

Community Participation in Urban Solid Waste Management in Metro Manila and Metro Cebu, the Philippines

***Case Study Report* Community Participation in Urban Solid Waste Management**

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PREFACE

This study has been done in the framework of UWEP, the Urban Waste Expertise Programme, a six-year programme - 1995-2001 - of research and project execution in the field of urban waste management in the south. UWEP aims at:

- * generating knowledge on community and small and micro enterprise involvement in waste management
- * developing and mobilizing south expertise on urban waste issues

The Urban Waste Expertise Programme covers a range of topics related to waste management in the context of the urban environment in the south - solid waste collection and transfer, waste minimization, recycling of various waste fractions, resource recovery and liquid waste treatment.

Waste management and its various stakeholders now form a rapidly growing area of interest. The role played by small and micro enterprises and communities, however, is still much neglected. UWEP aims to generate, analyse, document and customize the information that is gathered during research and pilot projects, in order to enhance the expertise of the UWEP target groups, ultimately aiming at an improved integrated sustainable waste management system. This will in the long run lead to an improved environment, create more employment and offer improved urban services for everyone.

One of the UWEP research topics was community participation in urban solid waste management, which deals with the roles and activities of communities and authorities in various combinations. This report, "Community Participation in Urban Solid Waste Management in Metro Manila and Metro Cebu, the Philippines", reflects the results of a case-study research done by Danilo G. Lapid, Ligaya U. Munez and Lidel Lee I. Bongon, commissioned by WASTE, the executing agency of the UWEP programme. Similar researches on the topic of urban solid waste management were undertaken in Nepal, Sri Lanka, Pakistan, Senegal, Burkina Faso, Mali and West Africa. By publishing these case-study reports, we explicitly aim at divulging the data gathered during the researches. UWEP sees this report as one of the ways of focusing attention on small and micro enterprises, community involvement and their invaluable role in urban waste management.

Hopefully this publication helps you to form a picture of the role the various stakeholders play in urban waste management. More information and an overview of the other UWEP reports and books can be obtained from WASTE.

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Gouda, April 1998

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LIST OF ABBREVIATIONS

Barangay	Smallest Political Unit
BSN	Basak-San Nicolas
BUPCC	Basak-San Nicolas Urban Poor Coordinating Council
CBOs	Community Based Organizations
CCUP	City Commission for the Urban Poor, Cebu City
CMA	Community Management Approaches
CO	City Ordinance
DILG	Department of Interior and Local Government
EPAPA	Edukasyong Pangkabuhayan at Pangkalusugan
FBPDO	Fort Bonifacio Planning and Development Office
GSIS	Government Service Insurance System
HEKASI	Heyograpiya, Kalusugan at Sibika
IRA	Internal Revenue Allotment
LGU	Local Government Unit
MAPSA	Makati Public Safety Assistance Group
MEIP	Metropolitan Environmental Improvement Programme
MCWD	Metro Cebu Water District
MMDA	Metro Manila Development Authority
NCR	National Capital Region
NGO	Non Governmental Organizations
PO	Peoples's Organizations
RAFI	Ramon Aboitiz Foundation, Inc.
REACH	Reach Efficiency Approach to Community Health
Sitio	Small Neighborhood within a Barangay
SWM	Solid Waste Management
Talipapa	Barangay Public Market
UBSP	Urban Basic Services Program
UNDP	United Nation Development Program
UWEP	Urban Waste Expertise Programme
WATSANEN	Water, Sanitation, and Environment
WB	World Bank
WTE	Waste-to-Energy
ZWM	Zero Waste Management

CHAPTER 1 INTRODUCTION

1.1 Background of the study

This study is a sociological research designed to understand the various types of community management approaches as far as solid waste management is concerned. Specifically, it contains two case studies of low income communities, namely, Barangay Pitogo in Makati, Metro Manila and Barangay Basak-San Nicolas in Cebu City, Metro Cebu.

This study is part of the Urban Waste Expertise Programme (UWEP) initiated by WASTE and funded by the Netherlands Directorate General of International Cooperation.

UWEP is a six-year programme (1995-2001) with the purpose of generating employment in waste handling through small and micro-enterprises, and improving the environmental conditions of low income communities. Through its course, the programme wants to develop local expertise by means of research and pilot projects, and to disseminate documented knowledge and technology as far as waste management is concerned. Furthermore, the programme aims to promote waste policies which aim at integration of SME's in the existing waste management systems through regional meetings and policy conferences with local authorities and development organizations. UWEP is implemented mainly in three regions, namely, Latin America, West Africa and South West Asia.

1.2 Purpose of the study

The main purpose of the study is to document the various community management approaches implemented in the two case communities in relation to SWM activities and projects. Community management approaches (CMA) concern the question "how do you do it?" What can you do to persuade people, which arguments can you use, how can you collect regular fees, how can you supervise the waste collectors, etc. Examples of such CMAs are:

- An awareness campaign to make residents realize that uncollected waste is not an individual problem but a community problem.
- The establishment of street committees with responsibility for motivating residents.
- Regular collection of fees for operation and maintenance.
- Surveillance or monitoring by people of the community.
- Communication and Complaint procedures between local settlement community and municipal authorities.

The two case communities experienced some changes in the way they treat and handle domestic solid waste. They were known to have garbage scattered along the major and narrow streets and other public places. That was before they implemented their respective SWM project. Although far from being the ideal communities, both now command a certain degree of respect from the larger community for having cleaner surroundings. How they managed to effect behavioral and institutional changes and promote community participation in the SWM is the focus of this study.

1.3 Methodology and limitations

Gathering data for the case studies involved actual field visits in the two communities. (See Slides No. B1) Two research assistants were hired to interview key informants, like the Barangay official, teachers and school principals, the priest and informal leaders. (See Slides No. B2) Focus group discussions were also utilized to get more information and validate previous ones. (See Slides No. B3) Interviews were both formal and informal using open-ended guide questions followed by relevant probing queries. Most of the interviews were recorded on tape. Ocular inspections of streets and neighborhood landmarks, unobtrusive observations of normal community SWM activities and slide photography were done.

In terms of secondary data, the research team requested barangay and CBO records from community leaders and member. Records included maps, minutes of meetings, old photos, posters and other printed materials.

As far as limitations of the study is concerned, the main issue is the scarcity of written materials about the two case studies. The team relied mostly on the memory and perception of the key informants. As such, the team took extra time in validating, if possible, given information from other sources. For Barangay Pitogo, this was not much of a problem since it is located within Metro Manila and easily accessible. With Basak-San Nicolas, however, the team did not have the luxury of time since it is located in the southern island province of Cebu that required more travel and field work expenses. Fortunately, both communities and their leaders were accommodating to the researchers.

1.4 Review of related programs and literature

The need to understand community participation and community-based environmental management initiatives have been addressed by researchers and concerned institutions for the past several years now. In 1992, the UNDP-funded and WB-managed Metropolitan Environmental Improvement Programme (MEIP) initiated studies on this issue in four Asian cities (Lapid, 1992). The purpose was to understand the impact of urban environmental degradation on the welfare of the poor, find out how they were coping with it and to recommend community-based actions to enhance welfare. This was followed by a similar study under the UNDP Asia Pacific 2000 Programme (AP2000). In the Philippines, three other urban centers, Baguio, Cebu and Davao were the subject of the study (CAPS, 1992a).

Another related undertaking is the four-year research program (1992-96) initiated by the Program on Environment of the East-West Center and the Department of Urban and Regional Planning, University of Hawaii. Aside from mere research, this program calls to task the research teams in seven Asian cities to work with communities to both assess current conditions and to build the institutional capacity for improving environmental management. Given a participatory approach, the research activity becomes an action research whereby the communities become aware of their problems, and then help plan, formulate and implement solutions even after the research is over.

This UWEP study on community management approaches on SWM is a related effort but deeper in nature. While the previous programs focused on what the communities have done or are trying to do, this UWEP study tries to ask how things are done and who in particular are doing what.

The action thrust of these related programs coincides with the thoughts or theories of recent related literature. The necessity of improving the welfare and environment of low-income communities through community participation seems to be the connecting thread in all these and other related programs. How to do this is the big question. Government action is an important ingredient but these studies have shown that community participation is an important factor to consider. Douglass (1992) posited the view that empowering households and communities to participate as active decision-makers in the use and management of these resources is a central issue and that if low-income households and communities are not empowered to improve their capacity to manage the environment, the future of cities will be one of drastic environmental decline.

Moreover, recent literature have tried to debunk traditional mindset of technocrats and planners that poverty “causes” environmental deterioration and the urban poor generate wastes that degrade their habitat (Lee, 1994b). Urban environmental degradation is a product of a complicated web of social, political and economic activities. Rapid urbanization, industrialization and migration coupled with institutional incapacity of governments to respond properly are a few contributing factors. The more common view now is that the urban poor are the victims and not the cause of environmental deterioration. Given access to important resources like land and even a minimal support from external groups and institutions, low income communities can improve and maintain a decent and livable environment.

Speaking of external support, NGOs have shown great potential as catalysts in assisting low-income communities in terms of empowerment and environmental issues (Lee, 1994). For the longer term, the increasing activism of indigenous NGOs in mobilizing community collective efforts represents a significant source of outside support. Local NGOs can facilitate the successful implementation of a community-based effort through an empowering strategy for the poor and their access to important environmental resources, particularly land, infrastructure and services necessary for environmental management” (Douglass, Lee and Lowry, 1994, p. xiv).

Nevertheless, although external assistance is important, a one-way top-down approach to community development is not effective and sustainable as experiences of development agents have shown. Intervention agencies, even with the best intentions, cannot impose "foreign" concepts and programs, and expect positive and sustainable results. In designing a community based development, community participation must be encouraged. It is important to realize that groups or member of groups cannot carry out certain task or achieve their goals individually (Narayan, 1995). Intersectoral partnership between communities and the private sector, both formal and informal, is the proper approach to strengthen urban environmental management, specially SWM (van de Klundert and Lardinois, 1995).

1.5 Overall SWM situation

Solid waste management (SWM) in the Philippines, in general, can hardly be described as earth-friendly. The most common method, specially in urban areas, involves collection by garbage trucks from waste generators, and disposal through dumpsites and landfills. In the rural areas, many resort to burning and backyard dumping. In Metro Manila, the 9 million residents generate about 5,000 metric tons of garbage per day. The local government units (LGU) of the 8 cities and 9 municipalities comprising Metropolitan Manila, also known as the National Capital Region (NCR), are in-charge of collection while the Metropolitan Manila Development Authority (MMDA) takes care of disposal. MMDA has about 4 major dump sites and 2 sanitary landfills. Unfortunately, most are approaching or have reached full capacity. This problem is even compounded by the growing public clamor for the closure of one landfill due to adverse environmental impact. The solid waste problem in Metro Manila is now in crisis proportion with no comprehensive solutions in sight. The panic button has already been pressed. Uncollected garbage on street sidewalks and vacant lots have become a common sight around the capital. Evidently, the simple collect-and-dispose method of SWM is not a sustainable and environment friendly approach (Lapid, 1995).

1.6 Currents trends in SWM

Current discussions among experts and concerned officials revolve around the setting up of a number of incinerators and/or waste-to-energy plants all over the country. Foreign suppliers are actively promoting waste-to-energy (WTE) plants as a method of disposing waste. The local government units are impressed by the possibility of getting rid of garbage quickly and at the same time produce energy in the process, unaware of the various technical matters to be considered.

