

4.2 Sanitation and Sewerage

4.2.1 General

The national strategy for sanitation and sewerage is demand-oriented. It aims to stimulate sustainable improvements in sanitation service coverage, public health and environmental pollution abatement. To achieve this goal, the Government has made investment choices based on demand and the extent to which choices contribute to efficiency and cost-effectiveness.

This sub-sector focuses on household toilets, school toilets and public toilets (public markets, bus/jeepney terminals and parks/playgrounds). The latest data from the PHO on household and public toilets as well as from DECS on school toilets were gathered by municipality. In case of household toilets, data were consolidated by urban and rural area. These facilities were classified into sanitary and unsanitary in terms of structure rather than the surrounding conditions.

The Code on Sanitation of the Philippines provides the minimum standards for services dealing with public health. Specifically, Chapter XVII on Sewage Collection and Disposal, Excreta Disposal and Drainage defines alternatives for on-site sanitation and sewage collection and disposal. At present, the development of sewerage systems, even in the urban centers of the province is not given priority because of the huge investment cost it entails.

In the NEDA Board Resolution No. 12 (series of 1995), definitions of approved types of sanitary toilets were outlined (refer to 4.1.2, Data Report). There were 4 approved types of sanitary toilets including the sanitary pit privy where water is not used but provided with cover to minimize the emission of foul odor and also to keep away flies and rodents. These definitions were applied in this Master Plan.

4.2.2 Types of Facilities and Definition of Service Level Standard

As set forth in the above-mentioned Resolution, the types of household toilet facilities commonly used are categorized into: 1) sanitary toilets - approved types of toilet facilities include water-sealed pour flush or flush-type toilets either with receiving pit or septic tanks/vaults, and ventilated improved pit latrines and sanitary pit privy (dry type) considering its low construction cost especially in rural areas and in areas where water is scarce; and 2) unsanitary facilities - include the types of facilities used for receiving and disposing human waste which do not fall under the category of approved types of toilet facilities such as open

pit privy and over-hung latrines (refer to Figure 4.2.1 DOH standard structure of a household toilet that meets the minimum requirements of a sanitary facility, Supporting Report).

In terms of service level, households are classified into: 1) served households - households with at least one (1) sanitary toilet; 2) underserved households - households with unsanitary toilets; and 3) unserved households - households without toilet. Coverage of adequately served households (with sanitary toilets) was estimated by urban and rural area of municipalities. The remaining households were considered as underserved or unserved. The service coverage was determined using the estimated number of households in 1997.

Service level standard for both elementary and secondary school toilets is translated in terms of: 1) served students - students who are adequately covered by the DECS standard ratio of one (1) unit per 40 students with access to sanitary toilets (number of sanitary toilet units multiplied by 40); and (2) underserved or unserved students - those with unsanitary and without toilet facilities, and students unserved (based on the standard ratio) even though they have access to sanitary toilets. Service coverage of adequately served students was estimated both for public and private schools by municipality. Figure 4.2.2, Supporting Report shows a standard structure of a school toilet facility adopted by the DOH through the JICA-DPWH and DOH Rural Environmental Sanitation Project.

For public toilets, the service level is classified into: 1) served - utilities that have at least one (1) sanitary toilet, and 2) underserved or unserved - utilities that have unsanitary or without toilet facilities. Service coverage of public utilities was estimated as a percentage of sanitary facilities to the total number of utilities.

4.2.3 Sanitation Facilities and Service Coverage

(1) Household Toilets

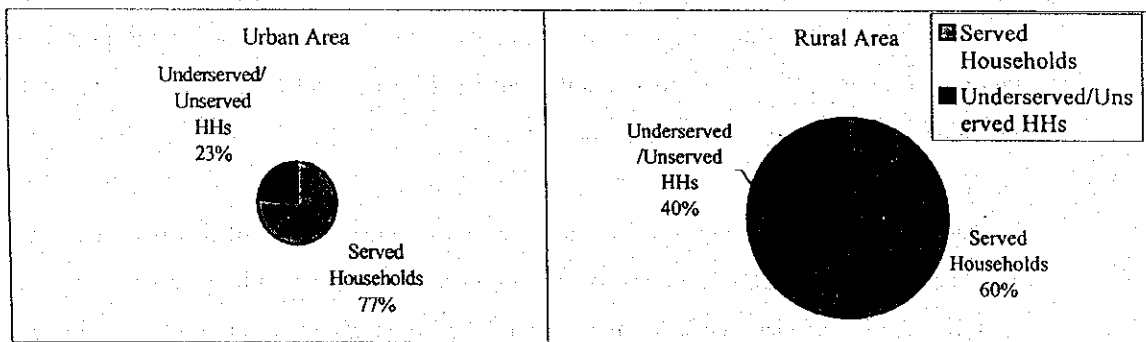
The service coverage of sanitary toilets in the province is 66% of the total number of households. The rest is underserved or unserved. Of this, a high 62% is without toilet facilities (refer to Table 4.2.1, Supporting Report and 4.2.3 Sanitation Facilities and Service Coverage, Data Report).

Municipalities/city that have higher or equal service coverage from the provincial average of 66% are Gingoong City (87%), Sugbongcogon (86%), Laguindingan (81%), Manticao, Naawan, Tagoloan (78%), Binuangan (75%), Balingoan (72%), Opol (71%), Libertad (70%), Jasaan (68%) and Villanueva (66%). On the other hand, the first 5 mu-

municipalities that registered the lowest service coverage are Magsaysay (46%), El Salvador and Alibijid (47%), Kinoguitan (48%) and Talisayan (52%). It was observed that in municipalities that have high water supply service coverage (Sugbongcogon Laguindingan), high sanitation coverage occurs and correspondingly, in low water supply service coverage (Magsaysay, Balingasag), low sanitation coverage also occurs. This can be attributed to the fact that the development of water supply almost always follows the upgrading of the household sanitation facilities because of access to water.

In urban areas, approximately 77% of the total households are served. A very much lower served households of 60% exist in rural area. Table 4.2.1 shows the municipal breakdown in the number of urban and rural household toilets by category, and service coverage. Figure 4.2.1 reflects the provincial service coverage of household toilet facilities for urban and rural areas.

Figure 4.2.1 Provincial Service Coverage of Household Toilet Facilities, 1997



Even if high percentages of sanitary toilets are revealed in the urban areas, problems arise from the unsatisfactory disposal of the effluent from the septic tanks or the direct discharge of wastewater to the local drains. Generally, there is little concern about the unsatisfactory disposal of wastes once it is outside their dwelling units. Practically, almost all the households dispose their wastes in the manner that poses risks to public health. Sullage waste management is unheard of.

(2) School and Public Toilets

Toilet facilities in elementary and secondary schools for both public and private schools were investigated. The province has a total of 2,965 toilet units found in 428 schools. Sanitary toilets adequately serve only 66% of the total number students. The rest, 34% is

Table 4.2.1 Sanitation Facilities and Service Coverage of Household Toilets, Urban and Rural, 1997

Municipality/City	Households, 1997		Household Toilets Facilities and Service Coverage													
	Urban	Rural	Urban						Rural						Municipal Total	
	Number	Total	HHs Served by Sanitary Toilets		Underserved/Unsanitary HHs		HHs Served by Sanitary Toilets		Underserved/Unsanitary HHs		HHs Served by Sanitary Toilets		Underserved/Unsanitary HHs		Number	% of HHs
			% of HHs	Number	% of HHs	Number	% of HHs	Number	% of HHs	Number	% of HHs	Number	% of HHs			
Alubjid	1,199	3,614	872	73	327	27	1,389	38	2,225	62	2,261	47	2,592	53		
Balingasag	2,411	6,503	1,301	54	1,110	46	3,552	55	2,951	45	4,853	54	4,061	46		
Balingoan	687	831	513	75	174	25	587	71	244	29	1,100	72	418	28		
Binauan	276	793	221	80	55	20	579	73	214	27	800	75	269	25		
Claveria	3,598	4,320	2,648	74	950	26	1,739	40	2,581	60	4,387	55	3,531	45		
El Salvador	1,219	5,386	808	66	411	34	2,278	42	3,108	58	3,086	47	3,519	53		
Gingoog City	6,196	11,325	6,196	100			9,081	80	2,244	20	15,277	87	2,244	13		
Gitagum	451	1,908	343	76	108	24	1,212	64	696	36	1,555	66	804	34		
Initao	1,299	3,597	1,080	83	219	17	1,768	49	1,829	51	2,848	58	2,048	42		
Jasaan	3,971	2,732	2,938	74	1,033	26	1,642	60	1,099	40	4,580	68	2,123	32		
Kinoguitan	352	1,692	241	68	111	32	736	43	956	57	977	48	1,067	52		
Lagonglong	654	2,431	464	71	190	29	1,466	60	965	40	1,930	63	1,155	37		
Laguindingan	509	2,989	459	90	50	10	2,357	79	632	21	2,816	81	682	19		
Libertad	724	1,160	570	79	154	21	753	65	407	35	1,323	70	561	30		
Lugait	1,283	1,686	883	69	400	31	677	40	1,009	60	1,560	53	1,409	47		
Magsaysay	294	4,394	171	58	123	42	1,987	45	2,407	55	2,158	46	2,530	54		
Manticao	1,302	3,305	999	77	303	23	2,599	79	706	21	3,598	78	1,009	22		
Medina	1,109	3,396	704	63	405	37	1,786	53	1,610	47	2,490	55	2,015	45		
Naawan	631	2,470	596	94	35	6	1,819	74	651	26	2,415	78	686	22		
Opol	1,436	3,660	564	39	872	61	3,029	83	631	17	3,593	71	1,503	29		
Salay	1,348	2,515	1,027	76	321	24	1,488	59	1,027	41	2,515	65	1,348	35		
Sugbongcogon	667	642	633	95	34	5	495	77	147	23	1,128	86	181	14		
Tagoloan	848	848	6,642	78	1,839	22					6,642	78	1,839	22		
Talisayan	824	3,067	444	54	380	46	1,585	52	1,482	48	2,029	52	1,862	48		
Villanueva	2,014	2,501	1,540	76	474	24	1,450	58	1,051	42	2,990	66	1,525	34		
Provincial Total	42,936	76,918	32,857	77	10,078	23	46,054	60	30,863	40	78,911	66	40,941	34		

underserved or unserved. Meanwhile, sanitary toilets adequately serve about 66% of the public school students. Table 4.2.2 provides the number and service coverage of school toilet facilities.

The number of sanitary school toilets is very low to meet the service level standard of 40 students per sanitary facility. At present, the average ratio is 58 students per sanitary toilet, a little over the standard level. A number of school toilets constructed are not being used due to lack of water supply, destroyed plumbing fixtures and water tank seepage. In some areas, this problem is compounded when access to the sanitary facility is limited to only the teachers and guests.

DECS is currently promoting the practice of having one toilet within the classroom. This practice should be thoroughly reviewed with respect to maintaining sanitary condition, provision of water faucet/supply in every toilet/unit, proper design of depository to avoid groundwater pollution, and provision of regular sludge collection and disposal.

There are 52 public toilets found in public markets, bus/jEEPney terminals and parks/playgrounds in the province. All these facilities are sanitary resulting to a 100% service coverage. Table 4.2.3 shows the number and service coverage of public utilities.

Public toilets at markets, bus/jEEPney terminals and parks/playgrounds, although culturally acceptable, are improperly used and maintained resulting to unsanitary conditions. In most cases, no specific arrangements are made for the operation and maintenance and for the collection of fees to cover such costs. Although considered as sanitary because of the structure, most of the facilities have unsanitary conditions due to inadequate/lack of water supply and destroyed appurtenances because of vandalism.

4.2.4 Sewerage Facilities

There are no existing sewerage facilities in the province. Most of the wastewater from the dwelling units with acceptable facilities finds its way to open drains and eventually to water-courses. These deficiencies are the major contributing factors to the poor condition of the water environment in some areas of the province.

