

# THE SUSTAINABLE CITIES PROGRAMME IN PHILIPPINES (1998-2007):

ADDRESSING POVERTY, GENDER INEQUALITY AND  
ENVIRONMENTAL DEGRADATION



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ENVIRONMENTAL DEGRADATION

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## ABBREVIATIONS

EPM	Environmental Planning and Management
LA21	Local Agenda 21
SCP	Sustainable Cities Programme
UN	United Nations
UN-HABITAT	United Nations Human Settlements Programme
UN-HABITAT/ROAP	United Nations Human Settlements Programme Regional Office for Asia and the Pacific



## PREFACE

The Sustainable Cities Programme/LA21 Programme in the Philippines was started in 1998 by UN-HABITAT in collaboration with the Department of the Environment and Natural Resources. It was targeted at secondary towns and was perceived as a localization of the Philippine Agenda 21. Its main purpose was to pioneer the integration of environmental planning and management within the city organizations using the Sustainable Cities Programme-Local Agenda 21 (SCP-LA21) approach. Three cities were selected as demonstration cities, that is, Lipa, Tagbilaran and Cagayan De Oro. By enhancing the capacity of local government units in participatory environmental planning and management, the programme sought to address issues of poverty, inequity, powerlessness, gender inequality, and environmental degradation evident in the participating cities. Each city went systematically through a 4 phase Environmental Planning and Management process as follows: Phase 1 - start up, Phase 2 – strategy and action planning, Phase 3 – follow up and implementation, and Phase 4 – consolidation and replication. Upon the termination of the Project in 2001, the application of the Environmental Planning and Management process showed good prospects in curbing urban problems. The participating Local Government Units found that managing sustainable urbanization presented tremendous challenges, requiring them to undertake bold institutional and policy reforms and new urban environmental strategies.







## CHAPTER 1: THE SUSTAINABLE CITIES PROGRAMME PROCESS

The development potential of cities all over the world is being increasingly threatened by environmental deterioration. Aside from the obvious effects on the health and well-being of people, environmental degradation directly impedes socio-economic development. For development to be truly 'sustainable', cities need to find better ways of balancing the environment with the pressures on it by human beings.

### ENVIRONMENTAL DETERIORATION IS AVOIDABLE

The Sustainable Cities Programme recognizes that environmental deterioration is not inevitable. Although many cities are suffering severe environmental and economic damage, there are encouraging signs that deterioration is not a necessary evil or an outcome of growth. Mounting evidence from cities around the world show that the fundamental challenge to development is good urban governance, better planning and more effective management.

### SUSTAINABLE CITIES PROGRAMME - A PARTICIPATORY PROCESS MODEL FOR GOOD GOVERNANCE

The Sustainable Cities Programme is a world-wide technical cooperation facility of UN-HABITAT and UNEP. It works at city level in collaboration with local partners to strengthen their capabilities for environment planning and management. It is a participatory process model to promote Good Governance. Employing a common conceptual framework tested in many countries, the Project adopts a style and methodology unique to each city to meet that city's specific needs.

The Sustainable Cities Programme emphasizes that properly planned and managed cities hold the key to human development in a safer environment.

Good Urban Governance is the key and is characterized by the principles of partnerships, transparency, & accountability. The Sustainable Cities Programme also supports the improvement of governance at the municipal level. It also promotes gender parity as an integral aspect of environment planning and management.

### STAKEHOLDER PARTNERSHIPS

The Programme's challenge has been to rally key stakeholders to work together for effective change in attitude and behavior in Environmental Planning and Management. Working group methodology has been found to be an effective tool for the purpose. The process consists of a logical sequence of inter-connected activities with specific outputs.





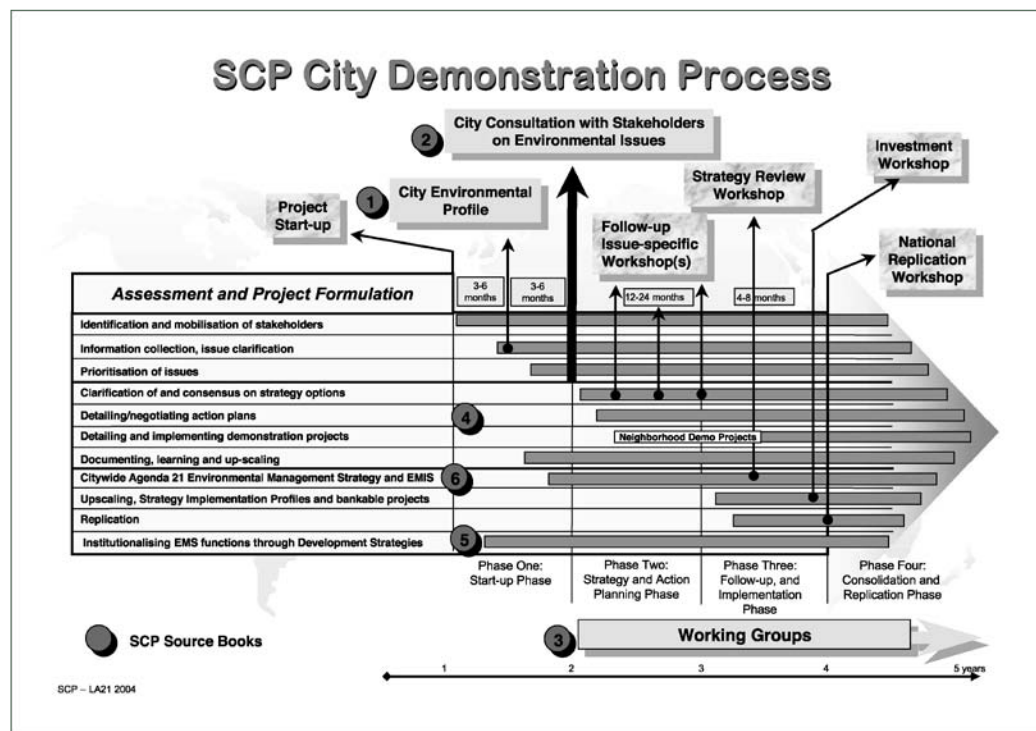
## THE GLOBAL APPROACH

The global approach of the Sustainable Cities Programme to effective environment planning and management has four distinct phases:

- (I) Start-up
- (II) Strategy building and action planning
- (III) Implementation and demonstration
- (IV) Consolidation and replication.

The appended chart illustrates the process of the Sustainable Cities Programme.

ILLUSTRATION 1: THE SCP DEMONSTRATION PROCESS



## CHAPTER 2: INTRODUCTION

### 2.1 BACKGROUND

The “greater democratic space” created in 1986 as a result of a change of government, encouraged public participation in local governance, which for over a decade has not existed anywhere in the country. The participatory approach has been confined to discussions on “talking points” developed by the Local Government Unit or in roundtable discussions on broad concerns of development. Some cities established “non-governmental organization desks” and appointed non-governmental organization liaison officers. The 1988 report “Our Common Future,” was influential in this shift towards greater community participation, and which recommended embracing policies on sustainable development. The participation of the Philippines in the 1992 Earth Summit and its pledged commitment to sustainable development has shaped the discourse and resulted in concrete actions. By comparison, the UN System in the country has been a vehicle in shaping policies, approaches, methods and tools on sustainable development. The Philippine Strategy for Sustainable Development of 1989 was presented at the Earth Summit. The Philippine Council for Sustainable Development was created through Executive Order 15 to orchestrate initiatives. The UN-supported Integrated Environmental Management for Sustainable Development Programme was implemented in 1995 by the Department of the Environment and Natural Resources. The programme influenced the conceptualization of the Local Environmental Planning and Management Project. UN-HABITAT had a strong presence facilitating the signing of the Memorandum of Agreement between the Republic of the Philippines and the organisation. Running parallel to the Integrated Environmental Management for Sustainable Development effort was the Capacity 21 Programme that crafted in 1996 the Philippine Agenda 21, which, in 1998, was approved by the President of the Philippines. Several related efforts followed like the Integrated Environmental Management Project for the industrial sector, Solid Waste Ecological Enhancement Project for solid waste, Private Sector Participation in Managing the Environment for the private sector, and Mainstreaming Sustainable Development in the Bureaucracy in 2003.

The UN-HABITAT/Department of the Environment and Natural Resources effort established in 1998 the Local Environmental Planning and Management Project. The other partner was the League of Cities of the Philippines, a quasi-governmental body, which was elected as the venue for city-to-city Environmental Planning and Management exchange between and among demonstration cities’ Lipa, Tagbilaran and Cagayan De Oro. The main purpose of the Project was to pioneer the integration of environmental planning and management within the city organizations using the Sustainable Cities Programme-Local Agenda 21 model. The task was doubly interesting because of the array of available sustainable development methodologies that were developed in the years following the Earth Summit. These instruments/tools were referred to during the customization of the Sustainable Cities Programme-Local Agenda 21 model to suit local specificities, and particularly the Republic Act 7160 (Local Government Code), which scopes the devolved functions from the Department of the Environment and Natural Resources to the Local Government Unit. The selection of the demonstration cities was based on a demand-basis, but a set of criteria provided the objective guidance in the appraisal process. The League of Cities of the Philippines played a major role in finally selecting the Environmental Planning and Management cities for the project.

The Environmental Planning and Management Project was an indigenization of Philippine Agenda 21. While Millennium Development Goal 7 (environmental sustainability) and climate change were not big labels then, the issue of



sustainability of cities vis-à-vis the impact of climate change was a concern. Upon the termination of the Project in 2001, the application of the Environmental Planning and Management process showed good prospects in curbing urban problems. Managing sustainable urbanization is a challenge for Local Government Units, requiring them to undertake bold institutional and policy reforms and new urban environmental strategies.

The request by the government of the Philippines' for further UN support to maximize its policy from the Environmental Planning and Management experiences, led to UN-HABITAT agreeing to strengthen its support of Philippine national partners by providing input to succeeding phases of the Environmental Planning and Management model in the country. This support is specifically anchored in enhancing capacities of cities on the Environmental Planning and Management process vis-à-vis pursuing adaptive and mitigative measures against the impacts of climate change. An Expert Group Meeting in Makati City (25-28 August 2008) explored the scope of an Environmental Planning and Management-based approach to climate change.

## 2.2 STRUCTURE AND METHOD OF DOCUMENTATION

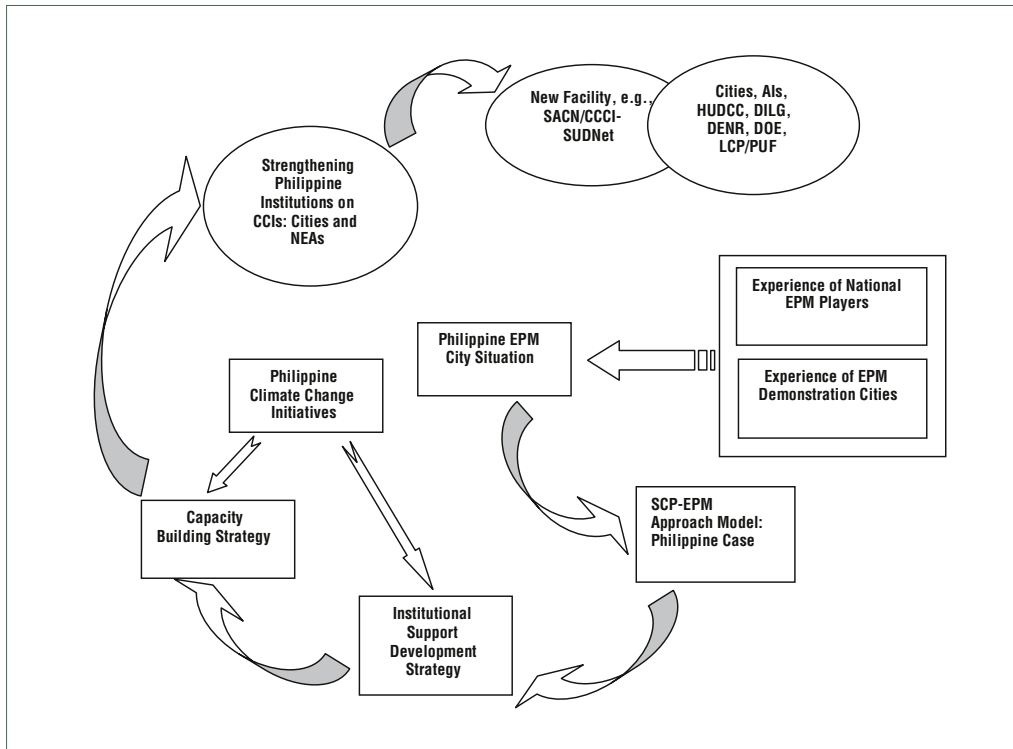
The Asian Institute for Management, the University of the Philippines Diliman-School of Urban and Regional Planning and the Liceo De Cagayan University documented the Environmental Planning and Management experiences in the cities of Lipa, Tagbilaran and Cagayan De Oro. The documentations were compiled with additional analysis from personal experiences and integrated into Chapter 3. Chapter 4 discusses the national capacity building strategy, and the institutional development support strategy for nationwide incorporation of the Environmental Planning and Management process. Chapter 5 is the conclusion citing lessons learned from the Environmental Planning and Management process in the Philippines, with recommendations for its future development.

The Institute for Housing and Urban Development Studies was contracted by UN-HABITAT to prepare worldwide documentation of the Sustainable Cities Programme Environmental Planning and Management experience in cities, which included the Philippines. The arrangement involved sub-contracting Anchor Institutions, namely, Asian Institute for Management, Liceo De Cagayan University and University of the Philippines Diliman-School of Urban and Regional Planning. A collegial body composed of National Executing Agencies and academic institutions, validated and reviewed written documents. The case documentation was externally driven, involving well-established and respected learning institutions. While Cagayan De Oro City had an in-situ institution - it did the documentation - it was peripheral to the Environmental Planning and Management process during the project period. The Institute for Housing and Urban Development Studies provided documentation instruments and guide, which were modified as the work progressed, while retaining the original intentions of the documentation. In contrast, a national adviser was tasked by UN-HABITAT/ROAP to formulate a national capacity building strategy, and an institutional development support strategy. A critical examination was conducted on the environment and resource issues, conflicts and convergences of actions by the Anchor Institutions and cities as they played their roles and responsibilities in the promotion of a broad-based and bottom up Environmental Planning and Management of cities.



