUNIANG BAYAN (SB) AND ASSOCIATION OF BARANGAY CAPTAINS (ABC)**

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>At the end of this stage, the barangay local government unit (BLGU) has expressed its appreciation for the SUD and LUB-BDP. At the municipal level, the SB should be convinced of the necessity of forming a Municipal LUB-BDP Team that will pursue the implementation of the scheme.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisites:</td>
<td>Prior to the orientation, the Mayor must already have an overview of the planning process, possibly presented during the League of Municipalities meeting in the province or other similar gatherings. Invitation to this orientation can now proceed.</td>
</tr>
<tr>
<td>Lead Player:</td>
<td>Municipal Planning and Development Coordinator (MPDC)</td>
</tr>
</tbody>
</table>
| Participants:     | - Mayor  
- Barangay Councils (BCs)  
- Sangguniang Bayan (SB)  
- Association of Barangay Captains (ABC)  
- Mayor’s Executive Secretary or Administrative Officer  
- Municipal Agricultural Officer (MAO)  
- Municipal Agricultural Technician (AT)  
- Municipal Agrarian Reform Officer (MARO)  
- Municipal Health Officer (MHO)  
- Municipal Local Government Officer (MLGO)  
- Municipal Environment and Natural Resources Officer (MENRO)  
- Municipal Engineer (ME or MEO)  
- Municipal Budget Officer (MBO)  
- Municipal Tourism Officer (MTO)  
- Municipal Accountant (MACCO)  
- Municipal Assessor (MASSO)  
- Municipal Social Welfare and Development Officer (MSWDO)  
- Municipal Tribal Council |
### STEP 1: ORIENTATION TO BARANGAY COUNCILS (BC), SANGGUNIANG BAYAN (SB) AND ASSOCIATION OF BARANGAY CAPTAINS (ABC)

<table>
<thead>
<tr>
<th>Facilitating Factors:</th>
<th>The Municipal Mayor issues a directive for the BCs, SB, ABC and municipal line agencies to attend the orientation. The schedule is made in conjunction with the Mayor’s knowledge or availability. In areas where jurisdiction is wide or access to different barangays is difficult, you will need sufficient lead time in delivering notices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Things to Watch Out For:</td>
<td>The LGU assigns a person or team to do the confirmation of the invited participants. The Barangay Captains appoint an alternate representative should they not be available on the scheduled date.</td>
</tr>
<tr>
<td>Resources Needed:</td>
<td>All target participants are to be given copies of the SUD Brochures and other IEC materials for their background information.</td>
</tr>
</tbody>
</table>

### STEP 2: FORMATION OF THE MUNICIPAL LUB-BDP TEAM

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>The Municipal Mayor shall have formed a Municipal LUB-BDP Team thru an Executive Order, specifying the team leader and the team members.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisites:</td>
<td>A list of suggested team members is given to the Mayor.</td>
</tr>
</tbody>
</table>
| Lead Player:      | MPDC - to finalize the list of members and draft the Executive Order  
|                   | Mayor - to sign the Executive Order                                                                                           |
| Participants:     | Executive Secretary or Administrative Officer to facilitate the signing of the Executive Order                                     |
| Facilitating Factors: | The Mayor or his staff selects team members based on their position, time and commitment to the LUB-BDP process. |
| Things to Watch Out For: | Paperwork, funds and other formalities may lead to the possible delay in the release of the Executive Order and late dissemination of copies to line agencies concerned. |
### STEP 2: FORMATION OF THE MUNICIPAL LUB-BDP TEAM

| Resources Needed: | Copy of a sample list from other MLGUs that have successfully installed its Municipal LUB-BDP Team. |

### STEP 3: FORMATION OF TECHNICAL ADVISORY GROUP

| Expected Outputs: | At the end of this stage, a Technical Advisory Group would have been organized, whose primary role is to assist the Municipal LUB-BDP Team and the community in the different steps of the LUB-BDP. |
| Pre-requisites: | Letter from the respective offices / agencies appointing technical staff to be the permanent member of the Technical Advisory Group. The letter may also indicate alternate of the appointed official member. |
| Lead Player: | MPDC |
| Participants: | Proposed members of the Technical Advisory Group, to include representatives from: |
| | - Department of Environment and Natural Resources (DENR) |
| | - National Commission on Indigenous Peoples (NCIP) |
| | - Provincial Local Government Unit (PLGU) - Provincial Planning and Development Office (PPDO) |
| | - Department of Agrarian Reform (DAR) |
| | - Other concerned agencies |
| Facilitating Factors: | Attendance of the proposed Technical Advisory Group members to the Orientation (Step 1) would provide them with an overview of the project vis-à-vis the mandate of their agency or institution. With this information, they can more readily decide on, and commit to, membership in the Technical Advisory Group. |
| Things to Watch Out For: | The process of designating specific individuals to the Technical Advisory Group may differ from one agency to another. This should be anticipated through constant coordination with the concerned agencies. |
| Resources | Copy of a sample list from other MLGUs that have |
**STEP 3: FORMATION OF TECHNICAL ADVISORY GROUP**

**Needed:** successfully organized its Technical Advisory Group.

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**#3 Note to the NGAs: EXPANDING LUB-BDP**

If it comes to a point when all barangays must go through the LUB-BDP process, the existing line-up of LUB-BDP service providers may not be sufficient. UDP was able to assist in 22 LUB-BDP (as of September 2006) in its term. NGAs, such as the Department of Agriculture (DA) and Department of Interior and Local Government (DILG) may be able to refer new and equally-capable teams.

Recommended in the UDP Pre-Completion Report (October 2005) is for the LGUs to adopt the lump-sum, municipal wide service contracting arrangement with the service providers to ensure continued technical assistance and support to the LUB-BDP Teams, until all the LUB-BDPs have been completed.

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**STEP 4: BARANGAY ORIENTATION AND ACTION PLANNING**

**Expected Outputs:** Barangay officials and residents shall have expressed their willingness to participate in the LUB-BDP process. In the same step, an Action Plan on how to proceed with implementing the LUB-BDP scheme would have been formulated.

**Pre-requisites:** With the Municipal LUB-BDP Team and the Technical Advisory Group already created, this next activity gives the barangay an initial glimpse of the planning process, solicits their feedback, assesses their interest and generates their awareness and commitment.

**Lead Player:** Municipal LUB-BDP Team takes the lead in conducting the activity.

**Participants:** Purok Leaders
STEP 4: BARANGAY ORIENTATION AND ACTION PLANNING

- Barangay constituents

Facilitating Factors:
Barangay Captain is informed of the schedule of the orientation and has sufficient time to disseminate this to the Purok Leaders and the constituents. Other means of communication must also be explored at this stage - such as the use of tarpaulin, radio announcements and posting in bulletin boards in Barangay halls, local market and churches.

Things to Watch Out For:
Purok Leaders and the barangay constituents, especially the upland dwellers or forest occupants are properly informed of the schedule. Extra effort is required to guarantee their participation in the orientation, because it has great bearing on the success of the LUB-BDP.

Resources Needed:
- Proposed Orientation Programme
- Visual aids
- IEC materials about SUD and LUB-BDP

#4 Note to the NGAs: NGA’s ROLES

The National Commission on Indigenous Peoples (NCIP) coordinates closely with IP leaders and communities. The Department of Social Welfare and Development (DSWD) works with women and youth groups. The Department of Agriculture (DA) also deals with farmers in the upland areas.

NGAs that have opportunities to work with these groups may also pitch in in creating awareness on the importance of the LUB-BDP process and encourage these sectors to attend barangay orientations.
BLUE BOX NO. 3 TESTIMONIAL FROM SAN ISIDRO, DAVAO DEL NORTE

“The municipality of San Isidro, Davao del Norte is a new municipality. All of its 13 barangays are considered uplands or feature as gently sloping to steep hills and mountains. The SUD model was piloted initially in two of its barangays: Mamangan and Dacudao. Land use based barangay development planning was also introduced to enable the barangays to identify both their agricultural and forest lands for appropriate technologies and management decisions by the locals. More than anything, LUB-BDP has encouraged greater social participation even among the marginalized sectors, including the indigenous peoples settling in the barangays.

With the initial gains in its two pilot barangays for upland development, the municipality of San Isidro decided to adopt the Sustainable Upland Development model schemes for their development strategy. Thus, from two barangays, the schemes of the SUD model are now being implemented at various stages in all of the 13 barangays of the municipality.”

(Excerpts from presentation of Mayor Tomas R. Abelita, Jr. Mindanao Island Conference on “Sharing of Best Practices on Sustainable Upland Development”, May 23 to 26, 2006, Apo View Hotel, Davao City)

STEP 5: BARANGAY LGU CONSULTATION ON BARANGAY BOUNDARIES

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>The barangay boundaries would have been established and agreed upon by the BLGU, the community and, ideally, the adjoining or surrounding BLGUs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisites:</td>
<td>Secondary data documenting the barangay boundaries should be made available (e.g. existing barangay development plans, municipal comprehensive development plans or municipal land use plans) as basis for determining the actual boundaries.</td>
</tr>
<tr>
<td>Lead Player:</td>
<td>Sangguniang Bayan&lt;br&gt;Barangay Captain</td>
</tr>
<tr>
<td>Participants:</td>
<td>Purok Leaders&lt;br&gt;Barangay constituents</td>
</tr>
<tr>
<td>Facilitating Factors:</td>
<td>The participation of Barangay Captains and/or officials of the adjoining or surrounding barangays not only ensures smooth conduct of the consultations, but it also generates consensus on the barangay boundaries agreed upon.</td>
</tr>
<tr>
<td>Things to Watch</td>
<td>It should be emphasized that the barangay boundaries are</td>
</tr>
</tbody>
</table>
### STEP 5: BARANGAY LGU CONSULTATION ON BARANGAY BOUNDARIES

**Out For:** being determined for planning, and not political, purposes. Where the issue of barangay boundaries is a potential source of conflict, extreme care and diplomacy should be used in handling this step.

**Resources Needed:** Maps and other Materials documenting barangay boundaries

### STEP 6: ACTUAL PERIMETER SURVEY

**Expected Outputs:** The BLGU and the Municipal LUB-BDP Team (GIS-GPS) would have conducted a perimeter survey of the entire barangay.

**Pre-requisites:** The Barangay Captain should be consulted on the best schedule to conduct the GPS/GIS survey. Purok Leaders, Barangay Kagawads and officials from adjacent barangays are invited to join the survey so that territories are properly marked.

**Lead Player:**
- BLGU
- Municipal LUB-BDP Team (GIS-GPS)

**Participants:**
- Representatives from adjacent barangays to provide input regarding territorial boundary
- Barangay Kagawad chairs of the following committees: Infrastructure, Economic, Agriculture or Environment
- Purok Leaders

**Facilitating Factors:** The schedule should be mutually agreed upon by all parties and the adjacent barangays should have also consented to sending their representatives to the survey.

**Things to Watch Out For:** The standards and specifications (or indicators) should be agreed upon before the actual survey so that the use of GPS can be fully optimized. The GPS equipment should be tested prior to the field work to make sure that it is functioning. The GPS operator should be available for this activity.
#5 Note to NGAs: BSWM AND LAND-USE

The Bureau of Soils and Water Management (BSWM), a technical arm of the DA, may also be consulted on matters related to perimeter survey and the production of maps. Since the bureau provides training for the LGU staff on land use, production and interpretation of maps on a counterparting scheme, it may consider disseminating this information to LGUs that do not have trained staff or enough funds to pay for consultants.

STEP 7: PROCESSING AND PRODUCTION OF BARANGAY PERIMETER MAP

Expected Outputs: After the perimeter survey, the BLGU should be able to produce its Barangay Perimeter Map that should:

- Delineate the planning unit for the land use mapping, using the natural landmarks of the barangay boundary as determined by the communities
- Situate the location of the barangay in the NAMRIA topo map
- Determine the exact total land area of the barangay

Pre-requisites: The completion and documentation of the Perimeter Survey
<table>
<thead>
<tr>
<th>Step 7: Processing and Production of Barangay Perimeter Map</th>
</tr>
</thead>
<tbody>
<tr>
<td>is necessary before this step can proceed.</td>
</tr>
<tr>
<td><strong>Lead Player:</strong>  Municipal LUB-BDP Team (GIS-GPS)</td>
</tr>
<tr>
<td><strong>Facilitating Factors:</strong></td>
</tr>
<tr>
<td>All the equipment and supplies should be sufficient and</td>
</tr>
<tr>
<td>readily available for the immediate production of maps.</td>
</tr>
<tr>
<td><strong>Things to Watch Out For:</strong></td>
</tr>
<tr>
<td>The Municipal LUB-BDP Team (GIS-GPS) should devote ample</td>
</tr>
<tr>
<td>time to complete the Barangay Perimeter Map, which is</td>
</tr>
<tr>
<td>the foundation for all the other thematic and analysis</td>
</tr>
<tr>
<td>maps of the LUB-BDP process.</td>
</tr>
<tr>
<td><strong>Resources Needed:</strong></td>
</tr>
<tr>
<td>▪ Results of Perimeter Survey</td>
</tr>
<tr>
<td>▪ Print and ink necessary for production of maps</td>
</tr>
</tbody>
</table>
BLUE BOX NO. 4 LUB-BDP IN ACTION

The LUB-BDP process does not have to take place in a formal atmosphere nor is it limited to professionals.

In LUB-BDP, it can take place anywhere and the main participants are the farmers, Indigenous people, women, youth and all other who has stake in the community’s development. Language, examples and even the PRA tools are adjusted to their limitations and experience.

SSTTEEPP 88::    BBAARRAANNGGAAYY  CCEENNSSUU//SSEECCOONNDDAARRYY  DDAATTAA  GGAATTHHEERRIINNGG

Expected Outputs:

At the end of this step, the following secondary data should have been generated as inputs to the LUB-BDP:

- Barangay History
- Demography
- Physical Characteristics and Natural Features (e.g. existing land use map)
- Sectoral characteristics (Economic, Socio-Cultural, Infrastructure, Local Government and Environment Services)
### STEP 8: BARANGAY CENSUS/SECONDARY DATA GATHERING

<table>
<thead>
<tr>
<th>Pre-requisites:</th>
<th>An orientation should be conducted for the enumerators/researchers who will assist the MPDC in gathering secondary data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Player:</td>
<td>MPDC</td>
</tr>
<tr>
<td>Facilitating Factors:</td>
<td>Pre-printed templates that serve a dual purpose of a research outline and documentation tool facilitate the census and data gathering process.</td>
</tr>
<tr>
<td>Things to Watch Out For:</td>
<td>Conflicting information from different secondary data sources should be temporarily parked but later on be resolved during the participatory rapid appraisal and thematic mapping activity (Step 9).</td>
</tr>
<tr>
<td>Resources Needed:</td>
<td></td>
</tr>
</tbody>
</table>
  - Secondary data sources - e.g. existing maps, plans, profiles  
  - Funds for transportation and reproduction |

### STEP 9: BARANGAY PROFILING: PARTICIPATORY RAPID APPRAISAL (PRA) WORKSHOP AND THEMATIC MAPPING

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>At the end of this activity, Municipal LUB-BDP Team (Facilitators) shall have gone through the different tools of the PRA, validated the secondary data gathered (Step 8) and produced the required thematic maps.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisites:</td>
<td>The Barangay Captain should be informed early of the schedule as well as the possible counterpart of the barangay. The venue should be agreed upon by the Barangay Captain and the Municipal LUB-BDP Team (Facilitators).</td>
</tr>
<tr>
<td>Lead Player:</td>
<td>The Municipal LUB-BDP Team leader leads this activity. He/she prepares letter, gets the mayor to sign it and approve the budget. He/she is also expected to be the lead facilitator of the workshop.</td>
</tr>
<tr>
<td>Participants:</td>
<td>BDC to participate in the workshop.</td>
</tr>
</tbody>
</table>
### STEP 9: BARANGAY PROFILING: PARTICIPATORY RAPID APPRAISAL (PRA) WORKSHOP AND THEMATIC MAPPING

| Documentors (both barangay secretary and one of the documentors of the Municipal LUB-BDP Team). |

**Facilitating Factors:**
A conducive venue, efficient training team and expert resource persons would help the participants undergo this mentally rigorous and intensive workshop and come up with the desired outputs.

**Things to Watch Out For:**
Attendance of Purok Leaders, tribal leaders and upland dwellers is necessary. Equally important is a documentation of the proceedings, both on paper and on audio tape.

**Resources Needed:**
Workshop materials such as two (2) or more dozens of manila paper, pentel, pens, cellophane for overlay, masking tape, scissors, idea cards, title cards, crayons, documentation logbook, tape recorders, blank cartridges, batteries for tape recorders, first aid meds, rulers, registration logbook or attendance sheets, participant kit (notebook, pen, pencil, pad paper). Some facilitators may require computer and LCD projector for their presentations.

### STEP 10: SITUATIONAL ANALYSIS (LAND USE AND SECTORAL)

**Expected Outputs:**
At the end of this step, Municipal LUB-BDP Team (Facilitators) should be able to consolidate the data gathered from the previous steps (i.e. steps 5 to 9) and prepare a Situational Analysis as follows:

**LAND USE**
- Land Use Issues and Conflict Map - which is produced after doing a Map Overlay Analysis of the thematic maps produced in Step 9.
- Proposed Land Use Map - which embodies the Land Use Plan of the barangay.

**SECTORAL**
- Sectoral Analysis - wherein the community participates in identifying the issues and problems per sector.
### STEP 10: SITUATIONAL ANALYSIS (LAND USE AND SECTORAL)

- **Cross-sectoral Analysis** - taking off from the sectoral analysis, the relationships (i.e. cause and effect) between and among the problems and issues per sector are determined, using the tools of Problem Tree, Strengths-Weaknesses-Opportunities-Threats (SWOT) and Fishbone Analyses.

#### Pre-requisites:
Steps 5 to 9, i.e. the perimeter survey, barangay perimeter map, barangay census and secondary data gathering, participatory rapid appraisal and thematic mapping, should have already been completed.

#### Lead Player:
Municipal LUB-BDP Team (Facilitators)

#### Participants:
- BDC to participate in the activity
- Documentors (both barangay secretary and one of the documentors of the Municipal LUB-BDP Team).

#### Facilitating Factors:
The venue has to be conducive for this intense activity.

#### Things to Watch Out For:
Key people whose inputs are necessary must be present in the activity. The documentors are also required to be thorough in their tasks, so that agreements are not only gotten across but also recorded and incorporated in the plan.

#### Resources Needed:
Writeshop materials such as two (2) or more dozens of manila paper, pentel pens, masking tape, scissors, idea cards, title cards, documentation logbook, tape recorders, blank cartridges, batteries for tape recorders, first aid meds, rulers, registration logbook or attendance sheets, participant kit (notebook, pen, pencil, pad paper). Computer and LCD projector are optional.

### STEP 11: BARANGAY PLANNING (5-YEAR LAND USE BASED BARANGAY DEVELOPMENT PLAN, ANNUAL INVESTMENT PLAN, ORGANIZATIONAL STRUCTURE AND MONITORING AND EVALUATION)

#### Expected Outputs:
Based on the situational analysis, the community should be
STEP 11: BARANGAY PLANNING (5-YEAR LAND USE BASED BARANGAY DEVELOPMENT PLAN, ANNUAL INVESTMENT PLAN, ORGANIZATIONAL STRUCTURE AND MONITORING AND EVALUATION)

able to prepare its Land Use Based Barangay Development Plan, consisting of the following:

- 5-Year Land Use Plan - that delineates protection and production forestland, agricultural land, settlement areas and other special uses
- Development Framework - to include the barangay’s Vision, Mission, Goals, 5-year Thrust and Key Result Areas
- 5-Year Sectoral Development Plan - featuring the goals, objectives, key result areas, objectively verifiable indicators, projects, activities, targets, resource requirements and policy recommendations for all five (5) sectors: Economic, Socio-cultural, Infrastructure, Local Government and Environment
- Annual Investment Plan - presented as a matrix of projects and activities, targets, resources needed and budget requirement
- Local Administration - illustrating the BLGU structure that will operationalize the plan
- Monitoring and Evaluation Plan - detailing the M & E activities to be undertaken, the indicators to be monitored and evaluated, and the individuals and persons who will conduct the M & E

Pre-requisites: As stated earlier, the Situational Analysis, and all its supporting textual and geographic data, should be complete at this point.

Lead Player: Municipal LUB-BDP Team (Facilitators)

Participants:
- BDC to participate in the workshop.
- Documentors (both barangay secretary and one of the documentors of the Municipal LUB-BDP Team).

Facilitating Factors: Again, the venue has to be conducive for this intense activity.