The more vocal environment-oriented NGOs have opposed this approach due to the air pollution that may come about and the high cost of building and maintaining these WTE plants according to international standards. There is also the argument that the composition of urban solid waste in Metro Manila and other urban centers may have high levels of moisture due to organic waste and, therefore, may not be suitable for such plants.

While the debate is going on, the good news is that this crisis situation has brought about local initiatives by NGOs and communities which can be called earth friendly. These initiatives include composting, recycling and an industrial waste-exchange program augmented by information and education campaigns (Lapid, 1995). The NGOs involved in SWM are few but growing in number (CAPS, 1992b). Those in the informal sector like the junkshops, itinerant waste collectors and small recyclers are beginning to be recognized. Many local government units around the country are getting attracted to Zero Waste Management (ZWM) as espoused by the Recycling Movement of the Philippines. ZWM, a term already becoming a household word, is an ecological approach to waste management whereby all household solid and liquid waste can be convert, processed or reused into something useful. A town just north of Manila is now composting its wet market waste and has gained popularity.

Barangay level initiatives to SWM, though still limited in number, are spreading. These two case studies to be discussed below can stand as witness.

CHAPTER 2 CASE STUDY 1. BASAK-SAN NICOLAS, CEBU CITY

2.1 Community background

2.1.1 Location, Population, and History

Barangay Basak San Nicolas (BSN) is a densely populated coastal barangay located in the southern part of Cebu City, facing the island of Mactan and the islet of Kawit in Cebu Strait (see Slides No. B4). It is about three (3) to five (5) kilometers from Cebu City Proper or about fifteen-minute drive from Colon (commercial area) via the Cebu South Road (see Slides No. B5) It has thirty-six (36) sitios (neighborhood zones) and is bounded by barangays Mambaling, Punta Princesa, and Tisa on the North (Slides No. B6), by Cebu Strait and Mambaling on the East (Slides No. B7), and Basak Pardo on the South (refer to Map 2). It is approximately three (3) to five (5) kilometers from existing dumpsite of the city located in Inayawan further South. BSN has a population of 32,000 or 5,090 families (City Health Data, 1994) about half of which are urban poor. According to its barangay captain, total 1996 population is estimated to be around 45,000.

Formerly characterized by vast rice fields, the barangay was referred to by the Cebuanos as 'basakan' which means rice field area or simply rice field. Before World War II, it was also referred to as San Nicolas since it was under the San Nicolas Parish of the Roman Catholic Church. The name San Nicolas was attached to Basakan, which later was contracted into 'Basak San Nicolas' as it is presently known.

2.1.2 Physical and Socio Economic Characteristics

BSN is generally a highly congested residential area. This is evident particularly in the southern portion of the Cebu South road where majority of its residents live (see Slides No. B8). Its large urban poor population lives in lightly built to semi-concrete houses that are also built so close to each other, almost wall to wall. A number of its residents who occupy the coastal sitios of Kanipaan, Seaside, Alumnos and Guinabsan in fact dwell in closely built houses onshore which can be reached through wooden footbridges (see Slides No. B9). According to some residents, this situation prevails since majority of the urban poor population of BSN are landless. They live in the community either as tenants, renters and/or squatters. There are, however some who were already awarded rights and title to the land they occupy through the government programs on human settlements (see Slides No. B10).

The main streets that traverse BSN are already concrete but the many alleys and passageways in interior sitios leading to the majority of the houses are not. These alleys are usually narrow, about 1.5 meter-wide, just enough for one or two persons to pass through (see Slides No. B11). Drainage canals are present only in some areas in the community usually along the main roads. (See Slides No. B12)

A number of business establishments and social infrastructure facilities are present within the community. Most of the business establishments are located near and/or along the Cebu South Road that traverses the barangay. These establishments include: hardware stores, gasoline station, telecommunication office, lumber yard, nickel plating factory near Friendship and GSIS Village,

and a footwear manufacturing firm. Also found in BSN, along Cebu South Road, is first 'sky walk' or overpass ever built in the Southern Portion of the city.

Small stone craft and shell craft manufacturers and/or exporters (most of these are cottage level industries) like the Alcon Industries, operate in the coastal sitios of Tabasca, Alumnos, and Guinabsan. These manufacturers produce various women accessory items and furniture made of either corals, shells, and white Mactan stones as well as display items like monkeys made from coconut husks and preserved outer shells of certain fish species.

Most of the residents are Catholics from Cebu or neighboring islands of Leyte and Bohol. There are also a few Muslims living in the barangay. An exact percentage of the present ethnic group membership however can not be ascertained. Majority of the residents, particularly those of the urban poor, work as craftsmen, laborers, drivers, micro-business operators, i.e., sari-sari (neighborhood) stores, vendors and small traders.

BSN has four (4) educational institutions (schools), two (2) health centers, located in Sitio Bontores and Alumnos, and about 25-bed capacity community hospital located along Rizal Ave. Extension (see Slides No. B13). Concerning access to toilet and water facilities, majority of the families in BSN have sanitary toilet facilities. They are supplied with water by the Metro Cebu Water District (MCWD) as shown below. (See also Slides No. B14)

	Total no. or units present in BSN	No. of families who avail of or are serviced by the facilities over the total family population
Sanitary Toilets	4,230	83 %
Water sources:		
Metro Cebu Water District	13,100	64 %
Artesian Wells	140	30 %
Deep wells (pumps)	95	6 %

Cebu City Health Office, 1994

2.1.3 Community Organizations

BSN had thirty two (32) community - based organizations (CBOs) which comprise the organized sector of the urban poor community in BSN. Early in 1995 they launched a SWM campaign in cooperation with the BSN Barangay Council (the governing body in BSN composed of seven elected officials headed by the Barangay Chairman), with the support from the Office of Cebu City Council-Committee on Public Services and Environment. According to leaders of CBOs, BSN was identified as one of the 'pilot' barangays where full implementation of City Ordinance No. 1361 will be enforced. CO 1361 which was promulgated by the Cebu City Council (The governing body at the city level composed of 7 elected officials headed by the Vice Mayor) in 1990, provided for

the system of proper collection and disposal of wastes in the city (refer to Appendix 1). Before C.O. 1361, several leaders of these organizations were already implementing waste management activities like operation "linis" or cleanliness.

The above CBOs are linked under a council called BSN Barangay Urban Poor Coordinating Council (BUPCC) whose present membership include a total of thirty-eight (38) CBOs (see Appendix 2). Most of BUPCC's member organizations were organized primarily due to land tenure issues as most of their constituents are renters and are not legitimate house and/or landowners. The BUPCC's main concerns are: land tenure and/or land acquisition; water, sanitation, and environment (watsanen); youth; women; education, livelihood; and health. Most of the leaders of these CBOs are women.

Of the above thirty-eight (38) organizations, only ten (10) are considered active and are very much supportive to the waste management concern of the BUPCC (see Appendix 3). Leaders of these organizations are active in the implementation of waste management activities particularly in information dissemination regarding waste management practices and CO 1361.

There are also POs in BSN with sectoral concerns like the Basak San Nicolas Women's Action Group.

2.2 Waste situation of BSN

The waste situation in BSN has changed significantly after the full enforcement of City Ordinance 1361. BSN used to be a dirty barangay. Some residents even compare it to Carbon, the central public market of Cebu City. Urban poor organization leaders said that indiscriminate throwing and dumping of waste were prevalent in BSN (see Slides No. B15). Wastes (i.e., plastics, papers, rubbers, glass materials, etc.) were seen scattered along the streets, and thrown into canals (see slides No. B16-B17). Interior sitios were dirty (see Slides No. B18), and coastal areas were even foul-smelling due to unattended garbage in the area. The sea shore in Guinabsan-Alumnos-Kanipaan area, which used to be a clean beach in the early 60s, was no longer fit for swimming. Although there are families whose members tried to maintain the cleanliness of their surroundings, they however, usually disposed of their garbage (paper and plastic materials alike) mainly by burning (see Slides No. B19).

With the implementation of CO 1361 in the community and with the active involvement of BUPCC in SWM campaign, the barangay became clean (see Slides No. B20). The launching of CO 1361, that involved information campaign on waste management, helped in improving people's awareness on proper waste management as well as it elicited participation from the majority of the residents in the collection and disposal of garbage in the community (see Slides No. B21-B22). According to the organization leaders, surroundings of residential areas are now regularly cleaned up (see Slides No. B23). A regular garbage collection is now in place. Trash cans that were donated by the Barangay Youth Council are also placed along streets (see Slides No. B24 and Map 2). Domestic wastes are now gathered and packed in plastic bags or sacks. It was observed that waste collection and/or disposal (i.e., cleaning of house surroundings, gathering of household waste, and bringing the waste to designated sites) is largely done by the mothers and daughters of each family.

There are instances, however, when the city garbage truck fails to collect the garbage in the community on time. This causes the streets to be temporarily untidy because of the packed garbage which await collection. In such cases, leaders of organizations who monitor the SWM situation in different neighborhood zones take the initiative to call up either the Cebu City Department of Public Services, the Office of the Cebu City Councilor Felixberto Rosito (Chairman) of the City Council - Committee on Public Services and Environment, or the Cebu City Commission for the Urban Poor (CCUP) under the Office of the City Mayor, to report delays in collection schedules and to complain.

Although cleanliness is generally observed in BSN, there are still some areas where it is not always maintained. This is noticed in the interiors of some neighborhood zone (i.e., Pundok Gamay, Panaghiusa, and Lupa Bontores) and in neighborhood zones located along the coasts (i.e., Kanipaan, Ipil, Sea Side, and Alumnos). A few of the residents in the said interior sitios, most of whom are allegedly non-BUPCC members, still practice the 'wrap and throw' method of waste disposal. Throwing of waste into waterways which is presumably done during nighttime, is partly attributed to the unwilling of these residents to cooperate with BUPCC leaders and barangay personnel and to their distance from the identified waste collection points. BUPCC leaders however, are constantly trying to remind leaders and/or members living near these areas, to encourage the said residents to participate in the waste management efforts in BSN.

In some areas of Kanopaan, Ipil, Sea Side, and Alumnos on the other hand, difficulty to observe and maintain cleanliness is due to BSN's proximity to Inayawan, the dumping site of Cebu City (see Slide No. B25). Wastes from Inayawan are usually carried afloat to these areas during high tide. According to some BUPCC leaders who live in these places, BSN officials were informed of this difficulty but they however could not do anything about it except to wait for the city government to improve the Inayawan dumpsite. The city government has a pending reclamation project that will cover the coastal areas of BSN towards Inayawan. Implementation of this project is perceived by BSN officials to improve the waste situation in the above coastal areas.

Although there is no junkshop within BSN, collection of recyclable bottles and plastic materials exists. Residents say that pushcart waste collectors from nearby barangay, particularly Mambaling buy their used bottles. There is an initiative however by Mr. Rizaldy Baruc, the president of BUPCC, to buy used bottles and plastics around Lupa Bontores area (see Slides No. B26-B27). He does this for a living. The nearest junkshops are located in Barangay Mambaling and Basak Pardo, both adjacent to BSN (see Slides B28). Garbage segregation is generally not practiced in BSN except for old newspapers and other salable materials as mentioned above.

2.3 Community management approaches to SWM

The improved waste situation of barangay Basak San Nicolas (BSN) is attributed to the timely and effective implementation of community management approaches and activities initiated by the council of urban poor organizations called Barangay Urban Poor Coordinating Council (BUPCC) of BSN which was supported by the local government unit of BSN also known as Barangay Council. As mentioned earlier (section 2.1.3), the BUPCC is composed of thirty-eight (38) CBOs.