Conceptually, Illustration 2 defines the 2-stage process. Stage 1 synthesized the effectiveness of the Environmental Planning and Management approach as an urban process-solution. Stage 2 translated the experience into strategies on the broad-based and bottom-up approach to enhancing the city using National Executing Agencies to adapt and mitigate the impact of climate change.

ILLUSTRATION 2. GENERATING IDEAS FROM SYSTEMATIC REFLECTION ON THE ENVIRONMENTAL PLANNING AND MANAGEMENT EXPERIENCE.



Various situations were examined: the Environmental Planning and Management experience of Lipa, Tagbilaran and Cagayan De Oro cities during and after the termination of the project; devolved Department of Environment and Natural Resources functions of the Local Government Units in relation to the expanded roles of National Executing Agencies for Environmental Planning and Management; and private sector and civil society participation in environmental governance. Previous Environmental Planning and Management project studies were also reviewed. The Philippine National Development Plan for the 21st century was referred to because it advocates collaborative management between government, the private sector and civil society. It is believed that the Environmental Planning and Management process in the three cities is a concrete example of public participation, multi-stakeholder engagement in environmental governance.

Current initiatives of the Environmental Planning and Management agencies are worth supporting:

- (1) Anchor Institutions discussed the development of an Environmental Planning and Management curriculum, which has led to the development of a 3-unit course at University of the Philippines Diliman-School of Urban and Regional Planning, an MA course at Liceo De Cagayan University, and integration of Environmental Planning and Management modules in Local Government Academy (Department of the Interior and Local Government) training.





- (2) Bureau of Local Government Development (Department of the Interior and Local Government) has developed an Environmental Planning and Management Guide and an instrument to assess functionality of the Solid Waste Management Board of the Local Government Unit by utilizing concepts and processes of Environmental Planning and Management
- (3) Anchor Institutions are defining a sustainable cities-climate change approach based on the Environmental Planning and Management framework.

## 2.3 BRIEF ON THE ENVIRONMENTAL PLANNING AND MANAGEMENT PROCESS FRAMEWORK

### THE 4-PHASE PROCESS FRAMEWORK

The sequence of the Framework includes Phase 1 - start up; Phase 2 – strategy and action planning; Phase 3 – follow up and implementation; and Phase 4 – consolidation and replication. Every phase constitutes a cluster of activities, which must be delivered before moving on to the next phase. In other words, each phase has to be completed to allow for succeeding activities to proceed.

The pace of each phase will be influenced by the performance of participating stakeholders. Some stakeholders will tend to hold back the process, but with the crucial coordination of the assigned city unit - Environmental Planning and Management Project Office - the completion of each phase is ensured.

### INNOVATIVE POINTS: FIVE ENVIRONMENTAL PLANNING AND MANAGEMENT RESEARCHABLE AREAS

The Sustainable Cities Programme/Local Agenda 21 model aims to address the issues of poverty, inequity, powerlessness, gender inequality, and environmental degradation.

In terms of a research agenda on city environmental planning and management, the following are identified as key researchable areas; (a) information management and harnessing and building up of expertise, (b) broadening strategizing and decision making, (c) enhancing implementation of strategies on collectively agreed actions (d) increasing efficiency of resource use (e) sustaining or institutionalizing the Sustainable Cities Programme/Local Agenda 21 model.

## 2.4 BASIS OF THE EPM INTERVENTION IN PHILIPPINE CITIES

Laws and policies have been enacted, invoking the need for an Environmental Planning and Management-like process for their implementation. These national policies uphold broad-based and bottom-up governance for sustainable development.





## CHAPTER 3: CITY-LEVEL: THE SUSTAINABLE CITIES PROGRAMME- ENVIRONMENTAL PLANNING AND MANAGEMENT DEMONSTRATION PROCESS

### 3:1 PHASE 1: DEVELOPING A COMMON INFORMATION BASE, PROMOTING PUBLIC PARTICIPATION AND PRIORITIZING ENVIRONMENTAL CONCERNS

Phase 1 outlines the steps required to analyze priority issues. Notably, the Environmental Planning and Management process is hinged on the maximum participation of stakeholders, organized into Working Groups as the main units of action. The Working Group was formed at the start of the process (Phase 1), not in Phase 2 as suggested in the original Environmental Planning and Management conceptualization stage. This adjustment or adaptation was evident in all three demonstration cities and was attributed to the emphasis on multi-stakeholder engagement for good governance. It was a natural logic for the city's residents to organize the Working Group as a first step to augmenting the city-dedicated Environmental Planning and Management unit. The Working Group ascertained the objectivity of Environmental Planning and Management, because it was crucial in coordinating the steps of the Environmental Planning and Management process. Effectively, this adjustment amended the stakeholder analysis and mobilization, and the City Consultation process. The City Consultation "formalized" the Working Groups, as it established its ascendancy through the Environmental Planning and Management process.

#### PREPARATION OF THE ENVIRONMENTAL PROFILE

##### (A) LIPA CITY

##### *Stakeholder identification*

In an effort to be inclusive, the Environmental Planning and Management unit initiated general assemblies (50 participants and more) and several activity sector meetings. The gatherings included persons with a direct and indirect stake in an issue. The meetings tended to compete with other priorities, changing the attendance and making it difficult to proceed to the next phase, as newcomers had to be apprised on previous meetings. No consensus could be reached because attendees had no power in the decision-making process. A good number of participants persisted through the entire Environmental Planning and Management process but sustaining the interest after the implementation of the demonstration projects, proved to be a problem with four of the seven issue task forces failing to pursue the action plans.



### *Evolution of the Working Group/Task Forces<sup>1</sup>*

A core group, the Technical Working Group - later known as the Consultation Working Group in Phase 2, - was organized by the Environmental Planning and Management unit to plan, advise and assess the process. The Technical Working Group included key department heads, and non-governmental organization leaders. The City Councillor who chairs the Environment Committee of the City Council also chaired the Technical Working Group. Coordinators of the Activity Task Forces were also members of the Technical Working Group. The membership composition changed with additions of new members. During the Environmental Profile preparation, stakeholders were organized as Activity Task Forces mainly for information collection. Issue Task Forces were formed for each prioritized issue after the City Consultation. Most of the Activity Task Force members continued their participation in the Issue Task Force. At the demonstration project level, sub-Issue Task Forces served in project management teams. The sub-Issue Task Force comprised the Issue Task Force Coordinator, the Environmental Planning and Management Deputy Project Manager, the Barangay<sup>2</sup> chairperson of the demonstration community, and representatives of different sectors of society (e.g., youth, religious groups, private, etc.).

The Task Force in Phase 1 is a deviation from the Sustainable Cities Programme-Environmental Planning and Management prescribed core or consultative group. The composition of the issue-Task Forces changed during the strategy formulation and action planning stages. The changes were due to a variety of reasons. All the Task Forces were established after the City Consultation. The Information, Education, and Communication Task Force was established before the launching of the demonstration of the projects.

### *The Environmental Profile*

The draft Environmental Profile was lacking comprehensive data much of which needed to be verified, thus the formation of a Technical Review Group, comprising members of the Technical Working Group and the Environmental Planning and Management unit, who were tasked with reviewing and rewriting the draft.<sup>3</sup> The Environmental Profile publication was delayed and was not directly used in the action planning of the various Issue Task Forces, although it served as a guide. It was Lipa City's first Environmental Profile, developed from intensive stakeholder involvement. It highlighted the key environmental issues of the city, the causes and where they were occurring. It also quantified vulnerable communities and marginal groups, and the poverty incidence per barangay was included. The Environmental Profile identified those stakeholders that contributed to the problems and those that were part of the solution. Environmental Planning and Management orientation workshops were conducted but participation did not go beyond the provision of data. With the systematized information providing baseline data, sectoral plans were formulated, such as the Urban Shelter Plan, Strategic Environmental Management Framework, Environmental Action Plan, and the Ten-Year Strategic Solid Waste Management Plan. These plans are yet to be approved.

Important data gaps, such as on air quality, condition of surface waters, biodiversity in the Mt. Malarayat forest reserve, status and carrying capacity of agricultural lands, and the rate of depletion of ground water source were identified. Since the Local Government Unit failed to implement the Environmental Planning and Management Project's recommendation that the Environment and Natural Resources Office should house the Environmental Planning and Management unit or its functions, the City Planning and

1 Working Group, the operational term used in the SCP-EPM approach and Task Force as used in Lipa are one and the same.

2 A barangay is the smallest administrative division in the Philippines

3 The Technical Review Group was comprised of professionals from the academe, Lipa Evangelical Church, non-governmental organizations, Metro Lipa Water District, and the EPM unit.



Development Office assumed the responsibility for systematically updating the Environmental Profile. A 2008 version of the Environmental Profile is integrated in to the Comprehensive Land Use Plans.

The Environmental Profile process started by mobilising stakeholders<sup>4</sup>. The basis of identification included those who possessed relevant information, or expertise concerning the environmental issue; those who controlled or influenced relevant instruments of intervention; and those whose interests were directly affected by, or whose activities were affected by the particular environmental issue. But, strictly applying the criteria would have only allowed about 10% to 20% of the attendees. Eight Activity Task Forces were formed as follows: (1) human resource development (2) urban development (3) waste management (4) life support systems (5) agricultural development (6) water resources (7) health and sanitation (8) enforcement and regulation. The priority issues agreed upon included, land use conversion, managing solid waste, managing recreation and green space, managing water resources, servicing unplanned settlements, managing air quality and traffic congestion, and institutional framework for incorporating Environmental Planning and Management.

## (B) CAGAYAN DE ORO CITY

### *Identification and mobilization of Working Group*

The stakeholders and partners were pre-identified and then invited to participate in the Environmental Planning and Management process. The Philippine Agenda 21 categorization of stakeholders was used in organizing the invitees into the following Working Groups; (a) urban ecosystem - industrial (b) urban ecosystem - solid waste (c) freshwater (d) forest and agriculture (e) coastal and marine (f) air and water quality (g) mines and minerals. The groups independently chose their coordinators, secretary and other officers. The Environmental Planning and Management staff was organized into the Working Groups. A Briefing Orientation Seminar for interested individuals/organizations was attended by Local Government Units, national agencies, academe, environment related non-governmental organizations, and the private sector, forming the first critical mass of participants. This was followed by a series of briefings in June and July 1999. During these briefings, a general overview of the Environmental Planning and Management project and the current environmental situation of the city were presented. The City Trainers Pool served as the facilitator and an Environmental Planning and Management staff was assigned as documenter for each Working Group. The resulting Environmental Planning and Management consultative body comprised membership from government organizations, people's organizations (fisher folk, farmers, homeowners, indigenous peoples, garbage pickers), multinational corporations, local enterprises, industry, academe, hospitals and even funeral parlors. Representation was through heads of organizations or specially selected individuals. Those chosen from the industrial sector were Pollution Control Officers, specialists in the field of chemistry.

### *Information collection and Environmental Profile formulation*

There was an initial reluctance to share data during the preparation of the Environmental Profile but later the attitude became positive and supportive. The Environmental Planning and Management unit took charge of collating data statistics based on the annotated Environmental Profile format. Basic facts

<sup>4</sup> Basic sectors include farmers, fisher folks, urban poor, cooperatives, children, women in the informal sector, disaster victims, students and youth, elderly, overseas contract workers, and persons with disabilities. Considered intermediaries were business, non-governmental organizations, church-based, civic and professional associations, mass-media, and the international community.







Cagayan De Oro EPM orientation © Cagayan De Oro EPM Unit

were derived from the Comprehensive Land Use Plan section on the Social and Economic Profile of the city, which later was enhanced by the stakeholders during deliberations and workshops. When the Environmental Profile process was introduced, there was already an existing Geographic Information System facility at the City Planning and Development Office, which accordingly was expanded by the Environmental Profile process. Early digital photos and projection maps were produced, like real property taxation and land assessment, civil works, infrastructure planning. In October 2000, a conference on Environmental Management Information System Framework and Strategic Planning was held. Data processing considered conflicts in information, trend, data gaps, and limitations.

The Environmental Planning and Management unit anchored the formulation of the Environmental Profile. The draft went through stakeholders' mini-consultations for validation and critiquing, and then finalized. Two versions of the Environmental Profile were produced; the popular version and the technical version. The environmental information found in the popular version was confined to the five ecosystems. The first draft of the technical Environmental Profile and the popular versions were distributed in December 1999 on the first day of the city consultation. During the Environmental Profile institutionalization workshop, the Technical Working Group recommended minor revisions to the Profile every three years and major revisions every five years.

The preparation of the Environmental Profile captured the interests of the various stakeholders who wanted their data reflected in the profile. As expected, contentious data were debated and required evaluation, consolidation and interpretation, which extended the work on the Environmental Profile beyond Phase 1. The Environmental Profile formulation was an educative process. For instance, it identified the urgent need for facilities, services, collection and policy support for the solid waste problem. The use of available software for statistical analysis helped problem areas in the data and it also built credibility in the process. Subsequently, the design of the Environmental Profile was expanded as it was expected to be one of the important sources of information for the conduct of Environmental Impact Assessments.

Several problems confronted the formulators. For example, there was always a need for accurate, updated, and more quantitative data; lead agencies failed to



arrive at a consensus on the accuracy of data; some people doubted the capacity of the Research Coordinator; some participants were holding back relevant data; a universal format for the formulation of the Environmental Profile and proposition papers was not acceptable to critical segments of the stakeholders. In the end, the Environmental Profile preparation took more than a year to complete. It was revalidated several times. Also, the key role of a Technical Working Group composed of environmental organizations to submit information updates on regular basis was not sustained, further stalling the process. The problems in the formulation of the final Environmental Profile and writing of proposition papers subsequently delayed the city consultation.