Table 4.2.2 School Toilet Service Coverage by Municipality

Municipality/City	Number of School	Total No. of Student	Number of Toilets		Service Coverage				
			Sanitary	Unsanitary	Served	%	Unserved	%	
Alubijid	Public	17	5,901	69		2,760	47	3,141	53
	Private								
	Total	17	5,901	69		2,760	47	3,141	53
Balingasag	Public	33	13,874	172	1	6,880	50	6,994	50
	Private	4	1,524	24		960	63	564	37
	Total	37	15,398	196	1	7,840	51	7,558	49
Balingoan	Public	8	2,129	20		800	38	1,329	62
	Private								
	Total	8	2,129	20		800	38	1,329	62
Binuangan	Public	10	1,769	20		800	45	969	55
	Private								
	Total	10	1,769	20		800	45	969	55
Claveria	Public	37	12,096	308		12,096	100		
	Private	1							
	Total	38	12,096	308		12,096	100		
El Salvador	Public	16	6,482	222		6,482	100		
	Private	4	1,185	18		720	61	465	39
	Total	20	7,667	240		7,202	94	465	6
Gingoog City	Public		22,544	311		12,440	55	10,104	45
	Private		1,837	64		1,837	100		
	Total		24,381	375		14,277	59	10,104	41
Gitagum	Public	9	2,145	42		1,680	78	465	22
	Private								
	Total	9	2,145	42		1,680	78	465	22
Initao	Public	18	6,755	112		4,480	66	2,275	34
	Private	1	300					300	100
	Total	19	7,055	112		4,480	64	2,575	36
Jasaan	Public	18	8,879	144		5,760	65	3,119	35
	Private	4	1,265	6		240	19	1,025	81
	Total	22	10,144	150		6,000	59	4,144	41
Kinoguitan	Public	11	2,171	52	2	2,080	96	91	4
	Private	1	146	4		146	100		
	Total	12	2,317	56	2	2,226	96	91	4
Lagonglong	Public	11	3,859	54		2,160	56	1,699	44
	Private	1	425		4			425	100
	Total	12	4,284	54	4	2,160	50	2,124	50
Laguindingan	Public	13	4,474	122		4,474	100		
	Private								
	Total	13	4,474	122		4,474	100		
Libertad	Public	19	3,106	61		2,440	79	666	21
	Private								
	Total	19	3,106	61		2,440	79	666	21
Lugait	Public	9	3,882	34		1,360	35	2,522	65
	Private	1	50	3		50	100		
	Total	10	3,932	37		1,410	36	2,522	64
Magsaysay	Public	28	7,535	101		4,040	54	3,495	46
	Private	3	532					532	100
	Total	31	8,067	101		4,040	50	4,027	50
Manticao	Public	17	5,203	127		5,080	98	123	2
	Private	3	972	31		972	100		
	Total	20	6,175	158		6,052	98	123	2
Medina	Public	23	7,803	100		4,000	51	3,803	49
	Private	2	185	10		185	100		
	Total	25	7,988	110		4,185	52	3,803	48
Naawan	Public	13	3,624	92		3,624	100		
	Private								
	Total	13	3,624	92		3,624	100		
Opol	Public	18	7,666	78		3,120	41	4,546	59
	Private	1	122	18		122	100		
	Total	19	7,788	96		3,242	42	4,546	58
Salay	Public	17	5,919	67		2,680	45	3,239	55
	Private								
	Total	17	5,919	67		2,680	45	3,239	55
Sugbongcogon	Public	10	2,395	65		2,395	100		
	Private								
	Total	10	2,395	65		2,395	100		
Tagoloan	Public	10	9,977	150		6,000	60	3,977	40
	Private	2	630	25		630	100		
	Total	12	10,607	175		6,630	63	3,977	37
Talisayan	Public	21	5,528	118		4,720	85	808	15
	Private	1	282	10		282	100		
	Total	22	5,810	128		5,002	86	808	14
Villanueva	Public	13	6,029	104		4,160	69	1,869	31
	Private								
	Total	13	6,029	104		4,160	69	1,869	31
Provincial Total	Public	399	161,745	2,745	3	106,511	66	55,234	34
	Private	29	9,455	213	4	6,144	65	3,311	35
	Total	428	171,200	2,958	7	112,655	66	58,545	34

Table 4.2.3 Public Toilets Facilities and Service Coverage in 1997

Municipality/City	Number of Sanitary Toilets				Number of Unsanitary Toilets				Total Number of PU Toilets	Served		Underserved	
	Public Markets	Bus/Jeepney Terminals	Parks/Playground	Public Markets	Bus/Jeepney Terminals	Parks/Playground	Public Markets	Number of Sanitary Toilets		%	Number of Unsanitary Toilets	%	
Abubjid	1		1					2	2	100			
Balingasag	2							2	2	100			
Balingoan	2							2	2	100			
Binuangan	2		2					4	4	100			
Claveria	2	1	1					4	4	100			
El Salvador	2							2	2	100			
Gingoog City	2	2	2					6	6	100			
Gitagum	2							2	2	100			
Initao	4							4	4	100			
Jasaan	3	1						4	4	100			
Kinoguitan	1							1	1	100			
Lagonglong													
Laguindingan	1							1	1	100			
Libertad	2							2	2	100			
Lugait	1							1	1	100			
Magsaysay	2							3	3	100			
Manticao	3		1					3	3	100			
Medina	1							1	1	100			
Naawan	1							1	1	100			
Opol	1							1	1	100			
Salay	1							1	1	100			
Sugbongcogon	1							1	1	100			
Tagotoan	1		1					2	2	100			
Talisayan	1							1	1	100			
Villanueva	1							1	1	100			
Provincial Total	40	4	8					52	52	100			

Chapter

5

**EXISTING SECTOR ARRANGEMENT
AND INSTITUTIONAL CAPACITY**

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5 EXISTING SECTOR ARRANGEMENT AND INSTITUTIONAL CAPACITY

5.1 General

Much has happened in the sector since 1987 when the national master plan for the sector was initially prepared. Its development targets to be attained for the medium term was renewed in 1996 through the Updated Medium Term Development Plan. The water supply, sewerage and sanitation sector today is still in a transition stage. As a recent development, a national level comprehensive plan, "The Philippine National Development Plan: Directions to the 21st Century," was published in 1998 by the NEDA.

As for the institutional aspect, the Local Government Code (1991) has essentially re-defined the role, relationship and linkages of central, provincial, municipal and barangay institutions in the provision of social basic services, including water and sanitation. Before the issuance of the Code, the responsibilities for water supply and sanitation functions were lodged with various national agencies. The new direction mandates the Local Government Units (LGUs) to play a larger role in planning and implementing water supply and sanitation projects. However, this has raised serious institutional capacity and resource reallocation issues.

Chapter Five provides an overview of existing sector policies and arrangements as a basis for formulating modifications and improvements. It identifies current capacity building issues that need to be addressed in the early stages of master plan implementation. More importantly, it assesses the impact of the present devolved delivery system at the local levels.

5.2 Sector Reforms

The GOP has set the future agenda for sector reform. These initiatives followed the completion of the Water Supply Sector Reform Study and the National Urban Sewerage and Sanitation Strategy Study. The GOP has endorsed the major recommendations of these studies through the following NEDA resolutions. These resolutions are also reflected in the above mentioned National Development Plan.

(1) NEDA Resolution No.4 (series of 1994)

In the context of the LGC and related decentralization efforts, LGUs now play a lead role in service delivery. NEDA Resolution No.4 allows LGUs to implement all levels of water supply projects and redefines the roles of other sector agencies.

With the purpose of ensuring common interpretation of Clause (g) of NEDA Board Resolution No.4 (series of 1994), the Implementing Rules and Regulations (IRR) was prepared by the DILG and was approved by the NEDA in 1998. The IRR came out as NEDA Resolution No.5 (series of 1998). It delineates the responsibilities of government agencies involved in the sector and defines the role of local government units in the provision of water supply and sanitation services, including O&M of the facilities. The new direction mandates the LGUs to play a larger role with an emphasis on institutional strengthening which is needed to adequately perform their devolved functions (refer to 5.2, Data Report).

(2) NEDA Resolution No.5 (series of 1994)

This resolution reaffirms the principle of provision of sewerage and sanitation services on the basis of willingness-to-pay. It mandates the establishment of a Central Project Support Office (CPSO) at LWUA to assist LGUs in the formulation, preparation and implementation of sewerage/sanitation projects (refer to 5.2, Data Report).

5.3 Sector Institutions

(1) Existing Institutional Arrangements

Although the LGC mandates major changes on sector structure and performance within LGUs, the sector is still in transition. The new sector role and respective responsibilities of the LGUs and national agencies are defined in the IRR.

At the national government level, there are three line agencies (DPWH, DILG and DOH) and two government-owned and controlled corporations (MWSS and LWUA) which are responsible for sector project implementation (refer to Figure 5.3.1). A regulatory board, the National Water Resource Board (NWRB) coordinates the overall policy framework for water resources development and management. There are government agencies involved but they are concerned with macro planning, natural resources allocation decisions and environmental protection and management.

At the local level, field offices of these national government agencies are present. The water districts, RWSAs and BWSAs deal with the actual delivery of water in different service levels. Some LGUs operate provincial and municipal water supply systems themselves. The private sector, non-government organizations and community-based organizations also undertake water supply and sanitation activities in the rural communities.

