



**GOOD PRACTICES IN LOCAL GOVERNANCE: FACILITY FOR
ADAPTATION AND REPLICATION (GO-FAR) PROMOTING LOCAL
ENVIRONMENTAL PLANNING AND MANAGEMENT (L-EPM)**

Making Waste Big

Kalimpyo Angay Maangkon sa Bugo Uban Ang Nasod (KALAMBUAN)
The Integrated Solid Waste Management Project (ISWMP) and Allotment Garden
Barangay Bugo, Cagayan de Oro City

REPLICATION MANUAL



on the Integrated Solid Waste Management Project (ISWMP)



SAFER RIVER, LIFE SAVER FOUNDATION, INC.

LICEO DE CAGAYAN UNIVERSITY
CAGAYAN DE ORO CITY

CENTER FOR ENVIRONMENTAL STUDIES IN MINDANAO

Anchor Institution of GO-FAR/L-EPM Project



DEPARTMENT OF INTERIOR AND LOCAL GOVERNMENT
Region 10
Cagayan de Oro City



**CITY GOVERNMENT OF CAGAYAN DE ORO THROUGH
CITY LOCAL ENVIRONMENT AND NATURAL RESOURCES OFFICE (CLENRO)**
Cagayan de Oro City



Republic of the Philippines
DEPARTMENT OF THE INTERIOR AND LOCAL GOVERNMENT
Region 10 - Northern Mindanao

FOREWORD

The Local Environmental Planning and Management Good Practices in Local Governance: Facility for Adaptation and Replication (LEPM-GO-FAR) is a project implemented by the Department of the Interior and Local Government (DILG), Liceo de Cagayan University through the Safer River, Life Saver Foundation, Inc. (SRLSF) and the City Government of Cagayan de Oro through the City Local Environment and Natural Resources (CLENRO).

The project is funded by the United Nations Development Program under its (UNDP-Habitad). The aim of which is to document the exemplary performance of the barangays of Lapasan, Gusa and Bugo all of Cagayan de Oro in the field of environmental planning and management. These barangays have proven that the smallest local government unit can effectively implement environmental planning and management with less support from its mother local government unit.

The project intends to replicate this exemplary practice in other barangays of Cagayan de Oro City by providing them the basic guide on how to implement effective environmental planning and management at their respective areas of concern. Hence, a replication manual is developed by the Safer River, Life Saver Foundation, Inc. The projects presented in this replication manual are Solid Waste Management and Coastal Resource Management.

The replication manual is envisioned to direct the users particularly the replicating local government unit what steps to undertake to effectively implement and sustain their project on Solid Waste Management and Coastal Resource Management at the barangay level. On the part of the DILG, this replication manual seeks to enhance the capacities of our field officers in providing appropriate technical assistance interventions to local government units in the area of environmental planning and management.

We are confident that with this replication manual, the best practices of the three barangays will proliferate in other the areas of Cagayan de Oro, Northern Mindanao and other regions for a healthy and clean environment.

AUSTERE A. PANADERO
Asst. Secretary for Policy Capacity Development,
International Partner & Field Operations



Republic of the Philippines
DEPARTMENT OF THE INTERIOR AND LOCAL GOVERNMENT
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OFFICE OF THE REGIONAL DIRECTOR

Message

I commend the laudable efforts of the Safer River, Life Saver Foundation, Incorporated of the Liceo de Cagayan University, Cagayan de Oro City, in successfully documenting the exemplary practices on Local Environmental Planning and Management (LEPM) of Barangays Lapasan, Gusa and Bugo, all of Cagayan de Oro City.

The development of this replication manual is another step forward in ensuring that local government units are given the appropriate tools as guide in enhancing their capabilities in the implementation of national and local laws.

The manual gives a detailed procedures in implementing Solid Waste Management, Coastal Resource Management at the barangay level and how the projects were sustained by the implementing barangays.

I congratulate also the City Local Environment and Natural Resources Office (CENRO) and DILG Regional Office Staff for a successful provision of technical guidance to the Safer River, Life Saver Foundation, Inc. in coming out with this replication manual.

Again, Congratulations.

QUIRINO M. LIBUNAO, CESO III
Regional Director



LICEO DE CAGAYAN UNIVERSITY
Rodolfo N. Pelaez Boulevard, Kauswagan
Cagayan de Oro City



OFFICE OF THE PRESIDENT

MESSAGE

The Liceo de Cagayan University of Cagayan de Oro City is very pleased and greatly honored to have contributed to the development of the modules in MASTER IN MANAGEMENT Major in ENVIRONMENTAL PLANNING AND MANAGEMENT (EPM) in the School of Graduates Studies and Good Practices in Local Governance promoting LEPM. I wish to acknowledge the contributions of the Safer River, Life Saver Foundation, Inc. and the School of Graduate Studies.

This component primarily focuses on the creation of a Center of EPM Studies in Mindanao that shall serve as the repository of knowledge on EPM Process and Projects in Mindanao. The Center is expected to facilitate organizing the Local Resource Institutes (LRIs) in Mindanao to share knowledge and technologies as well as design new tools, curricula, and projects concerning L-EPM. In addition, the Center shall closely coordinate with the Urban Leadership and Management Unit (ULMU) of Local Government Academy (LGA) that manages information on urban developments and concerns, including EPM processes.

In behalf of Liceo de Cagayan University, Safer River, Life Saver Foundation, Inc. the School of Graduate Studies. I commend and congratulate the Project Management Team of this endeavor for a job well done. Also, I express my thanks to the cooperating agencies, namely; the Department of Interior and Local Government through the Local Government Academy and the funding agency, the UN-HABITAT for all their support.

To all our partners and the Project Management Team, keep up the good work. Mabuhay!

A handwritten signature in black ink, appearing to read "Rafaelita".

DR. RAFAELITA PELAEZ-GOLEZ
President



Republic of the Philippines
City of Cagayan de Oro

OFFICE OF THE CITY MAYOR

MESSAGE

As the City of Cagayan de Oro scales new and greater heights on both domestic and international fronts, we cannot and must not lose ourselves in the heady milieu of higher altitudes. For with great progress comes the greater responsibility of maintaining the resources and circumstances that accommodates and supports our growth.

Recognizing and acknowledging this symbiosis, the City Government of Cagayan de Oro works hard – singularly and in partnerships – to protect the integrity and health of the environment that breeds, feeds – and at the same time benefits from – our city's advancement.