### (C) TAGBILARAN CITY<sup>5</sup>

The majority of the members of the Working Group were survey-respondents, who claimed that they participated in the preparation of the Environmental Profile, especially in the collection of relevant information/data. The information/data in the Environmental Profile was used by the Working Groups to clarify issues and to negotiate strategies. It was also used in the analysis of problems (causes and effects), the formulation of policy options and strategies, consultations, action planning, as well as in educational and communication campaigns at the community level.

All of the member-respondents of the Working Group regarded the Environmental Profile to have sufficient information and to have created enough awareness among stakeholders and their respective organizations/sectors about the condition of the environment. Working Group members revealed that they have assumed various roles in creating awareness such as conducted Information, Education and Communication briefings in non-governmental organization/private organization meetings. The Environmental Profile was used as a basis in planning and management, in lectures on priority environmental issues, in providing technical expertise, in facilitating meetings and consultations, and in sharing information/data. The Environmental Profile has not been updated since 1999 when it was first prepared.

Some of the problems/constraints that were encountered in the preparation of the Environmental Profile have been identified as follows: (a) information/data was scattered, incomplete, outdated/inapplicable or inaccessible (thus, making data collection difficult) (b) the time allotted to data-gathering was insufficient (c) only a few individuals participated in the drafting of the text of the Environmental Profile (which should have been a participatory process).

The Working Group coordinator-respondents suggested that in order to improve the preparation of the Environmental Profile the following should be done: (1) the Working Groups should be used as a tool for pooling and sharing information and maintaining an updated Environmental Management and Information System. This would provide broad based, relevant and accessible information for updating the Environmental Profile (2) the preparation of the Environmental Profile should involve broader participation of stakeholder groups/ organizations (3) ample time should be allotted to data gathering (4) key information gathered from local residents in the area during barangay consultations should be acknowledged (5) issues and data should be regularly updated (6) strengthen the network with the media and other stakeholders (7) the policies formulated to address the issues should reach the grassroots level.

<sup>5</sup> The University of the Philippines Diliman School of Urban and Regional Planning in 2005 conducted a survey on the experience of the Tagbilaran City. The information in this document is based on the university's report.





## CITY CONSULTATION

## (A) LIPA CITY

The three-day city consultation was held in November 1999. The work began with an orientation by the Consultation Organising Team about the city consultation concept and its process. The Technical Working Group with the Environment Planning and Management unit identified who constituted the Consultation Organising Team. A local management consultant group was engaged to facilitate the city consultation. Meanwhile, local resource persons were mobilized to write the proposition papers. People were provided with an outline of the content of the Environmental Profile. As there was barely a month to prepare the papers, some of them did not contribute much to the clarification on issues. Several pre-consultation meetings were held to plan the logistics of the consultation. The Consultation Organising Team, through information campaigns, ensured that the media would cover the event and that it would be attended by the Mayor and key decision-makers.

Out of 120 invitees, ninety attended the city consultation. Seventy per cent of the participants came from various government departments. The Mayor graced the opening and closing ceremonies, along with two City Council members and heads of Departments. Some non-governmental organizations and private sector representatives, as well as barangay leaders, were present. The local media covered the event. This was the first and last city consultation ever held. Four proposition papers, namely, managing water resources; servicing unplanned settlements; managing recreation and green space; and institutional framework were presented. Management of such a large group was difficult, and the medium used (English) inhibited participation while the presence of government officials intimidated many participants. There were complaints that the recommendations failed to reflect the agreements reached in the group discussions.

These criticisms have not been validated, because there was no minute-taking. In general, despite the shortcomings, the stakeholders regarded the city consultation as an arena for sharing information and interacting with civil society and the public sector, and for generating an interest in the future of the City.



Lipa TWG preparing for city consultation © Lipa EPM Unit



## LIPA 21 ENVIRONMENTAL MANIFESTO

We, the stakeholders and advocates of Sustainable Development Living in Paradise Again (LIPA):

- *Uphold Lipa as a world-class model city with the greenest, cleanest and richest resources; with God-fearing, earth-friendly, healthy and productive individuals and families living in harmonious neighborhoods*
- *Understand the importance of a progressive, ecologically balanced and sustainable city for all seasons and all reasons*
- *Recognize the right of all people to peaceful and secure existence with the provision of basic needs of food, clothing, shelter and water*

Hereby affirm our commitment to operationalize the principles embodied in the L.I.P.A. 2025 in the pursuit of a better life for all present and future generations of Lipeños.

(November 19, 2000, Tagaytay City)

## (B) CAGAYAN DE ORO CITY

Two-day mini-consultations were conducted in preparation for the city consultation. These were useful in elaborating issues, reviewing and refining draft strategies, and, agreeing on modalities of implementation. Proposition papers provided the framework and key content and the Environmental Profile provided the baseline information. Sets of issue-specific extracts were also circulated to support the clarification process. The mini-consultations gave everyone the opportunity to share ideas and sentiments. At the end, solid waste was identified as a priority area. The process of clarifying issues was frustrated because of the irregular attendance of stakeholders. The sharing of information, presentation of new information, and the management tools applied during workshops, such as, SWOT analysis, organogram (organization chart), cause and effect analysis, network analysis, and prioritizing focus group discussions proved useful.

In September 1999, the Technical Working Group comprised of representatives of all the various sectors and the technical staff of the Environmental Planning and Management project held an Issues Integration Workshop which produced a unified list of issues. This was followed by a Consultation Organising Team Workshop for Working Group chairpersons, members of the City Trainers Pool and EPM staff where roles and responsibilities, streamlined coordination and working arrangements for the city consultation were discussed. A preparatory City Consultation Presentation and Participatory Skills Workshop were held and another Consultation Organising Team Updating and Critiquing Workshop was conducted. Working Group consultations were held, and, by December 1999, a dry run of the city consultation had been conducted. Simultaneously, neighborhood level seminars on solid waste management were conducted for Villamar Subdivision, Iponan, Melecia Homes, Macasandig, Villa Trinitas, Bugo, and, Xavier Heights. These were joint activities of the Homeowners' Federation and various city government agencies.

The city consultation was the culmination of the activities of Phase 1. The strongest motivation was the desire for new knowledge and skills in city planning and management. For many, this was the first time they had participated in a public debate. People contributed their time and money to attending the



meetings. Phase 1 was a learning-by-doing experience in the Environmental Planning and Management process. The city consultations were considered a complicated task because no one in the group had any experience. The four-day city consultation facilitated by the City Trainers Pool, was broken into day-sessions so that the stakeholders and partners could report to their offices. Final agreement was not reached regarding institutional arrangements. It was also difficult to define the role of the Environmental Planning and Management unit in relation to the various councils, associations and related organizations.

A special session of leaders and technical staff integrated and short listed issues. During the assemblies, conflicting interests were resolved in the plenary session. The stakeholders were asked to rate the issues according to priority. In the end, solid waste was rated the most critical. The integration process adopted seven environmental projects: (1) recovery of municipal solid waste into compost (2) City coastal clean up (3) artificial reef development (4) support project on alternative livelihood for the conservation of Cagayan De Oro City watershed (5) mangrove rehabilitation and plantation project (6) peri-urban organic farming and water management development (7) fish sanctuary project.

## ESTABLISHING WORKING GROUPS

### (A) LIPA CITY

The public sector dominated the Issue Task Forces. In total, men represented 76% and women constituted 24% of the membership. The gender pattern applied to the sub-issue Task Force with only one female in leadership. The data suggests limited participation of the private sector. National government agencies in the working Task Forces, such as the Department of Agriculture and its affiliate, International Training Centre for Pig Husbandry, Department of Agrarian Reform, Department of the Environment and Natural Resources and the Department of Education provided technical information, experts' advice and sometimes, material resources for the demonstration projects. Learning was a two-way process. Key informants wanted more technical input from the Department of the Environment and Natural Resources, especially in measuring and managing air quality, Environmental Impact Assessment and biodiversity assessment.

The seven Issue Task Forces alternately hosted their meetings at the City Hall and other venues. The Task Force Coordinators and the Environmental Planning and Management staff facilitated these meetings. The action plans were presented and agreed in an assembly.

### (B) CAGAYAN DE ORO CITY

The representatives were grouped according to affinity or interest. Substantial time was given to the formulation and integration of the Environmental Profile into the Comprehensive Land Use Plan. The Working Groups controlled the process, although the opinions of the Pollution Control Officers from industry and academics had a major influence on developing environmental management strategies, articulating the linkages between issues. The final decision of the Working Groups was to adopt seven strategies that corresponded to the number and type of Working Groups already created.







Gusa Working Group at work © LDCU

### (C) TAGBILARAN CITY

The four Working Group coordinators were male and were working for the government of Tagbilaran. Some Working Group members were chosen on recommendation by other members/stakeholders, but generally, Working Group members were selected on the basis of several agreed factors. The majority of the Working Group members worked for the government while other members came from the private sector and from the non-governmental organizations; most held senior/managerial or technical positions.

Working Group coordinators and members were given authority to speak/decide on behalf of the organization/institution that they represented. They had varying experience in city planning and development and others in Coastal Resources Management, Institutional Development, and Information, Education and Communication sectors. In terms of Working Group membership, the Coastal Resource Management Working Group had 32 members (10 females and 22 males and the Working Group for Solid Waste Management had 30 members (12 females and 18 males). The figures were revealed to be much higher than the optimal number of 10 to 12 members for each Working Group or a maximum size of 14 as suggested by the Sustainable Cities Programme Source Book.

## 3.2 PHASE 2: ACTION PLANS IMPLEMENTED BY WORKING GROUPS

### (A) LIPA CITY

The Barangay Environmental Rehabilitation and Development Project and Greenspace Development demonstration projects had action plans and were implemented by the Working Group. The Barangay Environmental Rehabilitation and Development Project Work Plan had four activity-components: Information, Education and Communication, capacity building, procurement of materials, and procurement of supplies.

The Green Space & Recreation Development Task Force conducted several meetings with the owners of a huge private property regarding the development of this property into an ecological park, but the discussions did not bear fruit.



The Community-based Solid Waste Management Project likewise had an action plan which clearly described the activities and the expected outputs, namely, social preparation, stakeholder identification, social mobilization, community organizing and development, monitoring and evaluation.

#### (B) CAGAYAN DE ORO CITY

The strategies and plans for action took off from the Comprehensive Land Use Plan refinement and Investment Planning process. This experience is a significant modification of the Sustainable Cities Programme- Environmental Planning and Management process. Politically, it was correct to follow the line of the City Planning and Development Office, being the central unit of the city on planning and development, although its mandate stopped at planning, leaving the execution to other city departments. The City Investment Plan helped to define the Environmental Planning and Management action plan for a set of priority projects. Stakeholders got involved in actual urban development planning, a learning-by-doing exercise in strategy formulation and crafting of a five year Investment Plan. A Memoranda of Agreement between the Local Government Units (barangay or city), non-governmental organizations and academic institutions supported the Action Plans.

All the demonstration projects had action plans. To cite an example, the Integrated Solid Waste Management project involved the city, barangay, and the Garbage Pickers Association. The city provided the infrastructure and policy support, the barangay provided frontline services for implementation and the garbage pickers provided solid waste collection and segregation. To sustain the project, the volunteer garbage pickers generated income through the process, hence, partially addressing the poverty angle. A monitoring scheme was setup at the barangay for each of the projects.

#### (C) TAGBILARAN CITY

The Working Group prepared a One year Action Plan through (a) the use of action profile (b) conduct of action planning workshop including sectoral workshops (c) identification of implementers and their roles (d) determination of required resources. Working Group member-respondents claimed that they participated as much in action planning as in strategy formulation. Working Group members identified some problems in implementing the action plans, such as changing the city administration which resulted in a change in priority, a change in policy, and a lack of institutional support for the Environmental Planning and Management office with the responsibility of monitoring implementation.

### IMPLEMENTATION OF DEMONSTRATION PROJECTS

The experience of cities implementing demonstration projects showed promise, however deficiently experienced as in the case of Tagbilaran City. Process-wise, there was general approval in the manner that the Environmental Planning and Management process identified, prioritized, conceptualized, and took collective action. The issue of the absorptive capacity of Working Groups was important for larger projects, which then implied that the Working Group had to have business and/or professionals in the team.

The policy options from the demonstration projects were clearer by virtue of the composition of the Working Groups, which included policy formulators. Lipa and Cagayan De Oro cities successfully optimized the Solid Waste Management experience for policy development, although it took Lipa City three years after the project to realize it. The reason for the Cagayan De Oro quick-smart policy action was that it worked initially through existing strategic urban mechanisms such as the Comprehensive Land Use Plan, thus substantially dissipating or





eliminating the legalistic resistance in many of the Local Government Units policy work in the country.

The “dangling” of allocations by UN-HABITAT constricted the negotiation process on strategy, even if the amount was unknown to the participants. There was some backlash on participation when the limited project budget was announced. Only Cagayan De Oro was able to up-scale the experience into projects and to keep the majority of the Working Group members, but participation waned after the termination of the projects.

#### (A) LIPA CITY

The Task Forces played a crucial role in ensuring public participation during the implementation of the demonstration projects. The Barangay Environmental Rehabilitation and Development Project in Barangay 6 and the Community-based Solid Waste Management in San Nicolas, Balintawak were carried out by the United Church of Christ in the Philippines – Lipa Evangelical Church, which also served as Coordinator of the Consultation Working Group and Task Force. The Task Forces on Recreation and Green Space Development, and Solid Waste Management respectively, conducted briefing and discussion meetings with the barangay leaders of the two demonstration communities prior to implementation.