The Barangay Council on the other hand, is headed by the Barangay Captain or also known as Barangay Chairman. Members of the Barangay Council include the following elected officials: the Barangay Captain, six (6) Barangay Councilors, and the Chairman of the Sangguniang Kabataan ng Barangay (Barangay Youth Council). The BUPCC, through its water, sanitation and environment committee or '*watsanen*,' took the lead in promoting environmental cleanliness that began early in 1990s. A cleanliness drive called operation '*linis*' was the first community-wide activity organized by the council towards this end. Short lectures and discussions called 'teach-ins' regarding waste management were also conducted informally among residents. This initiative culminated in the launching of SWM campaign and full implementation of Cebu City Ordinance 1361 that provided a legal mandate to institutionalize proper waste collection and disposal in the community.

2.3.1 The CBOs/Watsanen and Initial Activities Towards SWM

The community-based organizations (CBOs) in BSN that composed the BUPCC were first organized independently in different neighborhood zones primarily to respond to the growing land tenure and settlements related problems of the residents. The urban poor families who settled in BSN for a long time now either as tenants and/or renters and squatters in the area, feared the possibility of eviction, after families from certain neighborhood zones received eviction notice from claiming landowners. As a response, they organized themselves, believing that their concerns will be better addressed if they band themselves together into a formal organization with a legal personality.

There were certain agencies that were instrumental in consolidating the organizing efforts of the urban poor of BSN. The Presidential Commission of the Urban Poor (PCUP) which operates nationwide under the Office of the President of the Republic of the Philippines and the CCUP under the Office of the City Mayor of Cebu, assisted the urban poor organizations in BSN in gaining official recognition through accreditation as legitimate urban poor organizations. They also assisted the BUPCC members in the processing of documents and in negotiating with landowners for the awarding of land titles through government sponsored programs on housing and land acquisition. Also, Ramon Aboitiz Foundation, Inc., (RAFI) which is a non-government organization (NGO), was instrumental in the capability building of the leaders of urban poor organizations through its Resource Efficiency Approach through Community Health.

Among the first organizations to be formalized are the Sitio Lupa Bontores Urban Poor Dwellers Organization, Inc., (1988) which is headed by Mr. Rizaldy Baruc, also the present Chairperson of the BUPCC; the Parents Reach Association in Sitio Alumnos (1988), and; Tabasca Community Association (1986). With the common concern to address the land tenure problem, these independent organizations began linking with each other sometime in 1989 and later agreed to formalize their association into a council in a convention of leaders held in November of 1993. In February 1994, the BUPCC was formalized through a Memorandum of Agreement signed by presidents of BUPCC member organizations (See Appendix 3). Under the BUPCC, a committee better known as '*watsanen*' stood at the forefront of all waste management related activities in the community. The figure that follows shows the organizational set up of BUPCC. (See Figure 3.1)

In one way or another, the creation of a *watsanen* committee within the BUPCC was said to have been influenced by the BUPCC leaders' exposures to community based programs of RAFI and

Lihok Filipina. As mentioned earlier, RAFI implemented the Resource Efficiency Approach to Community Health (REACH) in the late 1980s to early 1990s which include organizing women. The Lihok Filipina Foundation Inc., on the other hand, is a non-government organization operating mainly in the Visayas Region. It advocates and support various womens concerns. It is the lead agency in organizing component of the Urban Basic Services Program (UBSP). It coordinates with existing organizations in communities like BSN so that UBSP can support them and UBSP's thrust can concretely be implemented in the barangay level.

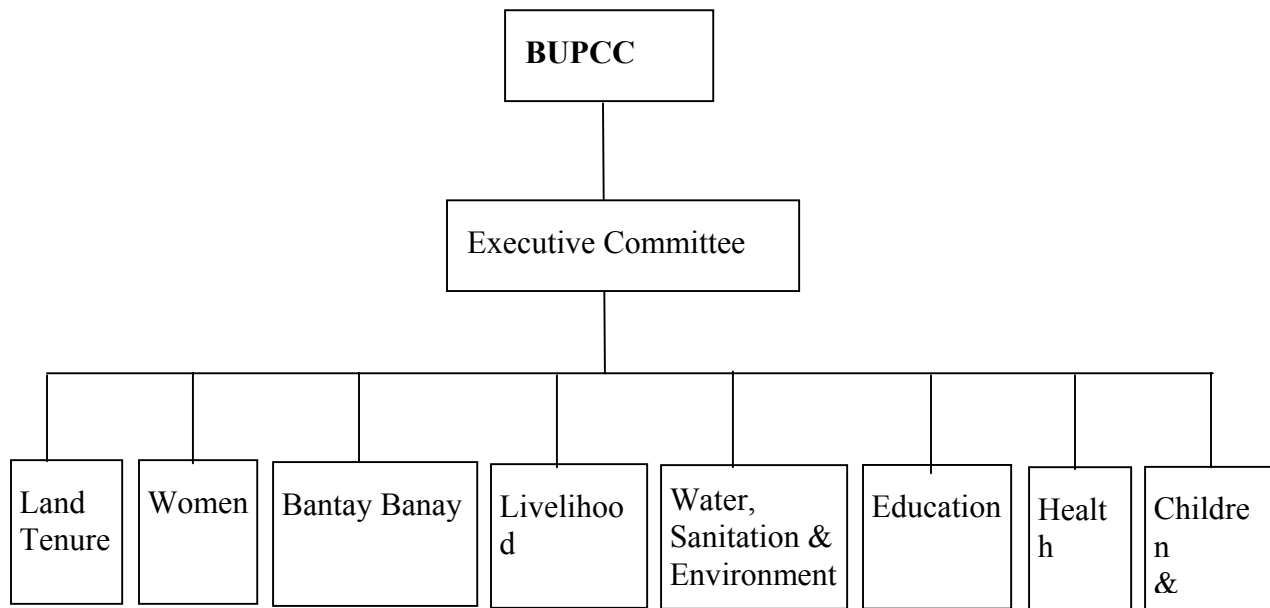


Figure 3.1
Organizational Chart of Basak San Nicolas BUPCC, in Cebu City

RAFI, CCUP, and Lihok Filipina coordinates with each other under a citywide/province-wide UNICEF-assisted program i. e., UBSP, whose implementing agency is the Cebu City Inter-Agency Committee (CCIAC). CCIAC is an NGO-Government collaboration and networking effort wherein the above agencies are members. UBSP's major components, which include land tenure, community organization, sanitation and environment, embody the concerns of BUPCC. In fact, BUPCC being an area task force of UBSP in BSN has an organizational structure that is patterned after that of UBSP-CCIAC.

Leaders of existing urban poor organizations most of whom are women, who were participants in the program/projects of the abovementioned institutions have been active in community affairs. Early in 1993, the BUPCC lobbied for the support of political candidates in the barangay elections. They managed to forge a covenant with then candidates to the Office of the Barangay Captain or Chairman to champion what they call the people's agenda (See Appendix 4). The covenant primarily sought to ensure representation of the urban poor groups in the Barangay Council, the governing body in the barangay. Representation in the Barangay Council was considered crucial so the urban poor group can assert for their concerns, including that of watsanen. In return, BUPCC supported the campaign of the candidates. Included in the agenda was the watsanen concern of the council. When Mr. George Rama (the present Barangay Chairman) won the elections, he provided

the council with an office in the barangay hall in recognition of the support they gave him in the elections (see Slides No. B29).

According to the BUPCC President, Mr. Zaldy Baruc, one of the reasons that motivated the urban poor groups to actively participate in waste management activities was the challenge to disprove, if not to counter, a notion of affluent members of Basak community. Affluent community members, according to him, think that it is the urban poor who generates the greater volume of waste that cause the dirty surroundings and the degradation of the environment of BSN. Mr. Baruc, one of the urban poor leaders in Cebu who was once invited to a seminar on waste management and segregation sponsored by the University of the Philippines-Cebu in 1993, believes otherwise citing that the volume of waste materials that could be generated by a household is directly proportional to the financial capacity to purchase consumer goods (see Slides No. B30).

Through watsanen committee, the BUPCC initiated in 1994 a continuing community-wide cleanliness drive tagged as 'operation linis.' In operation linis, leaders of BUPCC member organizations together with their respective members, voluntarily sweep or clean certain areas in the community on an agreed day to encourage homeowners to clean their surroundings. This is done after every six month in coordination with the barangay council.

Matters concerning watsanen were always given priority in the regular monthly meetings of the BUPCC held every first Saturday of the month. Watsanen committee which at present is headed by Myrly Navarro, coordinates regularly with the the Watsanen Committee of Urban Basic Services Program (UBSP) led by CCUP and with the Office of Chairperson of City Council Committee on Public Services and Environment (see Appendix 5). Mrs. Navarro is one of the people's organization representative from the Philippines in the recent International Conference on Human Settlements (Habitat II) by the United Nations in Istanbul. She is also the president of the Women's Action Group, a BSN-based organization that seeks to address local problems related to health, gender violence, and other issues. Women's Action Group, whose members include many of the women leaders of BUPCC organizations, actively supports the waste management activities in BSN in terms of attending BUPCC meetings, encouraging residents to observe cleanliness, and of coordinating with BUPCC leaders who monitor the waste situation in the community.

2.3.2 The Launching of City Ordinance 1361/SWM campaign in BSN

In the first quarter of 1995, the BUPCC, through watsanen, had taken another lead in waste management activities, this time in the launching and implementation of a city ordinance popularly called City Ordinance 1361 (see Appendix 1). Among the barangays of Cebu that have active representation in the city government, BSN was identified to be one of the four pilot areas for the implementation of the above ordinance. Other barangays to which CO 1361 is piloted are Inayawan, Pahina Central, and Punta Princesa. For the urban poor leaders, implementation of the CO 1361 provided the legal support to the operation '*linis*' they conduct.

The formal launching of SWM campaign in BSN was done in the first Quarter of 1995 after BUPCC conducted consultation meetings and after coordinating with agencies concerned. The BUPCC coordinated with the Office of the Barangay Captain for necessary support in logistics, A symposium, which form part of the education campaign for SWM, was conducted in coordination

with the Barangay Council, and CCIAC-UBSP through Lihok Filipina which assisted BUPCC in terms of finances and in inviting city government officials to grace the symposium. The following is a summary of activities undertaken in the launching of CO 1361:

a. Symposium

This was conceptualized and sponsored by BUPCC officers. This was attended by about 300 participants, both men and women members of BUPCC organizations. Held in Basak Elementary School. The Barangay Chairman provided for the chairs, sound system, and arrangements for the venue. Certain BUPCC officers were tasked to handle the program. Participants of symposium were asked to make a spot map of their own sitios, partly to identify areas that need to be cleaned.

b. Distribution of Information letters on CO 1361.

This was part of the information dissemination drive on CO 1361 and was done in coordination with the Office of the Barangay Captain (see Appendix 6A and 6B). As part of the launching, leaders were assigned to prepare the material and distribute the letters and were given P150.00 as allowance.

c. Parade

This was participated in by member organizations and church people of Basak San Nicolas. Organizations who participated in the slogan contest carried placards on which the slogans were written. The parade passed through major roads in the barangay (Cabreros-Alumnus-Tabada-Tabasca-Cabreros-Highway Bontores). Music, sound systems, chairs and venue for the program were provided by the barangay council.

d. Slogan making contest

BUPCC member organizations were asked to submit slogans that will promote SWM. Each member organization mobilized its own people in soliciting prizes for the winners of the slogan contest (see Appendix 7,8, and 9).