It is heartening to know that, although we do not flaunt our efforts, they are taken note of and honored, as in the selection of Barangays Bugo, Gusa, and Lapasan as Model Barangays in the implementation of solid waste and coastal resources management programs under the "Good Practices in Local Governance: Facility for Adaptation and Replication – Local Environmental Planning and Management (GOFAR-LEPM).

The Replication Manual that this project aims to produce through collaboration with the city government, UN Habitat, the Department of the Interior and Local Government (DILG), the Barangay Councils concerned, and Liceo de Cagayan University 's Safer River, Life Saver Foundation, Inc., will not only celebrate the efforts of everyone that has worked hard to achieve implementation success, but also ensure the success of future and further implementation efforts.

As those of us who went before boldly went where none had successfully gone before, so now we must hold up the light and show the way to those who resolutely follow, seeking to achieve the same balance.

VICENTE Y EMANO
City Mayor

FOREWORD

The implementation of the Integrated Solid Waste Management System Program in the pilot barangays of Lapasan, Gusa and Bugo in the City of Cagayan de Oro has been more than challenging and overwhelming. Proper waste disposal is a major contribution in dealing inevitable environmental issues. Promoting segregation at source will make ecological awareness climb to its peak.

The realization of this documentation will afford a hope that other municipalities and cities can reflect and replicate the implementation process. Not just as a community, but such consciousness will become part of each individual's personal values. After all there is only going to be one earth and it is everyone's responsibility to take care of it.

Dr. Rosalina S. Huerbana
Project Manager
GO-FAR/L-EPM Project

Preface

The Integrated Solid Waste Management Program is promoted by the Local Government Units all over the country to confront garbage issues that all along become afflicting to the environment. R. A. 9003 or the Ecological Solid Waste Management Act of 2000 – *An act providing for an Ecological Solid Waste Management Program, creating the necessary institutional mechanism, and incentives, declaring certain acts prohibited and providing penalties, appropriating funds therefore, and for other purposes.* It is a fundamental basis of the implementation of the project. All cities and municipalities are required to execute the law in its barangays. In Cagayan de Oro City, Ordinance Number 8975 – *An ordinance requiring the mandatory segregation of waste at source and providing penalty for violation thereof and for other purposes.* Hence, it is promulgated to make the said act fully operational.

Introduction to the Project

Bugo is made popular for the location of an international acclaimed producer of quality pineapple products. The said company has established its processing plant and wharf in the barangay.

It is the boundary barangay of Cagayan de Oro on the east, which is approximately fifteen kilometers from the city proper. It has a land area of 968 square kilometers that is divided into eight zones, including the *sitios* of Suntingon, San Vincente and Kihapon.

Topographically, Bugo is bounded on the north by the town of Tagoloan, Misamis Oriental; on the south by barangay Puerto; on the east by the province of Bukidnon; and, on the west by Macajalar Bay. As one of the largely populated barangays of the city, Bugo is categorized as a highly urbanized barangay. Its population totaled to 26, 473 (As of Dec. 2005).

The Integrated Solid Waste Management Project of Bugo has been pioneered by the Local Environmental Planning and Management (L-EPM) process. This method, in turn, is promoted by the Good Practice in Local Governance: Facility for Adaptation and Replication (GO-FAR). The focus of program is to support LGUs effort in confronting local environmental issues.



Stakeholders at the Project Area

The city government thru the endeavor of City Local Environment and Natural Resources (CLENRO) has invited organizations, institutions and individuals to become stakeholders.

With the participating stakeholders, a series of activities have been conducted for the orientation of the process as well as the identification of

Kalimpyo Angay Maangkon sa Bugo Uban Ang Nasod (KALAMBUAN)

environmental issues that need to be addressed. Hence, working committees at the city and barangay level is organized for the implementation of the project.

Barangay Bugo is one of the identified barangays to implement the project. The recognition is based on the active participation of its representatives during the consultation meetings. Thus, *Kalimpyo Angay Maangkon sa Bugo Uban Ang Nasod (KALAMBUAN)* was created. Its purpose is to reduce and utilize barangay waste into useful and profitable resources, in relation with its thrust to have a clean and green environment through values formation.

KALAMBUAN at a glance

Project History: A Retrospection

In 1999, the project on Integrated Solid Waste Management was introduced to the barangay as a result of the L-EPM process based on the Sustainable Cities Program (SCP). SCP seeks to promote and support sustainable development in cities and towns all over the world. Cagayan de Oro is one of the implementing cities in the Philippines. Moreover, SCP is also concerned with finding effective and realistic solutions to environmental problems that threaten world's cities vis-à-vis finding developmental paths that befit the opportunities and/or constraints of the city.

On the other hand, the L-EPM is a process that focuses on the identification and clarification of environmental issues; assembly and analysis of relevant information; and, identification and mobilization of stakeholders; a bottom-up method that prioritize ecological concerns according to doability and impact to the community.

L-EPM conducted series of city-wide meetings for its orientation and application. Furthermore, the said sectoral consultations had also organized L-EPM organizational team to give technical assistance and supervision on the course of the project implementation. The city government through CLENRO lobbied the action.

Essentially, KALAMBUAN or the ISWMP of Bugo started as a revision of the *Zero Waste Management* introduced by the past barangay administration as part of the local environmental program. In this connection,

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residuals and hazardous wastes were made the primary consideration in the improvement of the barangay waste disposal system.

Bugo Environmental Protection and Preservation Council was eventually established to address the barangay ecological concerns. Solid Waste was made a priority. In this regard, the ISWP was launched, and was founded on the guidelines of R. A. 9003 or the Ecological Solid Waste Management Act of 2000.

KALAMBUAN has earned Barangay Bugo an award from the Department of Environment and Natural Resources' National Search for Model Barangay for its Eco-Waste Management in 2004. Currently, there is a plan to expand the project throughout Bugo with a 5-year implementation plan. Prioritization will depend on the immensity of the waste problem of the barangay, and an available area for an accessible community garden.

Project Description: The Circumstance and Solution

Area Situationer

The piloting of a specific area of the barangay to implement ISWP is based on the location and condition. *Villa Trinitas Phase III* has 320 households. It is located uphill of the barangay. It has a creek that serves as a waterway from the upper hills. Eventually, the creek becomes a dumping site. In rainy days, the trash arises as the water rush down from the highlands. Thus, there is a need for the said stream to be cleaned up since it has become a big factor in the health condition of the village.