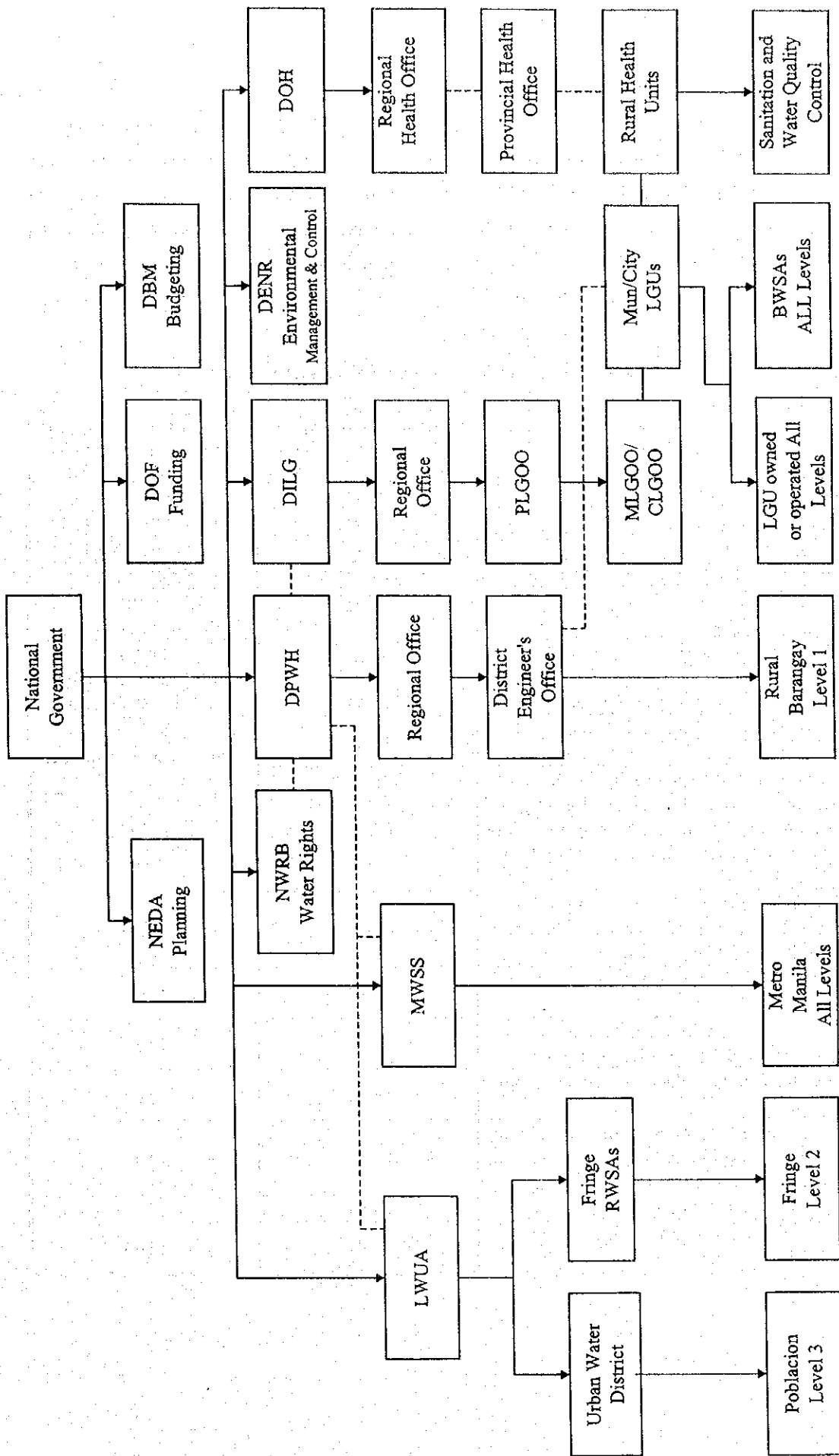


Figure 5.3.1 Functional Relationships

With the government decentralization and issuance of the NEDA Board Resolution No.4, drastic changes took place among the DPWH, DILG, DOH and LGUs. The transition functions of these agencies are presented in Table 5.3.1. As shown, the function of implementing water supply projects (which DPWH used to undertake) has now been transferred to the LGUs. The functions of PHO under the DOH have likewise been devolved to the LGUs. The overall coordination function for the implementation of the nationally funded WATSAN projects is now the responsibility of DILG.

Table 5.3.1 Transition Functions of the DPWH, DILG and DOH

Activities	Previous Involvement (Before NEDA Board Resolution No.4 in 1994)	Present Involvement (After NEDA Board Resolution No.4, s. of 1994)
Identify projects	DPWH	DILG
Design/Construct Level I	DPWH	LGU(PEO/MEO)
Repair/Rehabilitate Level I	DPWH	LGU(PEO/MEO)
Formulate/Evaluate maintenance. Program	DPWH	LGU(PEO/MEO)
Organize BWSA	DPWH	LGUs(PPDO) with DILG assistance
Train BWSAs on O&M	DPWH	LGUs with DILG assistance
Procure/supply materials/spare parts	DPWH	LGU (PGSO/MGSO)
Sector/Project monitoring and data-management	DPWH	LGUs with DILG assistance.
Overall coordination for project implementation (identification of project, training of BWSAs on O&M, and monitoring and data management). These functions were transferred from DPWH.	DILG	DILG
Assist LGUs to identify water supply systems, Level I, II and III. This function was transferred from DPWH.	DILG	DILG
Develop and implement rural sanitation programs nationwide	DOH	PHO
Implement the sanitation component of integrated water supply and sanitation projects	DOH	PHO
Monitor, inspect and disinfect water supply systems	DOH	PHO
Provide its health workers with training on water quality surveillance, hygiene education, and water purification treatment processes	DOH	PHO
Conduct health education campaigns	DOH	PHO
Produce information, education and communication (IEC) materials on water supply	DOH	PHO

(2) Sector Finance

1) Cost sharing arrangement

As a matter of policy, national government programs that have social and/or environmental objectives are implemented through a cost-sharing manner between the national government agency and LGUs. National government grants are provided for municipalities, which have limited socio-economic resources.

2) Financing and management systems

LGUs may either finance the sector projects directly or involve the participation of the private sector through concession-, management- or service-contracts.

In financing WATSAN activities, LGUs may tap their Internal Revenue Allotments (IRAs) and/or locally generated revenues for leverage. These are also the resources to borrow from government or private financing institutions.

LGUs can access ODA loans for devolved activities. However, they must pass through the Municipal Development Fund (MDF) or a Government Financial Institution (GFI). The policy-making bodies of MDF and GFI determine the re-lending/on-lending terms passed on to the LGUs. The policy on accessing loans through the MDF is currently under review by the central government to make the terms and conditions more concessional towards the LGUs.

5.4 Sector Agencies at the National Level

(1) Department of the Interior and Local Government (DILG)

The DILG is responsible, through the promulgation of rules and regulations and by means of technical assistance and training, for facilitating the implementation of the LGC. Accordingly, it is the lead national coordination agency responsible for the supervision and administration of water supply and sanitation projects implemented by LGUs. It is also mandated to strengthen local capacity for delivery of the services.

General administration and institution building support to LGUs entail the following: i) assistance in the formation and training of BWSAs, ii) coordination of master plan preparation, iii) provision of external funds, iv) formulation and installation of sector management systems (including O&M) and BWSA financial management systems. The DILG also provides assistance to LGUs in terms of technical support for evaluation of water sources and design of simple water systems (Level I and II).

The Water Supply and Sanitation-Project Management Office (WSS-PMO), a unit within DILG, is primarily responsible for water and sanitation activities in the Department. The Provincial Planning and Development Office (PPDO) and the Municipal Planning and Development Office (MPDO) are the immediate links of the DILG at the LGU level. For the purpose of ensuring coordination in implementing projects where there are other agencies involved, DILG facilitates the formation of Task Forces with the PPDO and the MPDO still assuming overall responsibility. Through the PPDO and MPDO, barangays that need improved water supply, and households that need sanitation improvements are identified. Water supply and sanitation associations are then formed.

Likewise, the DILG is now one of the leading institutions tasked to promote gender-responsive project management. Under the leadership of focal points, gender awareness training seminars have been conducted at the regional level.

(2) Local Water Utilities Administration (LWUA)

Presidential Decree 198 created the LWUA to act as a specialized lending institution for local Water Districts (WDs) and oversee the development of these water utilities based on the twin concepts of financial viability and self-reliance. In 1987, LWUA responsibilities were expanded to include assistance to Level II Rural Waterworks and Sanitation Associations (RWSAs). The provision of Level II and III services and of wastewater disposal systems in communities outside Metropolitan Manila is largely coordinated by the LWUA. However, NEDA Resolution No.4 directed LWUA to focus on its development-banking role to finance only viable WDs.

Financial services include economic and financial analysis, tariff analysis and fund sourcing. Various types of loans are available to finance the following activities: i) construction of water systems; ii) reactivation of non-operating systems; iii) rehabilitation and expansion of facilities; and iv) training. Special loans finance watershed management projects: construction of administration buildings; purchase of service vehicles, communication and computer facilities; restoration of facilities damaged by calamities; and initial or emergency operational needs. Commodity loans support generation of additional service connections.

LWUA maintains and fields a pool of management advisors, trainers, engineers and other professionals to give WDs and RWSAs proper guidance in their operation and administration. In addition, the Central Sewerage and Sanitation Program Support Office

(CPSO) was established at LWUA to coordinate the implementation of sewerage and sanitation projects at the national level and to assist LGUs and WDs plan and manage sewerage and sanitation at the local level.

(3) Department of Public Works and Highways (DPWH)

The Department was responsible for the construction and major repair/rehabilitation of rural water supply systems (Level I) and for the planning and execution of sewerage projects in some cities and larger poblaciones in the country with participation of LGUs. DPWH's responsibility drastically changed with the implementation of NEDA Board Resolution No.4. Based on the new mandate, the functions of DPWH are now limited to setting technical standards and assisting LGUs, upon agreement and in coordination with LGUs, in the conduct of surveys, preparation of plans, specifications, and programs of work, construction management, and technical researches in WATSAN projects.

The DPWH maintains about 92 District Engineering Offices (DEOs) nationwide at the field level. The DEOs were staffed with a water engineer and they had drilling crews and equipment. With the diminishing of the DPWH role, most of the staff members have transferred to the private sector.

(4) Department of Health (DOH)

The DOH is the principal health policy-making and implementing agency. Its main function is to develop and implement sanitation programs nationwide. It also administers health education campaigns aimed at reducing morbidity due to waterborne and sanitation-related illnesses, specifically diarrhea, which is the second leading cause of morbidity in the past years.

Under the current sector arrangement, the DOH shall assume the following responsibilities: i) set and/or update standards on water quality testing, treatment and surveillance and sanitary practices; ii) assist LGUs in the conduct of periodic water quality control and surveillance-related activities; iii) and monitor and evaluate health and hygiene education.

Through the PHO, the DOH conducts health and hygiene education campaigns that focus on women and children health improvement in rural communities. Centrally-produced information, education and communication (IEC) materials support the program. The DOH has produced and distributed IEC materials on water supply and hygiene behavior nationwide. Through its field health workers, it gives orientation to BWSAs on protection and disinfection of water sources and construction and maintenance of toilets.

(5) Other National Agencies

There are other national agencies that provide macro planning, funding support, and regulatory guidelines for the water supply and sanitation sector.

The National Economic and Development Authority (NEDA), the country's central planning office, ensures that all agencies' plans and programs are consistent with national priorities in the Medium-Term Public Investment Program and the Priority Sub-Sector Activity Layout. External grants and loan proposals are reviewed and approved at NEDA. Together with the DILG, NEDA coordinates the establishment of a system for national sector master planning and monitoring system.

The Department of Finance (DOF) is responsible for the generation and management of the financial resources of the government. It reviews and approves all public sector debt, and sets the fiscal deficit of major government corporations (as part of the public sector-borrowing program).

The Department of Budget and Management (DBM) plans the budget allocations for the government agencies, including capital and operating expenditures, equity infusion to public corporations, and grants and subsidies. The budget is sent annually to Congress for approval. DBM also ensures that budget releases conform to approved plans and programs.

The Department of Environment and Natural Resources (DENR) formulates and enforces policies and guidelines for environmental protection and pollution control. It is responsible for watershed protection and water resources management. It also checks compliance of major projects with environmental guidelines. DENR works with all environmental management agencies and special regulatory bodies.

The Department of Education, Culture and Sports (DECS) implements hygiene education programs through schools using the Teacher-Child-Parent (TCP) approach. Health and sanitation messages are integrated in the curricula and special activities are designed to make the parents and other family members practice what they learn. A wide range of learning materials is available and prototypes of safe water sources and water sealed toilets are set up in schools. DECS identifies priority schools for the GOP school toilet project and supports DOH's integrated health information, education and communication campaign using the formal and non-formal educational system.

The National Water Resources Board (NWRB) coordinates the overall policy framework for water resources development and management. NWRB was created to guide the orderly and scientific development of all water resources in the Philippines. Its guiding principles are optimum utilization, conservation and protection of water resources to meet present and future needs. NWRB also deals with water rights issues; it regulates the use of water resources through the issuance of water rights and sets the tariffs of privately run water systems.

5.5 Sector Agencies at the Local Level

(1) Provincial Level

The offices involved in WATSAN activities are the Provincial Planning and Development Office (PPDO), the Provincial Engineering Office (PEO), the Provincial Health Office (PHO), the Provincial Treasurer's Office (PTO), the Provincial General Services Office (PGSO), the Provincial Budget Office (PBO), and the Provincial Accounting Office (PAO).