Things to Watch Out For: Key people whose inputs are necessary must be present in the activity. The documentors are also required to be thorough in their tasks, so that agreements are not only
### STEP 11: BARANGAY PLANNING (5-YEAR LAND USE BASED BARANGAY DEVELOPMENT PLAN, ANNUAL INVESTMENT PLAN, ORGANIZATIONAL STRUCTURE AND MONITORING AND EVALUATION)

<table>
<thead>
<tr>
<th>Resources Needed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writeshop materials such as two (2) or more dozens of manila paper, pentel pens, masking tape, scissors, idea cards, title cards, documentation logbook, tape recorders, blank cartridges, batteries for tape recorders, first aid meds, rulers, registration logbook or attendance sheets, participant kit (notebook, pen, pencil, pad paper). Computer and LCD projector.</td>
</tr>
</tbody>
</table>

gotten across but also recorded and incorporated in the plan.

### STEP 12: GENERAL ASSEMBLY/PUBLIC HEARING: VALIDATION AND APPROVAL OF BARANGAY ORDINANCE

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The outputs of this activity are:</td>
</tr>
<tr>
<td>▪ Presentation of the LUB-BDP to the community for validation and approval; and</td>
</tr>
<tr>
<td>▪ Ordinances from the Barangay Council on the adoption of the LUB-BDP and accompanying annual evaluation of the implementation of the same shall have been produced.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pre-requisites:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The LUB-BDP is now ready for its public unveiling. The schedule for this presentation should be agreed upon with the Barangay Captain, making sure that you provide liberal time for information dissemination.</td>
</tr>
</tbody>
</table>

The Barangay Council must include the passing of the two ordinances within a month after the LUB-BDP presentation, so as not to lose the momentum of interest from the community.

<table>
<thead>
<tr>
<th>Lead Player:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRESENTATION</td>
</tr>
</tbody>
</table>

Barangay Captain to lead the presentation and validation of
### STEP 12: GENERAL ASSEMBLY/PUBLIC HEARING: VALIDATION AND APPROVAL OF BARANGAY ORDINANCE

<table>
<thead>
<tr>
<th>Participants:</th>
<th>PRESENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Barangay Kagawads to take turns in presenting the different parts of the BDP.</td>
</tr>
<tr>
<td></td>
<td>- Municipal LUB-BDP Team to assist in explaining the process of how the BDP was produced.</td>
</tr>
<tr>
<td></td>
<td>- Municipal LUB-BDP Team (Documentors) to capture comments necessary for the finalization of the LUB-BDP ORDINANCES</td>
</tr>
<tr>
<td></td>
<td>Barangay Kagawads to endorse the ordinances</td>
</tr>
</tbody>
</table>

| Facilitating Factors: | At the plan presentation and validation, the Purok Leaders must convince their constituents to attend, not as audience, but as owners of the plan. In this gathering, local wisdom, experience, reluctance and clarifications should be taken into consideration and addressed by the members of the BDC. |

| Things to Watch Out For: | It is futile to go on with the validation if the voices of those who matter will not be heard. Special arrangements or even a postponement should be considered if the scheduled date is suddenly hampered by bad weather or that upland dwellers and forest occupants could not attend the assembly due to inaccessible roads. |
|                         | It is possible that the Barangay Council session may suffer some delay, for one reason or another. The Municipal LUB-BDP Team should exert extra effort that the ordinances be included in the agenda of next scheduled meeting. |

| Resources Needed: | For full appreciation of the plan, it is suggested that the attendees to the assembly/plan validation are able to read in advance copies of the LUB-BDP. |
STEP 12: GENERAL ASSEMBLY/PUBLIC HEARING: VALIDATION AND APPROVAL OF BARANGAY ORDINANCE

A sample barangay ordinance would help the Barangay Council craft its own ordinances.

STEP 13: DIGITIZATION OF THEMATIC MAPS

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>The outputs of this activity are digitized copies of the thematic maps.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisites:</td>
<td>The raw geographic information generated from the perimeter survey, PRA, thematic mapping and situational analysis activities are to be digitized during this activity.</td>
</tr>
<tr>
<td>Lead Player:</td>
<td>Municipal LUB-BDP Team (GIS-GPS)</td>
</tr>
<tr>
<td>Facilitating Factors:</td>
<td>All the thematic maps should already be complete and validated; all the GIS equipment and printers should be available and in working condition; and there should be sufficient supplies (i.e. ink and paper), in order for the digitization to proceed unhampered.</td>
</tr>
<tr>
<td>Things to Watch Out For:</td>
<td>To avoid delays, the Municipal LUB-BDP Team (GIS-GPS) should have a self-imposed timetable of one (1) week per barangay for digitization, upon the complete submission of all manually produced maps.</td>
</tr>
</tbody>
</table>
| Resources Needed: | Manually produced maps  
GIS Equipment  
Computers  
Printers  
Paper and Ink for printing |

STEP 14: LUB-BDP/AIP MIS DATA ENCODING

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>Simultaneous with the digitization of maps, this step can proceed to produce the encoded form (using any word</th>
</tr>
</thead>
</table>
### STEP 14: LUB-BDP/AIP MIS DATA_ENCODING

<table>
<thead>
<tr>
<th>Pre-requisites:</th>
<th>The raw document for encoding consists of the handwritten and textual results of the perimeter survey, barangay census and secondary data gathering, PRA, thematic mapping and situational analysis activities, compiled and checked for completeness.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Player:</td>
<td>Municipal LUB-BDP Team (Documentors)</td>
</tr>
<tr>
<td>Facilitating Factors:</td>
<td>Before proceeding with the encoding, all the data and information should be complete.</td>
</tr>
<tr>
<td>Things to Watch Out For:</td>
<td>Whenever possible, the encoder should be one of the documentors of the actual activity, to facilitate the encoding process. If not, the documentors should be available to the encoder for clarification (e.g. illegible handwriting).</td>
</tr>
<tr>
<td>Resources Needed:</td>
<td>Complete handwritten documents Computers Printers</td>
</tr>
</tbody>
</table>

### STEP 15: WRITESHOP ON LUB-BDP

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>The output of this activity is a complete and properly formatted LUB-BDP, appropriate for distribution to the concerned parties (i.e. Municipal heads of offices, Municipal Development Council, SB).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisites:</td>
<td>Prior to the writeshop, all the maps should have been digitized and all textual data and information computer encoded (completion of steps 13 and 14).</td>
</tr>
<tr>
<td>Lead Player:</td>
<td>Municipal LUB-BDP Team (Documentors)</td>
</tr>
<tr>
<td>Facilitating Factors:</td>
<td>After verifying the correctness and completeness of the digitized and encoded information, task of writing the LUB-BDP should be divided according to the documentors’ expertise or experience.</td>
</tr>
<tr>
<td>Things to Watch</td>
<td>A deadline should be set for the Municipal LUB-BDP Team</td>
</tr>
</tbody>
</table>
STEP 15: WRITESHOP ON LUB-BDP

<table>
<thead>
<tr>
<th>Out For:</th>
<th>(Documentors) to wrap-up their task. An incentive could be provided, if necessary, if the project is finished on time.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources Needed:</td>
<td>To accomplish this task, the team requires complete documentation, dedicated computers for the tasks, printers, photocopiers and supplies.</td>
</tr>
</tbody>
</table>

STEP 16: CROSS SECTORAL TECHNICAL VALIDATION

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>At the end of this activity, the LUB-BDP would have incorporated the inputs from the municipal heads of offices and line agencies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisites:</td>
<td>The computer encoded and formatted LUB-BDP, and the accompanying digitized maps, should have been completed and reproduced.</td>
</tr>
<tr>
<td>Lead Player:</td>
<td>MPDC - to convene all municipal heads of offices and line agencies</td>
</tr>
</tbody>
</table>
| Participants:     | ▪ Municipal Heads of Offices and Line Agencies  
                    ▪ Municipal LUB-BDP Team - to respond to queries from the participants |
| Facilitating Factors: | The heads of offices and representatives of line agencies should be given advance copies of the LUB-BDP, with a formal covering request for written comments. This advance information would provide the agencies the opportunity to read the relevant chapters, write and submit their comments, ideally even before the technical validation. Thus, the technical validation activity becomes more of a clarificatory session for the refinement of the LUB-BDP. |
| Things to Watch Out For: | To anticipate possible time constraints on the part of the Municipal Heads of Offices and Line Agencies, they could be given just a portion of the plan that is relevant to their office or agency. A member of the Municipal LUB-BDP Team should be designated specifically to follow-up on the written comments even prior to the deadline. |
| Resources Needed: | ▪ Copies of the LUB-BDP  
                    ▪ Venue for Technical Validation |
### STEP 16: CROSS SECTORAL TECHNICAL VALIDATION

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>The outputs of this activity are two (2) resolutions, namely:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• From the Municipal Development Council - adopting the LUB-BDP and endorsing it to the SB; and</td>
</tr>
<tr>
<td></td>
<td>• From the SB - concurring and approving the same.</td>
</tr>
</tbody>
</table>

| Pre-requisites: | Both bodies should already have an overview of the SUD and LUB-BDP process, as well as an update on the contents of the LUB-BDP itself. Within the SB, there should be a key SB member (who supports upland development) to sponsor the LUB-BDP approval during their session. |

<table>
<thead>
<tr>
<th>Lead Player:</th>
<th><strong>MDC RESOLUTION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brgy Captain seeks MDC endorsement and resolution</td>
</tr>
<tr>
<td></td>
<td><strong>SB RESOLUTION</strong></td>
</tr>
<tr>
<td></td>
<td>SB Chair of the Committee on Environment or Infrastructure to sponsor the resolution approving the LUB-BDP</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participants:</th>
<th><strong>MDC RESOLUTION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• MDC Members adopt the LUB-BDP and endorse it to the SB</td>
</tr>
<tr>
<td></td>
<td>• MDC secretary to prepare the resolution for signature</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>SB RESOLUTION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Other SBs to concur and approve the LUB-BDP.</td>
</tr>
<tr>
<td></td>
<td>• Vice Mayor to chair the SB session, concur and approve the LUB-BDP.</td>
</tr>
</tbody>
</table>
### STEP 17: PRESENTATION TO THE MUNICIPAL DEVELOPMENT COUNCIL (MDC) AND SB AND FORMULATION OF RESOLUTION APPROVING THE LUB-BDP

<table>
<thead>
<tr>
<th>Facilitating Factors:</th>
<th>MDC RESOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Municipal LUB-BDP Team should request the MDC for an opportunity to present the gist of the plan. Even prior to this presentation, the team could lobby for support within the MDC, to expedite the adoption and endorsement process.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SB RESOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB support, either of the Vice Mayor or SB Chair of the Committee on Environment or Infrastructure, should be sought on the BDP. A private audience with these prospective supporters could be used as a venue to provide them a concise report on the LUB-BDP process.</td>
</tr>
</tbody>
</table>

| Things to Watch Out For: | The Municipal LUB-BDP Team should lobby for the inclusion of the LUB-BDP approval in the legislative agenda of the next SB meeting, after the MDC has endorsed the plan. The only limiting factors would be delay in the packaging of the plan and postponement of the SB Session. |

| Resources Needed: | For reference of the MDC, a copy of the LUB-BDP and a sample resolution should be given to the MDC Secretariat. Similarly, a copy of the LUB-BDP and sample SB resolution should be given to the SB. |

### STEP 18: INTEGRATION TO THE MUNICIPAL COMPREHENSIVE LAND USE PLAN, MUNICIPAL COMPREHENSIVE DEVELOPMENT PLAN AND MUNICIPAL ANNUAL INVESTMENT PLAN

| Expected Outputs: | At the end of this stage, the LUB-BDP should have been incorporated into the Municipal Comprehensive Land Use Plan, Municipal Comprehensive Development Plan and |
STEP 18: INTEGRATION TO THE MUNICIPAL COMPREHENSIVE LAND USE PLAN, MUNICIPAL COMPREHENSIVE DEVELOPMENT PLAN AND MUNICIPAL ANNUAL INVESTMENT PLAN

<table>
<thead>
<tr>
<th>Municipal Annual Investment Plan of your municipality.</th>
</tr>
</thead>
</table>

**Pre-requisites:** Integration can take place only if there is legal recognition of the LUB-BDP, as embodied in an approved and signed SB resolution adopting the Plan.

**Lead Player:** MPDC

**Participants:** Municipal LUB-BDP Team - to assist MPDC

**Facilitating Factors:** Integration into existing municipal documents would go much faster if the LUB-BDP already considered the format of these documents at the very beginning. Simultaneous LUB-BDP processes in all barangays would not only shorten the time necessary to update the plans, it would also provide a clearer municipality-wide picture of the Plan.

**Things to Watch Out For:** Where LUB-BDPs compete for limited municipal resources, the municipal LGU should be prepared to undertake its own prioritization process at the municipal level.

**Resources Needed:**
- Copies of the LUB-BDP, Municipal Municipal Comprehensive Land Use Plan, Municipal Comprehensive Development Plan, Municipal Annual Investment Plan and all relevant barangay and municipal maps
- Computers
- Printers

STEP 19: IMPLEMENTATION, MONITORING AND EVALUATION OF THE LUB-BDP

**Expected Outputs:** Finally, this last step is the realization of the LUB-BDP, with the corresponding M & E measures.

**Pre-requisites:** In terms of documents, the BLGU should have a copy of the LUB-BDP, its accompanying digitized maps and any relevant resolutions and ordinances passed by the BC or the SB to
STEP 19: IMPLEMENTATION, MONITORING AND EVALUATION OF THE LUB-BDP

 operationalize the LUB-BDP.

In terms of structure, an M&E Team should be organized and trained to undertake the monitoring and evaluation activities for the LUB-BDP, guided by an M&E Plan.

Lead Player:

- BLGU to take the lead in overseeing the implementation of the development interventions embodied in the LUB-BDP, as well as all relevant legislation
- Municipal LUB-BDP Team to handle the training of the M&E Team
- M&E Team to handle monitoring and evaluation of the LUB-BDP

Facilitating Factors:

Members of the M&E Team should be selected based on: 1) their first hand or intimate knowledge of the barangay (e.g. the RHU Midwife, Barangay Forest Protection and Management Council); and 2) their participation in the LUB-BDP process.

Things to Watch Out For:

The MLGU should watch out for complacency on the part of the BLGU, that had just completed intensive planning process. The Municipal LUB-BDP Team should remain on top of the implementation, monitoring and evaluation of the plan and encourage continued vigilance of the BLGU.

Resources Needed:

The resources needed for this activity should already be incorporated in the regular budget of the municipality, allocated among the different offices and line agencies.
### 1.4 HOW CAN I HELP - REQUIRED INTERVENTIONS FROM NGAS IN IMPLEMENTING THE SCHEME

#### Table 1.1 Required Interventions from NGAs in Implementing LUB-BDP

<table>
<thead>
<tr>
<th>RESOURCE REQUIREMENTS</th>
<th>SCOPE OF INTERVENTIONS</th>
<th>NATIONAL GOVERNMENT AGENCIES</th>
</tr>
</thead>
</table>
| Human Resources       | • Detail of NGA staff to the MLGU during the period where several LUB-BDPs are taking place.  
                         • NGA staff may also provide technical advice or act as resource persons in any of the activities enumerated in the scheme.  
                         • Conduct of social preparation activities to enable upland people open up and participate in the process  
                         • Presence of DENR staff during perimeter survey to ensure compliance with existing regulations and standards of DENR on surveys and mapping  
                         • Presence of DENR staff during actual land use planning to provide information on existing tenures in the barangay | ![National Commission on Indigenous Peoples](national-commission-on-indigenous-peoples.png) |
| Money                 | • Provide counterpart fund for local exposures, trainings and in hiring consultants/ facilitators.  
                         • Endorse BLGUs/MLGUs to other possible sources of funds.  
                         • Prompt releases of Internal Revenue Allotment to fund the planning process and the proposed activities. | ![National Commission on Indigenous Peoples](national-commission-on-indigenous-peoples.png) |
| Machinery or Equipment| • Lend GPS/GIS equipment to poorer LGUs  
                         • Lend vehicles for the exposure trips  
                         • Lend presentation equipment during orientations and validations | ![National Commission on Indigenous Peoples](national-commission-on-indigenous-peoples.png) |
<p>| Materials             | • Provide data which may be used in the | <img src="national-commission-on-indigenous-peoples.png" alt="National Commission on Indigenous Peoples" /> |</p>
<table>
<thead>
<tr>
<th>RESOURCE REQUIREMENTS</th>
<th>SCOPE OF INTERVENTIONS</th>
<th>NATIONAL GOVERNMENT AGENCIES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>situational analysis, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provide supplies and other needs during workshops and training</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Printers and ink for the production of maps</td>
<td></td>
</tr>
<tr>
<td>Means or Technology</td>
<td>• Share software required in the interpretation of the survey and analysis reports</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Share knowledge and expertise participatory planning tools (problem tree, objective tree, participatory analysis, etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Endorse BDP to the BDC and MDC, if necessary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provide list or inventory of model barangays/ municipalities that have exhibited exemplary practice in local governance</td>
<td></td>
</tr>
<tr>
<td>Minutes or Time</td>
<td>• Commit time in terms of active participation and prompt provision of services when requested by the LGUs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All NGAs depending on the requests</td>
<td></td>
</tr>
</tbody>
</table>

1.5 BENEFITS AND COSTS OF IMPLEMENTING THE SCHEME

*For NGAs - fulfilling their mandate at the local level.* Throwing in their support - in terms of manpower, technical, financial and physical resources - in the entire LUB-BDP process can be quite taxing, if not impossible, for the NGAs. Not all NGAs have staff or funds to spare down to the barangay level. As previously mentioned, it is wise to come up with a mechanism whereby NGAs can still involve their offices in the formulation of the LUB-BDP (a case in point is through the use of ICT). Inevitably, by extending their support, the NGAs are able to fulfill their mandate at the same time.
develop closer partnership with their LGUs and contribute in the empowerment of the local people.

For LGUs - improving governance. For the LGUs, the process of the LUB-BDP is demanding, lengthy, costly and encompassing. But going through it creates a profound sense of ownership, optimism, autonomy and respect for the environment. The process enables them to demonstrate transparency, accountability and conflict management. They are also taught how to properly mobilize their resources, while remaining true to the principles of sustainable development.

For the community - ownership of the plan. For the community as a whole (particularly those vulnerable sectors such as the IPs, women and youth), the scheme allows them to participate in the collective decision making, establish clear expectations from their officials, contribute their equity and become involved in monitoring and evaluating the progress of the plan.

The final LUB-BDP - a blueprint for development. The packaged LUB-BDP is considered as the final output of the LUB-BDP scheme. It is more than a listing of programs and projects intended for the barangay - it serves as a mechanism for the community to work together, a basis for allocation of funds, a barometer of the barangay leaders' performance and finally, a blueprint whereby outside, intervening assistance may design their project approach.

BLUE BOX NO. 5  MAINSTREAMING LUB-BDP PROCESS

The whole process takes 6 to 8 months to finish. NGO service providers are required to pitch in the preparation and development of LUB-BDP.

Source: UDP Pre-Completion Report, October 2006

Estimated cost comes to Php 150,000.00 to Php 200,000.00 per barangay, including the services of Consultants and/or Service Providers for a 45 to 50 day LUB/BDP preparation and training contract.
CHAPTER 2:
Upland Agricultural Extension

2.1 THE CONVENTIONAL WAY OF PROVIDING UPLAND AGRICULTURAL EXTENSION

Upland communities were primarily served by the Municipal Agricultural Offices of the Local Government Units (MAO-LGU). Their presence was supported by extension services of other national government agencies (NGAs), in particular the Department of Environment and Natural Resources (DENR), and several non-government organizations (NGOs) such as the Institute for Small Farms and Industries (ISFI), Mindanao Baptist Rural Learning Center and Don Bosco Diocesan Youth Center.

These groups shared common extension methods such as formal and informal community meetings, group and individual consultations, technology transfer through trainings and small input provisions, IEC materials distribution. Depending on the organizational mandates, project designs and expected outputs, they established demonstration plots, carried out seed dispersal and organized agricultural trade fairs.

But they varied in terms of frequency of service. Visits of agricultural technicians (ATs) from the MAO-LGU were made on a per-request basis or motivated by assistance from national or provincial agencies’ initiated projects. This was attributed to the limited funds allotted to their office by their LGUs especially for mobility/transport purposes. There were also areas where ratio between ATs and the barangays to be covered was simply lopsided. This led to the slow diffusion of appropriate technologies. In barangays where extension services have yet to come, upland farmers continued to practice destructive farming methods, either due to ignorance or for mere survival.

The NGOs, on the other hand, given the nature of their community immersion, provided better opportunities to upland farmers for more personal interactions that translated to better absorption of new technologies. The only drawback was that NGOs operate within a certain project life and could not sustain their services for long periods.
#6 Note to the NGAs: FUNDS FOR GOVERNMENT ROADS

Despite efforts to provide agricultural extension services, LGUs are reportedly only getting 8% of the national agricultural funds (80% still goes to the central offices) of the Department of Agriculture.

Efforts should be made to correct this scenario.