Objectives

KALAMBUAN is design to answer the garbage issue in the barangay. It emphasizes waste segregation as an initial and important component in proper garbage disposal system.

The primary objectives of the project are the following:

- Respond to the paramount need for a proper waste management system in order to address the garbage problem in the barangay that is affecting the whole community;

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- Increase barangay awareness on the relevance of Solid Waste Management System in relation with making solution to the prevalent environmental issues;
- Promote values formation, thus focusing on the change of the attitude of the barangay towards segregation;
- Create livelihood opportunities for the marginalized fraction of the barangay population, and improve their living conditions;
- Encourage good governance through full support of the City Local Government Unit (LGU) in ecological projects in the barangay level.

Basic Approaches

- ◆ *Segregation at Source* is being promoted as a key step in reduction of the waste volume. Households are encouraged to practice such disposal routine. In this manner, only the residuals and hazardous wastes will be transported to the landfill.

- ◆ A thorough information and education is rendered to create awareness and change of attitude towards the environment. There has been an

initial advocacy on 22 houses. Eventually, the extensive information campaign obtained 92% support from the total population of the neighborhood. The pilot area has attained 20-30% garbage for disposal after the IEC. This percentage only composed the residual waste.

Reduction at Source vs. Segregation at Source

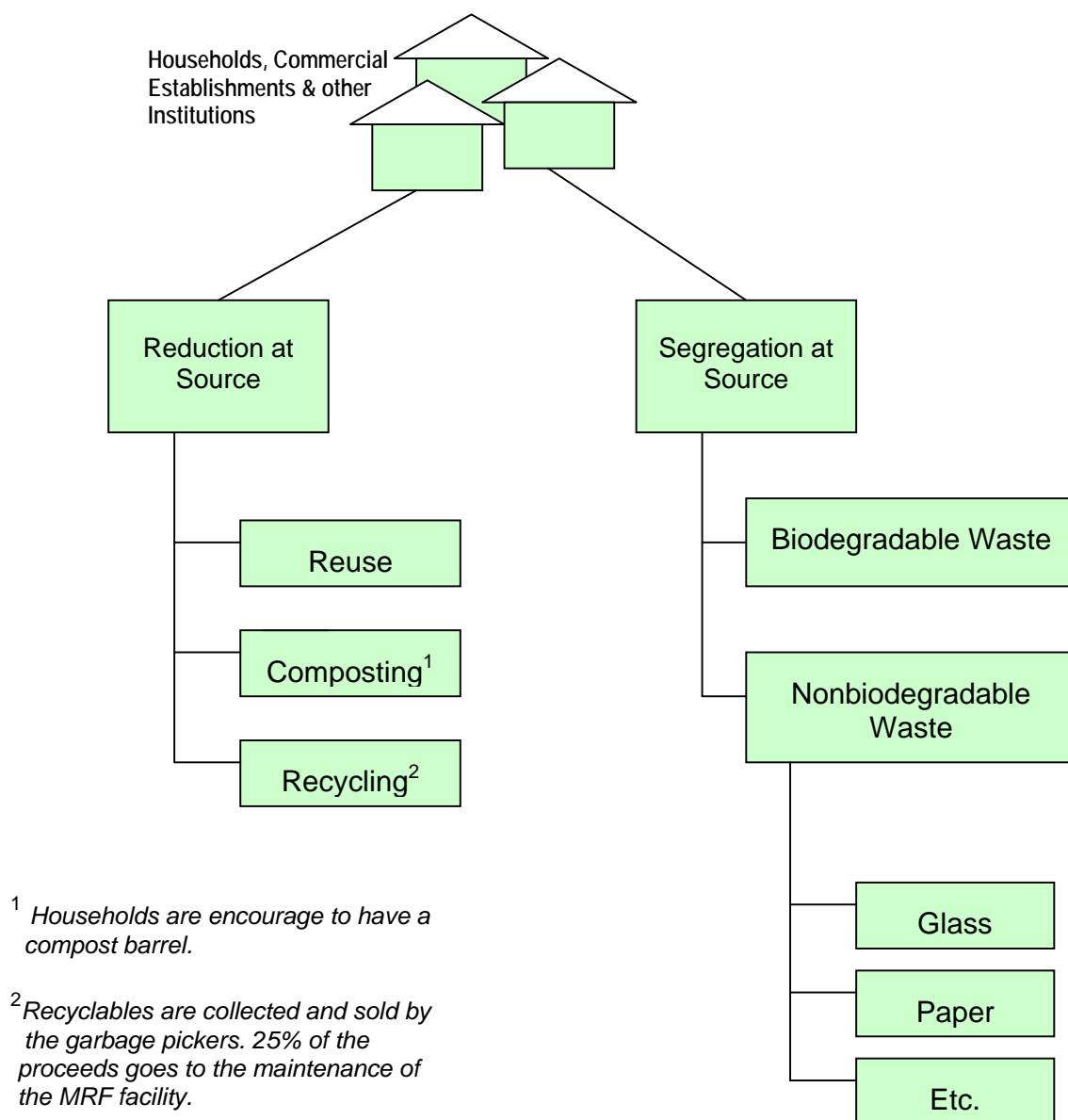


Figure 1. Reduction and Segregation at Source

The Material Recovery Facility (MRF)

The facility is constructed in the vacant lot of the neighborhood that is originally meant for a recreational center for the village. Thus with no sports facilities yet installed, the block has been utilized as the MRF venue because of its approximate dimension and accessibility. The MRF is the place for the final sorting of the collected wastes. It has the following major operational components:

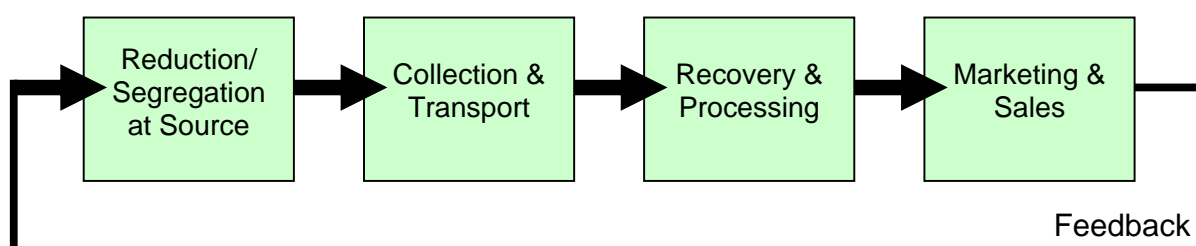


Figure 2. Final Sorting Flow

The Allotment Garden

The creation of the garden is an offshoot of the ISWMP as a receiving facility for the compost. Eight beneficiaries are initially identified by the Barangay Steering Committee to be the cultivators of the garden.