2.3.3 Formation of Watsanen Monitoring Teams

A week after the launching activity of CO 1361, the BUPCC called for a special meeting to discuss monitoring activities regarding maintenance of cleanliness and observance of proper waste collection and disposal. According to BUPCC minutes of meeting minutes, a steering committee was formed from among the leaders whose basic task is to accept reports from monitoring teams, inspect, and supervise monitoring in different areas. This steering committee with the monitoring teams meets every third Sunday of each month. Steering committee members are as follows:

1. Myrly Navarro	Chairperson
2. Rizaldy Baruc	Member
3. Raineer Claridad	Member
4. Rudy Ceneza	Member
5. Thelma Librando	Member

Prior to the formal launching of CO 1361, the BUPCC Execom had earlier opened discussions on who among the BUPCC members are willing to volunteer or to monitor the waste situation in the community. A number of individuals volunteered and subsequently an orientation on how to

monitor the watsanen situation in the community was later held. These efforts of watsanen to monitor the waste situation of the community is recognized by the local government officials of BSN. Although the Office of the barangay captain also deploys about 20 community guards (barangay tanod) to act as watchmen for possible violation of the CO 1361, the burden of daily monitoring of the interior sitios rests primarily on the watsanen. Deployed community guards are more concerned on the areas along main streets, particularly the temporary dumping stations.

Together with the steering committee, those who volunteered for monitoring activities divided themselves to form ten (10) monitoring teams with corresponding area assignments. Each team has its own leader and/or coordinator most of whom are CBO leaders themselves. (Please refer to the table below)

AREA COVERAGE	PERSONS RESPONSIBLE
1. Panaghiusa, Sitio Toong, San Roque	Lydia Alegado, Gloria Resma, Michael Laguna
2. Ubos Poso, Villa Kalubihan, Panagsama	Ildefonso Benguela, Dolly Espino, Agustina Manulare
3. Bagong Katilingban, Sitio Lupa, Bamboo Esquina Concord	Rosalinda Benoya, Rosenda Villarojo Rizaldy Baruc, Narcisa Obido
4. Eucalyptus, Bayabas, Manggahan, Llamas	Rudy Ceneza, Evelyn Bustamante, Hospicia Tayura
5. Guinabsan, Colveta, Tabok, Kanal, Alumnos, Sea Side	Myrly Navarro, Zosima Badano, Gaudiosa Polistico, Marcelina Sevilla
6. Basak Elem. School, Punay, Siloy Rama Compound, Friendship Village, Baclay Drive	Anatolio Dempaso, Bernaracao
7. Brotherhood, Mewrcado, Esquina Bontores	Rebecca Gamban, Rizaldy Baruc, Antonieta Lubeano
8. Cyco, Panagdait, Isla Alegre, Isla Mahilum	Editha Rosario, Glooria Valeriano, Crispin Juntilla
9. Tabasca, Pandayan, Mansueto, Tabada	Heldegarda Pañares, Nilo Antiporta, Marieta Antiporta
10. Cabrereros Esquina, Back Rubberworld, Pundok Gamay	Thelma Librando, Raineer Caridad, Evangeline Nuñez

Watsanen monitors the community on a voluntary basis, i.e., no monetary reward is being extended for this purpose and they are not legally authorized to apprehend violators of CO 1361. Monitoring functions and tasks that made effective in April 10, 1995 include:

- a. Listing down/identifying who are the homeowners/house renters who have volume of unattended garbage;
- b. Identifying/listing down households/house owners who fail to clean their area of responsibility;
- c. Inquire residents regarding failure to dispose of their garbage properly;
- d. Determining which households did not receive the info-letter regarding CO 1361;
- e. Report to the steering committee.

2.3.4 Scheduled Collection and Waste Disposal

With the C.O. 1361 in place, collection and disposal of wastes generated in BSN became regular. The city government through its Department of Public Services, deploys its garbage collection truck to collect garbage from BSN twice a week, usually on Mondays and Fridays. Collection, however is done only along main roads in the barangay (i.e., Cebu South Road, Cabreros, Tabada, Llamas, Rizal Avenue Extension).

With the SWM/CO 1361 campaign, an increase in the volume of collected waste was noted. These wastes are brought to identified pick-up points or temporary dumping areas along the roads to await collection by the dump truck. In sitio Lupa-Bontores for instance, significant increase in the volume of garbage was noticed. According to the BUPCC president this impelled them to suggest to the barangay captain to purchase a barangay dump truck necessary to accommodate the increasing volume of garbage. This suggestion plus the number of waste disposal-related complaints that have reached the Office of the Barangay Captain, convinced the Captain (Mr. Rama) and the Barangay Council to purchase the mini dump truck (see Slides No. B31). This mini dump truck complements the garbage collection being undertaken by the city's DPS.

The barangay dump truck has a loading capacity of approximately eight (8) to nine (9) cubic meter (see Slides No. B32). On the average, the mini dump truck collects three (3) truck loads of waste from BSN per day for six (6) days, or a total 140 - 160 cubic meter of waste in a week. Collection work is done by three (3) community guards who are also full time in garbage collection (see Slides No. B33). Community guards receive honorarium (around P1,500 to P2,000) from the funds/income of the barangay for the security services they render to the community. They are usually appointed by the Barangay Captain. Only three however, were chosen for garbage collection for which each guard receive an additional compensation. The BSN LGU, through the Internal Revenue Allotment (IRA) it receives from the city government, shoulders the maintenance costs of the dump truck as well as the salaries of the personnel involved in the collection and disposal. Each of the employed garbage collector/loaders receives a total monthly salary of P 4,000.00. IRA takes care of most if not all of the operating and overhead expenses of the barangay. Collection of garbage by the barangay dump truck is scheduled in three (3) different areas as follows:

AREA	COVERAGE or ROUTE	SCHEDULE
I	Hospital - Cyco- Mahilum- Kanipaan- Alumnos- Tabok Kanal- Guinabsan- Colveta- Villa San Antonio - Rizal Avenue- Tabasca- Crossing- Inayawan dump site (usually 3 trips a day)	Monday and Thursday

II	Hospital- R. Pan.- Gutchan Subdivision - Ubos Poso - Villa Kalubihan- Brotherhood - Lemon St. -Aguila - Macopa - Basak Elem School-Inayawan dump site	Tuesday and Friday
III	Hospital- Cabrerros- Back Rubberworld- Main Road- Pandayan- Tabada Public Market- Bayabas- Kaimito- Dap-dap- Eucalyptus- F. Namase- GSIS -- Friendship Village- Main Road- Inayawan dump site	Wednesday and Saturday

2.3.5 Other Activities and Concerns

Planned and On going WATSANEN Activities. Watsanen has scheduled other activities to help maintain the cleanliness of the community. These include: a zero waste management orientation seminar; a tree planting activity in July 1996; and a cleanliness contest in October. During the launching of City Ordinance 1361, BSN Barangay Captain (George Rama) promised to give a cash incentive to the cleanest sitio. The cleanliness contest will be participated in by urban poor organizations in the different sitios. While watsanen leaders continue monitoring their areas, some of them are initiating small activities that would encourage residents to maintain cleanliness of their surroundings. In Guinabsan for instance, Watsanen chairperson Myrly Navarro encouraged the youth to gather scattered wastes. She volunteered to pay a minimum of P1.00 per bag to whoever will be able to gather the most garbage in the plastic bags that she distributed earlier. The urban poor organization in Guinabsan is also informing the residents that they will charge a minimum of P10.00 fine to whoever will be caught disposing or throwing wastes to the shore. This is considered part of the fund raising activity of the organization. Residents who will not comply with this policy will be reported to the office of the barangay captain and this may cost the violator to pay a higher fine and, possibly, detention.

Participation of the BSN LGU. The support which BUPCC/Watsanen received from LGU of BSN can be considered crucial in the successful implementation of its SWM program. The BSN LGU, that is quite active in various concerns of the community, participated in the actual cleanliness activities. It supported the Watsanen SWM program through provision of sound system, chairs, and venue in its various activities.

The BSN LGU, being vested with the authority to apprehend violators of CO 1361, used threat, strong and open rebuke or reprimand in exacting obedience from its constituents. The BSN LGU found open reprimand to be an effective method in instilling discipline among its residents. Before Rama's term of office, BSN was a haven of some criminal elements and abusive police in the city. During the first few months of his office, Rama preoccupied himself in eliminating these elements and establishing his rule and authority as the barangay captain. He exercised certain degree of hard-line approach to law-violators and other citizens who challenged his authority and who showed disrespect to public officers and personnel. In some instances, for example, Rama called for certain

residents to report to his office after learning that these residents allegedly despised the barangay tanods. He openly reprimanded them and even cursed them.

Moreover, residents who were caught by the barangay tanod and police of BSN stealing others' property were not only reprimanded but were also subjected to physical punishments such as pouring boiling water on their hands. In such cases, the guilty person/s' families are expected to shoulder the corresponding medical treatment.

Concerning compliance with CO 1361, the following are specific instances that relate how the LGU exercised its authority.

- a. Barangay Captain Rama and the tanods once joined 'operation linis.' The captain said that they were cleaning the front yard of the residents because the residents are not cleaning it. He threatened residents however saying, that they will burn their houses should he find the place dirty on the next visit. From then on the people in the area started cleaning the place.
- b. During the first few months of the implementation of CO 1361, the barangay secretary (Mr. Mario Mariaga), together with some tanod used to make rounds in the community to check areas that are not kept clean. Using his megaphone he reprimanded residents and heavily cursed them for not observing cleanliness in the area.
- c. One rainy night, Mr. Mariaga saw someone about to throw two plastic bags of garbage into the creek. He approached the man and softly told him that he will be apprehended if he will throw the garbage into the creek. The man replied that it should not be Mr. Mariaga's concern since what he was to throw was only two plastic bags of waste. Mariaga said that he will have to pay P1,000.00 for the two bags if he insists on disposing it to the creek. The man did not seem to care so much and so Mr. Mariaga got his gun out and told the man that he will surely shoot him if he will not listen. The man realized how serious Mr. Mariaga was and so he obeyed and went home with the two bags of waste.

Some Issues Raised by BUPCC/Watsanen. The Watsanen raised three issues that in one way or the other affect the implementation of the SWM program of the organization. One is the issue of authority. In one sitio for example, monitoring efforts of urban poor leaders are being questioned by some residents who are not supportive to the program. They are being questioned for lack of legal authority to call the residents' attention. Confronted with this situation, Watsanen leaders sought the support of the City Public Health Office and the UBSP. They requested that they be deputized as sanitary inspector of some sort so that the people in the community will give them full recognition, particularly in their monitoring activities. Until now, however, there is no response from the above office regarding this matter such that some of the leaders felt hesitant to continue with the Watsanen activities.

Second is the leaders' felt need to avail of financial support or honorarium. Most of the BUPCC leaders expressed that they are slowly hampered to actively participate and support the activities of Watsanen because of financial needs of their families. Some of the leaders therefore became inactive with the organization because they have to attend to their jobs too. As a mitigating

response to the declining involvement of some leaders, Watsanen/BUPCC officers are now trying to develop 'second liners' who will eventually take leadership roles in the organization.

Lastly, the Watsanen committee identified the need for a continuing education and training of its members as well as other residents of the community. They find it vital in raising the awareness and understanding of residents regarding waste management.

CHAPTER 3 CASE STUDY 2: BARANGAY PITOGO, MAKATI CITY

3.1 Community background

3.1.1 Location, Population and History

Barangay Pitogo is a 16.3-hectare residential area situated beside the Military Camp of Fort Bonifacio (headquarters of the Philippine Army, Navy, and Marines) in Makati. The place is about two (2) kilometers away from Guadalupe where most of commercial establishments in the area lie and is accessible through five to ten minute tricycle ride from either Guadalupe or Estrella (see Map 3) or through private vehicles via Kalayaan Avenue. It is a dynamic community with a population of 16,000 individuals or 3,071 households. Nine hundred (900) of the households are homeowners and the rest are renters.