2.2 BRIEF DESCRIPTION OF THE SCHEME

The Local Government Code stipulates that the Municipal LGUs (MLGUs) are tasked with the direct provision of basic services to their barangays. These include social services (health and education), public works and infrastructures (irrigation, roads and water system), agricultural extension services and management of natural resources. Those last two (2) provide the basis for this scheme.

Realistically though and as much as the MLGUs attempt to provide these necessary services, they are besieged by limited resources, technical capacity and human capital.

Through the extension services that may be provided by the NGAs, the LGUs are able to maximize their upland resources as well as preserve and protect these for the future Filipino generations.

2.2.1 Rationale of the Scheme

In upland areas, communities have two choices - either they gather forest products for survival or they resort to farming. But upland farming is difficult, given the cold weather, topography, lack of water, poor soil fertility leading to low yield, more inputs requirement, high cost of bringing the products to market and a host of other problems.

Encouraging sustainable upland farming nevertheless ensures that the forest and watershed resources are protected. With the growing population and with lowland job opportunities getting scarce, human encroachment in these areas cannot be precluded. And once that they are there, it will be very difficult and costly to relocate them elsewhere.

With the introduction of appropriate farming technologies, communities are presented with legitimate ways of earning a living, proper and optimal utilization of upland
resources, and exploration of other high-return means of livelihood. These make agricultural extension works and services important for the people - and the upland itself.

NGAs, particularly the Department of Agriculture and its attached agencies, will find the scheme congruent to their mandate. It speaks of product diversification, upholding the upland ecosystem and improvement in the productivity and income of the farmers.

#7 Note to NGAs: AGRICULTURAL EXTENSION SERVICES

The Department of Agriculture has attached agencies that extend specialized services. This include the Bureau of Soil and Water Management (land use survey), the Bureau of Plant Industries (seedlings and planting materials), Bureau of Agricultural Research (new technology promotion), and Agricultural Training Institute (trains agricultural extension workers).

For the benefit of the poorer LGUs, these services should be widely disseminated and be made available. Priorities should be given to LGUs that have highly-vulnerable sectors, particularly the upland communities.

2.2.2 Objectives of the Scheme

Encouraging upland communities to engage in farming provides livelihood alternatives and diverts them from foraging the upland resources. The forests, home to countless plant and animal species, that may be endemic only to the country and sole source of numerous raw materials for food and exotic medicine, should ideally be spared from human infringement.

From the perspective of the NGAs, the implementation of this scheme corresponds to the government’s efforts in:

- Promoting product diversification in resource poor areas such as the uplands;
- Maintaining the integrity of upland resources by stemming its further degradation from soil erosion and human infringement;
- Increasing productivity by encouraging upland farmers to adopt new agricultural technologies;
- Expanding the livelihood opportunities of the upland farmers with different crops/produce; and
- Accelerating the adoption of new technologies in the upland communities by capacitating model farmers and training groups
BLUE BOX NO. 6. DFS DEFINED

Diversified Farming System or DFS is a sustainable farming system that appropriately applies (institutes) soil and water conservation measures (SWCM) in every land unit (usually distinguished by its slope) in upland farms. It incorporates a dualistic cropping pattern where cash cropping is situated in flat and slightly sloping lands, and tree farming dominates the moderate to steep slopes. It is farm planning utilizing the Slope Treatment-Oriented Practices (STOP) that helps extension workers and farmers identify site-specific solutions by taking into account the wide range of soil and environmental conditions, farm sizes and farmer objectives.

Landscape formed after land unit farming.

Specifically, the farmers grow short (to address his/her immediate cash requirements), medium (for income needs in the medium term), and long-term crops (for farmer’s pension) in the various land units. DFS lessens dependence on a single crop, promotes moving to dualistic cropping systems with an ever increasing area devoted to permanent/perennial crops and switching to better marketable crops as well as diversifying to small animal production.

Source: UDP Pre-Completion Report and UDP Sustainable Upland Development Model, October 2005.
2.2.3 Qualifying Criteria

a) Geographic Criteria

Farm Elevation. To qualify under this scheme, the potential area must be sloping, and located more than 100 meters above sea level.

Slope. The area should be dominated by slopes more than 18%. Farms that put in SWCM; are not cultivating; or have planted tree crops in slopes not more than 45%; farms not within the areas declared as conservation or protected zones, could also qualify.

b) Community Criteria

Prioritize IP Groups. Preference is given to communities with indigenous people or other tribal groups.

c) Legal, Institutional and Other Documentary Criteria

The scheme works best in areas that are officially categorized as depressed, belonging to municipalities classified as 4th to 6th classes, with no mining activities and with stable peace and order condition.

LGUs are also amenable to assign at least one (1) Agricultural Technician for every barangay covered by the project and can provide an equity of at least PhP 1 million per year in cash or in kind, i.e. salaries and wages of MAO personnel, equipment, food for work. LGUs must also demonstrate full support by opening or repairing critical roads that are access or entry points for project implementation.
BLUE BOX NO. 7 TESTIMONY FROM CARAGA, DAVAO ORIENTAL

The municipality started its upland development efforts in four (4) barangays, namely: P.M. Sobrecarey, San Pedro, Alvar and Palma Gil. In these upland barangays, farmers were just contented with their traditional way of farming, the slash and burn method and their indiscriminate cutting of trees. The shift in farming practices started when the barangays were capacitated to have a thorough assessment of their natural resources through participatory planning and actual survey of the uplands. As soon as areas for forest protection, forest production and agricultural lands were identified, the municipality concentrated on putting in place the barangay-based upland agricultural extension services.

In 1999, the local government earmarked part of their local government development fund for upland development efforts: additional four (4) on-job-order technicians were hired to focus their agricultural technical assistance in the four upland barangays. They were complemented with voluntary barangay extension workers and farmers training groups who were supported with trainings and field exposures on soil and water conservation measures and technologies on diversified farming systems.

With a capacitated upland agricultural extension manpower complement, establishment of model farms, learning sites and expansion of diversified farming system was possible. Budget inclusions not just for manpower, but also for establishment of a municipal nursery and locally-trained road maintenance crew ensure that the production from the uplands results to the upland farmers’ increased income.

*(Excerpts from presentation of Mayor Alicia B. Mori, Mindanao Island Conference on “Sharing of Best Practices on Sustainable Upland Development”, May 23 to 26, 2006, Apo View Hotel, Davao City)*
2.3 THE SCHEME: STEP-BY-STEP

2.3.1 Summary of Steps

UAE has a total of fourteen (14) chronological steps as illustrated below:

Figure 2.1 14 Steps in UAE

- **STEP 1:** Appointment and Deployment of Agricultural Technician (AT) by the Mayor
- **STEP 2:** Training of AT on Extension, Facilitation, Community Organizing and Land Management using the STOP Manual
- **STEP 3:** Entry of AT in the barangay
- **STEP 4:** Appointment of Barangay Extension Worker (BEW) by Barangay Captain
- **STEP 5:** Formation of Farmers’ Training Group (FTG)
- **STEP 6:** Identification and Establishment of a Learning Site (LS)
- **STEP 7:** Capacity Building for the Community-based Extension Team (CBET)
- **STEP 8:** Establishment of Partnership for Upland Agricultural Extension Network
- **STEP 9:** Securing Local Government Support, Recognition and Adoption
- **STEP 10:** Management of Extension Resources
- **STEP 11:** Coordination with the Upland Agricultural Extension Network
- **STEP 12:** Facilitation of Extension Planning, Implementation, Monitoring and Evaluation (PIME)
- **STEP 13:** Training of Municipal Agriculturist and AT on Participatory Monitoring and Evaluation (PME)
- **STEP 14:** Design and Implementation of PME
2.3.2 Detailed Description of Each Step

### STEP 1: APPOINTMENT AND DEPLOYMENT OF AGRICULTURAL TECHNICIAN (AT) BY THE MAYOR

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>Agricultural Technician (AT) designated and deployed by the Municipal Mayor to particular barangay/s.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Player:</td>
<td>Mayor - Appoints and deploys Agricultural Technician/s to a particular barangay.</td>
</tr>
<tr>
<td>Participants:</td>
<td>Municipal Agricultural Officer or Municipal Agriculturist (MA) - Facilitates assignment of full-time and regular/permanent AT in the barangay</td>
</tr>
</tbody>
</table>

### STEP 2: TRAINING OF AGRICULTURAL TECHNICIAN ON EXTENSION, FACILITATION, COMMUNITY ORGANIZING AND LAND MANAGEMENT USING THE STOP MANUAL

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>AT trained on Agricultural Extension and Land Management</th>
</tr>
</thead>
</table>
| Lead Player:      | - Agricultural Training Institute (ATI) designs farm-based or on-site training identifying the nearest and appropriate Learning Site. The design must also include budget and cost-sharing by MLGU, ATI, DA-RFU, relevant institutions in the established Extension Network, or projects that may support extension.  
- Regional and Provincial Trainers who have undergone and have passed the Training of Trainers (TOT) on Agricultural Extension and Land Management join ATI in training the ATs. At present, the trainers’ pool are from DA -RFU, ATI 11 and 12, State College and Universities, Regional Research Consortia, and the LGUs in the Provinces of Davao Oriental, Davao del Norte, Compostela Valley, Davao del Sur, Sarangani Province and South Cotabato, Sultan Kudarat, Cotabato Province, and the City of Davao |
| Participants:     | Designated AT attends the training                     |
STEP 3: ENTRY OF AGRICULTURAL TECHNICIAN IN THE BARANGAY

Expected Outputs: At the end of this stage, the ATs introduce themselves to the barangay officials. They consult the LUB-BDP regarding the declared agricultural land and forestlands. They gather information on the existing community organizations and other groups that have interest in agriculture, natural resource management or community development. They also link up with the area’s other organizations and opinion leaders, progressive farmers who are practicing good cropping systems, soil conservation, etc. They work with the BLGU for a meeting, encouraging a multi-stakeholder presence. In such meeting, they are to assess the area’s farming productivity, adaptability and systems.

ATs are to build good relationship with the local people and different organizations present in the community. After direct consultations with all concerned, ATs are to present a community-managed extension plan. Finally, ATs are to facilitate appointment of BEWs under the supervision of the BLGU.

Lead Player: AT enters the community

Participants:
- Municipal Agricultural Officer or Municipal Agriculturist introduces the AT to the barangay leadership
- Barangay Captain introduces the AT to his/her constituency and briefs the AT on the barangay

STEP 4: APPOINTMENT OF BARANGAY EXTENSION WORKER (BEW) BY THE BARANGAY CAPTAIN

Expected Outputs:
- Barangay Extension Worker (BEW) appointed by the Barangay Captain
- BEW given orientation by the AT

Lead Player: Barangay Captain - appoints a BEW with the approval of the members of the Barangay Council and farmers organizations/POs
### STEP 4: APPOINTMENT OF BARANGAY EXTENSION WORKER (BEW) BY THE BARANGAY CAPTAIN

| Participants: | AT - gives an orientation to the BEW |

### STEP 5: FORMATION OF FARMERS’ TRAINING GROUP (FTG)

| Expected Outputs: | A Farmers Training Group (FTG) is constituted whose composition are coming from the community (organization). There should be at least one member from each sitio in the barangay. |
| Lead Player: | Agricultural Technician - facilitates the creation and training of the FTG |
| Participants: | FTG Members - commit to actively participate in the scheme |

### STEP 6: IDENTIFICATION AND ESTABLISHMENT OF A LEARNING SITE (LS)

| Expected Outputs: | A Learning Site (LS) is identified and established. The LS can be a farm of one FTG member that is most accessible and highly visible within the community (to all the members of the group) or another model farm with a willing owner. The topography of the farm preferably represents the general landscape of the area and the farm technologies that are being demonstrated apply to the common marketable commodity grown in the area. It is more advantageous for the local extension team if the owner of the LS is also member of the FTG because he/she can always be available for FTG extension activities in the LS. It would be ideal to have one LS in each upland sitio. |
| Lead Player: | AT, BEW and FTG together form the community based extension team or the CBET, which operates under the overall overseeing of the Municipal Agriculturist. The CBET will select and establish an LS. |
### STEP 7: CAPACITY BUILDING FOR THE COMMUNITY-BASED EXTENSION TEAM (CBET)

**Expected Outputs:**
- The CBET is convened
- CBET Training Needs are identified, among them:
  - Cross visits
  - On site training on technology, extension and facilitating skills
  - Knowledge enhancement or updating through various media and sources
  - Team building
  - Managing extension

**Lead Player:**
AT - after undergoing training, he/she can act as resource person for the different trainings. The AT also leads the CBET.

**Participants:**
MA and BEW - help identify training needs

### STEP 8: ESTABLISHMENT OF PARTNERSHIP FOR UPLAND AGRICULTURAL EXTENSION NETWORK

**Expected Outputs:**
- In Regions 11 and 12, the extension delivery network has been formally established to include the following:
  - Department of Agriculture (DA)
  - Agricultural Training Institute (ATI)
  - Provincial Local Government Unit (PLGU) and the Office of the Provincial Agriculturist (OPAG)
  - Municipal Local Government Unit (MGLU)
  - University of Southeastern Philippines (USP)
  - University of Southern Mindanao (USM)
  - Southern Philippines Agribusiness & Marine & Aquatic School of Tech. (SPAMAST)
  - Davao Oriental State College of Science and Technology (DOSCST)
  - Integrated Development Services (IDS)
  - Balay Davao Sur, Incorporated

- In line with their vision, mission and mandates, each member institution can extend support to extension - training, technical inputs, organizational development, facilitator, information, education and communication
### STEP 8: ESTABLISHMENT OF PARTNERSHIP FOR UPLAND AGRICULTURAL EXTENSION NETWORK

(IEC).

**Lead Player:**
- MA - performs the following:
  - Identifies training needs of ATs and for such training
  - Serves as the link between the Regional/Provincial network and the Community-Based Extension Team (CBET)

**Participants:**
- Barangay Captain - Facilitates requests, through resolution, for support from the extension network
- CBET - participates in the training

### STEP 9: SECURING LOCAL GOVERNMENT SUPPORT, RECOGNITION AND ADOPTION

**Expected Outputs:**
- Local government actively supporting the Upland Agricultural Extension Scheme

**Lead Player:**
- MA, AT, BLGU and partner conduct:
  - Consultation
  - Advocacy
  - Finding the basis for mainstreaming and the appropriate groups to advance extension initiatives
  - Meetings and Resolutions

**Participants:**
- MA - ensures inclusion of community based extension delivery in the Annual Investment Plan (AIP)
- AT - implements cooperative extension service mechanism with the Barangay Extension Worker (BEW) and Farmers Training Group (FTG) with the support of BLGU, barangay organizations, and the community

### STEP 10: MANAGEMENT OF EXTENSION RESOURCES

**Expected Outputs:**
- Human resources involved in Upland Agricultural
## STEP 10: MANAGEMENT OF EXTENSION RESOURCES

<table>
<thead>
<tr>
<th>Extension are properly compensated, updated and empowered for their work</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lead Player:</strong></td>
</tr>
<tr>
<td>• MA Manages Human Resources</td>
</tr>
<tr>
<td>➢ Incentives, rewards</td>
</tr>
<tr>
<td>➢ Continuing education and training</td>
</tr>
<tr>
<td>➢ Strengthening institutional anchorage especially in fund generation and management</td>
</tr>
<tr>
<td>➢ Accreditation by mandated institution</td>
</tr>
<tr>
<td>➢ Keeping track and close contact with members of extension network</td>
</tr>
<tr>
<td><strong>Participants:</strong></td>
</tr>
<tr>
<td>• MA - ensures inclusion of community based extension delivery in the Annual Investment Plan (AIP)</td>
</tr>
</tbody>
</table>

## STEP 11: COORDINATION WITH THE UPLAND AGRICULTURAL EXTENSION NETWORK

| Expected Outputs: |
| Strong linkage established between municipality/barangay and the network |
| Readily available pool of technical assistance |
| **Lead Player:** |
| • MA keeps track and close contact with members of extension network for support: resource persons, trainings, training funds, information, technology and the like |

## STEP 12: FACILITATION OF EXTENSION PLANNING, IMPLEMENTATION, MONITORING AND EVALUATION

| Expected Outputs: |
| Information and Extension needs identified, among them: |
| ➢ No. of farmers trained at Learning Site |
| ➢ No. of Model Farmers produced by LS and CBET |
| ➢ No. of Adopters of STOP, SWC, DFS |
| ➢ Quality of DFS and STOP/SWC |
STEP 12: FACILITATION OF EXTENSION PLANNING, IMPLEMENTATION, MONITORING AND EVALUATION

- No. of IEC activities
- Increase in income
- Policy/Ordinance support to Land and Natural resource Management
- Extent of BLGU and MLGU support

Lead Player: AT, BEW and FTG or the CBET identify information and extension needs

Participants:

- MA - Plans and implements agricultural projects including soil and environmental conservation; supervises the ATs
- AT - facilitates the following activities:
  - Farm planning
  - Farm classes/farmers field schools with farmers
  - Field demonstrations following STOP Manual
  - Consultations at farmers field
  - Organization or enhancement of existing community organizations
  - Assistance to farmers in the preparation of loan and marketing documents
  - Assistance to farmers in securing tenurial instruments
  - Liaison work for linkages with processors and institutional buyers or products
  - Act as liaison to the LGU, through the MAO
- Barangay Captain - provides local government support through:
  - Provision of appropriate policy and program support to extension and adoption of technology/practice
  - Allocation of fund support for extension at the local level
  - Assistance in monitoring and evaluation of extension
- Barangay Extension Worker - conducts the following extension activities:
  - Assist farmer in putting up of recommended farming systems, in this case the DFS, multi-storey, and the like
  - Assist farmer on the layout of contour lines and establishment of hedgerows where relevant and following the STOP Manual
## STEP 12: FACILITATION OF EXTENSION PLANNING, IMPLEMENTATION, MONITORING AND EVALUATION

- Attend farmer consultation on urgent farm problems
- Update Barangay Council about extension activities through periodic reports and meetings
- Report to barangay when needed

## STEP 13: TRAINING OF MUNICIPAL AGRICULTURIST AND AGRICULTURAL TECHNICIAN ON PARTICIPATORY MONITORING AND EVALUATION

**Expected Outputs:**
MA/AT trained on participatory monitoring and evaluation (PME)

**Lead Player:**
MA and AT - participate in the training

## STEP 14: DESIGN AND IMPLEMENTATION OF PARTICIPATORY MONITORING AND EVALUATION (PME)

**Expected Outputs:**
PME Design prepared and implemented

**Lead Player:**
- MA Manages Human Resources
  - Incentives, rewards
  - Continuing education and training
  - Strengthening institutional anchorage especially in fund generation and management
  - Accreditation by mandated institution
  - Keeping track and close contact with members of extension network

**Participants:**
- CBET, composed of the AT, BEW and FTG prepared and implemented the PME design
  - Plan the framework, objectives and indicators
2.3.3 Over-all Expected Outputs

After the implementation of this scheme, it is expected that there would have been an increase in the number of upland farmers, increase in their income, widespread use of new farming technologies, prevalent switch to planting marketable crops, and reduced need to open up more lands in forest areas.

2.3.4 Over-all Pre-requisites

LGUs will need extra funds to bankroll the entire process of the UAE scheme as well as training for its extension team. Indigenous people or tribal groups also need “conditioning” before any new technology can be introduced.
2.3.5 Over-all Facilitating Factors

Plan Preparation. The BLGU and MLGU prepare a plan that will serve as a guide in terms of what type of technology to promote first, when do extension workers come in, what indicators will be monitored and evaluated. The plan can also serve as basis for requesting support from the provincial government, NGAs and NGOs that will enter into the picture.

Provision of inputs and other in-kind incentives. Upland farmers are receptive to interventions and adoption of new technologies if these are coupled with inputs and other in-kind incentives. This was proven in the implementation of the Diversified Farming System and other agri-based projects such as goat dispersal, poultry dispersal, seedlings and other agricultural inputs. Readily, without requiring cash input from their end, farmers can easily apply new technologies and other scientific knowledge.

Strong BLGU support and participation especially in the provision of incentives for the BEWs. Read Blue Box No. 9 below on how involvement of the barangay could spell the difference between success and failure in undertaking the upland agricultural extension scheme.
BLUE BOX NO. 9  JUMPING ON THE BANDWAGON

In UDP’s experience, the support of barangay and municipal LGUs is responsible for the strong adoption (and dramatic conversion) of upland farmers to the DFS. In some barangays, they went as far as declaring compulsory adoption of DFS. Otherwise, the residents would not get community service or worse, they would be prohibited from farming their own land if they do not follow the soil and water conservation measures (SCWM) under DFS. Such ordinances exist in Barangay Rio del Pilar in Glan, Sarangani Province and in Barangay Pito, Malalag, Davao del Sur.

Farmers visiting DFS farms.

Extension worker consulting with upland farmers.

In some municipalities, they also require farmers to adopt the SCWM before they can avail of the fruit tree seedlings under Plant-Now, Pay-Later plan. Even the non-UDP farmers replicated the DFS on their own.