The Garden's Plot

The objective of the garden is to produce inexpensive and chemical-free vegetables using the compost from the biodegradable waste from the households. The products will then be sold to the community. Vegetables such as pechay, cauliflower, lettuce, cabbage, string beans, patola, upo and fist-size tomatoes are sold at half the market price.

Kalimpyo Angay Maangkon sa Bugo Uban Ang Nasod (KALAMBUAN)

Project Results: Beyond Noble Undertaking

The project has brought about success to the community:

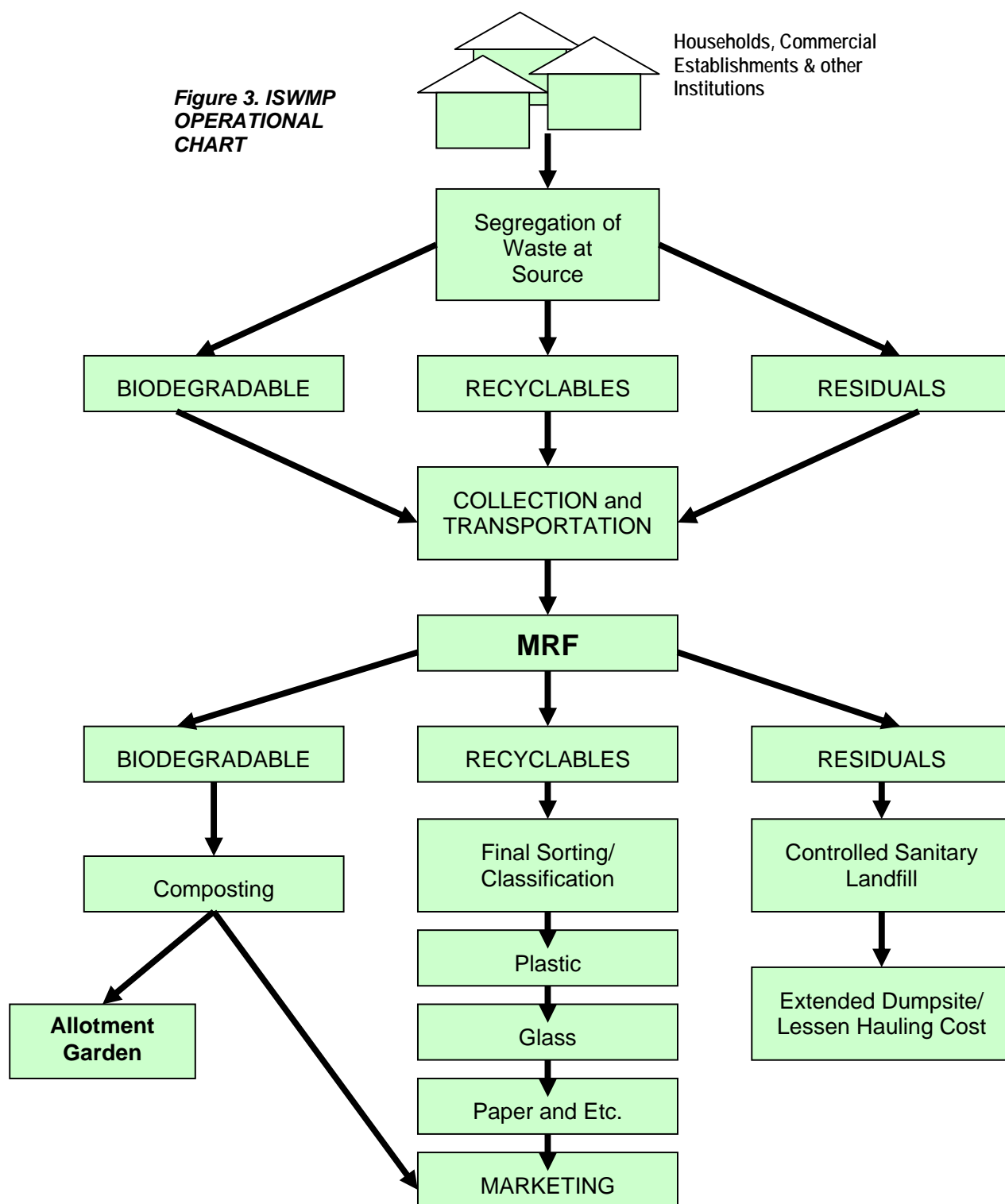
- The serious garbage problem in the area has been addressed. Volume of garbage is reduced;
- Perfection of the Solid Waste Management Program, with the emphasis on segregation;
- The attitude of the community with regards on waste and environment is changed. Thus, they become supportive of the project;
- Economic improvement of the garbage pickers. They were absorbed by the barangay council as employees;
- Local empowerment is intensified. The Solid Waste Management System can sustain itself even only with the effort of the community. It can function independently even without outside aid;
- Livelihood was generated from the harvest of the Allotment Garden and the income from the recyclable. Recently, the sale of compost barrels to replicating communities has earned additional profits;
- Commitment of the barangay council in all aspect of resources. Enactment of barangay ordinance that assured the sustainability in on progress;
- New Stakeholders had come in. The NSTP Program of Xavier University tied-up with the project.



The Allotment Garden and Harvest

Key Implementations Steps

**Figure 3. ISWMP
OPERATIONAL
CHART**



Establishment of the Project Concept at the city level:

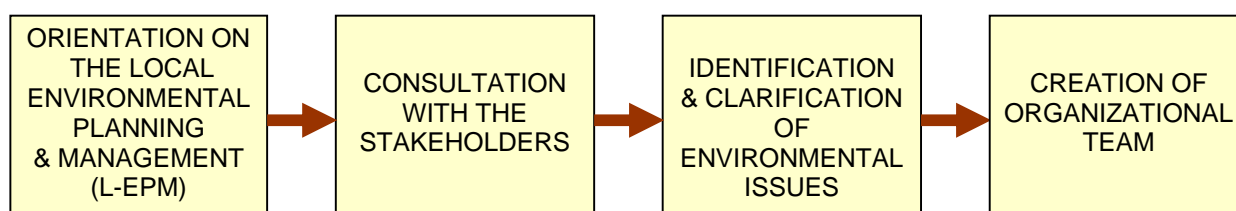


Figure 4. Preliminary Steps

1. Preparation for Actual Implementation:

- Consultation with the barangay council for the adoption of the project;
- Sourcing out appropriation for needed resources;
- Preparation of project proposal;
- Formulation of action plan for the application of the project.