Named after the palm trees called Pitogo that was abundant in the area before the World War II (see Slides No. P1), the place was once a part of Fort Bonifacio. It was also referred to as the Enlisted Men's Barrio, since the site was a military reservation camp. Civilians mostly relatives of United States (US) and Filipino veterans settled in the area as early as 1945. When the fort was turned over to the Philippines in 1949 by the US government, the number of settlers increased. Military personnel were given permission to construct houses by the Post Commander of the Fort and in 1986 they were awarded land titles. In 1956, a local Lieutenant was appointed by the Post Commander to administer the affairs in the community until barangay election was held in May 17, 1982.

3.1.2 Physical and Socio-Economic Characteristics

Pitogo is a highly congested place with narrow but concrete and defined roads (see Slides No. P2-P4). It is divided into seven zones (see Appendix 17). Zones 1, 2, and 7 that cover the eastern portion of the barangay are elevated. (See Slides No. P5) Narrow roads in the community usually serve as the parking areas for cars and other vehicles (see Slides No. P6). Due to lack of space for recreational activities within household premises, the roads that reach to the interior of barangay serve as playgrounds for children and hang-out for adults (see Slides No. P7). Open drainage system exists along these narrow roads except along Kalayaan Avenue, towards South Cembo, where drainage is covered (see Slides No. P8).

House structures in the community vary from permanent to temporary (see Slides No. P9). They are closely built with the walls also serving as fences (see Slides No. P10). At present, many of these houses are being renovated to accommodate more renters.

Educational and health facilities are also present in Pitogo (see Slides No. P11). These include a daycare center, a nursery/kindergarten school, two (2) elementary schools, public health center, five (5) medical/dental private clinics, and one (1) public dental clinic.

Commercial establishments like neighborhood "sari-sari" stores also abound in the area (see Slides No. P12). At the center of Kalayaan road is a small community market called "talipapa" which stretches from corner of Sulu street towards Guadalupe Nuevo (see Slides No. P13). Other

businesses present also include restaurants/food parlors (12), one (1) pawnshop, two (2) welding shops, and one (1) junkshop.

Pitogo is a lower to middle income community with its residents employed as clerical workers; sales worker; artisans and firefighters; service workers; laborers; private household workers; professional and technical workers; and managers, officials, and proprietors.

3.1.3 Community Organizations

Pitogo is governed by the Barangay Council (the lowest local government unit). It is composed of seven (7) elected councilors with specific committees and the Barangay Captain or Chairman who is the head (see Slides No. P14 and Appendix 10 for names of public officials and committees). Before the implementation of Local Government Code (LGC) of 1991 or the 'autonomy act,' there used to be only six councilors. This change, as mandated by LGC, also required reclassification of the zonal boundaries from six to seven zones. The Barangay Council receives funds from Internal Revenue Allotment/share (IRA) from the national budget and from residence certificate fees it issues.

There are at least fourteen (14) CBOs (also called non-government organizations or NGOs) present in the community that are engaged in various concerns (see Appendix 11). These CBOs are mostly socio-civic organizations that are engaged in different concerns like livelihood, sports, fight against drug abuse, among others. Some of them are affiliated to either citywide or nationwide organizations. Of the abovementioned fourteen (14) CBOs, only the Senior Citizens Group, Pitogo Sub-Parish, Pitogo Vendors Association, and Siklab Movement are engaged in waste management -- related activities.

Community-based organizations, according to some women residents who were first settlers in the place, played a vital role in the improvement of the living conditions in Pitogo. Pitogo Women's Association, the first group or CBO organized in the community, was born out of the need to establish a community chapel and a health center. When the place was not yet recognized as a barangay, other CBOs were formed specifically to gain legal identity and/or recognition so that political groups running for position in the Municipality of Makati provide them the necessary social services that the community needed e.g. infrastructure services like roads and health services. Another group in particular, the Pinagsama, whose membership include those in other barangays, was organized to attend to their land tenure which eventually paved the way for the granting of land titles to individual owners. The leaders of these CBOs that were active in community undertakings in the past remained to be active in the present organizations of Pitogo. Some of them even hold positions as leaders of their respective CBOs.

3.2 Waste situation in Barangay Pitogo

3.2.1 Waste Situation Before and After the Cleanliness Campaigns: Attitudes and Practices

The implementation of waste management activities drastically changed the waste situation in Pitogo. Before the implementation of a national government-initiated project on 'Pook Kalinisan' (environmental cleanliness) in 1989, dumping of waste along the streets and burning were the

prevailing practices of the Pitogo residents. Garbage collection was very irregular. In some areas particularly Kalayaan Road, wastes were scattered and left unattended. Vendors, passers-by, and individual residents, specially those living near the Kalayaan Road, dumped wastes along the 'island' of Kalayaan. Swarm of flies on piles of rotting garbage was a common sight. This made the area very dirty. Before 1986, there used to be a military trailer van parked along Kalayaan where people dumped their garbage. This trailer van, however, was removed from the community only when the residents, mostly leaders, complained of the matter at the Administrative Office of Fort Bonifacio. Otherwise, it was left unattended regardless of volume of waste dumped into it.

Vacant lots were also favorable places to indiscriminately dispose of domestic wastes. As population grew and as the place became congested, however, vacant lots became scarcer. Some residents employed other method of disposing their garbage through self-help and cooperative work (bayanihan). They dug open pits which when filled with garbage were then covered with soil.

While some areas are dirty, there were areas where cleanliness and system of disposal were observed. Some residents tried to maintain cleanliness through individual initiatives. For example, they stored their garbage in sacks and placed them inside the yard until government collection truck passed by. Retired veterans cleaned the roads fronting their yards, a habit that they said was acquired through military training and discipline since the military places high regard on cleanliness and sanitation.

There were local initiatives to improve the roads in Pitogo which eventually led to the maintenance of the cleanliness. The cementing of narrow streets were initiated by the Barangay Council way back in 1982 through the 'bayanihan' (cooperation). The Barangay Council solicited for funds for construction materials while the Ladies Club provided the snacks for volunteer construction workers who were actually the household heads and their sons. There was also an instance when one resident of Sulu Street initiated the cementing of road in front of his house to provide a safe playing ground for his children. The neighbors who noticed of such initiative were encouraged to do the same. They contributed money to buy materials as well as labor in cementing the rest of the narrow Sulu road (see Slides No. P15).

In 1989, cleanliness campaigns were initiated under a government-initiated project called 'Pook Kalinisan' Project (see 3.3.1.A for further discussion). These campaigns encouraged a wider participation of residents in waste management activities. Placing garbage inside the sacks or plastic bags and storing it inside the yard to await collection by city truck became a common practice. Elected officers for Pook Kalinisan Project demanded for a regular collection of garbage such that collection service by the Metro Manila Authority (MMA) became regular. Collection stations were also defined (see Map 4).

At present, there are no garbage dumped along the sidewalks (see Slides No. P16). Narrow streets of the community specifically along the interiors of the barangay are now regularly cleaned by three (3) street sweepers employed by Pitogo Barangay Council. This is apart from the two (2) street cleaners hired by city's Department of Environmental Services (DES). The city used to deploy six (6) street cleaners for Pitogo alone but the Barangay Council requested to reduce them to two (2). Kalayaan Road particularly the "talipapa" is no longer dirty. Market vendors now maintain the cleanliness of their stalls and area fronting their stalls (see Slides No. P17). The two (2) street cleaners employed

by the city sweep the Kalayaan and part of Palawan road daily at 7:00 - 9:00 A.M. and 2:00 - 3:00 P.M. Among households, delivery of accumulated wastes to collection stations is often done by mothers since they are usually the ones who wake up early and who are available to do the task (see Slides No. P18).

Pitogo generates about three (3) to four (4) trucks of garbage a day consisting of papers, plastics, kitchen wastes, among others. Waste segregation is only limited to salable recyclables which are sold to a junkshop within the barangay (see Slides No. P19). Other wastes like left-over food and fish gills are usually fed to domestic animals like dogs and cats or are thrown into canals. There are also a few residents, mostly women that attended seminars on solid waste management sponsored by Earth Saver (an NGO), who practice household level composting despite congestion in the area. They use pots or large and thick plastic bags as compost bags and/or pots.

3.2.2 Existence of Junkshop

There is one existing junkshop in the community owned and operated by Mr. Ely Tulallan (see Slides No. P20). Mr. Tulallan is a native of Bicol region, a place located at the southeastern part of Luzon. He migrated in Metro Manila with the hope of finding a better economic life. He settled in Pitogo in 1974 and as advised by his fellow Bicolanos who were engaged in the same business activity, he started the junkshop in 1976. At first, using a native basket for collection, he went from one house to another buying recyclable materials, particularly used bottles. His business progressed later such that he was able to own a place in Cebu Street and to buy additional recyclable materials from his costumers like scrap metals, boxes, and papers (see Slides No. P21). At present, he employs eight (8) individuals whom he provides with pushcarts and a daily capital of P 300.

Mr. Tullallan's business received moral support from the Barangay Council. The Barangay Council encouraged residents to patronize Mr. Tullallan's junkshop and prohibited other junkshop dealers to operate wihtin Pitogo. It recognized the importance of the junkshop to their campaign on zero waste management aimed at zero waste generation by waste reduction, reuse, and recycling. It also financed the painting of Mr. Tulallan's pushcarts as part of the barangay's campaign for "Pera sa Basura" (Cash in Trash). "PERA" means money in Filipino vernacular and stands for Pitogo Environment Recycling Area.

3.3 Community management approaches to SWM

Barangay Pitogo achieved success in waste management. The place is now recognized for its clean surrounding. In 1989, the place was recognized as a Pook Kalinisan Project. It was awarded the Most Outstanding Barangay of the city government of Makati in 1991. In 1994, it was recognized as greenest barangay in Makati and in July 1995, it received a Plaque of Recognition for Environment, Ecology and Energy by the Premier Bank. Recently, Pitogo received the third prize in the Clean and Green Contest initiated by the Department of Interior and Local Government (DILG) of Makati.

3.3.1 Social Waste Management Activities

The reputation of Pitogo as a clean barangay was caused by the implementation of three significant community waste management activities and/or projects. These include

A. Pook Kalinisan,

- B. Clean and Green, and
- C. Oplan Tapat-Tapat.

A. The Pook Kalinisan Project Taking the Lead

Pook Kalinisan (environmental cleanliness) was a project conceived by the Presidential Management Staff under the Office of the President of the Republic of the Philippines. This was launched in Metro Manila as a joint project of Metro Manila Authority (MMA now Metro Manila Development Authority or MMDA) and the Presidential Task Force on Solid Waste Management. The project aimed to engage the local community to actively participate in identifying and in finding solutions to their waste management problem. It called for a united effort from community members, non-government organizations, and government organizations.

The Project was introduced to the community in March 1989 through a meeting facilitated by MMA personnel. The meeting was conducted in cooperation with the Barangay Council who informed the residents about the meeting through the zone leaders and their assistants. Those already active in community affairs who were often members in various civic organizations and are considered informal leaders due to their reputed leadership in the past responded to the call. A set of officers was right away elected from among those who were present in the meeting to specifically implement the project. The set of Pook Kalinisan Officers were autonomous from the Barangay Council and could freely conduct campaigns on cleanliness within the community.