Source: UDP Pre-Completion Report, October 2005.
Credible technology providers. Upland farmers’ keenness to adopt new technologies is considered high if these are delivered by credible people. They respond more positively to BEWs and FTGs who have successfully tried these new technologies. Nonetheless, BEWs and FTGs undergo specialized training to enhance their voluntary role and effectiveness as community extension workers, thereby distributing their gains more evenly to the community. These people work for free - so their only incentives are the trainings, income-generating projects at the Learning Sites and access to new technologies and planting materials.

#8 Note to NGAs: SPECIALIZED SERVICES

The Agricultural Training Institute (ATI) of DA is the leading government agency that coordinates the agricultural extension delivery system for the LGUs. They set standards as well as certify extension providers. Results of new researches are also communicated to the farmers through different training and extension activities.

ATI can strengthen each LGU’s extension delivery system through coaching and mentoring of LGU-appointed staff.

Farmers’ perception on technologies introduced. Farmers who have previous knowledge on the benefits and relevance of new technologies are more likely to display interest in adopting these. Farmers tend to align themselves with positive ideals, such as the protection of the environment and improvement of quality of life.
BLUE BOX NO. 10 LEARNING SITES

Participants taking cue from the extension worker on locating the contour lines.

Seeing is believing - which is why learning sites (LS) are such a big help in spreading the DFS in the upland areas. LS are training ground, field classrooms and venues for discussions and regular meetings. LS also serves as locale for group centres, funnels or linking mechanism for external support. LS are managed by the farmer but are supported by the FTG, BEW and UBA. It can also become an income site - propagating planting materials (they cater food too for the requirements of training participants).

At the last count, a total of 32 LS are located across Compostela Valley, Davao Oriental, Davao del Sur, Sarangani and South Cotabato provinces.

Source: UDP Pre-Completion Report, October 2005.

Regular monitoring. The constant presence of agricultural extension workers also facilitates the proliferation of good agricultural practices as well as
directly resolves problems that relate to production, marketing, support sourcing and linkaging.

**Provision of training assistance.** Farmers also appreciate opportunities to attend formal or structured learning activities, which become good channels for imparting new knowledge. In addition, training sustains the interest of the farmers and allows them to interact with other people.

### 2.3.6 Things to Watch Out For

**Multiple roles.** There are areas whereby the BEW, the UBA Chairman, FTG member and the model farmer is just one person. To avoid confusion and resentment, it is best that responsibilities are spread in the community.

**Farmers’ concerns - poor technical advice, farm type, tenure and capital requirement.** Some upland farmers are willing to apply the proper technologies but do not always get quality technical advice from their local extension workers. This will result to poorly developed DFS farms. The concern on tenurial status also affects the replication of the DFS. Lastly, farmers also face financial limitation in adopting the DFS package. Additional capital from a credit facility will help them develop their farms better.

**Long Wait for the DFS approval.** Farmers will appreciate better if the wait for the DFS approval is shortened. They tend not to pursue adoption of the DFS system if the planting materials are taking a long time to be approved and released.

**Location of Learning Sites.** Accessibility and high visibility are the best factors in developing or choosing the location of a Learning Site.
BLUE BOX NO. 11  DFS IN THE UPLANDS

Examples of the “end product” of DFS and dualistic farming can be seen in some barangays in Santa Cruz, Davao del Sur; and in many areas of Davao del Norte. In these areas the farmers have multi-storey plantations of coconuts and fruit trees, with small areas for growing vegetables for home consumption. The income from the fruits is sufficient for the family needs, covering household food requirements, education, etc. Because little labour is spent on growing food the people are able to further boost their incomes by working for other people.

![Farmer tending to his farm.](source: UDP Trainors' Manual.)

![Profile of another DFS farm](source: UDP Trainors' Manual.)

![A newly-established, multi-storey farm.](source: UDP Trainors' Manual.)

**Record keeping.** With their busy schedule or perhaps without the benefit of a system, some farmers fail to keep record of their production and monetary transactions. This makes monitoring difficult. It is best that a session on record keeping be included in every training activity given to the farmers.
Information monitored from a document determines which technology, product, market and harvest time are actually benefiting the farmers.

2.4 HOW CAN I HELP - REQUIRED INTERVENTIONS FROM NGAS IN IMPLEMENTING THE SCHEME

Table 2.1 Required Interventions from NGAs in Implementing UAE

<table>
<thead>
<tr>
<th>Resource Requirements</th>
<th>Scope of Interventions</th>
<th>National Government Agencies</th>
</tr>
</thead>
</table>
| Human Resources       | ▪ Improve skills of the LGU workers in doing extension works.  
                        ▪ Sponsor extension workers and farmers to trainings or activities that disseminate technologies.  
                        ▪ Invite resource persons to share best practices in upland farming.  
                        ▪ Train farmers in basic record-keeping and book-keeping. |
| Money                 | ▪ Provide counterpart funding to pay for training, input, travel, hiring of consultants, etc.  
                        ▪ Explore credit facilities that may be tapped by the farmers. |
| Machinery or Equipment | ▪ Lend farm equipment |
| Materials             | ▪ Provide planting materials and other inputs to farmers to speed up adoption of new technologies. |
### Resource Requirements

<table>
<thead>
<tr>
<th>Resource Requirements</th>
<th>Scope of Interventions</th>
</tr>
</thead>
</table>
| **Means or Technology** | - Explore new ways of disseminating technology to farmers (new medium, new incentives, etc.).  
- Provide training manuals and other reading materials for the extension workers and the farmers.  
- Orientation for the IPs on the benefits of the new technology.  
- Address farmer’s concerns regarding their tenurial status. |

### 2.5 **BENEFITS AND COSTS OF IMPLEMENTING THE SCHEME**

The NGAs are assisted in their mandate to promote sustainable agricultural practices as well as preservation of upland resources. Through this scheme, the NGAs will have greater visibility in the barangay level and are, therefore, given more opportunities to extend technical services - addressing the enduring concern on poverty alleviation and food security.

In the same manner, the upland community will also benefit in terms of the following:

- Gradual switch from mono-cropping to diversified farming system of short-term and long-term crops, thereby increasing their income and productivity;
- Wider option to engage in other sustainable livelihood activities such as poultry and livestock raising, fishponds, handicrafts;
- Heighten confidence in venturing to other activities;
- Stronger bargaining power due to collecting processing and marketing of produce; and
- Access support from network partners.

Investment costs of establishing an effective extension mechanism as described above is around Php 650,000 all-in for a total coverage of five (5) barangays. Annual recurrent costs of extension service delivery will be around Php 1,200,000 all-in, also serving five (5) barangays. A one-time time support of Php 3,000 in kind per farmer for seedlings as an incentive to farmers to switch to SUD would require Php 1,500,000 for 500 farmers (100 per barangay).

A cost-benefit analysis for a 10-year period that compares LGU barangay investment to the net income from one hundred (100) hectares of DFS farms shows a net present value (NPV) at 14% of approximately Php 4.8 million or around Php 750,000. The IRR is...
more than 30%, which seems to be very much profitable. Other benefits from e.g. reduced erosion, less flooding, landslides and the like, due to protection measures by farmers and their BLGUs are not yet included. The same is true for increased coastal fish stock, as fishing grounds will also improve by reduced erosion. These benefits may be even much greater than the direct benefits from increased farm productivity.

**Figure 2.2 Cost-Benefit Analysis of a Diversified Farming System**

<table>
<thead>
<tr>
<th>THE BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 hectare of mainly corn = P15,000/year income for a farmer</td>
</tr>
<tr>
<td>1 hectare of diversified farm will generate in terms of additional net income approximately in</td>
</tr>
</tbody>
</table>

![Cost-Benefit Analysis Graph](image-url)
CHAPTER 3:
Barangay Forest Protection and Management

3.1 CONVENTIONAL WAY OF DOING BARANGAY FOREST PROTECTION AND MANAGEMENT

For many decades prior to the release of the Community Forestry Program (DENR Administrative Order No. 123) in 1989, forest protection was mainly vested with the Department of Environment and Natural Resources (DENR). For a host of many reasons, the country’s forest continued to be denuded. In 1995, the Local Government Code was enacted, recognizing the important role of the local government in the enforcement of forest protection laws. This was reinforced thru the Joint Memorandum Circular of 2001 between the DENR-DILG-LGU on the transfer of forest management functions from the DENR to the LGUs. The local communities were finally recognized as a critical group in protecting the forests, and the Community-Based Forest Management (CBFM) Program was adopted as the national strategy for the sustainable development of forestlands. When the CBFM Program was developed, the forest protection and management functions of the DENR were then devolved to the local government units.

While planning for forest protection did transpire in the past, local communities were not included - they were not consulted nor were their intimate knowledge of forest resources considered vital. Their non-inclusion only heightened the feeling of indifference toward fractional forest protection efforts.
BLUE BOX NO. 12 WHERE ARE THE TREES?

Degraded land areas

Unsustainable land use.

Source: UDP Trainer’s Manual
3.2 BRIEF DESCRIPTION OF THE SCHEME

3.2.1 Rationale of the Scheme

Uplands are basically forest areas. Many are now concerned, particularly the NGOs, that the country now only has patches of and second-growth forest. Illegal logging persists. Trees are felled to give way to indiscriminate conversion to non-forest land uses such as farming, commercial and residential activities. Barangays are ill-prepared for protecting their forests as well as being intermittently overruled by conflicting orders given out by the central government.

Since forests maintain our ecological stability, they must be preserved at all costs. Forests have a stabilizing effect on the uplands by preventing soil erosion and enhancing water infiltration. They maintain our biological diversity - keeping the endemic flora and fauna from extinction. They provide a cushion against natural calamities in the lowlands as well. They are a source of employment for millions of people dependent on wood and timber industries.

People living in and around forest areas are the best line of defense from its further destruction. Guided properly on what to do, local communities will be empowered to stave off further encroachment of the forest areas and maximize what has already been made available for farming and other income generating activities.

NGAs, specifically the DENR, will find the scheme worthy of pursuing as it engages local people to be the primary steward of the upland resources.

#9 Note to NGAs: CLOSELY LINKED

Environment and development are inextricably linked. But the tricky part is maintaining the ecological stability yet at the same time giving the people opportunities to live decent lives.

LGUs and upland communities must be made to understand that balance can be achieved - but it takes time, commitment and funds to do it. Social preparation, capability building and alternative livelihood activities are just few of the assistance NGAs can provide.

3.2.2 Objectives of the Scheme

The scheme corresponds to the following mandate of the NGAs:

- Enhancing the protective, economic and bio-diversity value of the forests;
- Protecting the remaining forestlands from further destruction and further expansion of farming and other destructive activities;
- Enabling the declaration of Barangay Forest Protected areas;
- Enhancing the awareness of the entire barangay on the importance of protecting and managing the remaining forests and ecologically critical areas within the barangays;
- Mobilizing the structures in the barangay in protecting and managing the remaining forestlands;
- Introducing appropriate community-based and site-specific forest protection and management activities based on plans participated in by the community and all other key players of the barangay;
- Forging strong co-management partnerships between the BLGU, MLGU, DENR, NCIP, the local community and other interested parties like barangay schools (Department of Education), local Philippine National Police (PNP) forces and other NGOs in managing the forestlands by devolving forest management functions at the barangay level; and
- Establishing LGU mechanisms for the adoption and replication of the Barangay Forest Protection and Management Scheme to other Barangays within the municipality.

3.2.3 Qualifying Criteria

a) Geographic Criteria

Location and Elevation. The scheme can be implemented in any forest area in upland or even lowland barangays, and in areas that are environmentally critical and qualified to be declared as protected areas, such as: natural forest, head water areas, riverbanks, ecotourism sites, barangay parks, lakes, springs, caves, steep slopes and others.

b) Community Criteria

Community concern for the forest. The scheme is applicable in areas where there is high awareness and concern for the forest. If there have been similar moves in the past, it is wise to first investigate the extent of success or the gaps that have not been previously addressed.

Support from LGUs. The different levels of local government, as well as devolved national government agencies should be willing to participate and commit resources to the implementation of the scheme. The sources and types of support needed are:

- Barangay and Municipal Level. The BLGU and Municipal Environment and Natural Resources Office (MENRO) should support BFPM by including the scheme as a regular programme with fund appropriation in their Annual Investment Plan, Municipal and Barangay Development Plans.
• **Provincial Level.** The PLGU can play a role in consolidating all declared forest protected areas in the municipalities and come up with provincewide watershed protected areas. Likewise, the Provincial Environment and Natural Resources Office (PENRO-LGU) should include this as their regular programme with a budget allocation in the Provincial Annual Investment Plan and Provincial Development Plan.

*The technical expertise of the NGAs* is critical to the success of the scheme.

*Existing people’s organizations as conduits of funding.* Since the scheme might require substantial funding (depending on the severity and scope of area to be protected and rehabilitated), there should already be existing and functional cooperatives/organizations that will be used as conduits of funds.

c) **Project Proposal Requirement**

**Project Proposal.** A project proposal is required, containing attachments such as the barangay’s present land use map, SB resolution on the conduct of perimeter survey, and the results of the perimeter survey with SB approval.
3.3 **THE SCHEME: STEP-BY-STEP**

The scheme covers a 12-step process of empowering local people to protect their forest resources.

3.3.1 **Summary of Steps**

*Figure 3.1 12 Steps in BFPM*

- **STEP 1:** Identification and Selection of Barangays
- **STEP 2:** Formulation and Approval of Budget Proposal
- **STEP 3:** Facilitation of Barangay Orientation and Creation of BFPMC
- **STEP 4:** Conduct of Perimeter Survey and Community Mapping
- **STEP 5:** Conduct of Environmental Awareness Seminar and Preliminary Community Mapping
- **STEP 6:** Preparation of Site Management Agreement and Conduct of Information Drive to Forest Occupants
- **STEP 7:** Formulation of a Barangay Ordinance for the Declaration of a Forest Protected Area
- **STEP 8:** Formulation of a Memorandum of Agreement on a Forest Protected Area
- **STEP 9:** Declaration of a Forest Protected Area, MOA and Site Management Agreement Signing
- **STEP 10:** Post-Workshop and Assessment on BFPMS
- **STEP 11:** Conduct of Capability Building and Training Activities
- **STEP 12:** Conduct of Various Activities Related to Forest Protection and Rehabilitation
### 3.3.2 Detailed Description of Each Step

#### STEP 1: IDENTIFICATION AND SELECTION OF BARANGAYS

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>At the end of this step, it is expected that meetings and consultation shall have been conducted and specific barangays to be covered have been selected.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisites:</td>
<td>A meeting is first arranged with the selected barangay’s officials and constituents, wherein they are informed that their barangay has been selected and is about to undergo the BFPM process. The LGU can fund this process or funds may be sourced from prospective assisting agencies or private organizations.</td>
</tr>
</tbody>
</table>
| Lead Player:       |  - Municipal Environment and Natural Resources Officer (MENRO) prepares project proposal for a given barangay identified as potential beneficiary of the Barangay Forest Protection Program.  
                            - Barangay Captain participates in meetings and assists the MENRO in the conduct of identification activity. |
| Facilitating Factors: | The MGLU should first secure the interest of the barangay by a resolution before putting this scheme into action. Likewise, all the necessary information (plans, socio-economic and other relevant data) on the barangay must be gathered so that the project proposal is grounded realistically. |
| Resources Needed:  | Attendance of the local people to the meeting is crucial. The following should be made available: necessary materials, food and staff to handle the meeting. |

#### STEP 2: FORMULATION AND APPROVAL OF BUDGET PROPOSAL

| Expected Outputs: | At this stage, it is expected that the BFPM Proposal has been completed (containing activities, budget, resource requirements and other relevant attachments) and submitted to the Municipal Mayor/funding agency. |

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*Series Book No. 3: National Government Agencies’ Guide on the Sustainable Upland Development (SUD) Model – Chapter 3: Barangay Forest Protection and Management*
## STEP 2: FORMULATION AND APPROVAL OF BUDGET PROPOSAL

<table>
<thead>
<tr>
<th>Pre-requisites:</th>
<th>Barangays have been identified and selected.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Player:</td>
<td>MENRO prepares the financial proposal.</td>
</tr>
</tbody>
</table>
| Participants:   | ▪ BLGU to provide information and data to MENRO in the preparation of the proposal.  
▪ MLGU/prospective funding agency to review, validate and approve the proposal. If the MLGU is the funding agency, then the project should be included in its work and financial plan. The requirements of the bank or other institution’s requirements should be met if these are the funding sources. |
| Facilitating Factors: | The technical capability of the MENRO in forest resources management and proposal writing is important. The MENRO and the BLGU maintain linkage or good working relationship to properly include all main points in the plan. |
| Things to Watch Out For: | To succeed in this step, it is important to keep the interest of the barangay. Other people should be included in proposal preparation. The project must be included in the MLGU’s budget for a given year. |
| Resources Needed: | Staff who will prepare the proposal, relevant barangay information and finally, approval from the MLGU are required to implement this step. |

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### #10 Note to the NGAs: BEEFING-UP SKILLS OF LGU STAFF

Some BLGUs may lack expertise and experience in developing project proposals. NGAs, particularly those with the Project Development Team, may consider holding workshops on project proposal preparation. Through this, the BLGUs may be able incorporate all the necessary elements in their proposal as well as include the recommended system for monitoring and evaluation.
# STEP 3: FACILITATION OF BARANGAY ORIENTATION AND CREATION OF BARANGAY FOREST PROTECTION AND MANAGEMENT COMMITTEE (BFPMC)

## Expected Outputs:

This is about conducting an information campaign on the scheme. People will appreciate knowing more about the project and its importance, as well as contemplate how they may be able to personally contribute to the project.

The orientation/briefing may cover the following topics: SUD as a strategy to ensure the sustainable management of upland resource base; importance of the barangay forest protection and management scheme; benefits when such scheme is implemented; LGUs and community partnerships; and identified activities under the scheme.

This is also the stage where the Barangay Forest Protection and Management Council or Committee is created.

Completion of this step would signify that:

- Courtesy call with MLGU and BLGU have been done;
- Potential participants have been determined, specifically barangay officials;
- Barangay orientation has been conducted;
- Report of barangay orientation has been completed; and
- Barangay Forest Protection Management Council (BFPMC) has been created.

## Pre-requisites:

After agreeing on the schedule of the orientation, letters are sent to the barangay officials, tribal leaders, key representatives and other people who may be interested to become part of the project. A team is assigned to do the confirmation, arrangement with the venue, prepare materials, facilitate processing of vouchers etc.

## Lead Player:

- The MENRO, MAO or whoever is designated by the Local Chief Executive (LCE) is the lead facilitator during the orientation.

## Participants:

- Members of the Barangay Council and Barangay school principals or teachers
- PO representatives
- DENR to be in charge in the discussion of environmental laws related to Forest Protection.
- MA to be in charge of the discussion on sustainable
farming practices.
- Funding institution to discuss the package they can offer to the barangay.

**Facilitating Factors:**
Central to the success of this activity is the ability of the resource persons to make the scheme understandable as well as their frank response to the concerns of the local community. Proper coordination between the BLGUs and the NGAs is necessary.

**Things to Watch Out For:**
Commitment and counterpart of MLGU, DENR, DA, NCIP and other concerned.

**Resources Needed:**
Budget for food, materials, rentals (if necessary), honorarium (if required) and venue.

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**BLUE BOX NO. 13 BARANGAY ORIENTATION ON BFPM**

Former extension worker turned Municipal Councilor explains the process of BFPM.
**STEP 4: CONDUCT OF PERIMETER SURVEY AND COMMUNITY MAPPING**

| Expected Outputs: | The next step is the conduct of a perimeter survey in order to delineate zones - such as the strict protection zone, production zone, and buffer zone, among others. This step is completed once the:  
- Barangay Forest Protection area has been zoned;  
- BLGUs have been tapped to assist in the conduct of perimeter survey; and  
- Community mapping has been conducted. |
|---|---|
| Pre-requisites: | The approval of the SB on the conduct of perimeter survey is sought. Arrangements should be made with the barangay on the schedule of the survey and community members should be invited to join the activity.  
Forest occupants (specifically the indigenous people) are consulted and informed of the schedule. They are to be notified on the coverage of the survey (such as the vegetation cover and existing water bodies) to save time during the actual survey. |
| Lead Player: | MENRO leads in the conduct the perimeter survey. |
| Participants: | BLGUs and CENRO assist in the conduct of the survey.  
DENR assists in the review of existing land use and other activities related to forestry.  
NCIP ensures that IPs rights are not violated. |
| Facilitating Factors: | Approval of the conduct of the survey, budget to cover all the expenses related to the exercise and commitment from the participants. |
| Things to Watch Out For: | Should there be any existing conflict between the BLGU and the IPs, this should be settled first, since the survey will “intrude” into the latter’s territories. The objective of the perimeter survey must be clearly conveyed to the IPs so
## STEP 4: CONDUCT OF PERIMETER SURVEY AND COMMUNITY MAPPING

<table>
<thead>
<tr>
<th>Resources Needed:</th>
<th>Manpower, budget and transportation (since the survey will be covering wide areas)</th>
</tr>
</thead>
</table>

that there will be no delay in its conduct.