2. Organizational Set-up:

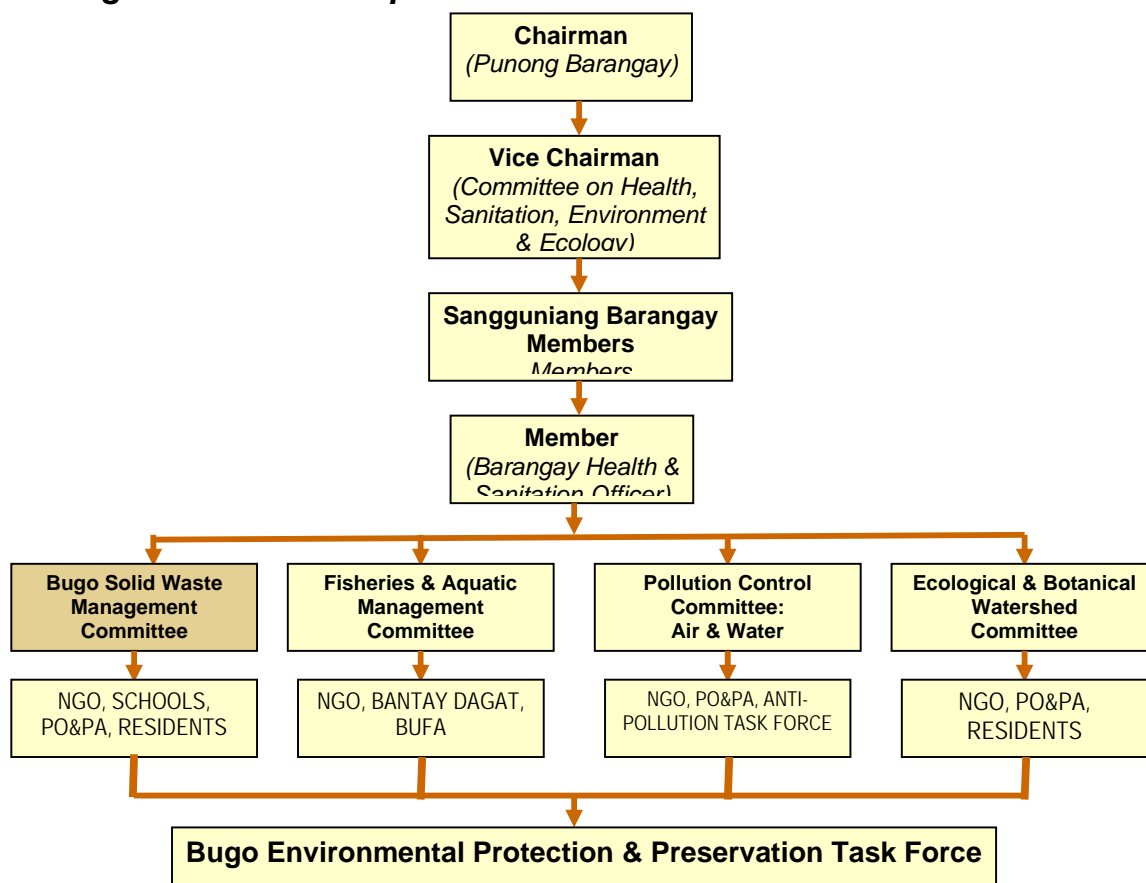


Figure 5. Organizational Chart

Kalimpyo Angay Maangkon sa Bugo Uban Ang Nasod (KALAMBUAN)

The Barangay Council together with representatives from CLENRO and the community coordinated as well as deliberated for the following:

- Organization of the Barangay Steering Committee for the program;
- Identification of the Trainors and Facilitators for the capability building activities and IEC campaigns;
- Grouping of the Working and Monitoring Committees.

3. Capability Building Activities:

The working groups hosted series of activities for program implementation with necessary technical inputs from CLENRO:

- Conduct of orientations, seminars, trainings and workshops for the barangay council and appointed committees for the program;
- Trainors' Training for the facilitation of IEC campaigns;
- Mock Implementation. The barangay council passed a resolution that all barangay officials, staff, employees and government offices of the barangay. This was to set an example to the rest of the citizens of Bugo by primarily practicing segregation in their respective residences and offices (see *annex*);

4. Preparatory Phase:

The Barangay Steering Committee and the respective working groups oversee the activities:

- Construction of MRF along with the fabrication of compost barrels, which would be placed in residences;
- Preparation of the Allotment Garden. It was very important to consider the topographical quality of soil. Bugo's garden was formerly hard and rocky surface. Yet, they tilled the soil to accommodate for the garden;
- Acquisition of materials, tools and equipment needed.



Setting the Composting Facility

In the meeting of funding specifications, the barangay council establishes its allocation. Barangay Bugo has an annual appropriation of PhP 40,000 for the waste management system alone. In addition, a monthly counterpart of PhP 100.00 for the water bill of the garden was taken from its regular barangay budget.

There were circumstances that funding subsidy from partner NGO and donors fall short out of the expected. The working groups in this respect had contingencies and considered other alternatives.

Del Monte Philippines Inc. has contributed materials for the installation of the Multi-purpose building in the garden.

5. *Intensive Information, Education and Communication Campaign :*

Barangay Steering Committee coordinated with people's organizations within the barangay to help in the extensive dissemination:

- Preparation of materials for the advocacy. Printing of handouts, posters, billboards, notices and stickers;
- The youth sector was organized for the publication of the materials;
- Conduct of seminars in the pilot area;
- Creation of Task Forces by zones in barangay;
- Assemblies cum Strategic Orientation. The committee for this activity collaborates with the academe. The facilitators tap the schools within the vicinity for the venue, like the Bugo Elementary School. Parents of Day Care pupils and teachers were given lectures about the program. Consequently, the teachers incorporated it in their classes. Students were taught about the basics on waste classification;



Advocating Segregation

Kalimpyo Angay Maangkon sa Bugo Uban Ang Nasod (KALAMBUAN)

- The National Service and Training Program (NSTP) students of Xavier University that has been assigned in Barangay Bugo, were utilized for the information drive.
- House-to-House education on segregation. Trained persons that form part of the advocacy group like the Barangay Health Workers (BHW) and Nutrition Scholars were tasked to introduce and convince each household.