1) Provincial Planning and Development Office (PPDO)

The PPDO is in charge of the formulation of comprehensive development plans and policies for consideration of the Provincial Development Council. It conducts studies, research, and training programs necessary for the formulation of plans and programs for implementation. This office likewise integrates and coordinates sectoral plans and studies undertaken by different functional groups or agencies. It monitors and evaluates the implementation of the different development programs/projects and activities of the LGU concerned based on the approved development plan. The office is composed of one division with 4 sections, details of which are shown below (refer to Organization Chart Figure 5.5.1, Supporting Report):

- Administrative Division - Its function is to provide efficient administration and timely and adequate support services. It has 3 staff members.
- Plans and Programs Section - This section is responsible for planning and programming the various sector development activities. For WATSAN projects, it conducts project feasibility studies and assists in organizing BWSAs. It also coordinates training programs for engineering staff of the province and municipalities. Ten (10) regular personnel man it.
- Research, Statistics and Monitoring Section – This section provides assistance in the implementation and evaluation of provincial development projects. It collects and arranges statistical information/data of various sectors of the province, and

prepares statistical reports. It likewise monitors the implementing activities of development projects. However, it is presently non-operational. All staff members belonging to this section have been assigned to other offices.

- Electronic Communication Section - This section is primarily responsible for receiving and transmitting messages either by voice or by radio teletype which are then routed in accordance with approved procedures. It also performs work that requires a higher level of expertise than a radio technician. The section supervises a small group of technicians and operations in the municipality. It has a total staffing complement of 6.
- Records Section- This section is tasked with keeping official records of incoming/outgoing reports, correspondences and other communication items. It checks if such items comply with official rules and regulations. It has 2 regular staff.

2) Provincial Engineering Office (PEO)

The PEO is responsible for planning, programming and designing of roads and bridges/public works projects; maintenance of provincial roads and bridges and parks; provision of heavy and light equipment maintenance services; and construction of waterworks projects, roads and bridges. It formulates policies and objectives, plans and programs, techniques and procedures/practices in infrastructure development, and provides engineering services such as investigation and survey, designs, feasibility studies, and project management. It also provides technical assistance to all engineering offices of component municipalities. The office has 5 divisions, namely: Administrative, Planning and Programming, Materials and Soil, Construction & Improvement, Maintenance and Motor Pool Division (refer to Organization Chart Figure 5.5.2, Supporting Report).

- Administrative Division – This division provides personnel, legal, accounting, property, supply, procurements, clerical, messengerial, security, and general housekeeping services to the PEO.
- Planning and Programming Division – This division is responsible for project planning, designing and programming, investigation and survey, and architectural work. It conducts feasibility studies as a pre-construction activity in order to evaluate the economic benefits, viability, workability and effectiveness of a project. It also updates records of project activities.
- Materials and Soil Division – The division undertakes testing of construction materials and investigates sub-soil for the construction and improvement of roads, bridges, water systems, buildings and other public works. It studies the project's feasibility in terms of physical characteristics by conducting said testings and investigations. It also provides corrective measures.

- Construction and Improvement Division – This division is responsible for constructing and improving provincial roads, bridges, waterworks, public buildings, etc.
- Maintenance Division – This division maintains highways in good operating condition. Such maintenance works, however, do not include rehabilitation, betterment and improvement.
- Motor Pool Division – The division controls all equipment and vehicles of the province. It directs and coordinates the activities of the different sections of the PPDO including scheduling and keeping records of equipment assignment in various jobs. It also evaluates individual equipment utilization and cost.

3) Provincial Health Office (PHO)

The PHO is responsible for the complete integration of the promotive, preventive, curative and rehabilitative components of health care delivered within the province. PHO activities include health programs/projects implementation, surveillance of health diseases and imposing health laws and regulations. It exercises technical supervision and control over District Hospitals, Municipal Hospitals, City Health Offices of component cities and Rural Health Units, and other health units such as the Chest Center and Puericulture Centers. The PHO is composed of an administrative division and 2 technical units -- Hospital Service and Public Health Service (refer to Organization Chart Figure 5.5.3, Supporting Report).

- Administrative Division – This division provides the PHO with economical, efficient, effective service relating to personnel, information, records supplies, equipment and custodial work; prepares the budget for the PHO and; performs such other functions as may be assigned by the provincial health officer.
- Technical units – The technical units develop health plans and programs and implement health activities in the province; provide consultative and technical guidance to the chief of hospitals and municipal health officers and their staff in the implementation of health programs; evaluate the progress of the various activities under implementation; compile/tabulate/analyze and maintain health statistics for health activities; and submit periodic reports to the provincial health officer. These units also perform such other functions as may be assigned by the provincial health officer.

4) Provincial Treasurer's Office (PTO), Provincial Budget Office (PBO), Provincial Accounting Office (PAO), and Provincial General Services Office (PGSO)

The PTO is in-charge of the disbursement of all local government funds. It collects taxes, revenues, fees and other charges that are required to support the general appro-

priation ordinance. The office maintains and updates the tax information system, exercises supervision over all treasury offices of component municipalities, conducts periodic tax education information/collection campaigns, and trains barangay treasurers and officials in the methods of collecting real property taxes, other fees and charges.

The PBO provides fiscal budget administration for the provincial government. It is responsible for budget preparation, execution, control and accountability. The office reviews and consolidates the budget proposals of different offices of the LGU. It coordinates with the treasurer, the accountant, and the planning and development coordinator for the purpose of budgeting. It also provides prompt and efficient reviews of municipal budgets.

The PAO is tasked with the recording and review of financial transactions in accordance with government accounting principles, rules and regulations. It summarizes and prepares financial statements for submission to different offices for their information on the financial condition and operations of the province. The office also reviews financial transactions in accordance with existing auditing rules and regulations and recommends measures necessary to improve the system in the utilization of government funds and properties.

The PGSO provides effective direction and coordination over the various administrative and support services necessary for the operation of the office, including the keeping of government records and the proper and timely dissemination of printed communication and correspondence. It is responsible for acquisition/procurement of supplies and materials as identified in the overall fiscal plan. It collates and disseminates information on prices, shipping and other costs of supplies and other items commonly used by the LGU.

5) Provincial Development Council (PDC)

The main function of the PDC is to formulate a long term, medium term and annual socio-economic development plan and policies as well as the investment program of the province. The PDC is headed by the Governor and is composed of the following: Representative of the Congressman, Chairman of Sangguniang Panlalawigan's Committee on Appropriations, municipal mayors, representatives from NGOs, president of the Association of Barangay Captains, President of the Councilors League and the Sangguniang Kabataan President.

6) Provincial Monitoring Committee (PPMC)

The role of the committee is to expedite project implementation at the various levels and to determine whether the objectives of the projects are accomplished. It provides up-to-date information on the overall status of project implementation at each level for planning and budget allocation. It also identifies problems/issues which impede project implementation and which need remedial action. The PMC is composed of the following members: Governor, DILG representative, officers from PPDO (as a secretariat), PBO, PEO, PIO, and NGO representatives (to be renewed every year).

(2) Municipal and Barangay Level

The municipality primarily serves as a general-purpose government for the coordination and delivery of basic, regular and direct services and effective governance of the inhabitants within its territorial jurisdiction. It has a similar organization structure and legislative authority as the Province. For WATSAN projects, the following offices are directly involved.

1) Municipal Planning and Development Office (MPDO)

The MPDO is in charge of the planning and development. It formulates an integrated economic, social, physical, and development plans and policies for consideration of the Municipal Development Council. Its regular activities include preparation of planning documents, monitoring and evaluation of projects; and promotion of people participation in development planning within the local government unit concerned.

2) Municipal Engineer's Office (MEO)

The MEO undertakes all engineering activities. It initiates, reviews and recommends changes in policies and objectives, plans and programs, techniques, procedures and practices in infrastructure development and public works of the local government unit concerned. It regularly performs engineering services for the local government unit including investigation and survey, engineering designs, feasibility studies and project management.

3) Barangay Councils (BCs)

The LGC designated barangays as independent units of local government. The barangay council acts as the legislative body of the barangay. Aside from their share in the IRA from the National Government, the barangay councils are empowered to enact tax and revenue ordinances that are necessary to discharge the responsibilities

conferred upon them by law and to promote the general welfare of the inhabitants. They are also allowed to solicit funds for the construction of barangay facilities, maintain and regulate their use, and charge reasonable fees for their use.

4) Rural Health Units/Barangay Health Stations (RHUs/BHSs)

The RHUs/BHSs are under the direct supervision of their respective municipalities and the MHO extending health services to the barangay residents. They provide assistance in family-planning activities, emergency/relief services especially in far-flung barangays, and other similar activities that promote the general well-being and health needs of the residents. Midwives and other health workers usually schedule periodic visits to these health units/stations.

(3) Field Offices of Central Sector Agencies

1) DPWH District Engineer's Office (DEO)

The DEO is mandated to undertake and evaluate the planning, design and construction, and work supervision functions of the DPWH for all public works within the district. It coordinates with other departments, agencies, institutions and LGUs within the district in the implementation of infrastructure projects. The previous water supply section, a unit under Construction Division, is maintained at some DEOs. Its staff consists of a water supply engineer, a well driller and a well drilling supervisor.

2) DILG Provincial /Municipal Local Government Operations Offices (PLGOO/MLGOO)

The PLGOO/MLGOO is tasked to provide general administration and institution-building support to LGUs to strengthen local capacity for delivery of basic services. Every province has a PLGOO assigned. The Provincial Task Force on Water Supply, Sewerage and Sanitation was organized for WATSAN-related projects. It was disbanded with the creation of the Provincial Sector Planning Team (PSPT). The DILG Provincial Action Officer is a member of PSPT.

3) NEDA Regional Office and Regional Development Council

Private and public sector organizations coordinate with DILG to establish a system for regional sector master planning and the monitoring system. As Secretariat of the Regional Development Council, the NEDA Regional Office ensures that sector plans are consistent with regional and national priorities. It requires project proposals/plans

and programs to be approved and endorsed by the Provincial Development Council (PDC) whose task is to incorporate, consolidate and prioritize municipal plans, programs and projects.

(4) Water Districts (WDs)

The water district is a local government corporation formed pursuant to Presidential Decree No.198. It is organized for the purpose of serving the water supply requirements of the residents within its franchise area. Technical and financial assistance (loans) are provided the by LWUA to WDs. LWUA also exercises regulatory functions vis a vis the districts. A WD, to be self-sufficient, is operated in a business-like manner to generate enough revenue from its water sales. The income is used to meet operational expenses, debt service and reasonable reserves for contingencies.

(5) Barangay Waterworks and Sanitation Associations/Rural Waterworks and Sanitation Associations (BWSAs/RWSAs)

A BWSA is an organization of water supply and sanitation beneficiaries in a barangay. Its objective is to own, operate and maintain the water systems. RA 6716 requires its formation to ensure the provision of adequate, potable and accessible water supply to its members through the proper operation and maintenance of Level I facilities. The organizational size depends on the number of facilities, need, culture and situation in a particular barangay. Its structure is quite simple, consisting of the board of directors, a book-keeper and caretaker/s.

The formation activities of a BWSA are divided into three phases: pre-formation/social preparation, formation and post formation. During the formation phase, pre-membership training and election of the BOD and Officers are held. In this phase, individual member interest and community commitments are manifested through application for membership in the association and the signing of a Manifesto Resolution. RWSAs are organized to operate, manage and maintain Level II and small Level III systems, which are not covered by Water Districts.

(6) Private Sector

The private sector has been involved in water supply development in the form of investments, technical studies and construction of water supply and sanitation facilities. The NGOs have also demonstrated a capability to undertake project development and implementation with community participation.

5.6 External Support Agencies Active in the Sector

(1) Multilateral Agencies

The Barangay Water Program (BWP) was a special project implemented by the then Ministry of Local Government (now DILG) with financial assistance from the USAID. The program envisions to improve the health standards of small rural farming and fishing communities by providing safe, adequate and potable water through the establishment of public faucets or individual house connections. The systems for these communities should be owned, operated, maintained and managed by the users themselves through rural waterworks and sanitation associations. The program also intended to enhance the capabilities of local government units in project planning, programming, designing, implementation, evaluation and monitoring. Phase I of the BWP was implemented in the period 1978 – 1981, while Phase II started in 1982 and was extended until December 1987. Phase II operations officially ended in December 1987, but a one-year winding-up period was agreed upon between the GOP and USAID. USAID extended loans to cover the construction costs and the installation of facilities on a reimbursement basis while the GOP through DILG shouldered the operational, training and personnel costs. Through BWP, waterworks projects were implemented in 50 provinces (including Bukidnon, Davao del Norte, Misamis Oriental and South Cotabato), 22 cities and 7 municipalities.