The elected officers formulated the plans on how to implement the project to the whole community. The plan was to handle a contest for the cleanest zone if appropriate funding is made available. The implementing agencies (i.e., MMA and the Presidential Task Force on SWM) then, identified the Rotary Club of Makati Metro, a newly formed group then, to finance the project. With the assurance of a regular garbage collection from MMA and financial support from the rotary Club, the officers effected the following community management approaches:

a. Appointment of zone and street coordinators

Mrs. Guardino, the elected president for Pook Kalinisan, together with the rest of the officers, appointed zone coordinators (only one of the seven coordinators was male) who in turn appointed street coordinators according to their own preference. These coordinators were apart from the zone leaders and zone assistants appointed by the Barangay Officials, though some women leaders assumed dual role. The responsibility of the coordinators was to inform their members about the project and its activities. These zone coordinators directly oversee, monitor, and support the activities of the street coordinators.

A weekly inspection and monitoring, i.e., every Sunday, was done by Pook Kalinisan officers, zone and street coordinators, and the active officers of the Club to monitor the cleanliness of each zone. All streets and drainage were also checked. Bags of garbage indiscriminately thrown along the roads were also investigated. Officers of Pook Kalinisan open these bags to look for evidence that will identify its owners. Those proven to have thrown these bags were asked to report to the Barangay Hall for proper sanctions. Such move was reinforced by a barangay ordinance on proper solid waste management set by the council (see Appendix 12A and 12B).

Houseowners, including renters, were advised to place trash cans in front of their houses so that littering of garbage is avoided. Likewise, they were strictly instructed to store their trash inside their yard until the collection truck arrives. In places where too many wastes litter and residents remain unmoved, the project officers and leaders were the ones who do the actual cleaning (and de-clogging) with the permission of the house owners. With this, some houseowners/renters were moved out of shame such that they started cleaning their own yards.

The talipapa was also strictly monitored compelling vendors to maintain cleanliness in their respective places (see Slides No. P22). Pook Kalinisan Officers coordinated with the City Market Administrator and Pitogo Vendors Association in order to strictly monitor the cleanliness of the place (see slides No. P23). With Pook Kalinisan President as the adviser and Mrs. Paraan, as both the president of the Pitogo Vendors Association and the zone leader for the whole Pitogo Public Market, monitoring was easy. The market administrator also conducted visits and strongly supported the campaign of Pook Kalinisan.

Vendors were required to have a garbage can where trash generated for the day could be stored. Placing big trash cans, however, were prohibited because vendors and nearby residents along Kalayaan Avenue no longer wait for the collection truck schedule, but instead, dump their garbage in it. The stall owners fronting these trash cans complain of the discomforts brought by the stored garbage. Also, Pook Kalinisan Officers and coordinators were recognized by the city market administrator to recommend closure of the stalls of vendors who do not cooperate with waste management efforts. If garbage is left unattended, stall owners were strongly reprimanded. Officers threw the trash in front of the stall owner for him/her to realize his/her negligence. The maintenance of cleanliness in the talipapa/Kalayaan Public Market earned the "Gawad Piling Palengke" (A Model Clean and Green Public Market) recognition given by Philippine Organizing Community of Clean Up the World in August 1994.

b. Promotion of the project

Apart from verbal and personal means of promoting the project, Pook Kalinisan Officers and leaders also used posters and/or printed propaganda that they made together with their children (see Appendix 13A-B and 14A-B). Mrs. Guardino, the Pook Kalinisan President, who was once an experienced leader of Pitogo Rural Reconstruction Women's Association used her own influence to engage residents to actively participate in the Pook Kalinisan Project. She encouraged and motivated her friends to encourage other residents, particularly women, to join the project.

The Rotary Club of Makati Metro fully supported the activities of the project, particularly the cleanliness contest. The Club provided the plaque and cash award to the winners of the said contest during the awarding ceremony held at Hotel Intercontinental, a five-star hotel in Manila and location of Rotary Club of Makati Metro head office. Apart from the prize for the cleanest zone held for seven (7) consecutive months, the Club also sponsored health related projects like free medical check-ups and dental services. According to Pook Kalinisan President, cash prizes amounting to P 1,000 were later used by the community for the improvement of their zone eg. in drainage construction.

c. Follow-up activity

Pook Kalinisan Officers initiated a community festivity with waste management as the theme. This activity was a sort of a replication of the yearly barangay "fiesta" (festivity dedicated to a patron saint). They adorned the streets with fiesta paraphernalia and held a community program at the center of Kalayaan road. Extemporaneous speech contest and poster making contest on waste management were done, the winners of which were given scholarship grant as prize by the Rotary Club of Makati Metro.

With the efforts of Pook Kalinisan Leaders and the full support of Pitogo Barangay Council, the Pitogo (Kalayaan) market administrator, and Rotary Club of Makati Metro, implementation of waste management activities in Pitogo gained national and international recognition. Pook Kalinisan Project of Pitogo was featured in regular television program in the Philippines called "Magtanong sa Pangulo" (Ask the President) in August 27, 1989 and in the international television programs of Mr. Ian Kiernan of ABC Australia and Ms. Barbara Fyles of CNN.

Pook Kalinisan President (i.e., Mrs. Guardino) likewise, was recognized by various groups. She received plaques of appreciation from the Rotary Club of Makati Metro in 1989 and Pitogo Barangay Council in May 1990 for her valuable leadership. In March 1992, she was recognized by the Mother Earth Savers, an organization that focuses on development and rehabilitation of the environment through media and science. The Women's Environmental Development Organization also recognized and identified Mrs. Guardino to attend in the Women's Summit in Brazil and the International Women's Conference in China in 1995.

To date, the role of Pook Kalinisan Project in implementing waste management measures had been assumed by the Barangay Council through the Head of the Committee on Health and Sanitation. This could be attributed to the inactivity of Pook Kalinisan Officers and members which in turn was due to several factors. First was absence of Mrs. Guardino in the community when she attended the Women's Summit in Brazil and the conference in China. No activity was conducted during her absence since the officers and members of Pook Kalinisan relied on the idea that Pitogo residents had already imbued the habit of proper waste disposal and upkeep of their surroundings.

Second, there had been changes in the administration of Rotary Club of Makati Metro which also affected the Pook Kalinisan Project in Pitogo. The new set of officers of the Club formed new group within Pitogo during Mrs. Guardino's absence. The group called the Rotary Village Core, serve as another recipient of the Clubs support since there were activities initiated by Pook Kalinisan officers for the club to support with. The group also formed to handle waste management concerns in the barangay. The financial support which was solely provided to Pook Kalinisan before was diverted to them. There was no significant contribution however, to community waste management, was allegedly heard from Rotary Village Core. According to former zone coordinators of Pook Kalinisan, this was primarily due to the lack of Village Core members' participation since they were not engaged during meetings. Officers of the Village Core were mostly Pitogo residents who were not active participants in the Pook Kalinisan Project.

Third reason for the inactivity of Pook Kalinisan was the change in national government administration from former Philippine President Corazon C. Aquino to President Fidel V. Ramos as the President of the Republic. A renaming of cleanliness/waste management projects, though of

conceptually the same nature, took place. The Clean and Green Project came to be known during Mr. Ramos administration.

B. Clean and Green Contest

This is a nationwide project aimed to promote care for the environment (see Slides No. P24). For Pitogo, this is an appeal and a conscious effort by Pitogo Barangay Council to encourage the house owners/renters to work harder for environmental cleanliness so that the community will maintain the recognition they gained through Pook Kalinisan, at the same time, to compete with other barangays in Makati. As Pook Kalinisan initiated activities waned, clean and green activities were on the fore. Pitogo barangay council conducted activities which help them achieve the Greenest Barangay of Makati in 1994. These activities include:

a. Cleanliness campaigns and information drive

Barangay Councilor Doromal who is the Head of Pitogo Barangay Council-committee on Health and Sanitation and other Barangay Officials went around the community and promoted the clean and green project using a megaphone. They also conducted street dialogues or assemblies to explain the project and the participation of Barangay Pitogo in the contest for the cleanest barangay. The Barangay Officials or Council members, together with the zone leaders went from one zone to another. Meetings were first conducted in three zones followed by the the remaining four zones. This way information about clean and green contest was properly disseminated.

Pitogo Barangay Officials also checked areas that are dirty, particularly drainage and/or canals. As what Pook Kalinisan leaders had initiated, Barangay Officials themselves clean these areas to serve as models for the residents.

b. Greening activities

At present, Pitogo Barangay Council maintains a nursery and compost 'pots' beside their barangay hall (see Slides No. P25). Compost 'pots' which are actually drainage culverts filled with soil and wastes, numbering around twenty (20) are distributed to different parts in Pitogo to encourage composting among homeowners/renters (see Slides No. P26). Compost pots are maintained by three (3) street sweepers and one janitor employed by the barangay. The compost produced is used in planting ornamental plants or given to those residents who asked for it (see Slides No. P27). The Barangay Council contracted out the production of pot that they use in the distribution of plants to the community to be displayed along the side of the road (see Slides No. P28). A new tank for watering the plants in times of water shortage is bought out of the price won in the Clean and Green contest sponsored by the DILG (see Slides No P29).

C. Oplan Tapat-Tapat, Tapat Ko, Linis Ko!

(Operation Front Yard, My Own Yard is my Responsibility to Keep)

Oplan Tapat-Tapat, Tapat Ko, Linis Ko! is a citywide campaign that seeks to promote and strengthen individual and/or household initiatives for cleanliness. This is based on the Municipal Ordinance # 93-172 authored by Makati Councilor Raul Javier (see Appendix 15). The project is introduced to the different barangays through the city's Association of Barangay Captains (ABC). Another way of disseminating the project is through a seminar on SWM called 3B=3K or "Basura ay Bawasan, Balik-gamitin, Baguhin ang anyo para sa Kalusugang hatid ay Kalusugan at Kayamanan" (Waste Should Be Reduced, Reused, and Repackaged for the Benefit Gained on

Cleanliness is Health and Wealth). They also distributed sticker, poster, and comics on 3B = 3K. The city through the DES employs personnel to specifically implement the project. No seminar has been conducted in Pitogo, however, but the Barangay Council has promulgated this project in Pitogo by producing campaign stickers. The stickers are distributed to house owners by the zone leaders and assistant zone leaders. Stickers are placed at the gate, fence's post or mail box where house owners can easily read it (see Slides Nos. P31-P32). These stickers are to remind the residents of their responsibility to maintain the cleanliness of their premises (see Appendix 16). Trash cans are also distributed to store owners to be placed in front of their stalls (see Slides No. P33). This is to encourage passers-by and costumers from littering their garbage. Oplan Tapat-Tapat is an on going activity in Pitogo.

3.3.2 Sectoral Participation

3.3.2.1 *The Local Government Unit (LGU)*

The Pitogo Barangay Council was very supportive in the implementation of Pook Kalinisan Project and at present, is very active in implementing SWM measures (see Slides No. P34 for picture of Barangay Hall). It promulgated and enforced a barangay ordinance that provided legal support to the waste management activities of Pook Kalinisan.

Mr. Hermie Llagas, Sr., a Barangay Councilor, formulated a barangay ordinance on proper waste disposal based on an earlier presidential decree and city ordinance (Presidential Decree 825 and Makati City # 03). He drafted Barangay Ordinance 05-89 which was approved and implemented by the Barangay Council of Pitogo in 1989. Barangay Ordinance 05-89 prohibits indiscriminate disposal of domestic waste and provides for a minimum fine of P 100.00 for first offense, P 200 for second, and barangay court litigation for the third offense (refer back to Appendix 21 and 22). Copies of the ordinance were distributed for proper dissemination through the zone leaders and their assistants and were also posted in places where they could easily be read by the residents.