6. Course of Action – Material Recovery Facility (MRF):

Segregation at source. A 'No Segregation. No Collection.' Policy was implemented. Households as well as institutional, industrial, commercial establishments were complied to segregate their garbage. Otherwise, it will not be collected thus they would be warned and penalized. Waste should be classified as compostable, recyclable and reusable and residual or hazardous.



Driving the collection

Collection and Transportation. Designated community collectors gathered the waste from houses, which would be taken to the MRF. Schedule of garbage collection was strictly imposed.



Classifying recyclables

Segregation at the facility. Classification and separation of collected waste, which would be stored until taken to its last destination of disposal. Time being was set for the storage period. The assigned individuals would carefully supervise the activity. Recyclable and Reusable waste should be recovered and respectively sorted out. Residuals and Hazardous would be stored until taken out. Biodegradable would be taken to the composting bins.

Final Disposal. After the biodegradable decomposed, it would be taken to the allotment garden to be utilized as fertilizers. Recyclable wastes were sold. Profit from the sale was solely apportioned to the garbage pickers. Reusable materials were taken to the place where they would be further used. Residuals and Hazardous wastes were transported to the landfill. . A pick-up point was agreed upon, where only the residuals and hazardous would be collected as scheduled. In Bugo's case, the collection has decreased to once a week collection.



Taking in the waste



The Allotment Garden

7. Course of Action – Allotment Garden:

- Ground Preparation. The land within the area was cultivated and developed into garden plots. Bugo started with 8 plots and became 64 at present;
- Seed Germination. This included the selection of the variety of vegetables that will be planted;
- Transplanting. The actual planting of the seeds into the plots;

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- Care and Maintenance of the plants. The beneficiaries allocated a portion of the income from the production for the maintenance.

8. Monitoring and evaluation for project sustainability and continue information campaign on the project:



Project Team in Action



- Designated individuals, who composed the monitoring committee, simultaneously checked on each household to insure segregation at source to avoid error in collection schedules;
- Weekly monitoring and monthly evaluation regarding number of households segregating and the volume of garbage disposed;
- Broadcasted project, specifically the community garden updates.

Lessons and Insights: Looking into and Through

The implementation of KALAMBUAN has afforded Barangay Bugo a number of lessons that will help replication to other LGUs:

Empowerment of the community. In the case of Barangay Bugo's ISWMP, the feature of L-EPM to be a bottom-up process has been proven in the implementation. The success of Bugo has produced a ripple effect to the rest of the barangays in the city. Along with it, is the ability of the community to bridge resources gaps. The barangay has sourced out funds if not materials and equipment from local donors, establishments and organizations.

Lobbying with the Stakeholders. The implementation of the project has earned popularity and participation of different stakeholders. Stakeholders are the primary movers for the operation and sustainability of ISWMP. This includes the involvement of private sectors. These private companies do not only help in the resources, but it had applied ISWM in its own operation and employees' community.

Enactment of Law for Sustainability. It is very essential for the project to continue even after its preliminary application. A sanction of a local ordinance will assure the maintenance of the operation. It will guarantee the prioritization ISWMP and its development in spite any change of administration.

Activity Summary for Replication

<i>Activity</i>	<i>Time Frame</i>	<i>Approximate Budget</i>
A. Organization Set-up: 1. Organize Barangay Steering Committee; 2. Identify Trainors' and Facilitators; 3. Identify Working Committee and Monitoring Group	1 day	PhP 300.00
B. Capability Building Activities 1. Trainors' Training 2. Mock Implementation	1 month	30,000.00
C. Preparatory Phase 1. Fabricate waste containers/compost barrels 2. Construct MRF 3. Preparation of the Allotment Garden 4. Purchase of equipment and tools	1 month	100,000.00
F. Collection of Sorted Waste	4 months	5,000.00
G. MRF Operations 1. Final Sorting 2. Transport non-recyclable and non-reusable waste 3. Composting of biodegradable	4 months	5,500.00
H. Garden Operations 1. Ground preparation 2. Germination of seeds 3. Transplanting 4. Care and maintenance of plants	4 months	1,000.00
I. Monitoring and Evaluation 1. Weekly monitoring 2. Monthly evaluation 3. Notice of violators and sanctions	4 months	500.00

Kalimpyo Angay Maangkon sa Bugo Uban Ang Nasod (KALAMBUAN)

Matrix for Primary Action Plan

<i>Activity</i>	<i>Strategy</i>	<i>Objective</i>	<i>Responsible Persons</i>	<i>Resources / Instruments</i>	<i>Budget</i>	<i>Indicators</i>
1. Definition of project targets.	Stakeholders will convene.	To set vision, mission and goals	- Barangay Council - CLENRO - Representatives from the Homeowners' Association of the pilot area	- Venue - Materials to be used like pens, bond papers, manila paper, etc.	PhP 3,000.00	Concrete purpose of the project.
2. Determination of working groups and its tasks	-do-	To identify the committees to carry on with the project	-do-	-do-	-do-	Groups and tasks flow chart
3. Identification of the location	Survey of the vicinity.	To explore for the pilot area	-do-	- Vehicle - Transportation allowance	500.00	Venue for MRF and Allotment Garden.
4. Identification of the beneficiaries	A meeting will be conducted to list down group or individuals.	To provide livelihood	-do-	- Venue	-do-	Actual beneficiaries for the garden and the income from the recyclable.
1. Formulation of project proposal and budget	Consultation between stakeholders.	To propose and estimate cost	-do-	- Venue - Materials	Php 3,000.00	Actual project proposal.