## STEP 5: CONDUCT OF ENVIRONMENTAL AWARENESS SEMINAR AND PRELIMINARY COMMUNITY MAPPING

### Expected Outputs:

The substance of this scheme is for the local people to know which part of their upland area is declared a forest protected area. Prior to the declaration, this step includes several sub-activities, which are:

- Environmental awareness seminar and conduct of some preliminary activities prior to site selection:
  - Review of existing land use of the barangay
  - Formulation of barangay action plan for forest protection site identification

- Identification of forest protection area by considering the following factors:
  - Elevation
  - Areas near rivers
  - Any, if not all, environmentally critical areas

- Identification of actual forest area occupants taking into consideration the IPs’ concern

### Pre-requisites:

The specific area is determined by the perimeter study.

### Lead Facilitator:

- The MENRO, MAO or whoever is designated by the Local Chief Executive (LCE) is the lead facilitator during the seminar and community mapping

### Participants:

- Barangay Captain
- Barangay Kagawads
- Purok/Sitio Leaders
- NCIP representative/s
- UBA/UCO officers/representatives

### Facilitating

The perimeter survey becomes the basis for zoning. An
### STEP 5: CONDUCT OF ENVIRONMENTAL AWARENESS SEMINAR AND PRELIMINARY COMMUNITY MAPPING

<table>
<thead>
<tr>
<th>Factors:</th>
<th>Information campaign would help establish a common understanding among the local people.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Things to Watch Out For:</td>
<td>For the barangay action planning activity, the resource persons should have undergone training and should be capable of “trafficking” the flow of discussion. Every participant must be given time and opportunity to put in their opinions and suggestions.</td>
</tr>
<tr>
<td>Resources Needed:</td>
<td>Fund allocation for meetings, information campaign, notarization and blue printing of the maps, and all the cost related to the actual survey.</td>
</tr>
</tbody>
</table>
BLUE BOX NO. 14 REMAINING FOREST FRONTIERS

A billboard declaring the site a protected area.

The billboard shows the Barangay Ordinance of a declared forest protected area citing among others the law and penal provisions for violation of the ordinance. The Partners logo is also presented. The billboards are put in conspicuous areas where most people in the barangay can have a good glimpse and are obliged to follow the ordinance.

STEP 6: PREPARATION OF SITE MANAGEMENT AGREEMENT (SMA) AND CONDUCT OF INFORMATION DRIVE TO FOREST OCCUPANTS

Expected Outputs:
The SMA is an agreement between the forest occupants staying within the area and the BLGU for the active involvement and participation of the occupants in forest protection activities. Thus, the outputs of this scheme are:

- Site Management Agreement prepared and well understood by the forest occupants; and
# STEP 6: PREPARATION OF SITE MANAGEMENT AGREEMENT (SMA) AND CONDUCT OF INFORMATION DRIVE TO FOREST OCCUPANTS

- Barangay Forest Guards selected and designated by the Barangay Captain

## Pre-requisites:
Prior to this stage, the Environmental Awareness Seminar should have already been conducted so that the forest occupants are already familiar with the BFPM scheme. Also, the community map should have already been completed as basis for the delineation of the area to be declared as a forest protected area.

## Lead Facilitator:
MENRO to prepare the SMA.

## Participants:
- BLGUs to assist the MENRO in the conduct of Information Drive.
- NCIP to represent the IPs and to ensure IPs concerns are noted.
- Community to participate in the conduct of Environmental Awareness Campaign (EAC).

## Facilitating Factors:
The SMA should be subjected to consultations with the community prior to finalization.

## Things to Watch Out For:
A set of criteria for the selection of Barangay Forest Guards should guide the barangay in the process. This is to avoid any conflict that would hamper the implementation of the scheme later on.

## Resources Needed:
Fund allocation for the small meetings for the information drive, where the community could be asked to provide some form of counterpart (e.g. venue, food).
STEP 7: FORMULATION OF A BARANGAY ORDINANCE FOR THE DECLARATION OF A FOREST PROTECTED AREA

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>The following outputs expected at the end of this step:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- A Barangay Resolution Adopting the Forest Protected Area passed by the Sangguniang Bayan;</td>
</tr>
<tr>
<td></td>
<td>- A Barangay Ordinance declaring the Forest Protected Area;</td>
</tr>
<tr>
<td></td>
<td>- The Barangay Forest Protected Area presented and approved and ratified by the General Assembly thru a Public Hearing; and</td>
</tr>
<tr>
<td></td>
<td>- Barangay Forest Protected Area endorsed by the Municipal Council and Local Chief Executive</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pre-requisites:</th>
<th>At this point, the Site Management Agreement should have already been formulated, the provisions of which form the basis for the barangay ordinance.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Player:</td>
<td>Barangay Council to formulate the barangay ordinance, with technical assistance/advice from the MENRO.</td>
</tr>
</tbody>
</table>

Facilitating Factors: A sample barangay ordinance would be helpful to the Barangay Council as they craft their own legislation.

Things to Watch Out For: The formulation of the ordinance is largely dependent on the working calendar of the Barangay Council. The MENRO and the Barangay Forest Protection and Management Council should both lobby for immediate action on the ordinance.

Resources Needed: Sample format of the barangay ordinance
STEP 8: FORMULATION OF MEMORANDUM OF AGREEMENT ON FOREST PROTECTED AREA

Expected Outputs: The basic difference between the SMA and the Memorandum of Agreement (MOA) is the parties to the agreement. While the SMA involves the forest occupants and the BLGU, the MOA is more inclusive and multi-party in nature. More specifically, the MOA is actually a Co-Management Agreement on Forest Management forged by key partners, to include: BLGU, MLGU, PLGU, DENR, NCIP, the community (represented by their PO), PNP and the Tribal Council.

Pre-requisites: The two (2) major pre-requisites of this step are:
- Consultation and agreement of all parties to participate in the management of the forest protected area; and
- Formulation of the Barangay Ordinance (Step 7)

Lead Player: MENRO to prepare the MOA

Lead Participants: To provide inputs to the MOA:
- Barangay Council
- Forest Occupants
- All parties included in the Co-Management Agreement

Facilitating Factors: Although the MENRO is designated as the point person for preparing the document, he/she should pro-actively seek the inputs of the other parties so that the MOA is the product of a participatory and collaborative effort.

Things to Watch Out For: The MENRO should combine his/her technical expertise with the intimate area knowledge of the Barangay Forest Management Council in coming up with a final MOA.

Resources Needed: Sample format of the MOA

STEP 9: DECLARATION OF FOREST PROTECTED AREA, MOA AND SITE MANAGEMENT AGREEMENT SIGNING

Expected Outputs: This stage formalizes the institutionalization of the BFPM in the barangay. The outputs of this stage are:
- A formal declaration of the Barangay Forest Protected Area
- MOA
- Site Management Agreement
### STEP 9: DECLARATION OF FOREST PROTECTED AREA, MOA AND SITE MANAGEMENT AGREEMENT SIGNING

<table>
<thead>
<tr>
<th>Pre-requisites:</th>
<th>This step can be undertaken only if the MOA and SMA have already been formulated and subjected to multi-sectoral consultations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Player:</td>
<td>Barangay Captain - takes the lead in the conduct of the barangay assembly and officially declares the barangay forest protection area.</td>
</tr>
</tbody>
</table>
| Lead Participants: | To participate in the General Assembly and sign the MOA and SMA:  
  - Barangay Kagawads  
  - Purok/Sitio Leaders  
  - DENR and NCIP representative/s and all other parties included in the Co-Management Agreement  
  - UBA/UCO officers/representatives  
  - Identified actual forest occupants |
| Facilitating Factors: | Because this is one of the most crucial community gatherings throughout all the steps as it doubles up as a formal launching of the scheme in the barangay, they should be assisted in preparing the program, inviting the key participants and providing the logistics; however, the major decisions should be left with the barangay. |
| Things to Watch Out For: | Given how crucial this activity is to the eventual success of the scheme, the following persons should be invited to the signing:  
  - Key influencers in the community - the persons whose opinions are highly regarded in the barangay should be invited.  
  - Document signatories -The signatories themselves should attend the gathering to signify not only the importance of the meeting, but their commitment to the success of the scheme. |
| Resources Needed: | Budget for Invitations, Transportation, Logistics Documents for signing |
**Expected Outputs:** The final output of this step is a Five-Year Action Plan for the implementation of the BFPMS on an annual basis, which could include: a Barangay Forest Management Plan; Capability Building Activities; specific Projects and their corresponding Activities.

**Pre-requisites:** In addition to the signed documents from Step 9, the BFPMC should already be completely organized by this time.

**Lead Player:** BFPMC to conduct the workshop with technical assistance from MENRO.

**Facilitating Factors:** This workshop is an ideal venue for the MLGU to streamline and converge on-going BFPM-related programs and projects in the barangay - whether funded by local, national or foreign funds in the entire forest protection and management.
### STEP 10: POST-WORKSHOP AND ASSESSMENT PLANNING ON BFPMS

<table>
<thead>
<tr>
<th>Things to Watch Out For:</th>
<th>The BFPMC should be at the forefront of BFPM at this point. It should institute a Monitoring and Evaluation system to support the scheme’s implementation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources Needed:</td>
<td>Documents - hard copies of: signed SMA and MOA; existing barangay and municipal plans; and any documents on ongoing BFPM-related programs and projects. Logistics - for the meeting, i.e. venue and meals.</td>
</tr>
</tbody>
</table>

### STEP 11: CONDUCT OF CAPABILITY BUILDING AND TRAINING ACTIVITIES

<table>
<thead>
<tr>
<th>Recommended Activities:</th>
<th>To further enhance the local communities in forest protection and rehabilitation, some capability building activities are recommended:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>§ Recommended activities:</td>
</tr>
<tr>
<td></td>
<td>- Training on environmental laws for BLGU, BFPMC and Barangay Forest Guards.</td>
</tr>
<tr>
<td></td>
<td>- Training on site-specific forest management activities and the implementation of support projects for forest management such as but not limited to:</td>
</tr>
<tr>
<td></td>
<td>- Training on nursery establishment</td>
</tr>
<tr>
<td></td>
<td>- Tree planting</td>
</tr>
<tr>
<td></td>
<td>- Maintenance of planted forest seedlings</td>
</tr>
<tr>
<td></td>
<td>- Buffer zone development</td>
</tr>
<tr>
<td></td>
<td>- Training of BFPM Committee, forest occupants, forest guards on RAINFORESTATION</td>
</tr>
<tr>
<td></td>
<td>- Training on how to conduct mapping activities</td>
</tr>
<tr>
<td></td>
<td>- Training on the formulation of Barangay Forest Management Plan</td>
</tr>
<tr>
<td></td>
<td>- Continuing Information, Education and Communication campaign</td>
</tr>
<tr>
<td>Expected Outputs:</td>
<td>It is assumed that training on environmental law has been conducted, participants trained on specific forest management and Barangay Forest Management Plan</td>
</tr>
</tbody>
</table>

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## STEP 11: CONDUCT OF CAPABILITY BUILDING AND TRAINING ACTIVITIES

<table>
<thead>
<tr>
<th>Pre-requisites</th>
<th>Selection of barangay and the approval of project proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lead Player:</strong></td>
<td></td>
</tr>
<tr>
<td>▪ BLGU/BFPMC determine the training needs of BFPMC.</td>
<td></td>
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<tr>
<td>▪ DENR, MENRO and NCIP and other partners to assist in</td>
<td></td>
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<tr>
<td>the conduct of all forest management rehabilitation</td>
<td></td>
</tr>
<tr>
<td>activities as well as conduct of information campaign</td>
<td></td>
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<tr>
<td>on environmental laws.</td>
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</tr>
<tr>
<td><strong>Participants:</strong></td>
<td></td>
</tr>
<tr>
<td>Community to participate in forest management activities identified under the scheme.</td>
<td></td>
</tr>
<tr>
<td><strong>Facilitating Factors:</strong></td>
<td></td>
</tr>
<tr>
<td>Interest of the local people and the expertise of the lecturers will make these activities worth doing.</td>
<td></td>
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<tr>
<td><strong>Things to Watch Out For:</strong></td>
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<tr>
<td>Training needs of the prospective participants should be assessed so that training/seminars will be prioritized. Another important thing to consider is commissioning resource trainers who are experts in watershed management. Most ATs have formal training and orientation on agriculture; while watershed management and forestry are alien to them.</td>
<td></td>
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<tr>
<td><strong>Resources Needed:</strong></td>
<td></td>
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<tr>
<td>Budget, people coordinating all the requirements and conducive venue.</td>
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</tbody>
</table>

*Series Book No. 3: National Government Agencies’ Guide on the Sustainable Upland Development (SUD) Model – Chapter 3: Barangay Forest Protection and Management*
BLUE BOX NO. 16 NURSERIES

Tree seedlings for planting under the BFPM scheme.
BLUE BOX NO. 17 COMMUNITY IN ACTION

Marking trees in the forest...

Painting red on tree trunks means that the trees have undergone inventory.

Tree planting involving students
**STEP 12: CONDUCT OF VARIOUS ACTIVITIES RELATED TO BARANGAY FOREST PROTECTION AND REHABILITATION**

<table>
<thead>
<tr>
<th>Recommended Activities:</th>
<th>Under this step are several recommended activities:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>▪ Fencing of forest lines/protected zone</td>
</tr>
<tr>
<td></td>
<td>▪ Nursery establishment</td>
</tr>
<tr>
<td></td>
<td>▪ Tree planting in delineated area and buffer zone development</td>
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<tr>
<td></td>
<td>▪ Mounting of billboards</td>
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<tr>
<td></td>
<td>▪ Working out for Barangay ordinance on “no cutting of trees” in protected area</td>
</tr>
<tr>
<td></td>
<td>▪ Establishment of forest fire lines</td>
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<tr>
<td></td>
<td>▪ Conduct of foot patrol to ensure that no illegal cutting of trees occurs in the protected area.</td>
</tr>
<tr>
<td></td>
<td>▪ Conduct of replanting activities when necessary.</td>
</tr>
<tr>
<td></td>
<td>▪ Conduct of continuous information campaign</td>
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</tbody>
</table>

| Expected Outputs: | At the end of this stage, the forest lines would have been fenced, billboard mounted, buffer zone developed, ordinance formulated and approved, and several IEC campaigns conducted. |

| Lead Player: | Municipal LUB-BDP Team, MENRO and Barangay Captain - work together to facilitate the conduct of the capability building activities. |

| Participants: | Barangay Kagawads, Purok/Sitio Leaders, NCIP representative/s, UBA/UCO officers/representatives, and the identified actual forest occupants participate in the training. |

| Facilitating Factors: | Participation of the community and the deputization of forest guards. |

| Things to Watch Out For: | In fencing in the buffer zone, some of the possible problems that could arise are inadequate or loss of fencing materials. Safety measures should be considered so that this will not happen. |

| Resources Needed: | Among the resources needed are manpower, budget, fencing materials, nursery buildings, seedlings for tree planting, raincoats for forest guards/forest protection officers, billboards and other IEC Materials. |
BLUE BOX NO. 18  IEC EFFORTS

Billboards such as these, found along the highway or main road, serve to remind the local community of their commitment to protecting the forests.

A billboard in Magtinago, Maragusan, Compostela Valley.

BLUE BOX NO. 19 RELATIONSHIPS UNDER BFPM

Diagram showing relationships between:
- DENR/NCIP
- MLGU-Municipal Environment and Natural Resources
- Service Provider
- BLGU/Barangay Forest Protection and Management Committee
- Upland Barangay Assn.
- Forest Guards
3.4 HOW CAN I HELP - REQUIRED INTERVENTIONS FROM NGAS IN IMPLEMENTING THE SCHEME

Table 3.1 Required Interventions from NGAs in Implementing BFPM

<table>
<thead>
<tr>
<th>Resource Requirements</th>
<th>Scope of Interventions</th>
<th>National Government Agencies</th>
</tr>
</thead>
</table>
| Human Resources       | ▪ Provide technical staff for the conduct of the orientation, meetings, perimeter survey and environmental seminars.  
                         ▪ Conduct training on project development.  
                         ▪ Demonstrate commitment through action to further inspire local communities in protecting the environment |                              |
| Money                 | ▪ Provide funds for the capability-building activities.  
                         ▪ Provide funding for the hiring of technical consultants or forestry experts in interpreting survey results.  
                         ▪ Allocate funds as honorarium of the forest guards |                              |
| Machinery or Equipment| ▪ Lend presentation equipment during meetings, orientations  
                         ▪ Lend transportation during survey and other meetings |                              |
| Materials             | ▪ Provide fencing materials, nursery buildings, seedlings for tree planning  
                         ▪ Provide raincoat and other paraphernalia that will aid the deputized forest guards while patrolling the protected sites.  
                         ▪ Develop manuals for forest nursery management, forest plantation establishment and development  
                         ▪ Provide supplies and materials during orientations or meetings  
                         ▪ Provision of seedling materials (DENR) |                              |
| Means or Technology   | ▪ Lobby for the passing of Barangay/Municipal resolutions supporting the BFPM project  
                         ▪ Provide venue for above activities  
                         ▪ Maintain close coordination between the LGUs and the NGAs.  
                         ▪ Provide support in securing legal documents  
                         ▪ MOAs on the partnership and the delineation of responsibilities  
                         ▪ Introduce new policies or projects in support to the BFPM  
                         ▪ Conduct of social preparation activities for the affected people such as the IPs |                              |
3.5 BENEFITS AND COSTS OF IMPLEMENTING THE SCHEME

Earlier in this section, it was mentioned that forest protection is the centerpiece - the most important feature - of sustainable upland development.

By supporting this scheme, the NGAs are sharing with the LGUs and the local people the responsibility of protecting, conserving and maintaining the country’s forest reserves. NGAs are the given the opportunity to impart their expertise and assist in empowering the upland communities through different training, seminar and joint-activities.

Environmentally, upland communities and even the lowland population will be looking forward to increased forest cover, increased number of wildlife, sustainable potable water supply, low incidence of soil erosion and finally, protection of nearby coastal resources.

Upland communities will definitely experience a deeper sense of kinship, not only with nature, but more importantly, with the different groups of people they will be working with. The shared ownership of keeping the upland areas green, pristine and teeming with life, places them in a unique position which the future Filipino generations will look up to.

The investment costs of implementing the BFPM scheme as referred to is around Php 575,000 for a municipality, on the assumption that five (5) different barangays/sites would be covered. The annual recurrent cost would be around Php 250,000 for all the five (5) sites.
CHAPTER 4: Labor-based Routine Road Maintenance

4.1 THE CONVENTIONAL WAY OF DOING BARANGAY ROAD MAINTENANCE

Many logging companies had made Southern Mindanao the source of their timber products. With their brisk business in the past, they spun webs of roads connecting the forest to lowland areas, bringing the logs to processing plants, sawmills and furniture shops. Most of these roads suffered from deficiencies in design and construction, inadequate maintenance and damage from overloaded vehicles. Landslides, roads slips and clogged culverts only worsened the already-miserable state of the barangay roads.

Under this situation, products from the upland areas would take a long, difficult time reaching their markets, seriously affecting its competitiveness and consequently, its sale. In the same manner, upland communities were also deprived of access to other economic opportunities and social services.

Road maintenance (for provincial, city, municipal and barangay categories) was lodged solely on LGUs. But even with its decentralization in 1991, not all LGUs were able to allocate sufficient resources to maintain their road appropriately. Apart from funds, LGUs lacked qualified people to adequately cover roads under their jurisdiction. Finally, poorer LGUs could not tap funding sources due to high interest rates.

BLUE BOX NO. 20 COMMON UPLAND ROAD

Unpaved roads leading to the uplands are not only unpaved, but dangerous and inconvenient.
#11 Note to NGAs: ALLOCATION FOR ROADS

The World Bank Study (Local Roads Study, 2000) observed that while the management of local roads was devolved to the LGUs, investment in local roads was mostly funded by the NGAs. The Department of Public Works and Highways shared 50%, while the combined allocation of 25% was shared between the Department of Agriculture, Department of Agrarian Reform, Department of Environment and Natural Resources and the National Irrigation Authority; and the remaining 25% was spent directly by the LGUs.

This project-by-project approach resulted to fragmented administrative responsibilities while selection of road improvement was decided in an ad hoc manner.

4.2 BRIEF DESCRIPTION OF THE SCHEME

The scheme proposes that the upkeep of barangay roads is shared with the people in the community. The scheme is classified into three:

- **Road Management** refers to measures to prevent unnecessary damage to the road, e.g. ordinances, imposition of fines, construction of humps and erosion control measures.