Local media and teachers were vital to the Information, Education and Communication campaigns on environmental issues and the demonstration projects, and their participation bore fruit. At De La Salle University, an EARTH course was taught and the Barangay Environmental Rehabilitation and Development demonstration project was the subject of students’ thesis. At the demonstration community level, the Lipa South Central School was extensively mobilized to participate in the Information, Education and Communication campaigns for the Barangay Environmental Rehabilitation and Development Project. In other communities, the Mabini Academy allowed the walls of its school to be used for a mural painting contest for elementary students. More recently, the government mobilized the Lipa City Public College and Local Government Unit assisted school in the city’s Information, Education and Communication and outreach activities for solid waste. Private corporate business participated in Solid Waste Management. In 2003, in a meeting with the Mayor, 19 private business corporations committed to the management of their waste and pledged to contribute to a cleaner Lipa. The Lipa Medical Doctors Society in 2004 brought the issue to the attention of the Mayor and helped in the Strategic Planning Workshop for Ecological Solid Waste Management.

#### *Community-based Solid Waste Management in San Nicolas*

The garbage problem was diagnosed by the Environmental Profile and city consultations, which highlighted the absence of a systematic garbage disposal system. The major sources of garbage come from households, industries, commercial establishments, particularly the city market and some hospitals and the poultry and hog industry. The Environment and Natural Resources Office collects only 35% of the waste in the city centre and adjoining barangay, while uncollected waste is burned or dumped on the streets, or in the canals and creeks. Composting and recycling are rarely practiced. San Nicolas, located near the city’s main public market has a creek running through it that is nearly dead because of waste dumping. The market generates about 2.67 tons a day of garbage, (about 1.6 % of the total city waste).

#### *Objectives*

- Inform and organize households about reducing, reusing, recovering and recycling as a waste management strategy



- Organize local junkshop operators into a cooperative
- Set up public information billboards
- Establish a mini waste-recycling depot in the community.

### *Basic action plan*

The following items constituted the work of the project: Capability building; Information, Education and Communication; and Initial implementation and mobilization. Each activity carried a corresponding responsible person/group, budget and time frame.

### *Project implementation*

The Task Force organized a Project Management Team composed of the Barangay Development Council, Lipa Evangelical Church, Task Force Coordinator, and the Environmental Planning and Management Unit. Later, membership included purok<sup>6</sup> leaders, a representative of the youth, religious and other groups. The expanded core group or the sub-issue Task Force participated in capacity building activities. The Task Force on Information, Education and Communication assisted both projects in their campaign. Activity indicators - the number of eco-aides trained, trainings, house-to-house visits conducted - were written clearly in the work and financial plans and progress reported. However, other important indicators, such as the number of households segregating their garbage, were not included, and therefore not monitored.

Residents participated in intensive information, education and communication campaigns. Capacity building essentially focused on waste segregation, recycling, reuse and composting. Community dialogues generated commitment although this was not sustained.

Education materials were produced and distributed for the house-to-house campaign. It was difficult to gather participation for the establishment of the Material Recovery Facility. In the beginning, there was some resistance to segregating waste but later, the practice was accepted, especially when the Material Recovery Facility became operational. Today, an improved composting system has been introduced.



San Nicolas composting facility © Lipa EPM Unit

Problems with the barangay chair resulted in the termination of the Memorandum of Agreement, because project completion was at 20% while expenditure was at 77% of budget. Succeeding work improved with the replacement of key persons. The continuing information, education and communication campaign was pivotal in attaining positive results: house tags and billboards were posted in strategic spots, and leaflets on anti-littering law were distributed. While disagreements on project supervision and accounting procedures resulted in a strained environment, this was eventually resolved by following the UN implementing procedure. It should be said that the

6 A purok is a political and geographical unit smaller than a barangay. A barangay consists of several puroks.

Environmental Planning and Management Unit failed to coordinate functions, for example, when the Project Manager and Deputy were out on travel, the task of overseeing implementation was not delegated properly. Despite these difficulties, the expected results were achieved.

At the height of implementation, the streets of San Nicolas were cleaner. Residents participated in the clean-up, practiced waste segregation and waste was disposed in designated garbage bins. The practice was maintained for three months, and thereafter, some residents began dumping mixed waste in vacant lots, in the main roads and in the creeks. Market stalls stopped segregating waste, while others burned their waste in their backyards. Because there was no follow through, after six months of project establishment, the old habits came back quickly.

On the positive side, coordination improved between the barangay and agencies. For instance, the Department of Agriculture/International Training Centre for Pig Husbandry provided technical assistance and information materials on proper disposal of animal wastes and the Environment and Natural Resources Office became more visible in the barangay as it provided training on waste segregation and composting.

The Task Force on Solid Waste Management was not aware of the Barangay Chair's drinking problems that impaired his capacity to perform; this ignorance may have been avoided if the community assessment prior to implementation had been more thorough. A demonstration project should endeavour to mobilize resources - financial, material and expertise - from the community to foster a sense of ownership in the project. Provision of local counterparts should have been a criterion for selecting project partners. In project relationships, transparency, trust, and checks and balances would avoid some of the difficulties the project encountered.

The persistence of the barangay health workers to conduct information, education and communication campaigns was a big factor in raising awareness and changing attitudes and practices. The brochures distributed by the International Training Centre on Pig Husbandry (Guide to Proper Management of Hog wastes) enlightened the community to the need to properly manage animal waste.

### *The Barangay Environmental Rehabilitation and Development Project*

The proposition paper suggested adopting greening activities, hence the Barangay Environmental Rehabilitation and Development project. It adopted Laguna's Food-Always-In-The-Home technology. After several meetings, the Task Force agreed to grow flowering plants, other ornamentals and vegetables. Weekly meetings were held for progress reports, where the purok leaders informed their members, and established an effective forward-backward feedback scheme.

Barangay 6 in the city centre is home to 1,190 residents (199 households, 1997). Businesses, including banks (1/3 of all city banks are located in the barangay), telecommunications companies, convenience stores, auto repair shops, and bakeries occupied most of the green spaces prompting stakeholders to describe the community as "a concrete jungle", with little green space. The presence of several schools further added to the competition for space. Air pollution was a problem compounded by diesel run public vehicles and 2-stroke tricycles. There was "idle" land in the community whose owners only visited to pay tax; this land was seen as potential plant nurseries.

The project was an attempt to demonstrate that urban greening could benefit the community. With a high degree of voluntary help, and many Environmental Planning and Management staff residing in the barangay, project monitoring was expected to be easy.





### *Objectives*

The general objective was to develop a clean and green barangay through the concerted efforts of the community in collaboration with relevant agencies. The specific objectives were to:

- earn additional income from planting vegetables, ornamentals and other plants
- minimize air pollution and increase soil water holding capacity
- contribute to the aesthetic beauty of the barangay
- demonstrate the benefits of greening the barangay
- prove that greening activities were possible even with minimal space
- foster cooperation and unity in the barangay and minimize the negative effects of partisan politics

### *Basic action plan*

The plan had a clear timeframe, selected responsible persons/groups, a budget and anticipated goals. The plan included: Information, Education and Communication; Capacity building; Procurement of materials; and Supplies and materials for the garden and office.

### *Project implementation*

After the briefing of the barangay officials on the project, a follow up meeting was held to acquaint participants of the potential of the Environmental Planning and Management process for the barangay's planning activities. The initial meeting had low attendance but a core group was formed as the sub-issue Task Force. As a result of the information, education and communication campaign, more participants joined as members, and purok or cluster leaders were invited to be part of the Task Force, effectively expanding membership.

The Environmental Planning and Management unit decided to designate a project coordinator (Lipa Evangelical Church) to implement the two demonstration projects to facilitate fund transfer and management. Project Barangay Environmental Rehabilitation and Development had three components: 1) Information, Education and Communication 2) capacity building 3) plant nursery establishment and greening.

The communications task force was active, placing streamers at the plant nursery, and placards in strategic places. House tags were given to residents who adopted the Food-Always-In-The-Home programme in their homes to arouse curiosity. The project was featured in a radio programme where listeners made phone-in questions and comments, and pledged commitment to the project.

The first barangay assembly raised concerns about a lack of space, availability of technology, garbage disposal, jeepney<sup>7</sup> terminals and stray dogs. The consultation succeeded in mobilizing volunteers to tend to the nurseries, coming up with innovative ideas like renaming streets, selling vegetables, and collecting recyclable containers from the Solid Waste Management project. Some businesses promised their support. Some suggestions, such as the rent-a-plant scheme, were not implemented because the project was short-lived. Out-of-school youth and the elderly attended the Eco-Aide Training so that they could regularly look after the plant nurseries, assist residents and other participants in planting activities, bring the produce to the market dealers, report damaged information, education and communication materials, and help in waste management. The City

<sup>7</sup> A jeep minibus, a popular means of transport in the Philippines.



Agricultural Office demonstrated the Food-Always-In-The-Home programme and showed that vegetable gardening is possible with improved soil, and provided technical assistance and planting materials. The core group purchased some plants and garden tools. Stakeholders were involved in marketing (residents were given priority to purchase produce), managing the nurseries, and weekly ocular inspections, and the barangay chair kept a photo documentation. Purok leaders relayed information from the project management team to the residents and in turn received feedback from the residents. The core group and some barangay officials convened weekly meetings to update each other on the progress of the project and to monitor and evaluate the project.

Presently, the ornamental plants that lined the sides of the streets no longer exist, but some residents are still growing ornamentals in their homes. Though houses no longer have Food-Always-In-The-Home tags, some placards are still up in certain areas of the barangay. The community has reverted to its former dry and all-concrete state.

A study about the project, carried out by De La Salle University students,<sup>8</sup> indicated that the majority of the 52 respondents perceived aesthetic benefits, that it increased solidarity and social interaction, and it increased morale of people. The bulk of the harvest was consumed at home and only a negligible volume was sold to the market. Contrary to claims, the study reported that despite the information, education and communication activities, only 52 individuals in the community were involved out of 1,190 individuals. Coordination with the City Agricultural Office has improved with technical assistance provided from time to time. Internally, the plan to allocate a percentage of the barangay's Internal Revenue Allotment to Barangay Environmental Rehabilitation and Development Project activities did not materialize due to other priorities.

The entry of the project did not consider national elections as a factor causing failure. Indeed, the project flopped after six months because commitments were at token level, seemingly to draw votes rather than supporting the project, while others did not want to be construed as favoring the political party identified with the city mayor. Others were hesitant to take part in the greening activities until they have seen proof that they would benefit from it. In other words, the project timing was questionable. Difficulty was experienced in convincing weekend residents to participate and door-to-door campaigns were ineffective because the residents often were not at home. Owners of vacant lots identified as a possible location for a nursery could not be contacted. These difficulties point to the level of assessment and analysis required for a barangay before it is chosen as a project site. This is a classic case of miss-entry into the community.

The failure of the project beyond the pilot stage confirmed the negative perception by people of government. In addition, the project was marketed as an income-generating activity funded by the UNDP. The economic benefits to the community were highlighted to encourage more people to participate. It was found that no financial study was conducted to determine the economic benefits.

The involvement of the sub-issue Task Force ended after the UN funds were exhausted in the first quarter of 2002, as the project had no community ownership.

## (B) CAGAYAN DE ORO

Four demonstration projects were conducted in barangays of the city and each of the projects addressed local environmental issues.

<sup>8</sup> Cornejo, Maria Corina C., Jannette L. Cuna, John Dennis E. Dimayuga and Emelinda D. Hoseña. An assessment of the effectiveness of UNDP's Environmental Planning and Management Project-BERDE in Lipa City. Unpublished thesis. De La Salle Lipa Tertiary School, Lipa City.





### *Integrated Solid Waste Management in Bugo*

The processing and wharf facilities of an international pineapple company make Bugo popular even if it is about 15 km east of the city centre. The barangay is 968 km<sup>2</sup> and densely populated: 26,473 persons (December 2005). The Bugo Integrated Solid Waste Management Project was later picked up by the Good Practice in Local Governance: Facility for Adaptation and Replication project (GO-FAR) of the Department of the Interior and Local Government. The Kalimpyo Angay Maangkon sa Bugo Uban Ang Nasod was the ground organization. The Project's purpose was to convert barangay waste into a profitable resource while greening the environment. To strengthen the legal and political support, the Bugo Environmental Protection and Preservation Council was established and solid waste was made a priority. Later, the barangay earned an award from the Department of the Environment and Natural Resource's 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, particularly in Phase III Villa Trinitas. Villa Trinitas, located uphill with 320 households, has a creek cutting through it that became a dumping site, causing flooding in the area.

### *Objectives*

The primary objectives of the project are the following:

- Address the garbage problem in the barangay
- Increase awareness on Solid Waste Management
- Promote formation of proper Solid Waste Management values
- Create livelihood opportunities for population
- Encourage good governance

### *Basic Action Plan*

Four rules guided the Kalimpyo Angay Maangkon sa Bugo Uban Ang Nasod: (a) segregation at source, with only residual and hazardous waste being transported to the landfill (2) campaign to increase awareness on environmental management to attain 20-30% reduction of waste for disposal (3) make Integrated Solid Waste Management income generating (4) subscribe to the recommendations of RA 9003 (Ecological Solid Waste Management Act).

#### *(a) Reduction of garbage and segregation at source*

By committing to reduce and sort garbage at the household stage, garbage disposal is made simpler and more efficient. The basic idea is to reduce consumption and ensure that garbage is sorted according to biodegradable, recyclable and residuals.

#### *b) Material Recovery Facility*

The facility was constructed in the vacant lot that was originally meant for a recreational centre. The segregated wastes were collected and transported to the Material Recovery Facility for further sorting into biodegradables for composting and recyclables. The harvested bio-fertilizer is used in the garden to grow vegetables and the surplus is sold, while the recyclables are marketed to recycling plants.



### *(c) Allotment Garden*

The garden receives the compost to produce chemical-free vegetables such as pechay, cauliflower, lettuce, cabbage, string beans, patola, upo and tomatoes that are sold at half the market price (barangay residents get the first offer).

### *Project Implementation*

The consultation with the Barangay Council was crucial for forming the Barangay Steering Committee, identifying the Trainers and Facilitators, establishing the Working and Monitoring Committees, and action planning.