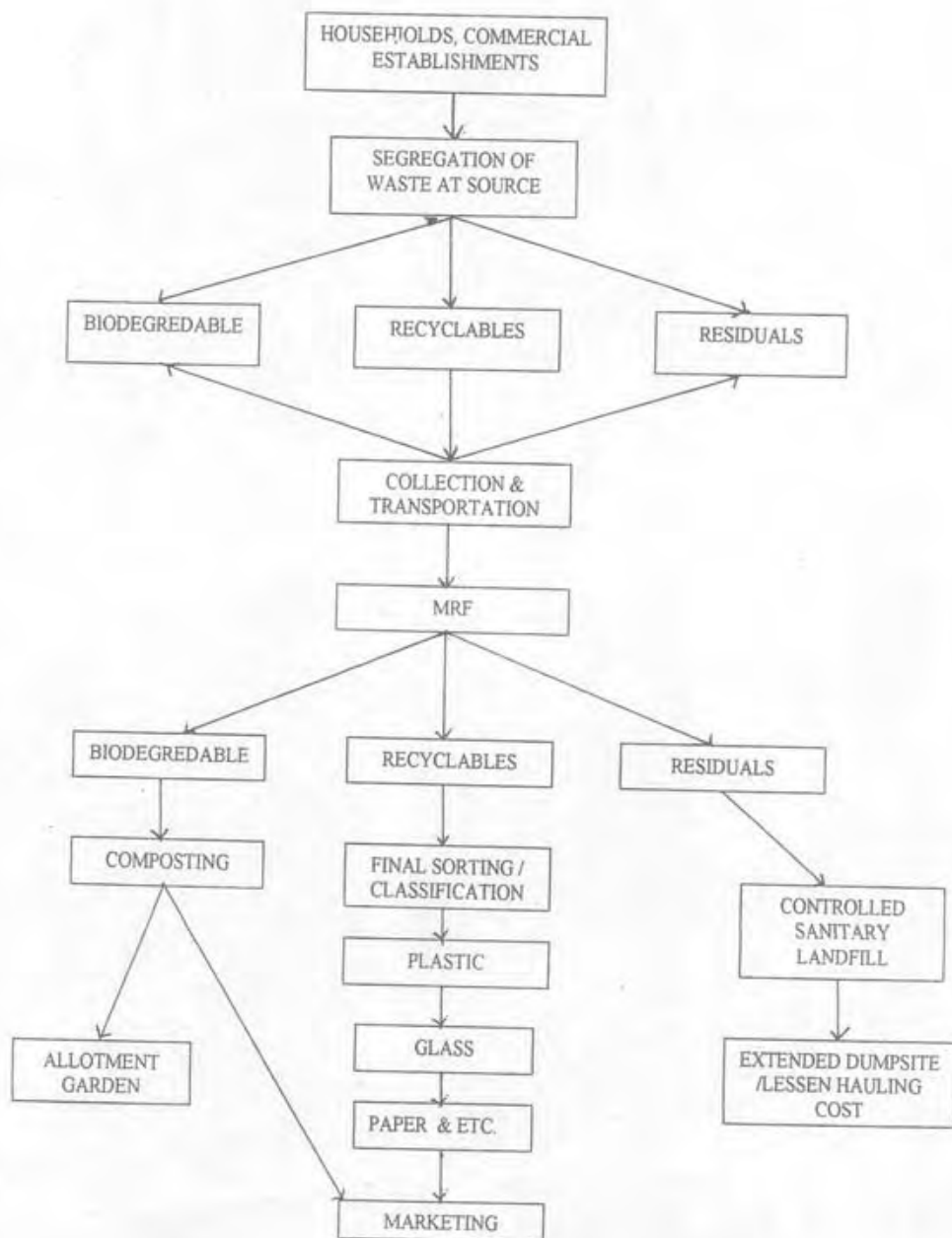
Kalimpyo Angay Maangkon sa Bugo Uban Ang Nasod (KALAMBUAN)

<i>Activity</i>	<i>Strategy</i>	<i>Objective</i>	<i>Responsible Persons</i>	<i>Resources / Instruments</i>	<i>Budget</i>	<i>Indicators</i>
6. Setting of implementation guidelines	<i>Meeting of Stakeholders</i>	To prescribe measures	- Barangay Council - CLENRO - Representatives from the Homeowners' Association of the pilot area	- Venue - Materials	PhP 3,000.00	Substantial guidelines
7. Project Implementation Proper (See Matrix for Key Implementation Steps)						
8. Turnover of the project	Organize an activity in the community	To promote the project sustainability	- Barangay Council - CLENRO - Community - Stakeholders - Invited guests	- Venue - Materials - Sound System - Human resources	PhP 10,000.00	Individuals who will continue the operation of the disposal system
9. Setting of monitoring and evaluation guidelines	Consultation of the Stakeholders	-do-	-do-	-Venue - Materials	PhP 3,000.00	Substantial monitoring guidelines