The World Bank supported the First Water Supply, Sewerage and Sanitation Sector Project or FW4SP. This project provided capital funds (US\$58.0M) for rural water supply system in Luzon provinces and sanitation system nationwide based on completed provincial master plans. The project concept called for a community-based approach through BWSAs. This was implemented from 1991 to 1995 with an extension up to 1997. Subsequently, the Capacity Enhancement Program (CEP) with DILG as implementing agency was conducted until the end of 1997. In addition, the Bank prepared a new loan for DILG implementation - the Local Government Urban Water Supply & Sanitation Project. This project aims to assist municipalities of the lower tier income class i.e. 4th, 5th, and 6th (approximately 50 municipalities in 20 provinces nationwide that are not covered by Water Districts) to improve water supply and sanitation services. Through its various trust fund facilities, the bank has also arranged for various technical assistance grants and other support activities.

The Asian Development Bank (ADB) currently provides assistance for the Rural Water Supply and Sanitation Sector Project or RW3SP. The project aims to improve the poor situation of water supply and sanitation of 20 Social Reform Agenda (SRA) priority

provinces located in Luzon, Visayas, and Mindanao. The project consists of two parts -- institutional development and construction/rehabilitation of water supply and sanitation facilities. The total project cost is estimated at \$57.4 million equivalent (a foreign exchange component of \$20.0 million and a local cost component of \$37.4 million equivalent). Implementation period is from 1997 to 2001.

UNDP assisted the Institution Building for Decentralized Implementation of Community-Managed Water Supply and Sanitation Project or IBWSSP known as UNDP PHI/93/010 Project under the Fifth Country Program (1994-1997). This project directly responded to the government's Poverty Alleviation Program. UNDP provided assistance in strengthening the institution involved in the delivery of water supply and sanitation services with emphasis on support to local government units, NGOs, and communities through the BWSAs. The project complemented earlier efforts by UNDP (through the UNDP/ World Bank Water and Sanitation Program) to promote appropriate cost effective technologies in water and sanitation and to improve the training capacity of the sector. The project covered seven (7) provinces; 180 sub-projects were implemented in the objective areas during implementation period 1994-1997.

The United Nations Children's Fund (UNICEF) supports the sector through the Philippines Plan of Action for Children. Apart from hardware support in the priority project site, UNICEF assisted NEDA in updating the national master plan. UNICEF works through the inter-agency committee on environmental health and through NGOs. With the World Health Organization (WHO), UNICEF has been assisting in the preparation of Information, Education and Communication (IEC) materials and in strengthening the sector monitoring system. As part of these various assistance, UNICEF supported NEDA in 1997 for the assessment of WATSAN Sector of Southern Mindanao. This was compelled by the unexpected occurrence of water-borne epidemics that hit Region XI.

(2) Bilateral Agencies

The Japan International Cooperation Agency (JICA) has been extending a grant aid program for the Rural Environmental Sanitation Project, which is jointly implemented by DPWH and DOH. The project covered construction of Level I and II rural water systems and school toilet facilities in 10 provinces. With DPWH, rural water supply systems were constructed at the evacuation centers for the Pinatubo refugees. JICA also supported the groundwater development study in Cavite province (with LWUA) and the institutional development activities for MWSS. The PW4SPs for the 9 provinces in Luzon area were completed through previous technical cooperation.

The Overseas Economic Cooperation Fund (OECF) provided financial assistance for the RWS IV project. It provided a loan of up to Y 5.08B, with a counterpart fund of ₱ 400M. The project covered construction/rehabilitation of Level I systems, construction of workshop building and procurement of different equipment. OECF has also been supporting the Provincial Cities Water Supply Project of LWUA and the Angat Water Supply Optimization Project of MWSS.

DILG requested OECF last year to provide a loan for the Water Supply and Sanitation Project (WSSP) for the 6 provinces (based on JICA assisted PW4SPs). The project will achieve additional service coverage both for water supply and sanitation as follows: 549,100 persons with water supply, 9,579 households provided with latrines, 18,750 students with 375 school toilets and 72 public toilets.

The Australian International Development Assistance Bureau (AIDAB) supported the Central Visayas Water and Sanitation Project through a \$ 14.65M grant. The LGUs and the RDC implemented the project. Project components include: planning and monitoring information systems; infrastructure planning and rehabilitation; and institution building with an emphasis on community management based on experience from other AIDAB-funded projects. The project period was extended until 1997.

The Canadian International Development Agency (CIDA) carried out until March 1998 Pre-Feasibility Study of Malalag Bay Alliance Water Supply Project. This project covers 10 coastal municipalities in Davao del Sur. The project includes water source development, construction of storage, transmission and distribution facilities, and service connections. Basic construction costs will be allocated between MBA and its municipalities. Implementation period is scheduled from 1998 to 2002. The Malalag Bay Area Development Office will submit a proposal for assistance to CIDA through the Regional Management Committee of NEDA Region XI office.

The terms and conditions, priority areas, programs and projects by donor are shown in Table 5.6.1, Supporting Report.

5.7 Project Management Arrangement, and Issues and Problems

To assess the project management capability of the Province, current policies and practices in the implementation of WATSAN projects were investigated. The findings are discussed in

terms of technical, institutional, financial and community development aspects. Problems/issues are also discussed by sub-component. Current conditions of the municipalities investigated are referred to. Furthermore, some of the discussion items covered the sector management field (refer to the Table 5.7.1 Supporting Report)

5.7.1 Technical Aspect

(1) Project Identification and Prioritization

1) Project conceptualization and series of procedures to select project

Annually, the provincial government conducts project identification and prioritization based on perceived needs. The PPDO, together with the Municipal Water and Sanitation Task Force (MWSTF), conducts fieldwork to identify project needs through a series of meetings with barangay people/officials. They then conduct the required survey in the barangays where the projects may be introduced.

Among the selected barangays, some barangay councils submit barangay resolutions on the project/s to the municipality. The project proposal/s are incorporated in the municipal development plan. The Municipal Development Council (MDC), through its 4 sectoral committees, reviews and gives recommendations for endorsement. The MDC endorses it to the Sangguniang Bayan (SB) for adoption and approval which in turn endorses it to the Provincial Development Council (PDC) for appropriate action.

Before the PDC incorporates proposals into the provincial development plan, its sectoral committees review the municipal development plan for consideration and prioritization. After review, the PDC forwards the proposal to the Sangguniang Panlalawigan (SP) for adoption, approval, and allocation of appropriate funds.

Before actual implementation starts, only the selected barangay/s are informed that the requested project/s were approved and funded.

2) Concerned parties/people in the sector and their respective activities

The PPDO plays a key role in the identification of project needs. The PPDO and MPDO motivate the barangays by introducing community organizing and participation in the projects. This involves a series of meetings/assemblies and consultations with the barangay people, conducting a barangay profile survey, and identifying the needs for WATSAN facilities. The barangay people/officials become aware of the project needs and their own roles through the series of meetings and surveys which

they participate in when identifying project(s). The end result of the activities is the project's inclusion in the Barangay Development Plan. This serves as a guide for the barangay council as it prepares and submits to the municipality a resolution requesting for project assistance.

At the municipal level, the MDC through its 4 sectoral committees (Macro, Economic, Social and Infrastructure Committees) reviews and gives recommendations to the plan before endorsing it to the SB and further on to the PDC.

At the provincial level, the PDC sectoral committees endorse the provincial development plan (incorporating the municipal development plans of the different municipalities) to the PDC for consideration. The PDC deliberates upon the documents and if they are in order, endorses it to the SP for adoption and approval, including appropriation of funds.

3) Criteria for selection of the projects

Selection criteria are based on the indicators prepared by the NEDA Regional Office. These were meant to identify the existence of problems that may constrain the achievement of certain development objectives and/or to determine further development potentials. However, it is still the Barangay Development Plan (which was prepared by the barangay council and ratified during a barangay assembly) which is the benchmark for the realization of the people's aspiration.

4) Technical considerations applied for identification and prioritization

A barangay profile survey is conducted and incorporated into the Barangay Development Plan. The barangay profile includes technical matters regarding water supply and toilet facility fabrication; brief description of water sources; and the like.

To further ensure the sustainability of the project, it is essential to involve the people, starting from demand identification during the basic survey stage. This is especially true for Level I water supply systems. A simplified coordination mechanism showing responsibilities/activities required among concerned parties is necessary. Periodic follow-up by LGUs at the barangays is also important to ensure logistic support and manpower requirements of the LGUs.

After submission of a project request by the barangay, a series of steps including identification, validation and prioritization has to be undertaken by the concerned LGUs. These

steps result in considerable time consumed before funding is finalized. A systematic and coherent project identification and prioritization among concerned parties is required.

With reference to the implementation of the medium-term target plan, review and modification of selection/prioritization criteria is done by LGUs taking into consideration the said barangay profile. The LGUs, together with barangay officials, should prepare the requirements (including barangay profile) in an expeditious manner as part of their annual activities.

(2) Preparation of Feasibility Studies (F/S) and Detailed Design (D/D) of Facilities, and Contract Procedures

1) Experience in master plan (M/P) preparation

The NEDA Office of Region X is currently preparing the Regional Master Plan (1998-2008). The PPDO staff is involved in the preparation of the M/P, specifically with the portion of the province. In addition, the Provincial Development Investment Plan (1994-1998) was prepared by the PPDO as a basis for their annual action plan.

2) Water source development experience in survey, planning and design of facilities

The provincial government is able to conduct water source development for both spring and ground water sources. In the case of spring development, technical-related information is first collected from the barangay. This includes location of the untapped spring and determining its discharge rate during the dry season. The preliminary topographic survey (elevation and distance) is then conducted to prepare the hydraulic profile of the transmission pipeline. For groundwater development, its technical feasibility is evaluated based on available technical data together with information from the barangay duly supported by field inspection of the existing wells.

3) F/S of Level II and III systems

The F/S for the development of Level II and III systems is usually done by the PEO/PPDO. In addition to the preliminary study on water source development, water production and water demand is determined as required by the project. Tentative locations of communal faucets are identified in a Level II system. The hydraulic profile (pipe size, length) and size of the intake box / reservoir are determined using methods learned in the ITN/DILG training seminar. The BWP design standard is also applied in this case. Finally, a cost estimate of the required facilities is made. The F/S report is submitted to PPDC for evaluation and recommendations before final approval.

4) Detailed Design (D/D) of facilities and Tendering

The D/D of WATSAN facilities is also prepared by the MEO/MPDO/PEO/PPDO based on the F/S report. It must also be within the available budget. The designs of the pipeline and structure are based on BWP standards, while the well design is based on DPWH standards. The PEO, however, has no experience in planning and designing large waterworks facilities, which include pumping stations/water treatment facilities.

Future water supply system(s), particularly those using surface water sources, will require water treatment facilities. The PEO will need more knowledge/practice in hydraulic analysis, structural calculation, and water treatment technology. Measures to increase the capacity of LGU technical staff in the area of planning and designing have to be considered. This may involve the utilization of consulting services.

(3) Procurement of Materials and Equipment, and Facility Construction and Rehabilitation

1) In-house experiences in the construction of facilities

Materials for WATSAN projects are regularly procured by the MEO/MPDO/PEO after the bidding documents are prepared by the municipal government/PGSO. After the bidding, the PA issues the purchase order and the procurement is done by the PGSO. Consultancy contracts are also awarded through bidding.