The preliminary activities of the Working Groups were orientations, seminars, trainings and workshops for the Barangay Council and appointed committees and Trainers' Training. Subsequently, the Barangay Council passed a resolution requiring government employees to practice Integrated Solid Waste Management. The Barangay Steering Committee and Working Groups organized the construction of the Material Recovery Facility, the fabrication of compost barrels, and the preparation of the allotment garden within the Material Recovery Facility. Barangay money was appropriated for Integrated Solid Waste Management and paid for the monthly water bill for the garden. Industry also had contributed materials for the installation of the Multi-purpose building. Intensive Information, Education and Communication campaigns were jointly conducted with the people's organizations. The academia was tapped and schools served as the venues and parents, pupils, teachers, and students were taught about waste classification. Students of Xavier University and Barangay Health Workers were used in information drives, like house-to-house schemes.

A 'No Segregation, No Collection' policy was implemented and a penalty imposed for non-compliance. The monitoring committee checked on each household to insure segregation and garbage volume was regularly monitored. A schedule of garbage collection was strictly imposed and classified wastes were stored for a specific time before final disposal. The bio-compost was applied in the garden as fertilizer while other recyclables were sold. The profits were solely apportioned to the garbage pickers. Bugo started with eight garden plots which have now multiplied to sixty four plots.

The project has reduced garbage volume with everyone segregating wastes, and there is added income to garbage pickers. Under the scheme, the Integrated Solid Waste Management could sustain itself and function independently without



Compost from the Material Recovery Facility maintains organic garden plots like this one  
© Cagaryan De Oro EPM Unit



outside aid. It has been institutionalized with a barangay ordinance, and new stakeholders have joined the initiative.

The Kalimpyo Angay Maangkon sa Bugo Uban Ang Nasod lessons can be replicated. The success of the broad-based and bottom-up Bugo Integrated Solid Waste Management produced a ripple effect in other city barangays. Establishments and organizations have started to support the project, and it has even inspired the private sector to set up its own Integrated Solid Waste Management project.

### *Gusa Coastal Resource Management*

The 1996-97 assessment of the Centre for Environmental Concerns identified the need for greater advocacy and actual conservation and rehabilitation work along sites in Macajalar Bay. The same conclusion was drawn in 1999 from the consultations facilitated by the Environment Planning and Management unit.

Gusa is a major source of fish, supplying about 16,843 MT/year. More recently, yield statistics show that the average fish catch was reduced from 630 gm/hr in the early 90s to 240 gm/hr in 1999 as a result of siltation, over fishing, and illegal fishing, compounded by mangrove conversion, intrusion of commercial fishers within restricted municipal waters, and waste disposal. Coliform bacterial counts (4000 to 33000mpn/100ml) had reached above the tolerance level of 1000 mpn/100 ml. The government had developed maritime and fishery laws but was facing difficulty in enforcement due to a lack of equipment, personnel and budget and poor coordination among agencies.

The alliance between the Barangay Fisheries and Aquatic Resource Management Council and the Gusa EA Fisherfolks Association made it easy to develop the project, which aligned with the IP-Comprehensive Land Use Plan priorities. The Xavier University Marine Biology Department and the Barangay Fisheries and Aquatic Resource Management Council confirmed the location as a strategic fish sanctuary.

### *Objectives*

- preserve marine resources
- increase the marine resources harvest of fisher folk
- rehabilitate/reforest the marine ecosystem

### *Basic Action Plan*

All these objectives were to be accomplished in the 8.6 hectares fish sanctuary. The sanctuary was to contain 43 concrete pyramid corals. The Working Group established a set of monitoring indicators for the sanctuary, such as, volume of fish stock, quality of corals, both precious and semi-precious, mangrove trees, and presence of crabs, seashells, birds and nest.

### *Project implementation*

Early in the project, stakeholder meetings were held, the Comprehensive Land Use Plan reviewed, and studies, ocular inspections, and surveys to augment the collective analysis of the situation carried out. With sufficient information at hand, the City Planning and Development Office were consulted on the project specifics. This was followed by action plans where Gusa EA Fisherfolks Association members were assigned specific tasks such as warden, maintenance and other tasks in the sanctuary and artificial reefing projects.







Rehabilitating marine ecosystem in Gusa by growing Mangroves © LDCU

Technical training and workshops were conducted and continuous public announcements on the project were led by Gusa EA Fisherfolks Association. The city and the Barangay Fisheries and Aquatic Resource Management Council helped source money and technical expertise. A floating guard and patrol boat were purchased and Gusa EA Fisherfolks Association members were equipped with rubber boots and raincoats and project supplies like flashlights, batteries, rakes, and shovels were acquired. A meeting hall was also renovated for the core group. A footbridge leading to the mangrove area was constructed and the area cleaned-up. Garbage at the sanctuary bottom was picked by divers in preparation for artificial reefing. The Gusa EA Fisherfolks Association marked the sanctuary borders with styropore balls and forty three units of concrete pyramid corals were then dropped into the bottom. The implementers worked out an alternating schedule for the guards. The association also started culturing guso within the sanctuary. Although priority was given to Gusa EA Fisherfolks Association members to handle the business, it was discontinued. Apart from the regular meetings, a monthly clean-up involved the community.

To remedy illegal fishing, barangay Ordinance 2001-06-02 was passed, which penalizes fishing, bathing, or passing of motor boats in the sanctuary.

The fish sanctuary and artificial reef showed positive results. Residents were excited about the increasing fish stock. A year after the setting up of the sanctuary, Gusa EA Fisherfolks Association allowed the casting of nets outside the sanctuary perimeters on a trial basis, but later, on prescribed frequency. The fisher folk caught large varieties of bagis weighing around three kilos each, and the barracudas netted were large. The volume of fish catch increased to as much as ten kilos a day, with the appearance of new precious and semi-precious corals.

Positive results were evident in the fast growing mangrove plantation with nesting birds, and crabs and seashells can now be found in the area. More significant is the control of river bank erosion and siltation of the beachfront. With persistence, the community has become more organized and involved in various activities including monitoring and coordination. If an urgent matter arises, the Working Group is called on to troubleshoot and to take action, and results are then presented to the Barangay Council for endorsement and the Gusa EA Fisherfolks Association leads the implementation. Legal support is provided by the Barangay Council.





Gusa EA Fisherfolks Association provided a better understanding and appreciation of the sea ecosystem. A certain level of diplomacy has developed in their dealings as a community. Learning was painful because after a while Gusa EA Fisherfolks Association folded due to personal differences. However, the new leaders learnt that the core values of commitment, resourcefulness and self-sufficiency were necessary alongside environmental protection, law and order and strong political will. Fishing methods changed to ensure adequate fish stock levels in the sanctuary.

### GUSA INTEGRATED SOLID WASTE MANAGEMENT

On one side of Gusa is Bigaan River, which drains to Macajalar Bay. The river has become a large garbage dumpsite, and it is believed that the garbage problem has substantially slowed Gusa's target for development. In 1998, the Barangay Self-Sufficiency Programme for Development worked on the problem but it was not sustained. The Barangay Environment and Health Brigade led an effective project of garbage sorting and collection by clustering households. A dilemma experienced was that the city trucks collected the garbage in bulk and dumped it all in the landfill thus discouraging household waste segregation, and making it illogical. However, when leaders left, the initiative died.

#### *Basic action plan*

After stakeholder commitment was secured, a Memorandum of Agreement was signed with the following progress indicators: physical impact of the projects in the demonstration areas; attitude of people to segregation; participation of the community in the various activities set-up by the Working Group; degree to which the project objectives are met according to schedule; and coordination between the Working Group and other stakeholders.

The long term vision and goals of the Integrated Solid Waste Management program of the city were referred to, and issues were identified, prioritized, and classified. Options to resolve the problems were synthesized, and detailed action plans were drawn, including monitoring and evaluation systems. The approach involved the establishment of a Material Recovery Facility; vegetable gardening; capacity building; Information, Education and Communication; and community organizing. Human resources were available because Integrated Solid Waste Management was incorporated in the barangay plan. Apart from reducing city expenses, the Material Recovery Facility provided extra income to managers, growers, and garbage collectors. People had access to low priced organically produced vegetables.

#### *Project implementation*

Stakeholders were invited to an Environment Planning and Management orientation briefing. The results of the studies, consultations, ocular inspections, and surveys were made available and presented in meetings. A database of the stakeholders and partners was also created with identities of those who have technical expertise. Working Group membership was gender sensitive and cut across different institutions. While the role of the Barangay Council in facilitating action was crucial, the Working Group managed the process.

The preparatory activities, before the full implementation of the action plan, were straightforward: stakeholder consultation, identification of issues and strategy, then finally organization of the project team.



### *Material Recovery Facility*

The Material Recovery Facility situated in Dao, Purok 3 in a 1,000 m<sup>2</sup> lot absorbed the biodegradable waste and recyclables of all 19 clusters in four demonstration puroks (6, 7 and later 4 and 5), and where the vegetables and ornamental garden plots were established.

The Integrated Solid Waste Management Committee spearheaded the Information, Education and Communication campaign. Weekly orientation seminars on Solid Waste Management were conducted in the 18 puroks of the barangay. Simultaneous workshops on segregation were given to clustered households. Part of the information drive was conducted in a house-to-house campaign of all 800 households or 570 houses in the pilot puroks 6, and 7. A separate training session for garbage pickers was also held on proper collection.

The project purchased ten weighing scales, ten pedicabs, 5000 garbage sacks, and ten garbage bins. Separate collection and transport were done for the pilot puroks and a recycling center was created at purok 6. All recyclables were then sold to the city landfill garbage pickers. Later, the Working Group decided to sell the recyclables themselves: 10% of the sale proceeds went to the Barangay Environment and Health Brigade, while the rest of the proceeds were divided among the Barangay Environment and Health Brigade volunteers. This was the state of affairs when the project was cut-short due to differences among barangay politicians. However, the Working Group refused to give up, and intensified waste collection and segregation. On October 2005, the pilot was expanded to include puroks 4 and 5. A new schedule was prepared for collection of recyclables, residuals, and biodegradable wastes. Segregation at source was strictly implemented. To ensure compliance, an ordinance, "Improved and Attractive Gusa Legislation Program Garbage Fee" was passed containing a penalty system for violators.

A Memorandum of Agreement was signed between the Gusa Barangay Council and the Rotary Club West Valley of Carmen for the construction of the Gusa Training and Information Centre inside the Material Recovery Facility. To use the large volume of compost, the community organizers formed the "Gusa Kabulakan (Flower) Association" which supplied its vegetable produce to a supermarket in the city.

Presently, the project is in full-operation and an expansion plan of action was prepared. Information, Education and Communication remains a key step in rallying the people's support.

Evidently, there is no litter in streets. After five years, the people developed the habit of segregating their garbage for collection. The project is a vehicle for community empowerment led by women members of the Barangay Environment and Health Brigade. Their enthusiasm has infected key sections of the barangay, including the council. The established system has reduced the fuel and lubricant expenses of the barangay by 50%. Income was generated from the Material Recovery Facility and shared by many. A working coordination system is in place. The Working Group puts together ideas into action plans then presents them to the council for endorsement. With regard to the information, education and communication campaign, the Gusa Training and Information Centre within the Material Recovery Facility served as an anchor. Modalities for public-private collaboration were explored and showed great promise for up-scaling in the future.

Initially, the barangay had to maintain the Material Recovery Facility but their contribution has been decreasing as income is generated. The strong policy support provided by the barangay corrected the initial stubborn attitude of some residents. Also, the information, education and communication campaign on solid waste management yielded positive results.





Communal effort at Material Recovery Facility, Gusa © Cagayan De Oro EPM Unit EPM

An operational Material Recovery Facility should be in place before strongly pushing for waste segregation. With the waste receptacle established, segregation at source was important for the success of the project. These technical aspects should be supported with a good level of volunteerism.

The project has relieved the city from servicing the barangay since it was able to stand alone. This is a classic case of shared responsibility. The Gusa Environmental Health Brigade Multi-Purpose Cooperative, created by the Barangay Council under the direct supervision of the Barangay Solid Waste Management serves as the future administrative arrangement for the project's implementation and maintenance.

### *Lapasan Integrated Solid Waste Management*

Consistent with agreed priorities during the City Consultation, the Lapasan Integrated Solid Waste Management is the third solid waste management project of the city.

Barangay Lapasan is a major business district in the city where many retail stores are located. Lapasan has two big creeks. Bitan-ag Creek serves as the physical boundary of the barangay and is a major dumping ground for households. The key sources of waste in Lapasan are households, institutions, commercial establishments, and industries. Although the barangay has dump trucks to collect and transport waste to the dumpsite, it cannot meet the demands.

### *Objectives*

- stop the dumping of garbage and rehabilitate the creeks
- setup a system of garbage disposal
- raise the awareness of residents and develop responsible citizenry

### *Basic Action Plan*

To attain balance of conservation and welfare, the following will need to be promoted; rule of law; transparency; responsiveness; a broad-based long-term perspective; equity and inclusiveness; effectiveness and efficiency; accountability; and optimal participation of stakeholders through the process of change.





### *Project implementation*

Following the Environment Planning and Management orientation phase, was a community consultation which identified and prioritized issues and strategies. This served as a validating exercise. Parallel work included explaining the project concept with the Barangay Council followed by the organization of a team. The council's support was used to leverage other contributors.

The 320 households were mapped into blocks and the Barangay Environmental Council was chosen to lead the group. Every house was visited, assemblies held, and 'recordida' or street broadcasting was regular. The community underwent training, seminars and workshops according to schedule. Responsibilities were distributed among the committees.

The collected wastes were weighed and recorded. Collection sacks were strategically located for the pedaled tricycle-collector. Waste container labeling was compulsory. Waste was not collected from violating households, who received a warning. Meanwhile, public recognition was awarded to the conscientious. A record of wastes (type and volume), violations, recognitions, and observations was kept.

The reported success is questionable because building of the Material Recovery Facility did not materialize due to a lack of space. The allotment garden appeared to be working, generating compost for its fertilization needs and selling surplus compost. The income generated benefited residents who were directly engaged in the process. Household segregated waste was stacked in sacks in designated places. This routine continued for sometime. However, the allotment garden could not serve long as the "Material Recovery Facility" was not set up. However, any new business undergoes Integrated Solid Waste Management orientation before receiving a barangay clearance needed for operation, suggesting that a sense of social responsibility has developed.