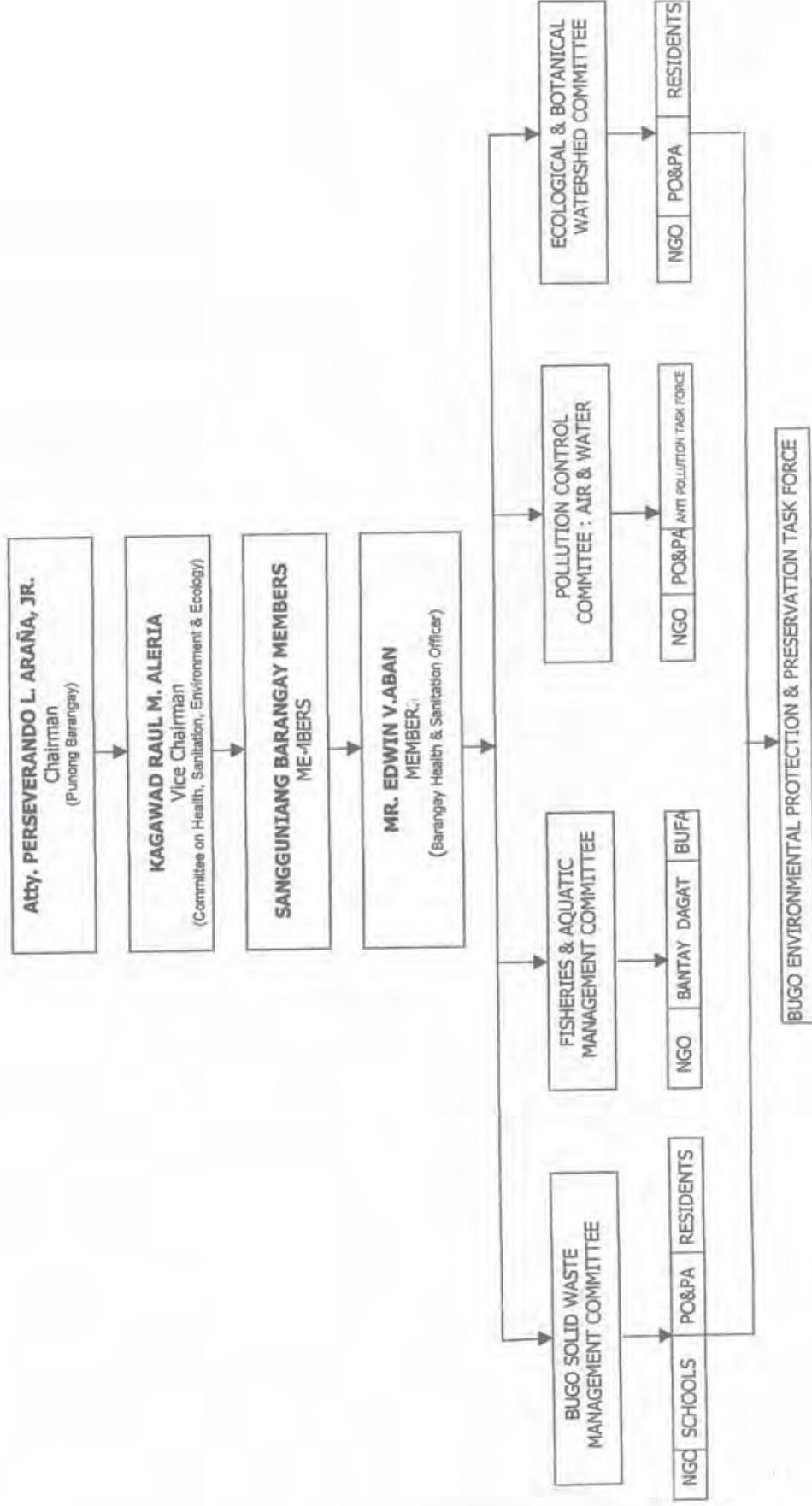
ANNEXES

ANNEX A.

OPERATIONAL FLOWCHART



BUGO ENVIRONMENTAL PROTECTION and PRESERVATION COUNCIL (BEPPC)



OFFICE OF THE SANGGUNIANG BARANGAY

ANNEX C

Resolution for Mock Implementation

RESOLUTION NO. 015-04

Series of 2004

RESOLUTION REQUIRING ALL BARANGAY OFFICIALS, STAFF, EMPLOYEES, AND GOVERNMENT OFFICES OF THIS BARANGAY TO SPEARHEAD THE MANDATORY SEGREGATION OF SOLID WASTE AT THEIR RESPECTIVE RESIDENCE OR OFFICE AND FOR OTHER PURPOSES.

WHEREAS, City Ordinance No. 8975 Series of 2003 requires the mandatory segregation of waste at source, primarily conducted and managed at the Barangay level;

WHEREAS, Barangay Officials, staff, employees, and other government officials assigned at the barangay, are responsible leaders of the community setting an example to the constituents on any programs of the government;

- now therefore -

On motion made by Kagawad Raul M. Aleña and duly seconded by Kag. Domingo Sonny G. David, and after thorough and mature deliberation of this august body in session assembled it was -

RESOLVED, as the Barangay Council (Sangguniang Barangay) has hereby resolve, to pass a Resolution requiring all Barangay Officials, staff, employees, and government offices of this barangay, to spearhead the mandatory segregation of solid waste at their respective residence or offices.

RESOLVED FURTHER, as the Barangay Council (Sangguniang Barangay) has hereby resolve further, to deputize the Barangay Health Workers, and Barangay Nutrition Scholars to monitor the strict implementation of this resolution.

RESOLVED FURTHER, to let copies of this Resolution be posted on the Barangay Bulletin Board for the information of all concerned.

UNANIMOUSLY CARRIED.

Done this 12th day of April 2004 at Barangay Bugo, Cagayan de Oro City.

I HEREBY CERTIFY TO THE CORRECTNESS OF THE FOREGOING RESOLUTION.


CARLITO P. OPPUS
Barangay Secretary

ANNEX D

BARANGAY ECOLOGICAL SOLID WASTE MANAGEMENT COMMITTEE

BARANGAY BUGO

CHAIRMAN: Atty. PERSEVERANDO L. ARAÑA, JR.

Punong Barangay

V- CHAIRMAN: Kagawad RAUL M. ALERIA

Chairman- Health, Sanitation, Environment & Ecology

MEMBER: BUGO BARANGAY COUNCIL

MEMBER: MR. EDWIN V. ABAN

Health, Sanitation, Environment & Ecology Officer

LECTURER/ ADVOCATE:

- 1. Atty. PERSEVERANDO L. ARAÑA, JR.**
- 2. KAG. RAUL M. ALERIA**
- 3. MR. EDWIN V. ABAN**
- 4. MR. ROY DINO TENAJA (ngo)**
- 5. MR. FERNANDO REMIGIO (ngo)**
- 6. MR. EMELIO BARBOSA, JR. (ngo)**
- 7. MR. GERALDINO ZABALA (ngo)**

GARBAGE COLLECTOR:

- 1. MR. AQUILINO SALUBO (brgy. employee)**
- 2. MR. RODOLFO LOMO-AY (brgy. employee)**

MEMBER: (ENFORCER)

**BUGO ENVIRONMENTAL PROTECTION & PRESERVATION TASK
FORCE. (BEPP TASK FORCE)**

LECTURER FOR ALLOTMENT GARDENING:

- 1. MR. GERALDINO "DOX" ZABALA**
- 2. MR. EMELIO BARBOSA, jr.**

ALLOTMENT GARDENER:

- 1. MR. GERALDINO "DOX" ZABALA**
- 2. RET. SGT. DANILO GONZALES**
- 3. MR. ANTONIO REDONDO, SR.**
- 4. MR. ANTONIO REDONDO, JR.**

GO-FAR/L-EPM PROJECT MANAGEMENT TEAM

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Executive Director
Safer River, Life Saver Foundation, Inc.
Liceo de Cagayan University
Cagayan de Oro City

MR. QUIRINO M. LIBUNAO

Regional Director
Department of Interior and Local Government (DILG)
Region X
Cagayan de Oro City

MS. ZAIDA TAN NERY

CLENRO Designate
City Local Environment and Natural Resources Office
City Government of Cagayan de Oro
Cagayan de Oro City

GO-FAR/L-EPM PROJECT DOCUMENTATION TEAM

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ENGR. MARISIA C. NAYBE

Project Coordinator

MS. MYRA B. FELICILDA

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MS. ZOLA PETE P. GONZALES

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Documenter/Writer

MS. ANGELINE B. BONDOC

MS. JOCELYN P. MADRONA

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