Since a large amount of work is required in implementing the medium-term development plan (which includes the preparation of the required tender documents), there has to be thorough evaluation of pre-qualification documents and the whole contract procedure. Presently, with the limited volume of work/projects, the procurement procedure already requires a long process, which always results in delays in project implementation. The provincial government should examine the current procurement system so that it could more effectively handle/manage the forthcoming projects.

2) Construction, Supervision and Rehabilitation

Construction of WATSAN facilities is usually done by the LGUs either by the municipal or the provincial office. The barangay council and the users mobilize labor. The MPO and MEO manage project implementation. PEO personnel supervise the construction work and PPDO staff monitors the project.

In spite of the LGUs' efforts, their present implementation capability is limited due to insufficiency of manpower resources as well as shortage of supporting vehicles/equipment. Contracting-out to the private sector may be practical. At the same time, it is necessary to increase the number of experienced water supply engineers who will coordinate and supervise future projects.

With regard to rehabilitation of the Level I facilities, some work has been conducted by employing skilled labor upon request from waterworks/beneficiaries. They were not completed in time due to budgetary constraints. It is necessary to establish a concrete implementation mechanism among concerned parties.

(4) Operation and Maintenance (O&M) of Facilities

1) O&M of facilities by service level

For Level I facilities, the BWSAs or beneficiaries have responsibility for O&M. However, their performance has not been sufficient. This can be gleaned from the presence of numerous non-functioning/abandoned wells constructed by DPWH. These problems arose due to lack of spare parts, drying up of water source, and water quality problems such as colored water, salty water, etc. In some cases, the BWSAs encountered problems related to water source just a few months after the turnover of the facility. Thus the beneficiaries revert to using their privately dug wells.

O&M of Level I facilities is not properly done by BWSAs/beneficiaries because of a lack of sense of ownership. There was a case, however, where the users contributed money to purchase spare parts when pump facilities broke down. It is necessary for the users to consider not only repair/replacement of mechanical parts but also re-development of wells and future upgrading of the service level.

A RWSA/communal association manages Level II and III systems, which are small in size. The required staff (permanent/casual) is designated to operate/maintain the facilities. There have been cases, however, where expansion of distribution pipelines and additional service connections were made without due consideration of the technical aspects (i.e. capacities of water sources and distribution facilities). F/S and D/D should be prepared on a timely basis by qualified engineer/s to avoid the decrease of supply pressure and quantity. Preventive maintenance of the system cannot be practiced due to the shortage of major spare parts inventory, which is in turn due to budg-

2) Communication mechanism practiced in case of facility breakdown

For major repairs of Level I systems, (non-functioning of hand pump parts, etc. for Level I), the barangay council passed a resolution to the municipality/DEO - DPWH requesting immediate repair. However, majority of the BWSAs does not know how to communicate with the LGUs or private sector in case of a major facility breakdown. The request for repair is thus improperly addressed. A communication system should be prepared and put into practice.

For major repairs of Level II and III systems (burst pipe/leakage), the permanent/casual staff undertakes the restoration/repair. In case the budget is not enough, the waterworks/RWSAs submit a funding request letter to the municipal/provincial government. In areas where RWSAs are not active, the barangay captain submits a request letter to the concerned agencies or directly to the provincial government. Under the LGC, the LGUs are responsible for developing sustainable O&M of their water system.

(5) Water Quality Examination

- 1) The water quality examinations presently done are only for bacteriological content and do not include physical and chemical parameters. The Rural Sanitary Inspector (RSI) of the MHO collects the samples. Frequency of sampling and disinfection is as follows: Level I systems - once every three months; Level II systems - once every two months; and Level III systems - once every month. Private wells are also sampled and analyzed. If found positive for bacteria content, they are either disinfected by the RSI or the SSI of the PHO.

The laboratory exam should include water quality parameters (physical and chemical) that are necessary to determine the potability of water as indicated in the National Drinking Water Standards. In addition, a regular program of disinfection for all levels of services is necessary; disinfection should not be done only when the source is found positive for bacteria content.

2) Capacity of laboratory

Collected samples are analyzed at the provincial laboratory. The analysis of the samples has to be scheduled due to the laboratory's limited capacity in terms of facilities and manpower. The sampling in municipalities is conducted only once a week (only on Monday) with 3 to 4 samples per municipality. The laboratory can accommodate

10-14 samples per week coming from 3-4 municipalities. In this regard, an adequate level of facilities, chemicals and manpower should be provided.

3) Water quality condition

The PHO-laboratory analyzes water samples using the BGLB and E.coli method. It has found fecal contamination at water sources of all service levels. Water quality problems usually occur during floods. This is aggravated by poor sanitation conditions in most villages – i.e. inadequate toilet facilities, improper construction of depositories/latrines, lack of sludge/sullage disposal management, and absence of drainage facilities. Improper handling of samples especially for samples from areas far from the laboratory also results in negative laboratory findings. The PHO recommended that another laboratory be built in an area with a municipality hospital that has trained personnel so that far-flung municipalities can be better served.

4) Budgetary support

Although a budget for water quality control was allocated to the PHO, the provincial government was not able to adequately perform this activity. Meanwhile, there is a high incidence of water-borne/related diseases and the percentage of contaminated sources of drinking water remains very high. The LGUs must assure the proper allocation of a budget for water quality surveillance.

(6) Private Sector Capability for the Sector Project

The capability of existing local contractors to engage in WATSAN projects is quite limited. In view of the scale and technical requirements of forthcoming projects, there is an urgent need to tap qualified and experienced main contractors from outside the province. These contractors are usually located in large cities such as Davao, Cebu, and Manila. It is necessary to prepare a database of available contractors, especially those experienced in well construction and with the required capability for the projects.

5.7.2 Institutional Aspect

(1) Linkages among Concerned Parties/Departments

The PPDO is the lead provincial office responsible for the implementation of WATSAN projects. It works either directly or indirectly with the national government's local offices and with the municipalities and other provincial offices (refer to Table-5.7.1, Supporting Report).

There is no established coordination mechanism among the agencies involved in WATSAN sector implementation in the province wherein interrelationship/linkages are clearly shown. Administrative and functional linkages are likewise not spelled out.

(2) Health and Hygiene Education with Typical Program

Due to the shortage of financial support and manpower of the PHO, health and hygiene education activities are quite limited at the present time. These are done only when a project is a component of DOH/UNICEF/NGO projects/program. It is recommended that LGUs accord more attention this need to ensure the sector's sustainable development.

(3) Training

1) Planning and engineering for LGU staff

The central government agencies have provided technical training on a project basis. Under the BWP, PPDO and PEO staff received technical training in planning and engineering and in O&M.

2) Institutional/community development/financial/gender specialists of LGU staff

Also under the BWP, the DILG-PDAP provided a WATSAN Trainers Training and Community Organizing Training/Workshop. There has been no experience, however, in gender-related training.

3) Organizing the association at barangay level

Before the construction starts, the beneficiaries are provided with information on how to set-up the association. At present, the beneficiaries themselves demand such training. This is an improvement over the previous supply-driven approach.

4) O&M for users

The provincial government provides technical assistance directly to the BWSAs. The BWSA staff are trained by PEO/PPDO (Province-Municipality-Barangay). The PPDO/PEO conducts training for the staff of the municipality 2-3 times/year aimed at strengthening the training capability of the municipality down to the barangay level. The PPDO/PEO, assisted by the municipality, also conducts a 3- day training course before turn over of the facility for BWSA officials which covers technical and management matters on Level I facilities.

Even though the central government has provided technical training to BWSAs/ beneficiaries for the foreign-assisted projects, O&M of Level I facilities is still commonly neglected. The fact is, some barangays are still willing to undertake further training in O&M of the facilities. More training program/s should be implemented by LGUs to satisfy this demand for more community development improvement.

5.7.3 Financial Aspect

(1) Budgetary Allocation to the Sector

The province pays for its capital expenditures from the 20% DF of the IRA. The LGU may allocate more than 20% of the total IRA to capital projects on condition that the income of the LGU from all sources (including IRA) must first be applied to the contractual and statutory obligations of the province. The Provincial Development Council (PDC) determines the allocation of the DF to the different sectors in the province.

Due to the limited resources of the province, it has to prioritize projects that require capital allocation from the budget. The GOP recently issued an administrative order directing all government agencies, government corporations, and units (including LGUs) to implement austerity measures. This limits government spending and cuts capital outlays and will help mitigate the negative effect of the peso devaluation. In view of the high social impact of the sector, however, the province gives priority funding allocation to the WATSAN sector.

The budget allotment for the sector is included in the reported 20% DF and in other budget items unless the waterworks system is considered an economic enterprise of the LGU. In evaluating the financial performance of the province, it was observed that there is no historical database on budgetary allocations. This can be remedied by computerizing the system so that such information can be readily accessed.

(2) Access to External Funds

The Provincial Government would like to learn how to access funds from other sources other than its IRA, local taxes, and economic enterprises. The province also has to explore ways to tap the private sector particularly for financing. The Province had gone into a build-transfer contract in the past. It can encourage more private sector involvement by simply minimizing bureaucratic red tape.

(3) Cost Recovery Practices by LGUs and by Users

During the period when the DPWH was still constructing Level I water supply facilities, the DPWH itself formed many BWSAs. A few of the BWSAs are still active and are collecting monthly fees. Most however are no longer functioning and no longer collecting water fees. As a consequence, the users have to ask the government (usually barangay or municipal) to solve any problem. In some cases, the users still approach the DPWH for assistance. Although the DPWH has no budget for operations and maintenance, it extends assistance in the form of materials (such as gaskets or joint pipes) from their supplies, if these are available.

Recovery of the capital cost in the Sector is dependent on how the community or the clientele perceives its role in the Sector. If the beneficiaries have a sense of ownership of the facilities, they will contribute to the O&M of the facilities. For financing capital expenditures, a sense of ownership of the facilities can be achieved by asking the beneficiaries to contribute their labor when building the facility. This will translate into a sense of responsibility for the sustainability of the system.

Similarly, for O&M cost recovery, the monthly contribution of beneficiaries contributes to the sustainability of the water supply facilities. Monthly contributions are an indication of the extent of ownership and hence, responsibility over the system determined. Government should initiate more community empowerment and encourage active participation even at the construction period in order to promote this sense of ownership.

5.7.4 Institutional Arrangements/Capability of the Municipal Government

The municipalities are responsible for the implementation of infrastructure projects that service the needs of the residents. For WATSAN projects, the BDC endorses projects to the municipality when it is not able to finance the project from its own funds. The municipality finances the project if funds are available and provides technical and material support. In case the municipality is not able to finance, the project is endorsed to the province.

The municipality, through the MPDO, prepares the municipal development plan and formulates an integrated economic, social and physical development plan. It identifies and prioritizes water projects and secures the necessary funding. The MEO provides technical services including investigation and survey, engineering designs, feasibility studies and project management. It is responsible for the organization and training of the BWSAs within its administrative boundary.

5.8 Community Development

5.8.1 General

This section presents the current status or the existing condition for community development (CD) in the Province of Misamis Oriental for the WATSAN sector from the side of the government, on one hand; and the point of view of the people and the communities served, on the other. Thus, it traces the development of CD through policy measures promulgated and/or enacted on the national level and shows how CD has filtered down to the local level.

The discussions are focused on the experience of the LGUs in performing CD work with reference to the typical manner through which the participation of the community is secured for the sector, whether these be Level I, Level II or Level III projects. The experience reveals the degree of readiness of the LGUs in doing CD work by examining the structures and linkages in place in the province that may either enhance or be an obstacle to the successful execution of sector projects. It also provides the true state of information, education and communication (IEC) processes in the province in so far as these relate to the supporting sector projects.