Even a politically strong Barangay Council could not act as the Working Group. This project was led by the council, although the Working Group was given the opportunity to facilitate the broad-based and bottom-up process. The council was the control valve of the process, making the project too Local Government Unit centered. In other words, the multi-stakeholder Working Group concept did not work well. As anticipated, the project could not rally as many volunteers or leverage enough funding support.



Clearing garbage dumped in the creek at Lapasan © Cagayan De Oro EPM Unit





Community empowerment as an outcome is questionable even though the participatory processes attempted to get stakeholder involvement. As it is, the project is owned by the Barangay Council. In some ways, this is positive. For instance, they have increased budgetary allocation to complete the waste disposal system in due time.

### 3.3 PHASE 3: CITY-WIDE APPLICATION

Demonstration cities tried sustaining the successes, but some of the critical stages of the process were not set in place. For instance, the requirement for integration or institutionalization of the Sustainable Cities Programme-Environment Planning and Management process in Local Government Unit was not completed. The application has been selective and limited. Other factors cited included the following: (a) the creation of an Environment and Natural Resource Office as a focal Environment Planning and Management unit is optional (considered by the Local Government Unit as a major limitation) (b) tension between the City Planning and Development Office and the Environment Planning and Management unit/Environment and Natural Resources Office, with the Environment Planning and Management process a middle ground for the two co-equal units (c) resources for the demonstration project were below expectation.

#### UP-SCALING DEMONSTRATION PROJECTS CITY-WIDE

##### (A) LIPA CITY

Linking the Solid Waste Management with Barangay Environmental Rehabilitation and Development Project was attempted but there was no follow-through. Another plan that failed was the rent-a-plant. The Environment Planning and Management unit, together with the project management team, planned to upscale projects into bankable projects, but because efforts dissipated, the experience did not invite capital investment in Solid Waste Management. The Green Space & Recreation Development Task Force met with the owners of a private property regarding the possibility of an ecological park. Nothing came of it. Three years after the Local Environment Planning and Management project (2004), a Strategic Planning Workshop for Ecological Waste Management was conducted. This non-governmental organization-initiated consultation brought together various stakeholder groups, old and new, to flesh out strategies to address the solid waste issue. No substantial follow through has occurred to date but feedback appears encouraging.

##### (B) CAGAYAN DE ORO CITY

Additional Integrated Solid Waste Management project ideas emerged from the interaction with the Public-Private Partnership for the Urban Environment Programme of UNDP, such as linkages with urban agriculture, coastal marine and fresh water conservation through forest protection and conservation, and stronger partnership with educational institutions. Subsequently, the Cagayan De Oro-Asia Urbs Project PHI 3-17 and Good Practice in Local Governance: Facility for Adaptation and Replication projects was developed. The Cagayan De Oro-Asia Urbs project partnered with Xavier University. The project built capacity on conceptualization and urban agriculture as an approach to urban settlement. The Good Practice in Local Governance: Facility for Adaptation and Replication project, a joint undertaking between the Department of the Interior and Local Government and Liceo de Cagayan University replicated the Environmental Planning and Management process in other Local Government Units. Policy papers for Local Government Unit adaptation were produced: (1) "Guide to the Environmental Planning and Management/LA21 Approach Model" for Local Government Units (2) "Measuring Progress of a Functional Solid Waste



Management Board". Surigao City is replicating the Environmental Planning and Management process with a focus on Solid Waste Management.

The Good Practice in Local Governance: Facility for Adaptation and Replication project has initiated a nationalized Environmental Planning and Management. Additionally, integration of environmental management at elementary and secondary levels was started by the Department of Education, garbage pickers association, Department of the Environment and Natural Resources, Save the Mother Earth Foundation of Bank of the Philippine Islands, and the city.

### (C) TAGBILARAN CITY

The expansion of the Solid Waste Management facility could be partially attributed to the bio-composting experience of the demonstration project. The segregation of waste, which was central to the information, education and communication campaigns on waste disposal, had taken root in the residents of the city. The apparent lack of follow through by the Working Groups has stopped the momentum once gained when an Environmental Planning and Management unit was still around.

## INTEGRATING ENVIRONMENTAL STRATEGIES IN CITY

### (A) LIPA CITY

The city produced a Strategic Environmental Management Plan which was approved. Similarly, the environmental component in the Executive and Legislative Agenda has been adopted by the City. The De La Salle University, on the one hand, has introduced a course, EARTH, which covers the Environmental Planning and Management experience. Other inroads include the proper garbage disposal integration in pre-school and elementary schools of the Association of Private Pre-elementary Schools in the city. The International Training Center for Pig Husbandry maintains close coordination with the City Agricultural Officer and the City Veterinarian on environment-friendly technologies for the pig industry. In 2005, the Local Government Unit, partnered with a federation of non-governmental organizations and Pusod, Inc. in implementing Lipa's Ecological Waste Management Programme.

### (B) CAGAYAN DE ORO CITY

The enhanced city Comprehensive Land Use Plan established the legal premise for the environment as a policy area, not a subsumed component of economic development as the current Comprehensive Land Use Plan guidebook suggests. In fact, the Commission on Indigenous Peoples already included environmental projects. This example of integration is a very effective way of applying the Environmental Planning and Management process city-wide even without the necessary institutionalizing instruments. The Comprehensive Land Use Plan document is a requirement for the release of the city Internal Revenue Allotment, subsequently securing a budget for environmental concerns and for continuing



Cleaner streets © Cagayan De Oro EPM Unit



the Environmental Planning and Management process in specific actions of the city. Partly, the City Local Environment and Natural Resources Office budget comes from this allocation. It has also maintained its position as a member of the Technical Working Group for the Comprehensive Land Use Plan.

The Environmental Planning and Management unit was able to integrate environmental strategies, influencing legal outputs and sections. The biggest effort was with the City Environmental Code formulation, in which the city council committee engaged the Environmental Planning and Management unit as co-lead group. In 2002, the City Local Environment and Natural Resources Office was tasked by the city council to revise a city ordinance making Segregation of Waste at source mandatory. The City Local Environment and Natural Resources Office drew up a Memorandum of Agreement between the city and a local advertising company to install illuminated modern segregation garbage bins on street sidewalks.

#### (C) TAGBILARAN CITY

The logical sequence for the integration of the Environmental Planning and Management process in city operations would be for Working Group remnants to increase Environmental Planning and Management advocacy, first within the city organization, principally through the chief executive officer, administrator's office and the City Planning and Development Office, then with other constituents. This is not re-doing the Environmental Planning and Management process but re-igniting enthusiasm. Legal venues which already contain the Environmental Planning and Management process like the Comprehensive Land Use Plan updating within the uptown development plan are good opportunities for re-integrating the institutionalized perspective. The hardest obstacle to institutionalization was the setting up of the Environment and Natural Resource office.

### 3.4 PHASE 4: INSTITUTIONALIZING THE PROCESS IN THE CITY

#### (A) LIPA CITY

A General Ordinance, No. VIII, series 1999, established an Environmental Management Fee. This directed the Metro Lipa Water District to collect a fee of PHP10/month from users within the concession. Half of the fee would go to the barangays for a solid waste programme. After the Local Environmental Planning and Management project, a training module on Barangay Ecological Solid Waste Management was developed. It is now being taught to all barangays. During the 2002 updating of the city Comprehensive Land Use Plan, it integrated environmental management as a technical sector in the Comprehensive Land Use Plan.

The present Environment and Natural Resource Office needs to assert the logic that it hosts the Environmental Planning and Management unit rather than the City Planning and Development Office. None of the current staff were part of the Environmental Planning and Management process, hence will require training and exposure on the nuances of the process. Nonetheless, consistent with the 1999 Institutional and Policy Study recommendations, the city set up measures to place the Working Group on Solid Waste Management and the Water Council under the administration of the office.

#### (B) CAGAYAN DE ORO CITY

Highlighting the institutionalization process was the Good Practice in Local Governance: Facility for Adaptation and Replication Project production of a Local Government Unit "Manual on Integrating Environmental Planning and





Management in Comprehensive Land Use Planning” which the Department of the Interior and Local Government circulated to all cities and municipalities nationwide. There will be training support on the use of the Manual. The effort of trying to institutionalize the Environmental Planning and Management process is laudable, however, whether the Local Government Units would use the process in their planning and management remains an option or until the Environment and Natural Resources Office becomes mandatory. There is good potential that the Environmental Planning and Management process would be made routine in the city governance since the City Local Environment and Natural Resources Office is a co-equal department. The legislated Environmental Code specifies the Environment and Natural Resource Office as conduit for Environmental Planning and Management activities. It clearly demarcates the tasks of the City Planning and Development Office's, which is problematic in many of the cities in the country. Both at city and barangay levels, Solid Waste Management legislation, drawn out from the Environmental Planning and Management experience, has been passed by the respective councils.

The City Consultation institutional framework for the city's environmental management was difficult to rate even though the quality of the outcomes of the Environmental Planning and Management process, since 1999, appeared acceptable. It could be said that the city had substantially met the institutionalization indicators, namely: an established institutional approach to managing an environmental programme; participating multi-stakeholders in the implementation of policies and programme plan of action; created an Environmental Management Information System for information and policy-decision purposes; and developed the city's capacity to implement a sustainable environment management programme.

The local universities today serve as Anchor Institutions, although, other non-governmental organizations and civic organizations could also function as anchor organizations.

### (C) TAGBILARAN CITY

The foundations established by the Environmental Planning and Management successes are still in place in the city, which includes the City Environmental Code, Environmental Profile, Working Groups (although down to a few), and champions from the various stakeholder groups.

An “Uptown Development Master Plan” as expansion site of the city to relieve the city core of pressure is being crafted, and expected, in due course, to be approved by the council. The broad-based and bottom-up participatory process of the Environmental Planning and Management did come into play during its formulation. In 2006-07, the University of the Philippines Diliman-School of Urban and Regional Planning updated the Environmental Profile and conducted a City Consultation to re-prioritize environmental issues and ending with almost the same issues. Working Groups have pointed out the need to re-examine the Tagbilaran City Environmental Management Office concept and draw up an action plan to set up a more appropriate unit to orchestrate the Environmental Planning and Management process in the city. Currently, the City Planning and Development Office doubles as the Environmental Planning and Management unit on a limited basis as it is not an implementing unit of the city. This anchoring concern has been raised in many discussions.

The bio-composting facility in Dampas had been sub-contracted to a firm with expanded tasks of handling all the solid wastes of the city, easing out Bohol Initiators for Sustainable Agriculture and Development, Inc. in the process. The signal is not encouraging to other Environmental Planning and Management stakeholders.





## CHAPTER 4: NATIONAL-LEVEL SUPPORT AND DISSEMINATING LESSONS LEARNED

### 4.1 BACKGROUND

Conceptually, an Environmental Planning and Management national level support is based on efforts of capacity building and institutionalization of the Environmental Planning and Management process at the national level through the Anchor Institutions, cities and their federation specifically, the League of Cities in the Philippines. There is now an Environmental Planning and Management momentum with entry mechanisms and structures available for national up-scaling.

The “researchable Environmental Planning and Management parameters” are subsumed in the sections of the following documents: (1) National Capacity Building Strategy, and (2) National Institutional Support Development Strategy. These empirically-based strategies were crafted with discussions with the Anchor Institutions and cities. Four situations were examined, i.e., (a) devolved national Environment and Natural Resource office functions to the Local Government Units in relation to the expanded roles of Anchor Institutions for Environmental Planning and Management, (b) Environmental Planning and Management experience of Lipa, Tagbilaran and Cagayan De Oro Cities during and after termination of the Environmental Planning and Management Project, (c) cities situation, vis-à-vis conduct of the Environmental Planning and Management activities, and (d) private sector and civil society participation in environmental governance. An analysis was done on the mandates and functions of Anchor Institutions-National Executing Agencies, vis-à-vis Environmental Planning and Management of the urban ecosystem, which required collaborative participation of government, the private sector, civil society and the community. It is believed that the practiced Environmental Planning and Management approach in the three cities and elsewhere was a concrete expression of the multi-stakeholder participation in environmental governance.

Chapter 3 is in effect, a reflection on the Environmental Planning and Management approach experience from the time that the Environmental Planning and Management Project was implemented in 1998-2001 to date, in mainstreaming the Environmental Planning and Management process in primary, secondary and tertiary cities, and in National Executing Agencies. The three major groups of players in the documentation process were the Environmental Planning and Management demonstration cities, educational institutions and the National Executing Agencies. The proposed up-scaling of the Environmental Planning and Management approach would be by curricularizing the experience as non-formal and/or formal training programmes in academic institutions and capacity building focused units of National Executing Agencies. The orchestration of Local Government Unit support of various national urban players demands that the prior concept of Anchor Institutions include functions other than capacity building.

Three national initiatives are worth supporting: (1) Anchor Institutions composed mainly of National Executing Agencies and tertiary educational institutions have been discussing how to include the Sustainable Cities Programme- Environmental Planning and Management into the curriculum, leading to a 3-unit course at University of the Philippines Diliman-School of Urban and Regional Planning, an MA course at Liceo De Cagayan University, integration of modules in the Local Government Academy (Department of the Interior and Local Government) offerings, (2) Bureau of Local Government Development -Department of the



Interior and Local Government has developed an Environmental Planning and Management Guide and an instrument to assess functionality of the Solid Waste Management Board of the Local Government Unit by utilizing concepts and processes of the Environmental Planning and Management (3) Anchor Institutions are defining a sustainable cities and climate change approach taking off from the Environmental Planning and Management experience.

## 4.2 DEVELOPMENT CONTEXT

The demonstration cities received the same training input from the Environmental Planning and Management Project, but varied on other related topics. Some of the National Executing Agencies came in the later period of the Environmental Planning and Management process, thus less exposed to the Environmental Planning and Management phases as espoused by the Sustainable Cities Programme.