- **Emergency Maintenance** covers maintenance of large structures like bridges, removal of large landslips, repair done to the road after a period of wear and damage, usually equipment-based.

- **Routine Maintenance** involves regular, labor-based, e.g. vegetation control, filling of potholes, rills and ruts, restoring the road surface, cleaning/repairing side ditches, etc.

The scheme proposes to mobilize the upland community, through local organizations such as the Upland Barangay Associations (UBA), and sign them up to assist with the upgrading and maintaining of selected roads. This way, the community has its own permanent maintenance team/crew responsible for a certain stretch of road. Further deterioration of the barangay roads is prevented since the crew members live near these roads and they are the first to notice if the roads need tending.
BLUE BOX NO. 21 WHOSE ROAD IS THAT?


4.2.1 Rationale of the Scheme

Land transportation is obviously the only practical way to move people and products from the upland to the lowland areas, and land transport relies heavily on these barangay roads. Statistics show that only seven percent (7%) of the country’s road is paved and a long stretch of it has earth surface that is highly vulnerable to weather conditions.

Bad roads are more than a cause for inconvenience to the passengers. They can spoil agricultural produce and cause damage to vehicles/trucks delivering products. Bad roads also delay the flow of technology, capital, tourism and other social changes to upland communities.

This scheme is particularly important to the NGAs as it shares the responsibility of maintaining local roads with the local people. With good roads linking upland barangays, these open up economic opportunities, preserve socio-political stability and promote good stewardship in the community.

4.2.2 Objectives of the Scheme

The scheme aims to entrust the routine maintenance of barangay roads to local people. By doing so, the scheme:

- Ensures that barangay roads are maintained regularly and upgraded when necessary;
• Builds the capacity of the local organizations to undertake contracts, thereby generating employment to their members and empowering the leaders;
• Harnesses the abundant physical labor available in the uplands;
• Promotes good governance in LGUs;
• Encourages steady access to social services and other economic opportunities; and
• Instills a spirit of “bayanihan” or solidarity among the local people

4.2.3 Qualifying Criteria

Before the scheme can be implemented, the following criteria must be satisfied:

a) Geographic Criteria

**Barangay Roads only.** Roads identified under this scheme have been designated as barangay roads.

b) Community Criteria

**Presence of active UBA.** The UBA that is being eyed to work on this scheme should already be existing and operational in the barangay.

**Passage of related ordinances.** Ordinances passed in support to this scheme should be respected.

**Training of maintenance crew.** Lastly, maintenance crew and the UBA members should be trained on the different steps of the scheme.
BLUE BOX NO. 22  GROUPS ORGANIZED BY UDP

The UDP has facilitated and strengthen sitio based organisations as well as upland barangay associations to take the lead in sustainable upland development together with their local government and other stakeholders. Federations of these community organizations are represented in the Municipal Development Council.

For UDP they had at least four roles, namely: (1) implementation of barangay routine road maintenance; (2) running of village enterprises; (3) appointment and checking on the forest guards in the barangay forest protection scheme; and (4) promotion of diversified farming system among the barangay farmers and organizations of other barangays under the municipal extension model.

Many of the members of these organizations achieved a level of recognition in their own barangays - that they became members of the Barangay Development Councils.

In sustaining these groupings, two things need a great deal of attention: (1) the often weak managerial and organisational capacity; and (2) the multiplicity/interlocking roles of some of the UBA/UCO leaders. Both factors impose stress on the organizational quality of these groups.

Source: UDP Pre-Completion Report, October 2005.

c) Legal, Institutional and Other Documentary Criteria

Memorandum of Agreement between MLGU and BLGU. A Memorandum of Agreement between the BLGU and the MLGU is drawn. Likewise, the MOA must be supported by a Barangay Council resolution, authorizing the Barangay Captain to represent the barangay.

Creation of Barangay Infrastructure Committee. At the Barangay Council, a Barangay Infrastructure Committee is formed and its membership includes the representative from the UBA.

Action Plan on LBRRM. Lastly, an Action Plan for the LBRRM should be formulated prior to the implementation of the scheme.

4.3 THE SCHEME: STEP-BY-STEP

Awareness Campaign. As the first step in establishing the barangay maintenance crew, an extensive awareness campaign on the importance of maintaining good roads - particularly those that link upland farms to the markets - is conducted. The local community needs to be acquainted with the entire process of the scheme.
Organization of Permanent Maintenance Crew. An agreement is forged regarding the appointment of permanent maintenance crews headed by a foreman, on vital barangay roads.

Conduct of Technical Training. A capacity building activity on appropriate upland technologies for municipal engineers is conducted. After this stage, the LGU engineers can proceed with training the crew themselves. Provision of tools during the training is essential.

Establishment of Monitoring and Supervision System. Finally, a monitoring and supervision system is established, to be headed by the LGU engineers.

The practical and independent steps and procedures in LBRRM are the following:
4.3.1 Summary of Tasks

Figure 4.1 15 Tasks of LBRRM

1. **TASK 1:** Vegetation Control
2. **TASK 2:** Filling of Potholes, Rills and Ruts
3. **TASK 3:** Restoring the Road Surface
4. **TASK 4:** Cleaning, Repairing and Re-shaping of Side Ditches
5. **TASK 5:** Cleaning Culverts and Other Structures
6. **TASK 6:** Erosion Control
7. **TASK 7:** Construction of Scour Checks
8. **TASK 8:** Construction of Humps and Diversion Banks
9. **TASK 9:** Construction of Turnouts (Mitre Drains)
10. **TASK 10:** Installation of Culvert Outlet Energy Dissipators
11. **TASK 11:** Repair of Land Slip
12. **TASK 12:** Installation of Fascines Using Madre de Cacao
13. **TASK 13:** Installation of Grass Barrier Silt Trap
14. **TASK 14:** Installation of Live Check Dams using Bamboo or Madre de Cacao
15. **TASK 15:** Surface Erosion Control with Vetiver Grass
4.3.2 Description of each Task

**TASK 1: VEGETATION CONTROL**

| Expected Outputs: | ▪ To maintain adequate site distance  
▪ To prevent clogging of the drains  
▪ To assist drying of roads |

![Vegetation Control Image]
TASK 2: FILLING OF POTHOLES, RILLS AND RUTS

Expected Outputs:
- To prevent the ponding and passage of water within the road
- To improve the surface smoothness
## TASK 3: RESTORING THE ROAD SURFACE

**Expected Outputs:**
- To maintain the shape of the road so that water is quickly removed
- To maintain the surface strength

---

![Image of workers restoring the road surface]

---

![Image of workers restoring the road surface]
Expected Outputs: To ensure the efficient interception and removal of water from the locality of the road.
**TASK 5: CLEANING CULVERTS AND OTHER STRUCTURES**

**Expected Outputs:** To ensure the road is not damaged by providing an unobstructed flow of water across and away from the road.

---

**TASK 6: EROSION CONTROL**

**Expected Outputs:** To avoid damage to the road and its drainage system.
TASK 7: CONSTRUCTION OF SCOUR CHECKS

Procedure:

- Use on steep gradients where concentrated water is eroding the ditch and there is nowhere to place turn-outs.
- The distance between the scour checks depends on the gradient and the soil condition of the road. The steeper the slope or the softer the soil, the closer the spacing of the scour checks.
- Use stones if available, otherwise bamboo or wooden pegs, which are supported by planting grass above and below the scour check.
- The height at the edges of the scour check must be higher than the water flow height and the water flows over the middle, not around the edges, otherwise, it will erode the side of the scour check.
**TASK 8: CONSTRUCTION OF HUMPS AND DIVERSION BANKS**

**Procedure:**
- These are useful means of diverting water off the road turnouts and they can be constructed with maintenance labor. The material (soil/aggregate) must be put on in layers and well tampered.
- The distance between banks will vary. In hilly areas, it can be as short as 40 m and in fact the more, the better so as to reduce the amount of water flowing off each one and therefore the erosion.
- The accompanying diagrams show relevant dimensions and it should be set at an angle to guide the water off the road.
- On hilly terrain, the shape of the downhill side is steeper than the road itself (i.e. slope of is 1 in 10, slope of the bank is 1 in 6).
### TASK 9: CONSTRUCTION OF TURNOOUTS (MITRE DRAINS)

**Procedure:**
- Turnouts lead water away from the side drains for dispersal in the surrounding area.
- Indicative spacing - steep - 10 m; medium - 20 m; gentle-50m
- The spacing is indicative only and really depends on volume to be removed. The more turn outs, the better as this means less volume at each turn out and meaning, less erosion in the drains and especially in the surrounding area.
**TASK 10: INSTALLATION OF CULVERT OUTLET ENERGY DISSIPATORS**

**Procedure:**

- The outlet side of the culvert should be gently sloping back to the stream and grassed or rock armoured to prevent erosion.
- Using rock armouring in the streambed at the culvert outlet will help prevent undermining of the culvert and improve conditions. Rocks 200-300 mm in diameter will be suitable for most situations, preferably with a geotextile layer below to prevent fine material washing away and gradually eroding the area.
- Live material such as madre de cacao can be used as energy dissipater.
## TASK 11: REPAIR OF LAND SLIP

**Procedure:**
- Land slip is one of the common problems encountered in maintaining barangay roads in the uplands.
- During rainy days, the soil along the cliff side of the road softens which eventually leads to huge soil erosion creating gully and cutting the road, at times making it impassable.

### Road Slip Before Repair

![Road Slip Before Repair](image1)

### Road Slip After Repair

![Road Slip After Repair](image2)
### TASK 12: INSTALLATION OF FASCINES USING MADRE DE CACAO

**Procedure:**
- Trim back the sides of gully if too steep. Throw excess loose material upstream.
- Bundles of 4-5 gliricidia cuttings, alternating the basal ends of some to lie adjacent top ends of others.
- Key the bundles into the sides of the gully depth of 30-50 cm and compact around.
- Ensure good contact between cuttings and gully bed, as this is where root reinforcement will develop.
- Make sure middle of check dam is lower than sides; otherwise, overflow may undercut the sides.
- Pack the base of the dam with brushwood and angular stones. Plant grass slips or cuttings on upstream gully sides.
**TASK 13: INSTALLATION OF GRASS BARRIER SILT TRAP**

**Procedure:**
- Set up planting guide line parallel to drain or road.
- Plant double row of grasses, 15 cm between plants, 20 cm between rows.
- Establish ground cover, e.g. ground legumes, between grass and drain. Scrubs above grass, e.g. calliandra.

**TASK 14: INSTALLATION OF LIVE CHECK DAMS USING BAMBOO OR MADRE DE CACAO**

**Procedure:**
- Line out a contour along the slope.
- Prepare bundles of 4-5 gliricidia cuttings, already ringbarked. Keep in shade until required.
- Prepare 20 cm deep trench on contour.
- To conserve moisture, do not open long lengths of trench.
- Place bundles in the trench. Ensure that separate bundles overlap.
- Cover the bundles with maximum of 10 cm of soil and firm.
### TASK 15: SURFACE EROSION CONTROL WITH VETIVER GRASS

<table>
<thead>
<tr>
<th>Procedure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Set up planting guide line parallel to drain or road.</td>
</tr>
<tr>
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</tr>
<tr>
<td>Scrubs above grass, e.g. calliandra.</td>
</tr>
</tbody>
</table>

#### 4.3.3 Over-all Expected Outputs

If the scheme has worked, the following are expected:

- Roads are in passable condition
- Likelihood of major damage is reduced, therefore lessening the need for outside assistance in the form of heavy equipment and machinery
- Upkeep of the road is contained within the capacity of the barangay
- Local economy is benefited because the funds are spent locally (salaries of the barangay crew, etc.)

### BLUE BOX NO. 23 LINKING FARMS TO MARKET

UDP, jointly and in a cost sharing arrangement with its collaborating LGUs, has rehabilitated a total of 35 km costing Php 7.188 million and 201 km of DA-MakaMASA-assisted Farm-to-market-roads costing Php 50 million.

Rehabilitation of farm to market roads stimulated not only the farming activities but also small business enterprises such as sari-sari stores, transport business, entertainment (karaoke bars). Ironically though, these effects were rather short-lived because of the poor standards of construction in combination with the absence of follow-up maintenance.

Source: UDP Pre-Completion Report, October 2005

Being a modelling programme, there was the need for a policy shift towards: In case required, first to be done is quality rehabilitation to bring vital farm to market roads up to a maintainable level. Secondly and right after the rehabilitation, well trained maintenance crews that are properly supplied with quality hand tools must be fielded, in order to immediately address cropping up maintenance issues. This will prevent rapid deterioration as happened in the past and keep the roads in good shape always.
4.3.4 Over-all Pre-requisites

In preparation for this scheme, several activities have to be arranged first and these include:

Installing a Maintenance System. Parameters are defined - in choosing teams, in determining their working arrangements (as a group or as individuals responsible for smaller section of the road) and the compensation system (food-for-work, pakyaw or daily wage).

Identifying Maintenance Tools. During the action planning, it is best to identify which construction/repair tools for what particular work will be required, how will these be procured, who will keep and issue them. Ideally, the Barangay Council or the UBA will be in-charge of this particular task. Most importantly, a storage area/warehouse is necessary where the tools can be stored when these are not in use. Tools must be of high quality.

Preparing Ordinances. A barangay ordinance defining the elements related to road management, such as the collection of toll fees, imposition of fines, how vehicle traffic will be controlled in bad weather.

Doing Periodic Maintenance. As a preventive measure, periodic maintenance such as grading may be considered. The LBRRM Plan to be drafted by the barangay should include the costs involved and where to source fund for this.

Budgeting and Funding. Per UDP experience, the average cost of road maintenance is PhP50,000/km/year, with at least one (1) maintenance worker employed per kilometer. For barangays that have a rather large road network, it is recommended that a combination of “bayanihan” and paid labor be explored. Approximately for the “bayanihan”, the food for work is pegged at PhP 2,400/quarter and for paid labor, daily rate ranges from PhP 120/day for ordinary laborers and PhP 150/day for the foremen.

Funds may come from the following sources: IRA (20% of development fund); municipal and provincial grants; toll fees (e.g PhP 2.00 for motorcycle, PhP 20.00 for Elf and PhP60.00 for ten-wheeler); grants from civic organizations; and other funds (e.g. fines, fees from barangay operated infra like drying floors)

Training of Maintenance Teams and Crews. As a final requirement, training for the maintenance crew and other community members should be conducted. Having an on-site test ensures that knowledge and skills are properly acquired by the local people.

4.3.5 Lead Participants

Barangay Council is legally responsible for barangay level roads and provides funds (e.g. 20% of IRA).
Barangay Council Infrastructure Committee is technically responsible for maintaining and managing the road.

Provincial LGU allocates funds and provides grader when appropriate.

Municipal LGU often allocates funds specifically for barangay roads, trains the barangay maintenance teams/crews and monitors the implementation of the road maintenance activities.

Upland Barangay Association (UBA)/PO will compose the crew who will undertake the emergency and routine road maintenance. They can manage the maintenance but they have no direct legal access to funds such as the 20% IRA.

4.3.6 Other Participants

Traders, passenger vehicle/skylab operators - will pay the toll fee and fines (as may be indicated in the barangay ordinance/s) to help generate funds for the road maintenance.

BLUE BOX NO. 24. RELATIONSHIPS UNDER LBRRM

4.3.7 Over-all Facilitating Factors

In the UDP’s experience, the successful implementation of the LBRRM has been attributed to the following:

a) Internal Factors

- Additional support from a third party to complement the funds of the municipal and barangay LGUs;
Strong support from the provincial and municipal LGUs in extending technical, equipment, in-kind/material and budget;
- Hands-on training for the maintenance teams/crews and the rest of the UBA members on the different steps/procedures;
- Implementing guidelines and field manuals to guide the crews on specific work item;
- Barangay ordinances in support of the scheme (e.g. toll fee and imposition of fines);
- Availability of tools when needed that allow the community to immediately work on road repair and preventive maintenance activities;
- Paid labor and, in exceptional cases food for work, allowing local people to earn income while helping maintain the road network in their barangay; and
- Constant visits and monitoring of barangay roads by provincial and municipal staff to verify adherence to the agreed plan and schedules.

b) External Factors

- Availability of materials such as aggregates (gravel), mountain mix and other filling material in their locality; and
- Cooperation of the rest of the community and those who use the barangay roads, in paying the toll fees and fines to generate additional funds.

4.3.8 General Things to Watch Out For

**Funds.** Lack of funds can seriously derail this scheme. It is also important to mobilize the local community, so that the “bayanihan” spirit prevails over the desire for paid work.

**Training.** Proper hands-on training helps in honing the skills of the crew. An illustrated LBRRM training manual in local dialect helps the crew remember/correct their work.

**LBRRM Action Plan.** The preparation of an LBRRM Action Plan for each replication barangay is deemed important in the successful implementation of the scheme.

4.3.9 Resources Needed

**People.** Based on conservative estimates, it requires about one (1) person per kilometer of barangay road to be maintained as paid labor to perform routine/preventive maintenance work. On top of that, there must be a foreman employed for each road that will have a maintenance crew.

**Funds.** An average of PhP 50,000/km/year is required for such activity. This allocation can go lower or higher, depending on the financial capability of the LGUs as well as the severity of the road damage done.

**Machinery or equipment.** As mentioned before, intermittent grader services can help the maintenance crews with their routine maintenance work and making these available for barangay road repair/maintenance, will likely be appreciated, not only...
by the local people but the crew themselves. It makes their job easier and the works to be done can be achieved faster.

**Materials.** These are gravel, aggregates, mountain mix and other filling material, as well as the live plant materials like bamboo and madre de cacao.

**Construction Technology.** The steps and procedures involved in road management, emergency repair and routine/preventive maintenance are very critical in the successful implementation of the scheme. The detailed steps as well as the accompanying illustrations and diagrams are very necessary to help guide the maintenance crew and barangay officials.

**Time.** The people contribute their time in undertaking construction work. Routine maintenance means that tasks/steps need to be performed on a regular basis such as twice monthly, monthly and as the need arises (after heavy rain, accidents, etc.).

### 4.4 HOW CAN I HELP - REQUIRED INTERVENTIONS FROM NGAS IN IMPLEMENTING THE SCHEME

**Table 4.1 Required Interventions from NGAs for Implementing LBRRM**

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<tr>
<th>Resource Requirements</th>
<th>Scope of Interventions</th>
<th>National Government Agencies</th>
</tr>
</thead>
</table>
| Human Resources       | ▪ Provide technical staff to advise the BLGUs and MLGUs in proper road maintenance.  
<pre><code>                    | ▪ Conduct hands-on training to the crews and foreman        | ![DG] ![NG] ![DAF] |
</code></pre>
<p>| Money                 | ▪ Provide fund for salaries/ honorarium of the crew.         | ![DG] ![NG] ![DAF] |
| ▪ Generate funds from toll fees.                            | ![DG] ![NG] ![DAF] |
| ▪ Explore other sources of credit/funds to be accessed by the BLGU/MLGU. | ![DG] ![NG] ![DAF] |
| Machinery or Equipment| ▪ Lend heavy construction equipment                         | ![DG] ![NG] ![DAF] |
| ▪ Lend storage space/motor pool in the barangay or municipal level | ![DG] ![NG] ![DAF] |</p>
<table>
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<tr>
<td><strong>Materials</strong></td>
<td>▪ Provide aggregates, fence materials, bamboo, madre de cacao</td>
<td></td>
</tr>
</tbody>
</table>
| **Means or Technology** | ▪ Follow standard design criteria for road  
▪ Conduct community activities to awaken sense of volunteerism |                            |

### 4.5 BENEFITS AND COSTS OF IMPLEMENTING THE SCHEME

In summary, the scheme opens many opportunities to the local communities, most of it having to do with their products fetching better prices at the market, people having to move freely and swiftly and conveniently from the upland to other parts of the municipality, health and social services being accessible and lastly, manufactured goods and other supplies having to reach the upland at a lesser transportation cost.

The scheme also significantly reduces the cost of the roads, since routine maintenance costs a lot cheaper than road rehabilitation. Local people are gainfully employed. The Filipino value of “bayanihan” affirms the community spirit of volunteerism. Information and hands-on experience gained from this scheme has no monetary value - but it helps in making local people feel more confident about themselves and what they can do.

In terms of costs, on the assumption that an LGU would facilitate the maintenance of 25 km of barangay roads (i.e. 5 km per barangay for 5 barangays), the initial investment which is in training, orientation, planning and provision of tools, would be around Php 265,000. Annual recurrent cost goes up to around Php 1,200,000.

From the standpoint of the NGAs, the proper maintenance of local roads links the upland communities to more economic opportunities and social services provided by the government and other NGOs. With local people managing to stem the further deterioration of their barangay roads, the NGAs can allot more funds to new road construction.
CHAPTER 5:
Rural Financial Services

5.1 THE CONVENTIONAL WAY OF PROVIDING RURAL FINANCIAL SERVICES

Different factors contribute to why rural financial services are found wanting in upland communities.