The valuable information were taken from the following: (1) The interviews undertaken with LGU officials during the study period; (2) The answers to the CD/GAD Questionnaire distributed to select provincial and municipal officials involved in sector development; (3) The Result of the Barangay Key Informant Survey, a survey administered to the officials of the select local communities (refer to the Supporting Report for details); and (4) Other documents researched on and provided by the national, regional, provincial, municipal and barangay level offices.

The other major part of this chapter presents the different levels of community participation in sector projects as determined by the people or the beneficiaries themselves. As such, it reveals the type and degree of involvement of the people in past sector projects and whether or not this involvement was adequate. It also illustrates the manner through which the beneficiaries want to actively participate in future sector projects, thereby demonstrating the predisposition and willingness of the community to commit themselves to new development projects.

The responses of the beneficiaries to the information desired are gender sensitive and were derived from the following: (1) The Result of the Group Interview Survey (details are referred to the Supporting Report); and (2) The Result of the Barangay Key Informant Survey; and (3) The results of studies conducted on CD by the national/regional/provincial agencies.

Due to time limitation, only five barangays were made to participate in both the key informant survey and group interviews. But the results of the key informant survey and group interviews are highly indicative of the situation prevailing in the entire province in so far as participatory community development is concerned on both the government's point of view and the side of the community. The current CD status is not without its share of problems; but this is exactly the purpose of the study, that is, to improve the WATSAN sector's performance by plugging all leaks that may get in the way of the successful implementation of sector projects, CD included.

5.8.2 Provincial CD Structure and Linkages for WATSAN Sector Projects

The 1987 Philippine Constitution recognizes and mandates the participation of every Filipino in attaining overall national development. Thus, community development is utilized as a national strategy and has been adopted in the Medium Term Philippine Development Plan-1993-1998 (MTPDP) and the Updated MTPDP (1996-1998) to address the country's problems of poverty and unemployment. As a general policy, the Plan gives the greater masses of the people a voice in charting and implementing programs in the country while encouraging the collaboration of the private sector, non-government organizations and all other sectors of society in the formulation and implementation of plans, policies and programs supportive of the development goals of the country.

The Philippine National Development Plan: Directions for the 21st Century which was released early 1998 gives more focus to building the capacities of communities for self-reliance. By recognizing the people's self-dignity and inherent capacity to improve their own lives, community-based approaches will be utilized when delivering basic services to the people. Towards this end, a development planning system that institutionalizes the bottom-up planning process was adopted.

In the 1980s up to the early 1990s, sector projects under the Barangay Water Program (BWP) and those funded out of OECF, WB and ADB were required some level of community participation but this was limited to the provision of free labor by few beneficiaries during the construction of Level I facilities. The actual implement these projects was a collaboration of several agencies such as the DILG, PEO, PHO, DPWH and non-government organizations.

The Province of Misamis Oriental considers water supply and sanitation as one component in the over-all planning system or process undertaken by the provincial, municipal and barangay units.

5.8.3 Assignment of CD Specialist to Sector Projects

Presently, the Provincial Planning and Development Office (PPDO) maintains a unit that implements or conducts community development (CD) work within the PPDO. There are staff members assigned to undertake CD work although nobody focuses on WATSAN projects alone. As explained by the PPDO, there is a lack of manpower such that PPDO staffs are sometimes assigned to other offices and projects. As for the PHO, it does not have a CD unit nor CD Specialist.

On the other hand, the Municipal Planning and Development Office in each municipality generally maintains a CD unit to undertake barangay-level development works and the WATSAN programs are among its major areas of concern. The Municipal Health Office of Gitagum, for example, even maintains a CD Specialist who focuses on implementing CD projects for the WATSAN sector alone. This is also true in the case of the MPDOs of Medina and Laguindingan, which both maintain staff members to handle needed CD work. The latter, however, does not concentrate on only WATSAN projects.

While both the PPDO and the PHO have the structure to undertake, conduct or implement CD, this is done only as part of or as a component of other projects. This apparent lack of identified major responsible players on CD in the LGUs, specially at the provincial level, creates a serious gap to the critical linkage and support of sector projects, from the provincial to the municipal and as far down as the barangay levels. Firstly, there is no CD framework in place and no permanent structure within the LGUs that serve guideposts in doing CD work, except for the manner/experience done in the past BWP projects.

This leads to the second situation. CD work, to be successful, is a continuous and consistent undertaking. Without a CD framework, a permanent structure or identified responsible people for said undertaking, then any CD work started cannot prosper to its successful completion.

The third condition is really a question of whether the provincial and municipal officials are cognizant of and committed to the true importance of CD as a foundation activity for sustainable sector projects. This awareness on the importance of CD must be translated to giving

full support – financial, human and material – to sector projects in their entirety. Although there is no existing position for a community development specialist in the province, and very rarely, in the municipalities, the LGU officials are in agreement that there should be better community participation in future WATSAN activities and projects for the facilities to be sustained. However, there is a need to reorient staff who would be involved in sector-related projects in order for them to learn some up-to-date techniques and strategies that are otherwise not present in previous CD process.

5.8.4 Training on CD

The province is willing to come up with a permanent body to implement, on a continuing basis, new projects on water supply and sanitation and give this group sufficient training for sector activities and projects. The LGUs showed willingness to facilitate said training programs that are relevant to the achievement of the sector plan under preparation as borne out by the discussions with these officials and the Results of the Barangay Key Informant Survey.

Some of the PPDO staffers have attended training programs with CD components and which were focused on WATSAN. These training courses are as follows:

- 1) Community Organization, Mobilization and Development sponsored by the defunct Rural Waterworks and Development Corporation (RWDC) in 1984.
- 2) Community Organization and Development sponsored in 1985 by the USAID in connection with the Barangay Water Project (BWP).
- 3) Social Reform Agenda-CBIS and Development Training Program sponsored by the PCFP-SRC in 1997.

As seen from the list, the earlier training on community organizing for the WATSAN sector has been more than ten years ago; while the latest training on CD is part of a larger project perspective.

Water district personnel also attended various training and seminars conducted by the Local Water Utilities Administration (LWUA), the large water districts in the region and other private training institutions; but these focused more on administrative, financial and technical aspects of level III water supply systems, rather on community development.

5.8.5 Utilization of NGOs

The provincial government considers non-government organizations or NGOs as partners in development in Misamis Oriental, and there are a handful of organizations presently working actively for the promotion of WATSAN-related projects. One positive point, however, is that these NGOs have had wide experience in dealing with the grassroots levels; they have knowledge of strategies on how to enter a community and blend with the local people. The provincial officials believe that tapping the assistance of the NGOs will not be difficult in the WATSAN sector. The list of NGOs that have a track record of doing work in the province is updated on a yearly basis (refer to the Supporting Report for the List of NGOs and CBOs for Misamis Oriental).

5.8.6 Existing Community Development Processes

(1) Manner of Participation in Sector Development

The practice of the LGUs in encouraging community participation for sector projects was generally confined to the organization of: (a) a BWSA for Level I systems; (b) a RWSA for Level II systems; (c) a water district or LGU waterworks for a Level III system; (d) or combination of a Level II and Level III system. Once formed, the organized BWSA, RWSA, LGU-WS and WD became responsible for soliciting the participation and involvement of the users-beneficiaries in ensuring the sustainability of the WATSAN organization and its various projects and activities.

For the BWSA/RWSA, the users' participation was usually in the provision of free labor and in the donation of cash, materials or sites during the construction phase of the sector project. Left to the central and local government planners was the responsibility for the other stages of project development such as planning and design, monitoring and evaluation which included activities as project identification, site selection, water rate setting, and operation and maintenance. As a result, only a few BWSA/RWSA are presently in operation because WATSAN facilities have not been properly maintained and very few users continue to pay their water fees.

As suggested in the results of the group interviews conducted for this sector study, both the male and female beneficiaries are now receptive to playing a more dynamic role in sector projects. They professed willingness to form themselves into water associations, readiness to be active members and to contribute free labor during any phase of system construction, repair and maintenance.

Water Districts (WDs), on the other hand, generally practice participatory community development. Users-beneficiaries are consulted on practically all phases of project development, that is, from the start of the water district's operation, before loans to be contracted, and before water rates are set and/or adjusted. Maintenance of the WATSAN facilities before the water meter, however, remains the responsibility of the water district.

(2) Typical CD Work

The typical CD work is a carry over from the manner it was done in past sector programs. This includes the formation of the water supply and sanitation association that follow the general guidelines set forth by the government such as project orientation at the barangay level and the conduct of training participated in by members of the beneficiary community.

More often than not, the agreement to organize the BWSA/RWSA was reached after one general assembly or organizational meeting called for the purpose. The BWSA/RWSA was tasked to operate and maintain the water supply and sanitation facilities. Their members were given different types of training, such as pre-organizational teach-ins, management training, pre-operational and post completion training and operation and maintenance seminars.

Typically, CD work consists of orientation and training on community organizing for development projects particularly on the planning and conceptualization aspect. The conduct of barangay development planning also involves CD work. When implementing health-related projects, the PHO staff of Misamis Oriental first meets with the local officials to orient them on the proposed project. After consultation with the local officials, PHO then conduct meetings among the barangay constituents. The WATSAN components for these activities, however, are not the focal points and are only part of the larger development framework.

For the WATSAN sector, Agusan del Sur, one of the provinces in the First Batch of this study, has been implementing a typical CD process that has been the result of a recent UNDP project (refer to the Supporting Report for the Detailed CD Process of Agusan del Sur).

In the Result of the Barangay Key Informant Survey among the barangay officials, tribal chieftains and other community heads, it was found out that the barangay councils are

willing to pay for the training of volunteers on the operation and maintenance of constructed facilities. The same survey showed the willingness of local residents to contribute cash while others will provide free labor for the repair and maintenance works as a manifestation of their active involvement with the BWSA.

In forming the water districts, LWUA, in coordination with the LGUs concerned, conducts a series of sectoral consultation with the community. Since water districts are formed at the option of the LGU, LWUA first consults the people, through a series of public hearings, to arrive a consensus on whether or not to form the water district. LWUA also encourages the community to participate in the selection of the WDs' five-man board of directors, who are nominated from various sectors. Once formed and operating, the water district conducts regular dialogues with its concessionaires on various issues such as water rates formulation/adjustment, expansion program and other matters that may affect the people-WD relationship.

5.8.7 Information, Education and Communication (IEC) As Foundation Activities for Community Development

A comprehensive, well-planned and executed IEC program on the sector informs and educates the people on the value of water, the benefits derived from good health and sanitation and on the programs and activities of government on the sector. This provides the proper media and venue for a sustaining mechanism to promote free, open, two-way exchange of information and communication at all times.

The province has an existing IEC program for sector plans and programs although this is being handled mainly by the PHO through its Environmental Health Services program being implemented in coordination with the municipal and barangay LGUs. Information on sector policies, opportunities and programs are given through community assemblies and house-to-house campaigns. Information is also disseminated through the production and distribution of posters.

There are problems, however, that hamper the effectiveness of IEC program. Firstly, there is some difficulty in generating data as an input to planning in some projects being implemented in depressed barangays. Secondly, the municipalities and the barangays do not have existing IEC programs to generate community participation on sector projects and depend on the province for IEC materials. Thirdly, the medium of communication and/or instruction in ethnic or indigenous communities needs to be translated to the prevailing dialect. Fourthly, "pu-

rok" and home visits conducted in far-flung areas are difficult to supervise and monitor. Lastly, special IEC projects need financial backing, and when times are hard, said projects are first to be scrapped or relegated to the last in the list of priorities.

On the other hand, the water districts (WDs), in general, implement a more systematic and comprehensive IEC program. Most WDs produce printed information materials such as newsletters, leaflets and posters that are disseminated to the concessionaires. Regular press releases on WD development issues are submitted to local newspapers. There are some WDs that sponsor radio programs while others conduct regular dialogues with the community. Those that do not possess enough expertise are assisted by the "bigger" WDs within the province/region.