### CITY CAPACITY PROFILE

The capacity building needs of cities are huge and their exposure to technologies reflects the types of project proposal packages that they formulate. The application of acquired skills is wide with Cagayan De Oro City as the most trained. This holds true with regard to more effective and efficient exposure of the cities to administration skills suggesting that cities will need to be trained to administer Environmental Planning and Management projects. An even more demanding situation in the future is to run bankable projects with large investment monies.

Responding to the learning needs should be calculated since not all cities may require formal or structured training, but may simply require systematic self study, actual exposure or a learning- by-doing approach. A first concern is to make training materials available to the cities. The range of training is wide, some of which is technically outside of the realm of Environmental Planning and Management, although related to the process.

### NATIONAL ENHANCING AGENCIES CAPACITY PROFILE

The National Executing Agencies have disparate exposure, knowledge and skills on urban Environment and Natural Resources planning and management, with some agencies having limited capacities. As expected, the Department of the Environment and Natural Resources is well trained while the Housing and Urban Development Coordinating Council, a mandated key agency in urban development has yet to develop its capacities on urban Environmental Planning and Management and the Bureau of Local Government Development as the Local Government Unit supervisor will also have to orient itself on the urban Environmental Planning and Management process. The League could provide Environmental Planning and Management advice to the Local Government Units if they have adequate training and exposure to Environmental Planning and Management processes. The Philippine Urban Forum, a national multi-sectoral group of people, is expected to support urban players by facilitating discourse on sustainable urbanization, although its present capacity on the Environmental Planning and Management process is inadequate. There is need to strengthen its organization by involving more urban stakeholders in programmed activities. The low level of appreciation or perhaps, understanding on the Environmental Planning and Management process is strongly implied by the range of concepts and tools/techniques expressed as capacity building needs.



### 4.3 NATIONAL CAPACITY BUILDING STRATEGY

A national capacity building strategy defines the linkages between the National Executing Agencies and the city Local Government Units as part of the process of decentralization and devolution of administrative policies and functions and roles in sustainable urbanization. A “swarming effect”, potentially confusing the city, could ensue from unrestricted interventions of the National Executing Agencies, including capacity building. There is the need for a capacity building strategy. The first recipient of capacity building is the city Environment and Natural Resources Office staff. The second is the city units and the private sector, respectively. The Philippine Agenda 21 defines the key stakeholders into eight groups: (1) Local Government Unit (2) local people (3) local business and industry (4) civil society (5) local media (6) financial institutions and intermediaries (7) national government (8) scientific community.

#### OBJECTIVE

The capacity building strategy will:

- (1) Network anchor institutions for systematic delivery of Environment and Planning and Management capacity building activities for the National Executing Agencies and the cities
- (2) Institute a training programme (formal/non-formal) on Environment and Planning and Management
- (3) Mobilize a critical mass of professionals with Environment and Planning and Management expertise at the city and national levels
- (4) Build a knowledge management network on Environment and Planning and Management, which is nationally shared by cities and internationally shared, especially in the Asian region.

#### COMPONENTS

A capacity building programme, anchored in the National Executing Agencies, is the most cost effective and efficient way to reach and serve cities, although efforts are better sustained with tertiary educational institutions leading as experienced in other cities in the world (Technical and Capacity Building Branch-UN-HABITAT, Southeast Asian study on urban practice-research-teaching, NCDuhaylungsod, 2008). Partnerships with academic institutions in Lipa, Tagbilaran, Cagayan De Oro Cities, and in the national capital region, have been developed where the present capacity building strategy is seated. However, an effective implementation of a national capacity building strategy requires a city Environment and Natural Resources Office as the fulcrum. The structure and staffing pattern of the city Environment and Natural Resources Offices of Lipa, Tagbilaran and Cagayan De Oro Cities were comprehensively defined in an Institutional and Policy Study conducted by the Center for Environmental Concerns in 2005.

#### *Component A: National knowledge management network*

An Anchor Institution is characterised by the main role it plays, i.e. capacity building, incorporating the Environment and Planning and Management model in city governance, and advocacy and stakeholders’ mobilization. Currently, the 15 Anchor Institutions forming the core network are “traditional” learning centres with a wide geographic reach into the regions, nationally and throughout Asia. An “informal” national knowledge management continually advocates for the application of Sustainable Cities Programme- Environment and Planning and Management approach. The network is: (1) adopting a single training design (Environment and Planning and Management approach-based) (2) graduating professionals on the Environment and Planning and Management process (3)



continuing to offer the Environment and Planning and Management model as a course in the education curriculum as more experiences are documented and processed (4) publishing a bulletin and/or journal on Environment and Planning and Management for sustainable urbanization (5) sustaining discourse on the approach model through expert group meetings, conferences, seminars (6) providing policy initiatives on Environment and Planning and Management for sustainable urbanization (7) exchanging and sharing of knowledge and skills on Environment and Planning and Management (8) providing expert advice to cities.

### *Component B: The Curriculum*

The network of Anchor Institutions prepared a curriculum of the Sustainable Cities Programme- Environment and Planning and Management approach, based on the 10-module proposal of the UN-HABITAT-ROAP. The purpose of the curriculum was to eventually “graduate” a critical mass of professionals trained in the approach, who in turn would bring their knowledge and skills to their respective institutions or organizations. The integration of the modules can be done as follows: (1) offer as an intensive training programme (2) integrate as a three-unit Master of Science course (3) integrate as an Master of Science specialization stream (4) offer as a Bachelor of Arts course. It was agreed that the Sustainable Cities Programme- Environment and Planning and Management approach would be the core of the curriculum. The curriculum would be developed following a three-stage process of writing comprising the philosophy/ theory, substantive information, and instructional guide.

### *Component C: Regional knowledge management network*

The regional resource is vast with about 40 cities in 8 countries involved in the application of the Environment and Planning and Management approach. The Knowledge Management Centre led by the UN-HABITAT/ROAP brings together regional networking success, cases, insights and lessons as a basis for improving instruments, methodologies and tools. The national network of 15 Anchor Institutions could cross-fertilize experience on sustainable urbanization with experience of Asian cities.

### *Component D: Capacity building activities other than training*

The present capacity building strategy includes a wider perspective than just training, although, it is the main component. It includes conventional tasks of Local Government Units such as a continuing legislative advocacy, conduct of spatial and management planning, scholarship, exposure and exchange, conference, expert group meeting, case study/documentation, and networking.

## CONDUCT OF CAPACITY BUILDING ACTIVITIES

Follow the Trainers’ Training, two strands of training on the Environment and Planning and Management approach are envisaged. Formal training by academic Anchor Institutions leading to graduate diplomas or degree upgrades, and non-formal training by National Executing Agencies leading to certified credit points that can be used as a basis for promotion. The system starts from the development of a training design and plan by the Anchor Institutions, which themselves conduct training. The trained National Executing Agencies set up a scheme and conduct national training with the expectation that trained individuals re-integrate with their offices, units or organizations in the city. The Anchoring Institutions ensure the training design is upgraded. Training should be carried out logically, with prioritization based on factors such as: (a) direct relevance and/or significance to the resolution of a major city issue with a high level of reproducibility possibly creating a domino effect (b) value added to the environmental planners, managers and implementers in the form of





technological improvements, broadened developmental perspective, innovative administration/governance, increased participation by stakeholders, among others (c) cost and timing.

### CAPACITY BUILDING THEMES

A 10-module training could be offered with coverage as below:

- Module 1 Urban ecosystems; urban institutional and policy environment; principles and concepts of urban ecosystem planning and management
- Module 2 Sustainable urbanization paradigm of the Environment and Planning and Management approach; broad-based and bottom-up development concepts; reducing/limiting ecological footprint and other concepts; innovative anarchic planning; gender sensitivity concepts and approaches; environmental politics; Millennium Development Goals; (Environment and Planning and Management approach products: Environment and Planning and Management approach researchable subjects; stakeholders analysis and mobilization; gender sensitivity analysis)
- Module 3 Poverty-environment-development nexus; participatory environment and natural resource assessment; multi-stakeholders' issues identification and key interactions, factors, valuation and dynamics associated with urban ecosystems management; (Environment and Planning and Management approach products: Geographic Information System; City Environment-Poverty Profile; Environmental Issue Prioritization)
- Module 4 Mode of knowledge production on sustainable urbanization; generation processes and management of data and information; city learning environments; capacity building contexts of national enhancing agencies and academic institutions; (Environment and Planning and Management approach products: Capacity Building Strategy, Environmental Management Information System)
- Module 5 Multi-stakeholders' negotiation processes; participatory formulation of city issue propositions through broad-based action groups; (Environment and Planning and Management approach products: Issue Proposition Papers, City Consultation).
- Module 6 Participatory principles and concepts; modes of participation in urban environmental governance; Issue Working Group modality of participation and mobilization; potentials and constraints of "small broad-based operational working groups"; (Environment and Planning and Management approach products: Participatory Governance; Good Urban Governance; Issue Working Groups)
- Module 7 Methods, techniques in designing environmental strategies and actions for priority issues through Issue Working Groups; (Environment and Planning and Management approach products: Environmental Action Plan, Environmental Strategy Plan, Neighborhood Demonstration Project Plan)
- Module 8 Review and iteration of strategies; identification of bankable sustainable urban projects; investment programming; institutionalizing the Environment and Planning and Management approach in city processes; (Environment and Planning and Management approach products: Iterated Strategy, Bankable Sustainable Urban Project Concepts, Investment Programming)



- Module 9 Institutionalization/internalization concepts and processes; institutional and policy development study methodologies; monitoring, adjustment and evaluation principles and concepts; participatory project implementation; (Environment and Planning and Management approach products: Measuring Progress Parameters, Institutional Support Development Strategy for Replication; Project Cycle Management for Sustainable Urbanization)
- Module 10 Principles and concepts on environmental remediation and restoration of urban landscape and seascape; eco-technology; legal concerns; valuation; remuneration; city plan iteration

#### 4.4 INSTITUTIONAL SUPPORT DEVELOPMENT STRATEGY

##### DEVELOPMENT CONTEXT

The Local Government Code defines the functional scheme of support to the Local Government Unit by the various bureaucratic offices. Details of the devolved functions are contained in a Department Administrative Order (DAO) 90-32, and refined via DAO 2000-102 by the efforts of the Environment and Planning and Management project. The agencies, which figure prominently on issues of urbanization are the Housing and Urban Development Coordinating Council, Department of the Interior and Local Government, Housing and Land Use Regulatory Board and the Philippine Urban Forum. By virtue of mandates, the Housing and Urban Development Coordinating Council coordinates and the Department of the Environment and Natural Resources orchestrates the substantive aspects. There were suggestions about the creation of a National Committee on Sustainable Urbanization to be located within the Housing and Urban Development Coordinating Council. Another was to utilize the Philippine Urban Forum.

##### *Roles in urban development*

The defined roles of players in the governance of cities, particularly with respect to the Environment and Natural Resource functions include: (a) National Executing Agencies especially the Housing and Urban Development Coordinating Council, Department of the Environment and Natural Resources, Department of the Interior and Local Government, Housing and Land Use Regulatory Board - top decision-making bodies for nationwide policy, legislation, planning, allocation of state resources, and dissemination of information relating to the environment and natural resources sector of the urban landscape (b) Local Government Unit - principal implementer of national policies even as they also legislate local policies (c) Local Government Unit Leagues - strong advocacy group (d) civil society (e) local business and industry (f) the local people (g) educational and research institutions (h) local media (i) financial institutions and intermediaries. A central "recipient unit" at the city is the Environment and Natural Resources Office performing the most critical role.

##### *City Environment and Natural Resource functions*

The institutional processes and procedures for environmental planning and management in the city organization could be gleaned from four of the Local Government Unit functions: (a) regulation (b) planning (c) policy making (d) education. As the city Environment and Natural Resource Office is optional, in some cities, Environment and Natural Resource planning and management functions are integrated with other functions, sometimes negatively impacting on the management of environmental issues. The city Environment and Natural Resource Office appears only marginally to participate in the planning and management of environmental issues because the overall city planning task



is carried out by the Planning and Development Office. Often the city plans reduce environmental concerns to tree planting, street cleaning and greening and similar activities. The policy making process in cities is largely through the City Mayor, the Legislative Council and the City Development Council. Other stakeholders participate in the process, although there is general ambivalence towards participatory processes. The city regulates development by approving or disapproving project proposals, but the environmental basis appears arbitrary considering that most cities are incapable of measuring environmental quality standards, or that these offices do not have the acceptable equipment.

### *Environment and Natural Resource devolved functions*

The “Guidelines for the transfer and implementation of the Department of the Environment and Natural Resources functions devolved to the Local Government Unit (DAO 92-30)” define the requirements and process of shared management. There has been, however, no specific Local Government Unit formal assessment of the impact of devolved functions of the Environment and Natural Resource. The provision in the law states that the devolution of most of the functions shall be “pursuant to national policies and subject to supervision, control and review of the Department of the Environment and Natural Resources”, which constrains the Local Government Units in their management of the devolved functions/areas like a Damocles sword hanging over them. Another provision in law constraining the Local Government Units is the optional nature of the Environment and Natural Resources Offices. The increased amount of Internal Revenue Allotment is not enough to fund the devolved Environment and Natural Resource functions. Local government units experienced a hard time funding the devolved functions.

### THE STRATEGY

The entire institutional support development strategy hinges on the argument that an operational city Environment and Natural Resources Office should be integral to the city organization and that the Anchor Institutions are systematic, timely and efficient in delivering their Environment and Natural Resource services to the city. The challenge to the city, specifically the Environment and Natural Resources Office, is to identify the most appropriate action, given its internal capacities and the external support that is waiting to be tapped.