The Barangay Captain (i.e., Mr. Laurilla), Health and Sanitation committee head of Barangay Council (i.e., Mr. Doromal), and the other leaders in the community promoted cleanliness through modeling and by regularly checking the roads and drainage early morning. At times, the captain personally cleaned clogged drainage of uncooperative residents. For Mr. Doromal, it became habitual to accompany the garbage collection truck in the morning to personally lead the driver on his route and to inform the residents to take out their garbage for disposal (see Slides No. P35). This emphasized the seriousness of Pitogo barangay council in implementing WM measures.

The Health And Sanitation Committee Head of the Barangay Council was specifically attentive and responsive to the complaints and needs of Pitogo residents, making them feel their importance and role in the process. Whenever there is an opportunity, waste management related problems are tackled in community meetings. For instance, there was a common complaint regarding dogs which dispose of its wastes along the road. Pitogo Barangay Council coordinated this matter to the city government to discipline dog owners. Dogs are caught by the city's "Dog Pound" and are bailed for of P 50.00 --- P 150.00.

As part of advocacy work, the Barangay Council continually emphasized the importance of individual participation and the natural effect of indiscriminate disposal of garbage. Houseowners'/renters' initiative to facilitate garbage collection, i.e., placement of no parking sign for identified route of the garbage truck was also properly acknowledged during meetings.

Pitogo has established a strong relationship with the city government such that its appeals are properly addressed (see Slides No. P36 for the ongoing activity of the City of Makati in Pitogo). Mr. Doromal attributed this to his friendly approach when requesting the city government to provide for their needs. Instead of antagonizing the personnel assigned for their inefficiencies, he offered his service to them e.g. coordinate with other agency/city offices to hasten the approval of their request.

On the other hand, those who are fully aware of the political set-up of the present Barangay Council attribute this strong relationship with the city government to the fact that majority of Barangay Council members and leading Makati City Officials belong to the same political party/line . This is why their requests are easily granted. The community affairs officer from association of Barangay Captains or ABC, on the other hand, attribute the quick response of the city to the deligence of the Barangay Officials assigned in requesting and following-up the result of their appeals. The same is true with the rest of the barangays in Makati. Notably, Mr. Laurilla's (the Barangay Chairman) industriousness is recognized in the office of ABC.

3.3.2.2 Zone Leaders

As identified by the barangay council, seven (7) zone leaders and eight (8) assistant zone leaders are appointed based on their cooperativeness and enthusiastic involvement in community projects. Their role is to monitor the zone's cleanliness and ongoing infrastructure projects within the barangay. They can recommend for house construction stoppage if the house owners do not comply with the requirements set by the barangay. If house and/or building construction affect the cleanliness of the area, they reprimand house owners and give due punishments (e.g., confiscation of permit to construct). Zone leaders and their assistants usually monitor and check their assigned areas in the morning. Aside from this, one (1) zone leader and two (2) of the assistant zone leaders were assigned to man the Fort Bonifacio Planning and Development Office (FBPDO) Office at the Barangay Social Hall. They give assistance to houseowners/renters who are applying for water supply connection from National Waterworks and Sewerage Authority (NAWASA) and to those requesting for electrical power connection from (MERALCO),as well as assistance to those needing permit for house construction. The FBPDO also employs a messenger who delivers the documents to the Engineering office for proper endorsement to hasten the release of the permit to construct. The zone leaders with their assistants also distribute letter of invitation when the Barangay Council calls for a general assembly or announcements to all Pitogo residents concerning community affairs like the copy of barangay ordinance, and sticker of Oplan Tapat-Tapat.

To hasten the communication process, each zone leader identified 'communication' leaders for every group of eight (8) to ten (10) households who work with the assistant zone leader specially when campaigning on new activities of the barangay. These 'communication' leaders work on voluntary basis.

Zone leaders used to be subsidized by the barangay alone. They used to receive a monthly allowance of P 600.00 per person from the Barangay Council. At present, they report both to the Barangay Council and the Fort Bonifacio Planning and Development Office (FBPDO). They now receive P4,000.00 from FBPDO (depending on the availability of fund from the office of Makati Councilor Mercado) and P600.00 from Pitogo LGU.

3.3.2.3 Makati Public Safety Assistance Group (MAPSA)/Barangay Tanod

MAPSA members are commonly referred to as barangay tanod because of their uniform (vest with patch named barangay tanod on the left side of the chest). They are hired and trained by the Department of Public Safety of Makati City for the specific role of taking care of peace and order situation in the barangay and in monitoring the waste conditions in the area (see Slides No P37 for MAPSA headquarters along Kalayaan Ave.). They report field findings for action both to the barangay officials and MAPSA office in Makati City Hall. Drivers of garbage collection trucks coordinate with them before collection for a pre set area schedule prepared by Mr. Doromal.

To date, there are twenty-four (24) MAPSA employees in barangay Pitogo with three (3) shifting scheduled from 6:00 A.M. to 2:00 P.M.; 2:00 P.M. to 10:00 P.M. and 10:00 P.M. to 6:00 A.M. Each MAPSA employee receives a salary from MAPSA amounting to P 6,000 per month.

3.3.2.4 Pitogo Elementary School

The Pitogo Elementary School participated in community efforts towards waste management by conducting specific cleanliness activities, in promoting waste segregation and in incorporating in its school curriculum, waste management concepts (see Slides No. P38).

The students on several occasion out of their classrooms and sweep identified dirty roads on a Saturday in support to the cleanliness drive promulgated by the city government of Makati. This was a citywide activity among public schools in Makati that was done as part of the cleanliness drive, to support and please the City Mayor (Jejomar Binay) on his birthday in 1995.

The school, through its administration's initiative also requires the students to bring plastic bags where they could throw their waste for the day. Some forms of rewards and punishments are also enforced by the school administrator and/or teacher like giving candy to the row of students who maintained the cleanest surrounding, praising and acknowledgment, and scolding to those who do not observe cleanliness.

Last year, the school promoted waste segregation by collecting saleable waste materials from students and selling them to a junkshop. The fund generated from the activity was used to augment the school's fund generated from their canteen's profit for their feeding program to malnourished students. Some of the money was also used to buy plant seedlings. The activity was considered successful that the present administration is planning to continue such effort by conducting the same activity this year.

Last, the Department of Education Culture and Sports incorporated waste management in the subjects of the school curriculum. Pitogo strictly implement this in the following subjects:

Edukasyong Pangkabuhayan at Pangkalusugan (EPAPA / Health and Livelihood Education). Topic on waste management is tackled in relation with physical well being of individuals and healthy environment. This subject also emphasizes that proper handling of wastes is inseparable to achieving good hygiene.

Heograpiya, Kasaysayan at Sibika (HEKASI/Geography, History and Civics). To emphasize other uses of waste materials, reuse of once classified garbage is done particularly on art projects.

Health and Science. Waste management is tackled in relation to:

- (1) Environmental degradation, i.e. depletion of ozone layer due to burning of non-biodegradable wastes;
- (2) The need to be resourceful since sources of most products that we are currently using came from trees and plants. These resources are slowly being depleted; and
- (3) How students could help in the growing ecological problem (i.e., segregation of waste into biodegradable and non-biodegradable materials, composting of wet garbage. Students also make use of waste materials during conduct of experiments.

Good Manners and Right Conduct. This is the only subject where a specific session is allotted for waste management. The subject runs for 20 minutes per day.

3.3.2.5 Community Based Organizations (CBOs)

Of the fourteen (14) CBOs mentioned earlier, only Pitogo Sub-Parish, the Senior Citizens Group, the Siklab Movement, and the Pitogo Vendors Association had concrete activities regarding waste management.

The Pitogo Sub-Parish. The Pitogo Sub-Parish is a group of women and men active in church activities. Various activities are being handled by the group for Catholic believers. A Holy Mass is celebrated once every Sunday at the chapel. The group conducts rosary crusade from each house willing enough to house the statue of Virgin Mary for the week. There are also church activities like Parish Renewal Experience (PREX) and Basic Eclessial Community (BEC) at Guadalupe parish that handles spiritual retreats/seminars relating to the Catholic religion. Members of Pitogo Sub-Parish are active in this church activities. The group has also been active in promulgating waste management activities in their own way. The priest, for instance, included waste management concerns during the sermon when campaign on cleanliness was at its peak.

At present the group is conducting a fund raising campaign for their chapel's renovation. Instead of collecting money, they collect saleable waste materials like newspapers, bottles, metals and other items with the end view of helping household owners to get rid of some of their waste. These waste materials are sold to junkshop elsewhere in Guadalupe because of relatively higher prices offered by Junkshop operators.

The Senior Citizens. The Senior Citizens is part of the nationwide organization of Senior Citizens aging sixty(60) years old and above. An identification card is given to the members to be able to avail discounts on basic services like transportation, food items, medicines, etc. In Pitogo, the Head of Committee on Health and Sanitation (Mr. Rodolfo Doromal) also heads this organization. Recently, the group, received a directive from the municipality of Makati to participate in the beautification and sanitation of the barangay. Their activities is yet to be formulated.

The Siklab Movement. The Siklab Movement, a youth organization in which the Sangguniang Kabataan (Youth Council) are members, is concerned with sports activities within the community. With the assistance of Barangay Council Committee Head on Health and Sanitation , the group once conducted a community clean-up activity as part of an anti-drug campaign. With the change in the leadership brought by the recent election of Sangguniang Kabataan, this effort, however, was not sustained.

Pitogo Vendors Association. Pitogo Vendors Association is an organization of all vendors in Pitogo Market (in Kalayaan). This unifies Pitogo stall owners to stabilize prices of the products sold at the community market. Through this association members contribute the amount of P 20.00 at the minimum to its deceased members (referred as "abuluy"). The group is also active in waste management activities. Their role was particularly significant during the peak of Pook Kalinisan Project. The association worked on the cleanliness and proper waste disposal in the talipapa along Kalayaan Ave. (Refer to discussion in 3.3.1 on Pook Kalinisan) Their involvement, however, waned when the city Mayor directly informed them that the city has no plan for their relocation when the government project on road widening is effected. (Kalayaan Avenue is part of Radial Road No. 4 (R4) of the Philippines 2000.) This was clearly stated to them when the Officers and member of the association coordinated with the City Mayor. The Brangay Council, nonetheless, proposes a place where the market could be transferred.

CHAPTER 4 ANALYSIS AND SUMMARY OF FINDINGS

4.1 Background analysis

Both BSN and Pitogo are situated within a highly urbanized setting, the former in Cebu City which is the second premier urban center in the Philippines and the latter in Metropolitan Manila, the premier one. This consideration is important because highly urbanized areas, specially in the southern countries, are where one will find congestion and extreme environmental degradation. Waterways are black and biologically dead; streets, vacant lots and other public places are littered with garbage and the air is very polluted. It is also in highly urbanized areas where slums and squatter communities abound normally located in marginalized and depressed areas, and danger zones, i.e., river banks, under bridges and railtracks. Therefore, low income communities are physically disadvantaged. And as observed by many social scientists, they have less access to necessary resources and are the least reached by modern infrastructures and public services. Moreover, the low income communities are subjected to negative public bias, accused of being the cause of pollution, urban decay, criminality and chaos.