A region-wide Water Information Network, called the Northern Mindanao Water Information Council, has been established with all WDs in the region as members. This network undertakes regular public information drive and helps smaller WDs to disseminate information. For the province of Misamis Oriental, it is the Cagayan de Oro City Water District, which is named Godfather Water District in Region X that assists the "smaller" WDs.

In certain municipalities, the MHOs collaborate with municipal-level agencies in undertaking comprehensive IEC programs. The MHO of Laguindingan, for example, coordinates with the MPDO, Social Services and Development Office and DILG in conducting health education campaign. Its recent toilet bowl distribution program utilized house-to-house visit to promote the project. DOH-produced posters were also distributed.

5.8.8 Health and Hygiene Education

The PHO, in coordination with all the rural health units (RHUs) implements a province-wide environmental health service program which involves house-to-house campaign and people assemblies. The program includes topics on the provision of water supply, toilet construction, food sanitation and garbage disposal. In this connection, the PHO conducts the following training programs:

1. Basic Health and Sanitation Education for selected barangay constituents
2. Foodhandlers' Training for food operators

A key informant survey among barangay residents revealed that people recognize the importance of good health and hygiene practices. Most of them learned about health and sanitation matters mostly from health workers, radio and school. They also learned health education from television, their relatives and friends and health clinics.

5.9 Gender

5.9.1 General

This section presents the current status or the existing condition for gender and development in the Province of Misamis Oriental for the WATSAN sector from the side of the government, on one hand; and the point of view of the people and the communities served, on the other. As such, it elucidates on the evolvement of gender policies on the national level and shows how these have filtered down to the local level where gender responsive planning has become a requirement for all development efforts on the WATSAN sector. It also reveals the extent of the awareness that the people and/or beneficiary communities have on gender matters as seen through their participation in past sector projects as well as their perceived participation in future projects.

Gender-related information were taken from the following: (1) The interviews undertaken with LGU officials during the study period; (2) The answers to the CD/GAD Questionnaire distributed to select provincial and municipal officials involved in sector development; (3) The Result of the Barangay Key Informant Survey for Misamis Oriental administered to the officials of the select local communities; and (4) The Result of the Group Interviews for Misamis Oriental conducted at the barangay level; and (5) Other documents researched on and provided by the national, regional, provincial, municipal and barangay level offices.

5.9.2 The Evolution of Gender and Development

The 1987 Philippine Constitution recognizes and ensures the fundamental equality of women and men before the law and cites their respective roles in nation building. The National Commission on the Role of Filipino Women (NCRFW), established in 1975, ensures the integration of gender concerns in all aspects of the project development. In 1991, Republic Act 7192, better known as "Women in Development and Nation Building" was enacted to strengthen the mandate of the NCRFW. The Act called for the allocation of a substantial portion of the official development assistance funds from foreign governments and multilateral agencies to support programs and activities for women.

The adoption of the Philippine Plan for Gender Responsive Development (1995-2025) paved the way for full participation of women and men in planning and implementation of technology for infrastructure projects, including those in the water supply and sanitation sector. In 1995, the Office of the President issued Memorandum Order No. 282 directing various government training institutions to incorporate "Gender and Development (GAD) Concerns and Programs" in their respective curricula in order to further institutionalize gender and development programs. The General Appropriations Act of 1997 mandated all departments, offices and agencies to set aside a minimum amount of 5% out of their 1997 appropriations to be used for projects designed to address gender issues. The Local Government Code includes a provision giving political empowerment to women by creating sectoral seat for women to be elected in every local legislative assembly all over the country. To facilitate the whole process, a gender conscious system of data gathering, processing and generation has been established.

The significance of RA 7192 has started to gradually filter down to the LGU levels. The DILG gives Gender Awareness Orientation and Training to its officials and employees, from the central down to the municipal level. The purpose for this is not only to establish a common awareness on gender, but also to recognize that they are catalysts of growth and development for LGUs. In compliance with the policies enunciated in RA 7192, all government departments and agencies were directed to revise, review all their regulations, circulars, issuance and procedures to remove any gender bias. Thus, recent projects that national government agencies have incorporated gender concepts including the projects from the water and sanitation sector.

The DILG implements gender responsive WATSAN projects. The DPWH implemented in 1991 the First Rural Water Supply and Sanitation Project which adopted the "Women in Development" (WID) approach aimed to create support mechanisms to enable women to surmount problems regarding water and sanitation thereby increasing their productivity efforts and giving them greater participation in decision-making. Most of the water and sanitation projects of the DOH are directed towards the improvement of women's health and physical condition as well as their social status in the community. As such, implementation of most health and sanitation projects, including water supply, utilizes the women's sector in the community.

5.9.3 The LGUs and Gender

For some time now, the province of Misamis Oriental, through the Provincial Health Office, has been implementing gender sensitive projects. The inclusion or utilization of gender sensitive approach to planning to WATSAN projects has been limited, however, more on the health, sanitation and hygiene projects.

The PHO is regularly conducting two gender-sensitive training courses, to wit:

- 1) Basic Training on Environmental Health Services for Barangay Health Workers
- 2) Food Handlers Classes for Food Operators and Handlers being conducted once a year in each municipality

5.9.4 Gender in WATSAN Sector Projects

(1) Gender Participation in Sector Development Projects

A province-wide survey and group interviews were undertaken to assess gender sensitivity of barangay officials and the beneficiaries in the roles and modes of participation that they, as men and women, perceive for themselves in sector projects. The respondents in the key informant survey were either an official of the barangay council, an official of the BWSA, or a recognized community or tribal leader. The purpose of the survey was to find out the degree and type of government assistance on the sector that cascades from the national government down to the barangay level.

In the five barangays surveyed, the total number of barangay council members is 42. Of this number, 31 were males and 11 females. One of the five barangay chairpersons is a woman.

The respondents in the group interviews, on the other hand, were composed of 32 females and 20 males, the majority of whom belong to the 46-60-age bracket. The level of education of said interviewees were fairly distributed from elementary to college levels with men outnumbering women at having graduated from college. The occupation of a big majority of the respondents is farming/fishing.

The objectives of the group survey/interviews were to identify potential service population and service level desired by the community, to assess the degree of involvement of both men and women in planning, managing, operating and maintaining WATSAN projects, and the willingness and capacity to pay of potential users. The findings are:

On the formation/composition of the BWSA/RWSA and WD Board:

The key informants in two of the three barangays indicated that there were BWSA/RWSA organized in their respective barangays, both of which were formed by the barangay councils. Men dominate BWSA membership, as indicated by most of the key informants.

On the other hand, almost all of the group interview respondents of the two barangays surveyed revealed that there were BWSAs/RWSAs in their barangays although only about 75 percent of them are members of these associations. For future WATSAN projects, all the male and female respondents indicated willingness to provide free labor or donate materials as their participation during the construction of WATSAN facilities. All of the female and majority of the male respondents indicated that they were not consulted nor briefed on their proposed roles and responsibilities in the planning, design and construction of water supply facilities as well as in the formation of the WATSAN association or the fixing of water charges.

There are five sectors represented in the water district's Board of Directors, one of which is the women's sector. More often than not, the educational sector almost always nominates/appoints a female educator.

On participation in WATSAN training:

Only a few respondents were able to attend training programs although the female respondents who were able to participate attended WATSAN-related training courses. Male participants attended courses on livelihood. However, all male and female respondents indicated interest to attend training programs for the WATSAN sector such as water supply management, O&M, and sanitation and on livelihood but preferred a training period of not more than three days.

On participation in health and hygiene:

Both male and female respondents equally recognized the importance of good health and hygiene practices although most of them have not attended training program on health education. However, they would like to attend training programs specifically on water supply maintenance and health and sanitation.

On water-related illnesses, it was found out that female children were mostly afflicted with diseases such as gastro-enteritis, malaria and diarrhea.

On participation in operation and maintenance:

Both the men and women believe that they can participate in operating and maintaining the WATSAN facilities. They said that they could provide cash and assist in the repair and maintenance of facilities. The interviewees indicated that someone in the barangay (council) is generally the one responsible for doing minor repairs of the family/community water supply facility.

(2) Gender in Water Supply and Sanitation Practices

The same survey also indicated gender sensitivity in water supply and sanitation practices, as presented in the following findings:

Responsibility in Fetching Water

All the female respondents indicated that their female children were the ones responsible for fetching water for family use. But the majority of the male respondents said that it is the wife who fetches water. The majority of female respondents indicated that families fetch drinking water twice a day while the male interviewees said its more than four times a day. Both the male and female respondents agreed that the duration of transporting water from the source to the house is about 10 minutes. Most of the male and female respondents admitted that they have problems with the current water source.

5.10 Existing Project and Sector Monitoring

(1) Sector Monitoring

The primary sources of sector data are the field office and staff of DPWH, DOH, LWUA, DILG and NSO. Other agencies, including NEDA and LGUs, use data from these agencies. Each of these agencies runs its own project and/or activity-monitoring system largely based on required reports of its field offices. Only the NSO gathers and assesses information nationwide on a regular basis as part of its Census on Population and Housing (CPH). The CPH "long form", which includes "water supply", is administered on 10% of the households once every ten years, and "short form" every five years. Water and sanitation is not included in the short form.

(2) Project Monitoring

Project monitoring has been conducted by different government levels depending on the characteristics of the project i.e., local funded or foreign assisted projects. However, only projects handled by the local offices of central government agencies are monitored, mainly focusing on physical accomplishments and capital expenditures of projects, by respective central government line agencies.

Monitoring activities under the Regional Development Council cover 4 components: Macro, Economic, Social welfare and Infrastructure. Monitoring report on foreign assisted infrastructure projects, including water supply project is submitted monthly from PPDO to the regional Office of DILG, while, the reports on other sectors and non-foreign assisted projects are submitted quarterly. The monitoring report submitted to the regional office of DILG is sent to the central government (NEDA) through RDC after compilation with other monitoring reports (by the secretariat of RDC). The central government agencies also report to the foreign assistance agencies such as ADB, WB, etc.

It was field confirmed at the NEDA Regional office that there are some foreign assisted projects directly provided to the regional office, such as grass root assistance with a limited amount. The NEDA is not involved in the occasion of signing with the foreign donor for such projects. However, the reporting on the project is usually made from regional office to the central office of NEDA. In this connection, the central office of NEDA sometimes overlooks the projects. It is necessary to establish data management system to monitor all related projects.

There are no differences in the current project monitoring systems at LGU level. Aside from local practices, the monitoring reports on foreign assisted projects are submitted to the concerned central government agencies through the regional offices.

The monitoring for the nationally funded WATSAN related projects are conducted under the Regional Monitoring and Evaluation System. As for provincial funded WATSA projects, the PPDO conducts monitoring from the start until completion of the project. A monitoring/evaluation team of the municipality evaluates locally funded WATSAN projects. This team closely monitors projects that are getting negative feedback and require validation and verification. The report covers status of implementation, finance, percentage of accomplishment and slippage/problems as well as evaluation and countermeasure. Figure 5.10.1 shows an example of UNDP assisted project illustrating the linkages among

concerned agencies.

Both in sector and project monitoring, the exchange of information between concerned agencies seems to be insufficient/not systematic, though there are opportunities to do so, such as through the periodic meetings done by the RDC. In addition, no data-management system causes not only increasing working burden in the monitoring but also wide dissatisfaction among project implementers themselves. Monitoring report preparation is seen as a nuisance to performing one's job, and is thus haphazardly done. This leads to the problem of reliability of information coming from the fields. A clear mechanism and data management system are required to authorize among relevant agencies.

Figure 5.10.1

**UNDP/PHI/93/010 PROJECT
PARTICIPATORY MONITORING FEEDFORWARD
AND FEEDBACK MANAGEMENT MECHANISM**