For lenders, commercial viability is the most influencing factor. Low population and the dispersed location of potential clients deter formal financing institutions from establishing branches in rural areas, much more, in upland, tribal communities. And if ever they managed to set-up branches in these areas, those mentioned reasons only push the cost of loan processing (appraisal, monitoring and enforcement of repayment) even higher. On top of it all, the seasonal nature of agricultural production and their vulnerability to pest and diseases, weather and other calamities are also restrictive.

Rural borrowers, on the other hand, are also cautious about the financial transaction costs attached to getting a loan. More often than not, they are made to pay several visits before they can actually have their loans approved. They also have to contend with the cost and the inconvenience of securing many documents and complying with collateral requirements. People in the uplands do not even have extra money for savings. Thus, in dire or emergency situations, upland communities have no choice but to borrow capital or money from informal money lenders under prohibitive rates.

5.2 BRIEF DESCRIPTION OF THE SCHEME

5.2.1 Rationale of the Scheme

The scheme corresponds to the mandates of relevant NGAs in terms of making credit accessible to small farmers and initiating development in the countryside.

When considering rural financial services development issues, it must be recognized that RURAL FINANCIAL IS A COMMERCIAL BUSINESS ACTIVITY and will only run on a sustainable basis if rigid compulsory savings, capital build-up and loan repayment discipline is maintained and enforced.
With accessible capital, farmers can expand opportunities to engage in livelihood activities and enterprises. They can purchase farm inputs to boost their agricultural production, leading to higher productivity and increase in income. In their own little way, farmers contribute in alleviating poverty and address concern for food security.

**#12 Note to the NGAs: CONTRIBUTION TO THE 10 PT. AGENDA**

Based on the 10-point agenda pushed by the present administration, on top of the priority is the “creation of 6 million jobs via more opportunities given to the entrepreneurs, tripling the amount of loans for lending to small and medium sized entrepreneurs and the development of 1 to 2 million hectares of land for agricultural business”.

Many NGAs have incorporated this agenda in their action plans.

**5.2.2 Objectives of the Scheme**

Extending credit is akin to that Chinese proverb, *give a man a fish and you feed him for a day; teach a man to fish and you feed him for life*. Loans are seed capital - a starting point toward a decent life.

This scheme deals with establishing a savings-based credit delivery system that provides micro finance, agricultural production loans and savings services on reasonable terms to upland farmers, enterprises and communities. The ultimate aim is to provide increased opportunities to engage in livelihood activities and enterprises through the availability of capital; to give access to affordable interest and appropriate loan as well as savings facilities; and to create opportunities for professional finance institutions to service upland clients.

**5.2.3 Qualifying Criteria**

- **a) Geographic Criteria**

  *None.* There is no geographic requirement before the scheme can be implemented.

- **b) Community Criteria**

  *Attitudes of a conscientious borrower.* Interest, cooperation, mutual trust and adherence to procedures are essential for the success of this scheme.
c) Legal, Institutional and Other Documentary Criteria

Established financial institutions. Only existing registered professional financial institutions should participate.

5.3 THE SCHEME: STEP-BY-STEP

5.3.1 Summary of Steps

Figure 5.1 5 Steps in RFS

```
STEP 1: Financial Market Survey in the Upland Areas
STEP 2: Identification and Consultations with Possible Financial Service Providers
STEP 3: Cross Visits to Successful, Rural Banks, NGOs and Cooperatives Handling Savings and Credit Services
STEP 4: Start-up Activities of Financial Institution in Selected Barangays
STEP 5: Monitoring
```

5.3.2 Detailed Description of Each Step

**STEP 1: FINANCIAL MARKET SURVEY IN THE UPLAND AREAS**

**Expected Outputs:** At the end of this step, it is assumed that updated and correct financial market information has been collected and analyzed. The database may include the type of agricultural production in the barangay, a general situation of the creditworthiness of the potential borrowers, past and current sources of financing.

**Prerequisites:** A checklist of the information to be gathered as well as the sources of this information wills speed-up the research.

**Lead Player:** Researcher gathers information and does financial market analysis
### STEP 1: FINANCIAL MARKET SURVEY IN THE UPLAND AREAS

<table>
<thead>
<tr>
<th>Participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ Barangay Captains provide relevant information</td>
</tr>
<tr>
<td>■ UBAs, UCOs (if existing) and POs provide relevant information</td>
</tr>
<tr>
<td>■ MAOs provide relevant information</td>
</tr>
<tr>
<td>■ Other NGOs existing in the area and extending financing support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Facilitating Factors:</th>
</tr>
</thead>
<tbody>
<tr>
<td>An advance letter to the sources of information so they can prepare the data prior interview/research.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources Needed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget for undertaking the research (either consultant/research team or in-house technical staff).</td>
</tr>
</tbody>
</table>

### STEP 2: IDENTIFICATION AND CONSULTATIONS WITH POSSIBLE FINANCIAL SERVICE PROVIDERS

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>After gathering relevant financial information, the LGU is now ready to proceed with negotiations with existing financial service providers. Government Financial Institutions (GFIs) such as the Land Bank of the Philippines (Landbank) and the People’s Credit and Finance Corporation (PCFC) can provide a list of potential financial service providers in the area (Rural Banks, Cooperatives handling credit services and Non-governmental organizations (NGOs).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prerequisites:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The communities must be convinced on the merits of becoming a member/client of these conduits.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lead Player:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGU</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ The Government Financial Institutions (GFIs) i.e. Landbank and PCFC - to provide resource persons and give orientation on available services such as providing institution-building activities and financial services; and</td>
</tr>
<tr>
<td>■ Other international Non-governmental organizations/Financial Institutions (FIs) to provide funds</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Facilitating Factors:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active participation and support of the GFIs.</td>
</tr>
</tbody>
</table>
### STEP 2: IDENTIFICATION AND CONSULTATIONS WITH POSSIBLE FINANCIAL SERVICE PROVIDERS

<table>
<thead>
<tr>
<th>Things to Watch Out For:</th>
<th>Financial service delivery is a private sector activity and must be viable and, hence, sustainable. Promises of subsidies and the like should be avoided.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources Needed:</td>
<td>Funds for the activities and other facilitation expenses.</td>
</tr>
</tbody>
</table>

### STEP 3: CROSS VISITS TO SUCCESSFUL, RURAL BANKS, NGOs AND COOPERATIVES HANDLING SAVINGS & CREDIT SERVICES

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>In this step, communities visit successful professional financial institutions and learn their models for success, their policies, systems and procedures. The learning from these cross-visits not just allows replication of success; they also provide a good reference point for facilitating the entry of the right financial service providers in the area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisites:</td>
<td>The objectives of the visit should be made clear at the outset. Good planning and coordination is required for the participants (community leaders and staff) to maximize this activity. There should be ample time to arrange for budget approval, finalization of itinerary, confirmation of participants, and provision of other logistics.</td>
</tr>
</tbody>
</table>
| Lead Player:      | • LGU staff  
|                   | • Study Tour Leader and staff to undertake all the arrangements  
|                   | • LGU or other organization to provide funds to cover all of the trip’s expenses |
| Facilitating Factors: | • It would help if the LGU has a network of rural banks, NGOs and cooperatives handling savings and credit services within the area, as possible sites for the cross visits. |
| Things to Watch Out For: | The participants have to understand that they are expected to conduct re-echo sessions and apply their learnings to facilitate the entry of service providers. |
| Resources Needed: | Funds and network will be required from this trip. |
### STEP 4: START UP ACTIVITIES OF FINANCIAL INSTITUTION IN SELECTED BARANGAYS

<table>
<thead>
<tr>
<th>Expected Outputs:</th>
<th>At the end of this step, it is hoped that the interested financial institutions will have begun with delivery of financial services to the upland clientele</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisites:</td>
<td>Committed financial institutions that are able to target upland households</td>
</tr>
<tr>
<td>Lead Player:</td>
<td>GFIs, Rural banks, NGOs and Cooperatives</td>
</tr>
<tr>
<td>Facilitating Factors:</td>
<td>Fund provider, organizational policies and M&amp;E system. GFIs have sufficient funds for retailing loans through their accredited financial institutions</td>
</tr>
<tr>
<td>Things to Watch Out For:</td>
<td>Some fund sources may operate within certain project lifespans. An exit strategy should be discussed with them</td>
</tr>
<tr>
<td>Resources Needed:</td>
<td>Fund and the management system.</td>
</tr>
</tbody>
</table>

### STEP 5: MONITORING

| Expected Outputs: | Proper monitoring of financial institution performance must be facilitated by the LGU regarding the continuous financial service delivery in the selected areas |

---

*Series Book No. 3: National Government Agencies’ Guide on the Sustainable Upland Development (SUD) Model – Chapter 5: Rural Financial Services*
BLUE BOX NO. 25 RELATIONSHIPS UNDER RFS

5.4 HOW CAN I HELP - REQUIRED INTERVENTIONS FROM NGAS IN IMPLEMENTING THE SCHEME

Table 5.1 Required Interventions from NGAs in Implementing RFS

<table>
<thead>
<tr>
<th>Resource Requirements</th>
<th>Scope of Interventions</th>
<th>National Government Agencies</th>
</tr>
</thead>
</table>
| Human Resources             | ▪ Provide training and seminars for the SLGs/FSCs to approximate and understand the requirements and responsibilities of running a credit group  
                            ▪ Provide regular briefings on proper money management for end-borrowers  
                            ▪ Extend individual counseling services, if necessary                        | LANDBANK, DEPARTMENT OF FINANCE  |
<p>| Money                       | ▪ Provide revolving capital to FSCs                                                    | LANDBANK                     |
| Machinery or Equipment      | ▪ Lend or provide access to computers and other office equipment                      |                             |</p>
<table>
<thead>
<tr>
<th>Resource Requirements</th>
<th>Scope of Interventions</th>
<th>National Government Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>▪ Provide manuals on credit cooperatives for the SLGs/FSCs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Produce other reading materials simple financial analysis, budgeting, bookkeeping etc.</td>
<td></td>
</tr>
<tr>
<td>Means or Technology</td>
<td>▪ Provide space as venue for the capability/institution building or as “office” for storage of files, meetings etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Link SLGs/FSCs to other successful credit cooperatives for information exchange/mentoring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Conduct of periodic audit or M&amp;E to immediately address problems or flaw of the system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Develop or share appropriate softwares</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Provide directory of possible fund sources or related support services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Expand IEC efforts to include business training, bookkeeping, etc.</td>
<td></td>
</tr>
</tbody>
</table>

5.5 BENEFITS FROM IMPLEMENTING THE SCHEME

Clearly, credit and capital must be present for the upland communities to survive decently. Their financial needs are quite small compared to urban areas and they are more susceptible to the vagaries of nature. Individually, the presence of accessible funds secures their immediate need for agricultural inputs, non-farm livelihood activities and as last option for family-related emergencies.

For the NGAs, the scheme is complementary to the national effort of alleviating poverty - helping farmers improve their agricultural production and venture into non-farm activities; and addressing income inequality and food security.

The scheme expands existing proven financial services into the uplands and builds on the income-earning potentials of upland clients.
6.1 THE CONVENTIONAL WAY OF SELLING AGRICULTURAL PRODUCE

In the past, the farmers were more concerned with getting their inputs together, protecting their crops from pests and calamities, harvesting at the right season and having their products picked-up from their farms. They were usually at the mercy of the “viajeros” - the traders or middlemen - who had the final word in setting the price of the agricultural products and to whom they owed money for the farm inputs (planting materials, fertilizers, farm implements).

Farmers could not well afford to bring their products individually and periodically down to the market, especially if the transport cost was high and that the service was not always available. For whatever extra produce they had, they had no choice but to deal with these traders or they would not be able to exchange their products for cash. It was not rare that farmers also sought these traders to “advance” their harvest if they were confronted with major family emergencies.

Such condition only further shackled farmers to subsistence farming and poverty in the uplands.

6.2 BRIEF DESCRIPTION OF THE SCHEME

But the agricultural landscape has gradually changed in the past decades. The national government, at the prodding of NGOs and development agencies, has adopted programs that gave way to market-oriented, farm systems approaches. Now, farmers are being groomed to become entrepreneurs - to take a more active role in improving their productivity and trying to link directly with their target markets.

The Village Enterprise Development (VED) is a step embodying that direction. The farmers, through their associations, are taught how to manage their farms, consolidate their products and seek their own markets, guided by a business plan and with clear-cut policies to work with. Further, the VED builds on the earlier accomplishments set by the other five (5) schemes - selecting crops based on their land-use survey, protecting the forest from further human destructive incursion, employing the
diversified farming system that is suitable to the upland contours, maintaining barangay roads that link to the market, and accessing finances to expand production.

6.2.1 Rationale of the Scheme

The strong motivation behind this scheme is for the upland farmers to maximize marketing opportunities and gain more economic autonomy.

From the perspective of the NGAs, the VED scheme is consistent with the dominant mandate of providing employment opportunities to most of the country’s population. Micro-entrepreneurs and small farmers are encouraged to undertake more-value adding activities to their products and try take over some of the marketing responsibilities themselves. And with that, they are able to deal more directly with their buyers and be able to negotiate better arrangements with the latter.

But the catch is, alone, they cannot do it. The VED pushes the farmers to deal with the market as a group - that by creating an enterprise through which they consolidate and sell their products as one block, they gain economies of scale and can negotiate for a better price and arrangement.

**BLUE BOX NO. 26 IN UNION THERE IS STRENGTH**

Upland Village Enterprise Development requires a two-pronged approach. The first component involves capacity building of farmer extension workers on how to assist farmers to shift from subsistence farming to farming as a business. CEFE-accredited service providers train these farmer extension workers, in order for them to: apply their acquired skills with respect to their own farm, so it can become a model farm for his sitio or area; and subsequently, to share their skills with the other farmers in their barangay.

The second component is the provision of Business Development Services (BDS) by private sector based Service Providers to Village Enterprises that have backward linkages to upland farmers. In UDP, twenty two (22) such enterprises in the uplands were supported. Most of them were in banana trading, abaca processing and trading, vegetable training, fruits and organic foliar fertilizers.

Barangay Palo 19 in Tampakan, South Cotabato has a success story to share. The cooperative has 300 members, good leadership and is situated along a good road. Apart from UDP, it is also receiving support from other institutions. In time, they were able to establish their own Bagsakan Center - where they collectively sell their products and have better control of the price. The group is now selling to General Santos City and Davao City.

Source: UDP Pre-Completion Report, October 2005.
#13 Note to the NGAs: OTOP PROGRAM

The Department of Trade and Industry (DTI) is implementing a program called “One-Town, One-Product” or OTOP. The program aims to encourage micro, small and medium enterprises to produce and market distinct products or services using indigenous raw materials and manpower.

DTI may disseminate such program to the upland communities and explore if they have unique products fit for the market.

6.2.2 Objectives of the Scheme

Transformation of the upland communities from mere farmers to entrepreneurs is the main motivating force of the VED. Specifically, it aims to:

- Train the farmers on the fundamentals of farm management
- Engage the guidance of competent BDS providers to assist the farmers gain business confidence until the initial phase of their commercial operation
- Expose the farmers to other successful village enterprises where they can adopt proven techniques and innovate based on their unique situation

6.2.3 Qualifying Criteria

a) Geographic Criteria

None. There are no geographical criteria for this scheme except having access to markets, to include physical access through good farm to market roads.

b) Community Criteria to avail of BDS Support

Willingness of farmers to consolidate. In going through this scheme, the farmers, through their associations, must be willing to work together.

c) Legal, Institutional and Other Documentary Criteria

Legal Personality. If the PO/UBA or the UCO decides to participate in this scheme, they have to assume legal entity by way of registering with the Securities and Exchange Commission or the Cooperative Development Authority. Other documentary requirements may be required - depending on the government agency they are accrediting/registering with.
6.3 THE SCHEME: STEP-BY-STEP

6.3.1 Summary of Steps

Figure 6.1 3 Steps in VED

6.3.2 Detailed Description of Each Step

**STEP 1: ENTRE-FARM TRAINING**

**Expected Outputs:**
This step aims to shift the mindset of the farmers by encouraging them to view farming as a business. The training is usually conducted by the Philippine CEFE Network Foundation and usually lasts one (1) week.

At the end of this step, farmers are enlightened on how to manage farms more effectively from the business point-of-view.

**Prerequisites:**
To stir up interest from the farmers, it is best that they have already visited a demonstration farm, where they can see the direct and immediate results of a well-managed farm enterprise.

**Lead Player:**
- Upland farmers as participants to the training
- Consultants/Service Provider to act as the resource people, facilitators or mentors
- Training Team that will oversee the administrative and technical arrangements of the training.

**Facilitating Factors:**
Central to the success of the training is the competence of the service providers, who as resource persons can effectively demonstrate the important business concepts in managing farms. Secondly, using the experiential learning approach makes it easier for the farmers to absorb the training’s basic points.

**Resources Needed:**
Funds for the training, visits to demonstration farm, availability of resource person, and agricultural inputs (for the application of technology).
#14 Note to the NGAs: OTHER DEMO FARMS AND NEW TECHS

The Department of Agriculture and its attached agencies/bureaus, the academe, research institutions and other NGOs can provide a list of demonstration farms and new technologies that are appropriate to the uplands. Through this, the upland farmers are guided on how to improve their productivity.

STEP 2: ENGAGING BUSINESS DEVELOPMENT SUPPORT (BDS) SERVICE PROVIDERS

**Expected Outputs:**

After the training (with their outlook opened-up to new entrepreneurial possibilities), the farmers will have to undergo several activities with the help of the BDS Providers.

At this stage, the farmers will have to deal collectively with a new group of people - often referred to as Business Development Support (BDS) Service providers - whom they will run through several activities and come up with the following output:

- Assessment of the organization’s capability in handling a business enterprise and the viability of the proposed enterprise they will establish.
- Preparation of a Business Plan that summarizes the different activities necessary for the venture to succeed.
- Development of an Operations Manual that contains the rules and procedures, policies and the system for monitoring and evaluation of accomplishment.
- Organizational Development (institution building) that addresses any conflict in terms of responsibilities as well as the conduct of regular meetings, etc.
- Initial operationalization of the enterprise, that is, gaining management experience, dealing with buyers, the government and other organizations.

**Prerequisites:**

The most important thing to be considered is the expertise of the BDS provider and their commitment to helping upland farmers. Secondly, the service provider will be requiring information from the farmers, PO/UBA, UCO and the barangay in order to come up with A realistic diagnosis as
### STEP 2: ENGAGING BUSINESS DEVELOPMENT SUPPORT (BDS) SERVICE PROVIDERS

| Lead Player: | ▪ PO/UBA provides information and at the later stage (when the enterprises commence commercial operation), consolidate the produce of the UCO/farmers  
▪ UCOs/farmers provide information and, subsequently, become the production units  
▪ LGU/NGAs provide information, analysis and funding  
▪ BDS provider to develop framework for the assessment and coach the group  
▪ PPO - monitor, facilitate admin./financial concerns |
| Facilitating Factors: | **Community commitment.** Commitment and hard work are needed to sustain the enterprise. Good leadership is also an indispensable part of this undertaking.  
**Basic infrastructure.** Secondly, it is also important that the basic infrastructure like the farm-to-market road, financial services and environmentally-acceptable upland farming practice (to ensure sustainable production) are already in place.  
**Market Agreements.** Third on the priority is the importance of having to close a medium-to-long term market agreements. This will encourage the farmers to improve their production.  
**Policies on handling revenues and profit.** Fourth is the policies and procedures on how to collect, consolidate and share the profit of the enterprise. This must be agreed mutually and strictly observed. Transparency in their business dealings is a must so that future conflict and distrust will be prevented.  
**BDS competence, experience and commitment.** Lastly, the experience of the BDS provider and their commitment to help the farmers become entrepreneurs are very important. |
| Things to Watch Out For: | Accomplishment of BDS objectives prior to phase-out. This is going to be a long engagement for the BDS providers. But before they conclude their contract, it is supposed that they have already laid the groundwork for which the VED/PO/UBA/UCO display improved organizational and |
STEP 2: ENGAGING BUSINESS DEVELOPMENT SUPPORT (BDS) SERVICE PROVIDERS

management skills; is able to clinch marketing arrangements for their products; has institutionalized the system by which the UCOs/farmers becomes the production units; and enhanced marketing skills of the UBA.

Marketing Contract. The community will have to work hard on assuring a sustainable supply of quality products to warrant a long-term contract or market arrangement.

Focus. Finally, it will be important for the group to remember that while diversification has its merits, it is wise not to venture into too many projects at the same time. It is bound to put stress on the managerial and bookkeeping capacities of their organization.

| Resources Needed: | Funds for hiring a BDS providers, participation of the community, marketing skills and information, and lastly, marketing contacts. |

#15 Note to the NGAs: TECHNICAL ASSISTANCE

DTI, DA and the Department of Science and Technology hold product clinics where they provide technical advice to the clients on how to improve the physical and aesthetic quality of their products. They also provide market information and organize market encounters such as agri and trade fairs, business matching and investment clinics.