### *Renewed City Environment and Natural Resources Office*

With strong coordination, enabling and empowering roles, the Environment and Natural Resources Office could mobilize the expertise and resources of various stakeholders to integrate and synchronize their policies, plans and programmes. To make the office responsive, it should be open to changes in structures and mechanisms. A comparative matrix of an expanded (coordinating and enabling) role versus the serving role of the city Environment and Natural Resources Office is provided (Illustration 3). The institutional framework for strengthening the Environment and Natural Resources Office shows that the outside shells represent the wider regions of governance (Illustration 3). The Environment and Natural Resources Office straddles between the private and public sectors to maximize resources, but would need innovative approaches to governance requiring institutional adjustments.

Earlier, the Environment Planning and Management Project<sup>9</sup> proposed an institutional structuring of the Environment and Natural Resources Office comprise four divisions with functions such as: (1) waste management (2) pollution prevention and management (3) sustainable resource use and

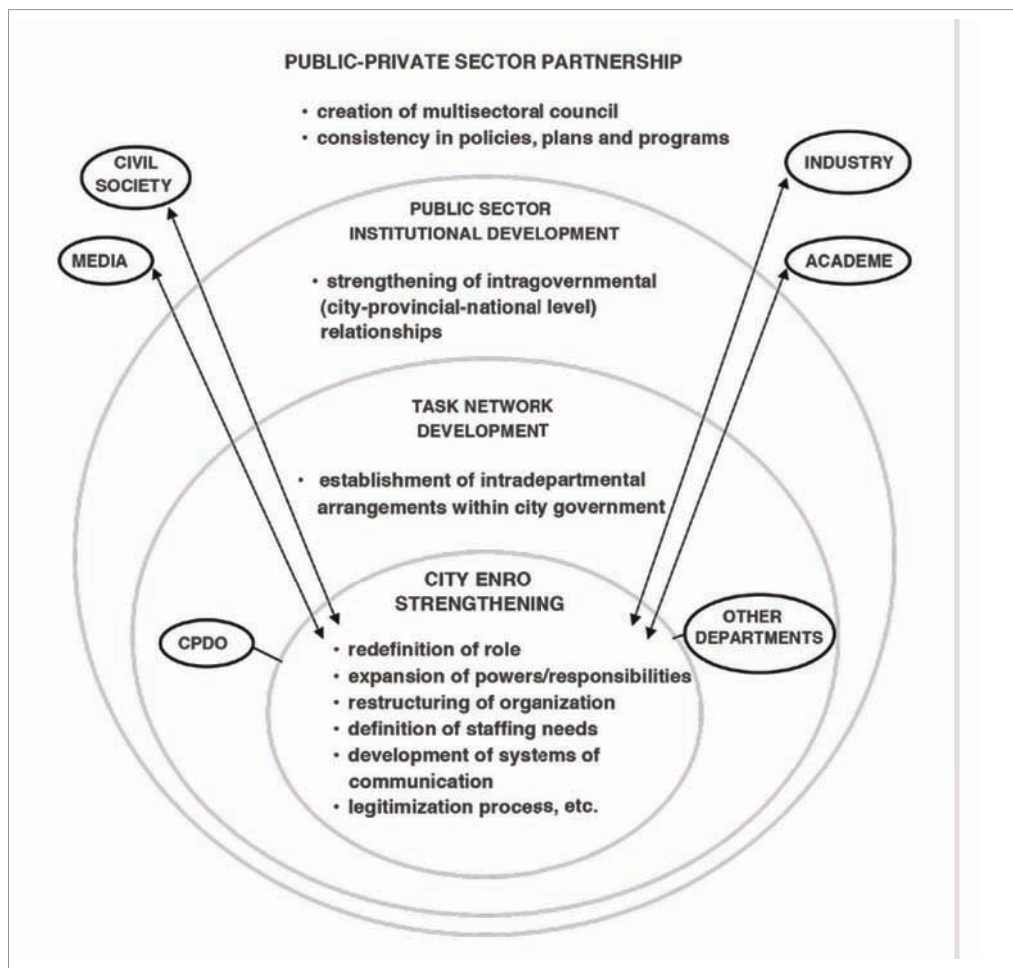
9 DENR-UNDP. 2001. Institutional and Policy Study of the City Organization Report. Centre for Environmental Concerns.





management (4) environmental education and advocacy, be supported by two other units, namely; (1) environmental and natural resources planning, and (2) administrative support.

ILLUSTRATION 3: PROPOSED CITY INSTITUTIONAL STRENGTHENING FRAMEWORK.



#### *Identification and definition of staffing requirements*

The case of Cagayan De Oro City was used to analyze the staff requirements for a renewed Environment and Natural Resources Office. It merged four divisions/units located in two different departments to form a substantive number of personnel for the proposed Environment and Natural Resources Office. There is a need to the redefine the position titles and balance technical with non-technical positions to match the requirements of the renewed office. An important assumption made is that the personnel to be assigned or recruited should possess a good level of competence (education, training and experience) and commitment to the Environment Planning and Management process. Training would be necessary. It is proposed that a phased approach is adopted in personnel recruitment so that none or minimal additional budget requirements would be needed.

#### SYSTEMATIZING ANCHOR INSTITUTIONS' INPUTS

Anchor Institutions' provision of goods and services for the urban sector, while anticipated, should be systematic and demand driven. In this regard, several opportunities to raise levels of urban Environment and Natural Resource discussions towards concerted action were identified in earlier workshops.





The twin approach of orchestrating the Anchor Institutions for sustainable urbanization takes a perspective that would include several interested parties: (i) a National Committee on Sustainable Urbanization that would manage government bodies (ii) the Philippine Urbanization Framework representing civil society organizations i.e. business, non-governmental organizations, private organizations, civic clubs, religious groups, and other non-governmental organizations.

On the assumption that the present Philippine Urbanization Framework has expanded and that the national network of Anchor Institutions has been organized, the Housing and Urban Development Coordinating Council does have a basis for establishing the National Committee on Sustainable Urbanization in accordance with a National Urban Development and Housing Framework. The Environment and Natural Resources Office's planning and management functions will be assisted by a singular multi-party body representing streams of emphasis on sustainable urbanization. The Anchor Institutions would take specific roles like Anchor Institution on capacity building, Anchor Institution for standards and mainstreaming in city government, and Anchor Institution for advocacy and stakeholder mobilization.

Overall, this institutional scheme for replicating the Environment Planning and Management approach in cities nationwide is dependent on the current Environment Planning and Management champions' effort to jump-start the process.



## CHAPTER 5: CONCLUSION AND LESSONS LEARNED

The achievements of the Environmental Planning and Management process in the Philippines can be categorized into three parts: (1) effects due to the intervention (Environmental Planning and Management model), although not wholly attributable to the Environmental Planning and Management Project (2) explanation of the success of the approach model explained in the five researchable areas (3) issues about the approach model. Opportunities to widen the effects are clearly reflected, but are heavily dependent on the willingness of a critical mass of officers and staff in institutions to champion the approach model.

### 5.1 INDICATING SUCCESS OF THE ENVIRONMENT PLANNING AND MANAGEMENT APPROACH

The five researchable Environmental Planning and Management areas could be used as the measuring stick of the level of changes occurring after the Environmental Planning and Management approach has been mainstreamed in city governance.

#### *Improving information and expertise*

Once the mental frame is geared towards the Environmental Planning and Management method, the corresponding changes in attitude in planning and management are expected. For example, the complete transparency of the planning process provides the stakeholders free access to information, while at the same time being involved in the generation of data and information. The orchestration of the process by the city government spreads the improvement of expertise to as many participants as possible through “learning-by-doing”. Locating the Environmental Planning and Management work in the city Comprehensive Land Use Plan and Comprehensive Development Plan formulation enriches the database of the city, and more importantly, is owned by every city dweller.

#### *Improving strategies and decision making*

In the Philippines, the scheme would be to organize Technical Working Groups, either on the basis of ecosystems or problem areas, a design adopted by the Philippines Agenda 21. The Working Group concept of the Environment Planning and Management approach brings Technical Working Group responsibilities into a higher plane that is to make decisions for the city. The negotiations during the City Consultations widen the decision field, and synthesizing priorities into a City Action Plan further improves strategy as this allows a complete cycle of options analysis. It should be an opportunity for wider collective strategy and decision-making process for city development.

#### *Improving implementation of strategies*

The involvement of more city dwellers in the planning process results in more choices of implementing the agreed strategies, and thus should improve implementation approaches. Consequently, the development of methods and tools/instrumentations and training should even better the implementation process. The Environment Planning and Management experience suggests systematic management of knowledge produced through the bottom up and



broad based planning and management process so that analysis is well informed of facts and figures.

#### *Making efficient use of resources*

A deliberate process of identifying bankable projects via participative methods explores multi-support which becomes a significant leveraging schema for greater entry of resources in to the city - as was experienced by Cagayan De Oro City. Specifically, the vast resources residing with the private sector could be optimized for investment projects, which they would have taken part in identifying. In the long run, the systematic process of project identification and development may influence city government spending. This situation could attract outside resources from the national government and from the international community.

#### *Institutionalization of the Environment Planning and Management process*

Legislative action is necessary for the institutionalization of the process, however, this must be supported with a policy to create a permanent city Environment and Natural Resource unit, which will orchestrate the broad-based bottom-up Environment Planning and Management. This institutionalization serves as a conduit to additional resources.

The institutionalization of the Environment Planning and Management approach, through the implementation of a national capacity building strategy and an institutional support development strategy, ensures the long-term and consistent conduct of the broad-base bottom-up Environment and Natural Resource planning and management of the city.

## 5.2 PRESENT GAPS IN ATTAINING COMPLETION OF THE 4-PHASE ENVIRONMENT PLANNING AND MANAGEMENT APPROACH FOR SUSTAINABLE URBANIZATION

#### *Addressing city politics*

Until a critical mass of "EPMers"<sup>10</sup> is consolidated, particularly those holding key positions in government, the politics of control could undermine the participatory process. An approach taken was to establish more Environment Planning and Management champions in the various levels of governance, particularly amongst the tenured officers and staff of the city organization. The active and persistent participation of civil society and private sector is insurance to objectivity, and effectively guards against backsliding. Professionalizing processes and structures through well-trained and respected officers will be more sustainable than the politically-laden changes.

#### *Capitalization*

The effectiveness of the Working Group negotiation and City Consultation was shown by the cities, and partially adapted by the 30 cities of the City Development Strategies Project, in identifying and prioritizing bankable environment-development projects. However, a major concern is on "capitalizing" the bankable projects, especially if a project requires levels of investment that can only be sourced outside of the city capacity. Apart from finding sources of capital, the city would need to sharpen its skills in project

<sup>10</sup> Stakeholders who are familiar with and experienced in the Environmental Planning and Management process



packaging. With increased institutional capacity, the Local Government Unit will confidently engage in investment Environment and Natural Resource projects that are bankable with substantial support from the private sector and civil society.

### *Knowledge displacement*

Environment Planning and Management knowledge is maintained by the city through proper placement of staff and officers in the city units, and in databases (e.g. Environmental Management Information System). Lateral and vertical movements of staff and officers in the city occur with changes in leadership. Key Environment Planning and Management officers may be targets of these movements such that some forms of shield or design to increase the absorptive capacity of the Environment Planning and Management Unit have to be set in place. Moreover, an iterative agenda on capacity building should anticipate threats and risks of completing the Environment Planning and Management approach cycle. A significant change in attitude/behavior in city governance based on the framework will ensure that sustainable urbanization is attainable.

A major prerequisite for institutionalization is the establishment of the city Environment and Natural Resources Office, and in this regard, significant inroads must be achieved in policy reform and legislation, with a focus on the removal of the "optional" clause attached to the unit. The Department of the Environment and Natural Resources and Housing and Urban Development Coordinating Council could effectively assist the city in their Environment Planning and Management processes. Anchor Institutions should pool together to form a critical mass of "EPMers".

### *Systematized Anchor Institutions inputs/interventions*

Efforts to assist cities and urbanizing towns have been sporadic and isolated because there has been no single orchestrator. Some cities are swarmed with enticing development proposals especially if the city is well-packaged while others seldom get a good offer. The national strategy for institutional support development addresses this concern.

## 5.3 CONCLUSION

1. The successes of application of the Environment Planning and Management approach in the cities of Lipa, Tagbilaran and Cagayan De Oro have changed the attitudes of the stakeholders. Where there are opportunities for multi-stakeholder gatherings, Working Group members emerge as champions of broad-based and bottom-up planning and management of the city, particularly for a synergized environment.
2. The Environment Planning and Management model application has initiated new governance schemes on specific concerns such as waste management, water conservation and utilization, coastal management, urban gardening, information management by a variety of stakeholders, partnership between the private and public sectors in environmental governance; commitment of local resources to development by various stakeholders resulting in behavioral change towards self sufficiency: social preparation of communities to ensure greater chances of success in implementing projects.





3. The Environment Planning and Management model has effectively argued for greater space in accountability, transparency and reporting by the city organization on matters pertaining to environmental governance. City stakeholders are involved from the conceptualization stage, to negotiation and planning through to the implementation of projects. Effectiveness of City Consultations in clarifying issues and arriving at consensus depends on skilled facilitation.
4. The experience was good advocacy, convincing National Executing Agencies to serve as Anchor Institutions or champions of the approach model; a network of 15 institutions (Seven academic, eight National Executing Agencies) is presently at the core of discussion to incorporate into the school curriculum several project principles that would enable more professionals to train in universities or take up certificate training courses; competency of partners to engage should be thoroughly established; capacity building input applied should be monitored and measures of their effectiveness set.
5. The Environment Planning and Management model has proved flexible; it undergoes progressive contextualization of design and methods as response to locale specificities.
6. Despite the institutional difficulties in establishing a central unit, "Environment and Natural Resources Office", the city organization has relentlessly programmed for its creation or strengthening, as the case may be; change in attitude must also occur at the department head level or at the highest level for real change to occur in the organization; political leadership commitment and support is critical and should be mobilized throughout.
7. The experience has expanded, and more cities are requesting assistance to apply the model in their cities.
8. The experience has been shared at global conferences, meetings and workshops, and received positive comments; documentation of processes as they happen is necessary to capture learning; a country's acquired skills and knowledge are downloaded to the regional knowledge management network lead by the UNHABITAT-ROAP.



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