Given such social, economic, political and physical barriers, the challenge to the low income sector is tremendous. It can be said that these two communities took the challenge and rose to the occasion to prove to themselves and others that they have the capacity and determination to improve their lot and environment. It is also observable that initiatives can come from the community members themselves like the urban poor of BSN (bottom-up) or it can come from the local government as in the case of Pitogo (top-down).

4.2 Community management approaches

Indeed, a lot of this “success” in SWM has to do with committed leadership and the support of the community members and other sectors. However, this is no simple matter. Many, if not most, are not as motivated as the leaders. Knowledge, attitude, behavior of the community members have to change before desired results are realized. From the two case studies, it is shown that some forms of social engineering, referred here as community management approaches or CMAs, were utilized.

4.2.1 Formal CMAs

CMAs take many forms and are implemented at different levels of the social structure. The CMAs can be formal. They are manifested in the promulgation of city or barangay ordinances and LGU sponsored activities. Ordinances, of course, refer to the C.O. 1361 in BSN and the Barangay Ordinance 05-89 in Pitogo. These ordinances form the legal basis from which the local authorities exact compliance from the community members; else, the violators are penalized through fines or detention or both. These ordinances can originate from a higher local government unit (city level) and implemented at the lower (barangay) level as in the case of BSN. It can also be inspired by a program conceived at the national level like the Pook Kalinisan. Implemented at the local barangay level in Pitogo, Pook Kalinisan was actually conceptualized by the Presidential Management Staff under the Office of the President.

In conjunction with the ordinances, the barangay leaders and officials conduct regular monitoring activities to ascertain compliance among the members of the community. On the formal level, the barangay tanods and the zone leaders, as employed by the local government, make the rounds of inspecting the streets and surroundings of the community. They have the legal basis and are on the front line of implementation of the SWM rules and regulations. As a feedback mechanism, they also receive and entertain complaints. This is one good CMA wherein residents feel they are heard and their complaints acted upon as quickly as possible.

Another distinct kind of formal CMA takes the form of awards. External institutions, government and private alike, give formal recognitions. In the case of Pitogo, it was awarded as the greenest barangay in Makati in 1994. In 1995, it received a Plaque of Recognition from a banking institution for its environmental projects. It was also awarded third prize by the City government in its Clean and Green contest for which they received P50,000.00 as monetary reward. External recognition enhances the sense of community among the members and boosts community pride. Local leaders are given plaques of appreciation for their responsive, proactive and innovative approaches to SWM problems. These recognitions tend to sustain local initiatives in SWM.

As shown above, these formal CMAs are very specific and focused in their goals and activities. It is important to note that rewards and recognitions were also direct and appropriate be it for the community as a whole or for the individual.

BSN has not received any award yet mainly because their SWM program is still new and not known to many. It can be said that recognitions come with consistency and maturity.

The school and the church are other venues where formal CMAs are manifested. Educational and religious institutions have a lot of influence over the mental makeup of the youth in terms of values and knowledge learned. In Pitogo, the school incorporates SWM matters in four courses offered. The school also conducts specific activities as part of cleanliness campaign promulgated by the city government of Makati. The parish church promotes collection and sale of recyclable waste to raise funds for the renovation of their chapel. The lay leaders, as concrete form of community participation, spearheaded the project.

4.2.2 Informal CMA

Informal CMAs are the type of social engineering approaches that require no legal or formal institutional basis. Very often, informal leaders are ones prone to apply such CMAs. Like the formal CMAs, they are also designed to increase the level of compliance and/or participation among the community members. Moreover, even the formal institutions and their representatives use these initiatives in the course of their duties to suit immediate situations or conditions. However, they follow no strict rules of implementation. Many times, they are short term reactions to address temporary needs. In other cases, informal CMAs applied by leaders border on the extreme just to deliver a message.

The CBO-sponsored activities like the symposium, parade and slogan contest in the BSN are the more visible examples of informal CMAs. Initiated by the BUPCC and supported by the LGU, these approaches are designed to increase awareness about the SWM project and promote participation

from the broad membership of the community. More awareness and knowledge are a prelude to change in behavior.

Social pressure is also a form of informal CMAs. Shown in these case studies, social pressure can range from the soft or subtle kind to the hard or offensive type. First time violators are simply informed of the proper ways to handle household waste and are reminded not to commit the same mistakes again. In Pitogo, leaders even cleaned the front yard of uncooperative households to prick their conscience. Gentle persuasion maybe the proper term. On the other hand, local leaders, both formal and informal, sometimes resort to threats. In BSN, the Barangay Secretary threatened to shoot the would-be violator. The Barangay Chairperson also threatened to burn the house of a delinquent if he does not change ways and follow proper waste handling procedures. (In the case of theft and robbery, he also burned the hands of a violator by pouring boiling water just to emphasize his seriousness.) In Pitogo, local leaders dumped piles of garbage in front of hardheaded market vendors.

In line with BUPCC initiatives, monitoring is also done at the informal level. Watsanen monitoring teams do the rounds of inspecting the streets and alleys. Since they are not deputized to apprehend violators, some uncooperative members ignore them. In such cases, they report violations to the proper authorities.

4.3 Other related issues

4.3.1 Prerequisites to Bottom-up Approach

The SWM efforts in BSN are relatively new compared to Pitogo's. But BSN has a couple of interesting features not found in Pitogo. First, the BSN case is an example of bottom-up approach. The urban poor sector, through the watsanen committee of the BUPCC, was the one which initiated the SWM activities in the area. Initially, the members of the urban poor organized themselves to address their problem of land ownership/tenure because most of them were squatters. But their concerns spread to other issues, like water, sanitation and environment. (It is relevant to note that in other barangays known to the research team, the usual committee is water and sanitation; environment is not included.) Their success in watsanen can be partly attributed to their desire to disprove the notion of their more affluent neighbors that they generate the greater volume of waste that dirty their surroundings. The other interesting feature is their ability as a group to exert political influence in election matters. They were able to strike a covenant with the then Barangay Chairperson candidate Mr. George Rama - a quid pro quo arrangement where they will support Mr. Rama candidacy as long as he will reciprocate the support to BUPCC's projects most specially those of the watsanen committee. These two features illustrate the urban poor's high level of self awareness and organization in BSN. Both features can be said as important prerequisites for bottom level initiated SWM projects or any community projects for that matter.

4.3.2 Motivations and Sustainability

Community participation can be viewed from many angles. One is through the motivation angle. On the level of community leaders, access to political and financial resources constitutes a strong motivation. Both Pitogo and BSN get more than three million pesos in annual revenues. They can

dispense favors by allocating funds to individuals or groups. Barangay tanods and zone leaders, who are mostly political appointees, received salaries and/or honorarium between P4,000 to 7,000. Many of them are undereducated and unemployed. Their service to the community becomes their employment. In contrast, the watsanen leaders in BSN do not receive any compensation from the barangay nor from the BUPCC which hardly has any resources, specially financial. Here lies the problem of sustainability. Watsanen leaders are starting to lessen their time spent on their projects since they too need to raise a living for their families. They foresee the need to develop second liners. There is a big chance in the future that less and less volunteers will come if their efforts are not rewarded. The committee and the whole organization have to innovate and implement measures to sustain their activities. Income generation from the waste recover and recycling is one way to address financial problems. Another is through continuing education and training of members of the different CBOs. For the residents at large, posters and stickers are good information vehicles and reminders. Increasing awareness and understanding of SWM matters are vital steps in community participation, as observed by BUPCC leaders in BSN.

4.3.3 Gender Participation

Gender participation as observed in the two case studies has some bias in favor of women, more specially in the case of BSN. Out of the 35 PO members of BSN, about two-thirds are led by women presidents. Of the thirty (30) PO leaders active in the watsanen monitoring teams, twenty-two (22) are women. Only eight are men. Watsanen committee and the steering committee are both chaired concurrently by Ms. Navarro, an energetic but soft spoken woman community leader.

In Pitogo, five of the seven zone leaders are males. However, most of the eight (six of eight) assistant zone leaders are women. All of them are equally active. Counting all of the fifteen, women (8) outnumber the men (7) by a point in terms of active participation. This lead, however, is not very conclusive.

It seems more is revealed when participation is analyzed in the context of domestic economics. There are more men than women occupying positions that have compensation, like zone leaders. Watsanen team members in BSN and the assistant zone leaders in Pitogo receive no compensation. It is observed, therefore, the women are more predisposed to accept community tasks, like SWM, on a voluntary basis, while their male counterparts are more attracted to positions with compensation. This observation can be attributed to the fact that the menfolks, in general, are the ones expected to be breadwinners for the family.

At the household level, members who are available and have time are the ones expected to clean the house and handle the waste. As such, mostly housewives are the ones seen sweeping and disposing household garbage. Cleaning the house is not perceived as a gender issue but is more influenced, again, by the household economics. Most men go to work or are employed outside the home. In Pitogo, retired military personnel are seen cleaning their surroundings early in the morning. Aside from having the time, it forms part of their daily exercise. Some attribute this behavior to the military training and discipline they were accustomed to during their active years.

REFERENCES

- Anschutz, Justine, 1996. Community-Based Solid Waste Management and Water Supply Projects: Problems and Solutions Compared - A survey of the literature, UWEP Working Document 2.
- Center for Advanced Philippine Studies, 1992a. A Study on Urban Environment-Related Initiatives of NGOs and CBOs, UNDP Asia Pacific 2000, December.
- Center for Advanced Philippine Studies, 1992b. A study on the urban environmental management through community and non-governmental organizations in Metro Manila. Paper submitted to the Metropolitan Environmental Improvement Programme, Washington DC, USA., August.
- Douglass, Mike, The Political Economy of Urban Poverty and Environmental Management in Asia: Access, Empowerment and Community-Based Alternatives, Environment and Urbanization, Vol. 4, No. 2, October 1992.
- Douglass, Mike, Yok-shiu F. Lee and Kem Lowry (special issue guest editors) 1994. "Introduction to the Special Issues on Community-Based Urban Environmental Management in Asia", Asian Journal of Environmental Management, Vol. 2 No. 1, pp. vii-xiv, May.
- Lapid, Danilo G., 1992. A study on the urban environmental management through community and non-governmental organizations. Paper presented at the Metropolitan Environmental Improvement Programme Third Inter-Country Workshop, 9-17 December, Colombo, Sri Lanka.
- Lapid, Danilo G., 1995. Earth Friendly Solid Waste Management in the Philippines. Paper presented at the International Workshop on Urban Agriculture and Sustainable Development, 8-10 December, Calcutta, India.
- Lapid, Danilo G., R. T. Soncuya, and A C. Catangay, 1994, A study on community-based urban environmental management in Metro Manila (I). Paper presented at The Third International Workshop on Community-Based Urban Environmental Management, 3-6 October, Bandung, Indonesia.
- Lee, Yok-shiu F., 1994a. Community-Based Urban Environmental Management: Local NGOs as Catalysts," Regional Development Dialogue, Vol. 15, No. 2.
- Lee, Yok-shiu F., 1994b. Myths of Environmental Management and the Urban Poor," in Fuchs, R. J., J. Chamie, F. Lo, and J. I. Uitto (editors), Mega-city Growth and the Future, pp. 390-411.
- Narayan, Deepa, 1995. Designing Community Based Development, World Bank Environment Development Papers Series no. 007, June.
- Van de Klundert, Arnold and Inge Lardinois, 1995. Community and Private (Formal and Informal) Sector Involvement in Municipal Solid Waste Management in Developing Countries. Background paper for the UMP Workshop in Ittingen, 10-12 April.
- Community Participation in Urban Solid Waste Management
in Metro Manila and Metro Cebu, the Philippines
WASTE, 1998