It is important to bring this information and service to the upland farmers for them to maximize their resources.
BLUE BOX NO. 27 RELATIONSHIPS UNDER VED

Expected Outputs:
It is expected that the farmers/PO/UBA/VED management have applied their learnings and insights in running their village enterprise.

Prerequisites:
A thorough planning and preparation is required. The objectives of the trip should be laid out and the BDS provider should find the best cooperative/village enterprise to visit. Ample time should be given to finalize the itinerary. Funds for the visit should be accessed out either from the LGU or some other source.

Lead Player:
- VED management, PO/UBA and UCO as participants
- LGU as participants
- BDS provider to facilitate the visit

Facilitating Factors:
It is important for the participants to keep an open mind in visiting model cooperatives, for them to grasp fully the essence of cooperative enterprises.

Things to Watch Out For:
A system of monitoring/follow-through is important to assess if the participants are able to adopt their learning in their own village enterprise.

Resources Needed:
Funding and itinerary/design of the visit.
BLUE BOX NO. 28  SAMPLES OF VED ACTIVITIES

6.4 HOW CAN I HELP - REQUIRED INTERVENTIONS FROM NGAS IMPLEMENTING THE SCHEME

Table 6.1 Required Interventions from NGAs in Implementing VED

<table>
<thead>
<tr>
<th>Resource Requirements</th>
<th>Scope of Interventions</th>
<th>National Government Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources</td>
<td>• Provide technical advice to village enterprises in terms of production, marketing, management and organization</td>
<td><a href="https://www.dti.gov.ph">dti</a>, <a href="https://www.dfa.gov.ph">DFA</a>, <a href="https://www.da.gov.ph">DA</a></td>
</tr>
</tbody>
</table>
### Resource Requirements | Scope of Interventions | National Government Agencies
--- | --- | ---
**Money** | • Provide counterpart funds for hiring of consultants  
• Provide subsidy in hiring designers/technologists for the improvement of products | ![dti]  
![DA]  
![Ds]  
![C]  

**Machinery or Equipment** | • Provide common service facility which will be shared among the members of the group  
• Provide testing equipment to maintain quality standards of the products  
• Explore possibility of providing “transport” assistance in bringing products to the market | ![dti]  
![BAR]  
![Ds]  

**Materials** | • Provide reading materials or manuals on better farm management (bookkeeping, etc.) | ![dti]  

**Means or Technology** | • Campaign for farmers participation in agri-fairs so they will have direct contact with buyers  
• Engage product designers to come up with new products using indigenous materials found in the uplands  
• Conduct training such as the Good Agricultural Practices  
• Encourage farmers to go into organic/natural farming as this has a niche market, particularly abroad  
• Provide list of institutional buyers  
• Compile inventory of VED for direct referrals to buyers’ inquiries  
• Share new product technologies  
• Provide area/building for a “bagsakan” | ![dti]  

## 6.5 BENEFITS OF IMPLEMENTING THE SCHEME

The SUD Model culminates in the operationalization of the village enterprises - integrating all previous schemes to create a community that is dynamic, forward-looking and empowered.
The scheme allows the NGAs develop more “entrepreneurs” in the countryside and place them on the first tier of the global value chain. It allows them more opportunity to serve a wider client base and to bring more government services to the upland communities.

On the other hand, the scheme turns the farmers from lone production units to collective entrepreneurs. By combining their produce and selling these products as one block, they minimize transportation cost and gain a certain degree of leverage when it comes to pricing. With a direct link with the market, they are able to expand their horizons and are stimulated to work better on their production capability to further tighten their hold on emerging economic opportunities.
APPENDIX A:
Executive Order No. 606:
“Pursuing Sustainable Upland Development Anchoring on Food, Wood, Non-wood Security and Economic Productivity and Providing the Mechanisms for its Implementation and for Other Purposes”
EXECUTIVE ORDER NO. 606

PURSUING SUSTAINABLE UPLAND DEVELOPMENT ANCHORING ON FOOD, WOOD AND NON-WOOD SECURITY AND ECONOMIC PRODUCTIVITY AND PROVIDING THE MECHANISMS FOR ITS IMPLEMENTATION AND FOR OTHER PURPOSES.

WHEREAS, a sustainable approach to the development of the natural environment through effective governance and improved delivery of basic services to the marginalized sector of society is called for by the government’s development agenda, the Medium-Term Philippine Development Plan (2004-2010) and the commitment to the United Nation’s Millennium Development Goals;

WHEREAS, there is a need to pursue a paradigm shift or refocusing to ensure sustainable development and livelihood in the countryside specifically in upland areas, through rehabilitation and adoption of programs geared towards producing high value crops and trees;

WHEREAS, the country’s land area is comprised largely of upland and forestlands, covering more than 50% of the 30 million hectares of land, with a big portion of occupied and tilled by marginalized people such as upland farmers, indigenous peoples and tribal groups, who mostly belong to the socially and economically displaced and disadvantaged sectors of society.

WHEREAS, the continuing problems of poverty and internal conflict are mostly brought about by the unequal access and control and inequitable distribution of the benefits over the country’s limited natural resources and productive areas, especially in the uplands;

WHEREAS, the Department of Environment and Natural Resources (DENR) is primary government agency responsible for the conservation, management, protection and proper use of the country’s environment and natural resources specifically forest lands and other lands of the public domain;

WHEREAS, under the Local Government Code of 1991, the national government, specifically the DENR, shares with the Local Government Units (LGUs) the responsibility in the sustainable management and development of forest and natural resources as exemplified under Joint Memorandum Circular signed by the DENR and the Department of the Interior and Local Government (DILG) and witnessed by the different Leagues of LGUs in 2003 and as early as 1998.

WHEREAS, LGUs have been supporting and addressing the problems of their constituency in the uplands have initiated innovative and exemplary practices in sustainable upland development, such as co-management of natural resources, community-based forestland use planning, forest protection, resource management, rural road maintenance and agricultural and forestry extension services in line with the principles of Sustainable Forest Management (SFM);
WHEREAS, three (3) rural development agencies of the national government namely the Department of Agriculture (DA), the Department of Agrarian Reform (DAR), and the DENR, under the convergence policy, have Institutionalized the DA-DAR-DENR Convergence Initiative to address rural development efforts of the government. This convergence towards sustainable rural development was formalized through Joint Memorandum Circular (JMC) No. 01, series of 1990, signed by the three Secretaries of the said agencies and revitalized through JMC 2004-01. Further, JMC 2006-01 mandated the “Adoption of the Guide for implementation on DA-DAR-DENR convergence Initiatives towards Sustainable Rural Development.”

WHEREAS, the adoption of the Community Based Forest Management strategy supports SFM and convergence initiatives among legally-mandated agencies working in the uplands and the local initiatives to effectively address poverty in upland areas;

WHEREAS, there is an urgent need to strengthen the existing development framework between national government and local government agencies for the improved delivery of basic services and development programs, specifically in the upland areas.

NOW, THEREFORE, I, GLORIA MACAPAGAL-ARROYO, President of the Republic of the Philippines by the virtue of the powers vested in me by law, do hereby order the pursuit of sustainable upland development anchoring on food, wood and non-wood security and economic productivity that leads to the improvement in the quality of life of upland communities, increase economic productivity of upland areas, and ensure sustainable management of the country’s forest resources.

SECTION 1. Declaration of Policy. It is the policy of the estate to pursue sustainable development of the country’s upland areas and communities by ensuring proper balance between ecological and economic concerns in a manner that the forests natural base is maintained and improved. At the same time this would promote economic activities in the uplands through agricultural and forest production and utilization of upland resources to generate sufficient income for the communities residing and making a living in the uplands.

It is further declared as state policy to ensure the equitable access to and enjoyment of the benefits of development and use of uplands by the marginalized segments of the population and preserve and conserve these benefits and developments not only for the present generation of Filipinos but also the future generation.

SEC. 2. Basic Guiding Principles and Strategies. As a matter of policy the operationalization of the country’s sustainable upland development strategy at the local levels shall be consistent with the principles of Sustainable Forest Management (SFM), adopting primarily the Community Based Forest Management (CBFM) strategy in the conduct of community mobilization, local land-use planning, delivery of basic social services, extension services, forest protection and resource management, rural infrastructure and development of local enterprises and livelihood activities. Furthermore, the implementation of sustainable upland development shall also be based on the following:

1) Co-management is the principle of institutionalizing mutual cooperation and collaborative partnership between national and local government institutions as well as local communities in the performance and implementation of legally-mandated responsibilities, roles and functions in the development and management of the uplands;

2) Convergence is the integration, complementation and maximization of institutional, technical, resource, financial and human resources of all the key stakeholders in the upland areas, especially among national and local government agencies; and
3) **Participatory Governance** Involves directly capacitating and fully involving local government units (LGUs) and communities in the whole process of formulating, planning, implementing and monitoring of all development activities and programs in the uplands.

**SEC. 3. Scope and Coverage.** The sustainable development of the uplands shall encompass and cover lands that are classified as forestlands, including allowable zones within protected areas. The key activities and areas of concern in support of the development of the uplands are outlined below but not limited thereto:

1) Identify and review convergence and impact of key programs and interventions provided by national and local agencies, including donor-assisted projects and programs to upland communities and areas.

2) Review and assess the effectiveness and efficiencies of capacities and operations of key national and local agencies in the implementation and performance of their mandates in the uplands;

3) Review and assess the consistency and applicability of existing national implementing policies, guidelines and program in addressing the needs and conditions of upland areas and communities;

4) Identify, formulate, develop and recommend specific programs of actions and interventions to support the sustainable development of upland areas and communities; and

5) Identify key policy reforms and recommendations to strengthen delivery and effectiveness of programs and initiatives in the uplands.

**SEC. 4. Agency Involvement.** The DENR shall be the lead agency for the implementation of the sustainable upland development order, assisted by the DA and the DAR.

**SEC. 5, Institutional Arrangement.** The Sustainable Upland Development Steering Committee is hereby created to oversee the implementation of this Order, chaired by the DENR, and the following as members: DA, DAR, DILG, and the Presidential Adviser on Agrarian Reform. The heads of various national LGU Leagues, such as the League of Provinces, League of Cities, League of Municipalities, and the Liga ng mga Barangays, are also encouraged to join the meetings of the committee. At the regional/provincial/city/municipality level, parallel committees created under the convergence initiatives with the provincial/municipal chief executives as chair, shall be adopted.

**SEC. 6 Duties and Responsibilities of Key Agencies Involved:**

1) **DENR**
   a) To call upon all national and local agencies or technical, policy information and resource assistance and support;
   b) Initiate and conduct national and regional discussions and consultations relating to policies, objectives and programs of actions for sustainable upland development;
   c) Review and translate specific recommendations into operational guidelines of national concern, programs and initiatives, key areas and themes in coordination with national and local agencies for sustainable upland development;
   d) Initiate and enhance partnership and coordinating activities with private sector groups, donor agencies and other relevant external bodies;
e) Provide assistance to the program beneficiaries in the packaging and marketing of products derived from the project areas including resource mobilization;

f) Submit regular reports and updates to the Office of the President and other relevant agencies.

2) DA

a) Assist the DENR in the identification of suitable crop combinations and cropping systems;

b) Assist the DENR in the transfer of appropriate and tested technologies to program beneficiaries;

c) Provide assistance to the program beneficiaries in the packaging and marketing of products derived from the project areas including resources mobilization.

3) DAR

a) Provide assistance in the conduct of capability building and enhancement programs for the beneficiaries

b) Provide assistance to the program beneficiaries in the packaging and marketing of products derived from the project areas including resources mobilization.

4) DILG

a) Ensure coordination at the local level as well as execution/implementation of projects;

b) Provide assistance to the program beneficiaries in the packaging and marketing of products derived from the project areas including resources mobilization.

SEC. 7 LGU Participation. The LGUs are encouraged to assist (1) in convening the provincial/municipal committees created under the Convergence Initiative for the identification of specific roles and functions, (2) in recommending specific programs/projects and interventions, (3) in formulating specific administrative and operational guidelines related upland development in coordination with members of related committees, (4) in identifying sources of funds to ensure the delivery of needed services and implementation of specific programs/projects and (5) in providing assistance to the program beneficiaries in packaging and marketing of products derived from the project areas including resources mobilization.

SEC. 8. Technical Assistance. The DENR shall tap the support services of the different technical working groups under the DA-DAR-DENR Convergence towards Rural Development and the DENR-DILG-LGU partnership as well as other individuals and institutional experts and specialists from both national and local technical agencies.

SEC. 9. Funding. Funds needed to carry out the provisions of this Executive Order shall be taken from available funds of the DENR, DA and DAR. Other sources of funds such as grants, donations, and other forms of technical and resource assistance from donor agencies, projects, and other public or private entities may be tapped and facilitated by the DENR, DAR, DA, DILG and all the Leagues (Provincial/Municipal/City/Barangay) to support the objectives and activities identified under the Executive Order subject to regular auditing guidelines and procedures.

SEC. 10. Separability. Any portion or provision of this Executive Order that may be declared unconstitutional shall not have the effect of nullifying other provisions hereof, as long as such remaining provisions can still subsist and be given effect in their entirety.

SEC. 11. Repeal. All rules and regulations, other issuances or parts thereof, which are inconsistent with this Executive Order, are hereby repealed or modified accordingly.
SEC 12. Effectivity. This Executive Order shall take effect fifteen (15) days after its publication in a national newspaper of general circulation.

DONE in the City of Manila, this 27th day of February in the year of our Lord, Two Thousand and Seven.

By the President:

EDUARDO R. ERMITA
Executive Secretary
FOR THE OVER-ALL IMPLEMENTATION OF THE SUSTAINABLE UPLAND DEVELOPMENT MODEL:

LEAGUE OF MUNICIPALITIES OF THE PHILIPPINES (LMP)
265 Ermin Garcia St., Cubao, Quezon City
Telefax (+632) 913-57-37 to 38; 440-7280; 440-7306
SMS: (+632)9178800337
E-mail: leagueofmunicipalities@yahoo.com ; lmpsecretariat@lmp.org.ph
Website: www.lmp.org.ph

FOR LAND USE BASED BARANGAY DEVELOPMENT PLANNING

1. VOLUNTEER WORKERS OF BONDOC PENINSULA (VWAB)
   Nabitasan St., BArangay 8, Poblacion 4311, Catanauan, Quezon Province

2. MINDANAO TRAINING AND RESOURCE CENTER (MTRC)
   Circumferential Road, BAJada, Davao City

3. MINDANAO RURAL ASSISTANCE PROGRAMME (MINRAP)
   Lower Bliss, Sainz, Mati, Davao Oriental

4. KAHUBLAGAN SANG PANIMALAY FOUNDATION
   Door 2, Diamond Apartments # 80 Km 4, MacArthur Highway, Davao City

5. INSTITUTE OF PRIMARY HEALTH CARE, INC.
   MTRC Building, Bajada, Davao City

6. ASSOCIATES FOR COMMUNITY AND ENVIRONMENT DEVELOPMENT
   (ACEDEV) Nabatasan St., Barangay 8 Poblacion, 4311 Catanuan Quezon Province

7. BALAY DABAW SUR, INC. (BDSI)
   Digos City, Davao del Sur

8. PAGLILINGKOD BATAS PANGKAPATIRAN FOUNDATION, INC. (PBPF)
   493 Mt. Apo Extension Gen. Luna St., Davao City

9. KINAIYAHAN FOUNDATION, INC.
   Artiaga St., Davao City

10. PROPONEENTS’ TECHNICAL ASSISTANCE AND MANAGEMENT CONSULTANCY SERVICES, INC. (PROTEAM)
    Juna Subdivision, Matina Davao City
    Email address: proteam.mindanao@yahoo.com

11. MANAGING ALTERNATIVES GROUP, INC. (MAGI)
    No. 44 First Avenue Juna Subdivision, Matina, Davao City

12. HORIZON INTEGRATED AND MANAGEMENT ALLIED SERVICES (HIMAS)
    Tupi, South Cotabato
13. KALIWAT THEATRE COLLECTIVE
   115 Pluto St., GSIS Heights Subd., Matina, Davao City

FOR UPLAND AGRICULTURAL EXTENSION

INTERNATIONAL CENTER FOR RESEARCH IN AGRO-FORESTRY (ICRAF)/WORLD AGRO-FORESTRY CENTER
2F, College of Forestry and Natural Resources
Admin. Building., UP Los Banos
PO Box 35024, College 4031, Laguna, Philippines

Tel. 63 49 536 2925/536-7645
Fax 63 49 536 4521
Email: r.lasco@cgiar.org or g.acaylar@cgiar.org
Website: http://www.worldagroforestrycenter.org./sea/ph

FOR BARANGAY FOREST PROTECTION AND MANAGEMENT

1. DAVAO PROVINCES RURAL DEVELOPMENT INSTITUTE (DPRDI)
   1359 Sobrecarey Street, Tagum City
   Telefax (+6384) 400-4020
   Email: dprdi@philcom.ph

2. PEOPLE’S COLLABORATING FOR ENVIRONMENTAL AND ECONOMIC MANAGEMENT (PCEEM) FOUNDATION, INC.
   Room 204 Lee Business Corner, Juan Luna Street, Davao City
   Telephone (+6382) 227-8774; Telefax (+6382) 227-8775
   Email: pceemdvomozcom.com
   Website: www.pceemdv.org.ph

3. PHILIPPINE ASSOCIATION FOR INTERCULTURAL DEVELOPMENT (PAFID)
   213 Mercedes Benz Avenue, Davao Executive Homes, Matina, Davao City
   Telefax (+6382) 296-0407
   Email: pafiddvomozcom.com

4. PRO-TEAM SERVICES, INC.
   Room 301, 3rd floor Apartelle de Davao, No. 6 Juna Avenue, Matina Davao City
   Telefax (+6382) 298-2566
   Email: proteam@skyinet.net

5. TECHNICAL ASSISTANCE CENTER FOR THE DEVELOPMENT OF RURAL AND URBAN POOR (TACDRUP)
   413 Aguho corner Champaca Strets, Juna Subdivision, Matina, Davao City

6. YAMOG RENEWABLE ENERGY DEVELOPMENT GROUP, INC.
   Room 302, GB Cam Building, Monteverde corner Alvarez Streets, Davao City
   Telefax (+6382) 227-4031
   yamoginc@mozcom.com
7. SILDAP – SOUTHEASTERN MINDANAO, INC.
   463 Pk. Camia, Mirafuentes District, Maguipo North, Tagum City
   Telephone (+6384) 400-3561
   Email: sildapse@philcom.ph

8. PAGLILINGKOD BATAS PANGKAPATIRAN FOUNDATION (PBPF, INC.)
   493 General Luna Extension, Mt. Apo Street, Davao City
   Telefax (+6382) 226-2059; 227-2603
   Email: pbpf@dvo.info.com.ph

9. PHILIPPINE PARTNERSHIP FOR THE DEVELOPMENT OF HUMAN RESOURCES
    IN RURAL AREAS (PhilDHRRA) – MINDANAO
   18-A-1, TanLeh Apartments, C. Pacana – Burgos Streets, Cagayan de Oro City
   Telephone (+638822) 722-820
   Mindanao@phildhrra.org; phildhrra_min@yahoo.com

10. PHILIPPINE EAGLE FOUNDATION'
    VAL Learning Village, Ruby Street, Marfori Heights, Davao City
    Telephone (+6382) 224-3021; Telefax (+6382) 224-3022
    Email: phileagl@pltdsl.net; info@philippineeagle.org
    Website: www.philippineeagle.org

11. MOVEMENT FOR A CLEAN ENVIRONMENT AND GREEN MOUNTAIN FOREST,
    INC. (MAMI, INC.)
    No. 05 Medalla Milagrosa, Buhangin, Davao City

12. WATERCARE MINDANAO, INC.
    Barangay Liwanay, Banga, South Cotabato

13. KASILAK DEVELOPMENT FOUNDATION, INC.
    2nd floor, Building 5, Dole-Stanfilco Compound, Doña Socorro Belisario Heights
    Subdivision, Lanang, Davao City
    Telephone (+6382) 234-0341 local 4294 or 4011; Fax (+6382) 234-0241 local 4188

FOR VILLAGE ENTERPRISE DEVELOPMENT

1. AD JESUM DEVELOPMENT FOUNDATION, INC.
   Sr. Bernadette Dollete, SJ
   Exec. Director
   Mati, Davao Oriental
   Tel. No. 087 811 2292

2. KALISOD MO TABANGAN KO-MICROFINANCE ENTERPRISE
   Mr. Ignacio U. Alvinzo
   Lianga, Surigao del Sur

3. AFFIRE (AUDIT FEDERATION INTERMEDIARIES IN REGION VIII)
   Mr. Vivencio Sumaylo
   L2 Bldg. A, Public Market, Ormoc City
   Tel. No. 053 560 6071 and 561 2153