

## **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 49% of the total number of households. The rest is underserved or unserved. Of this, a high 48% is without toilet facilities (refer to Table 4.2.1, Supporting Report and 4.2.3 Sanitation Facilities and Service Coverage, Data Report).

Municipalities that have higher service coverage than the provincial average of 49% are Alabel (89%), Kiamba (61%), Maitum (53%) and Maasim (52%). On the other hand, the municipalities that registered service coverage below the provincial average are Malun-  
gon (33%), Glan (38%) and Malapatan (43%). It was observed that in municipalities that

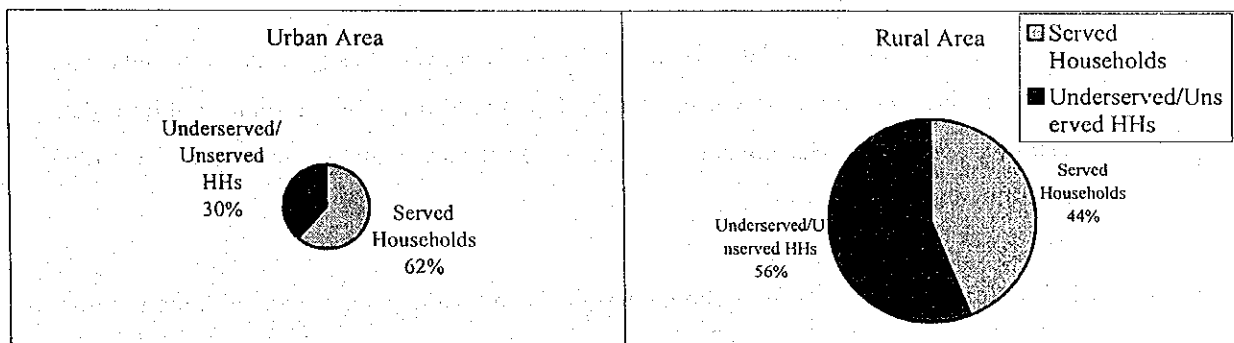
have high water supply service coverage (Alabel, Maitum), high sanitation coverage occurs and correspondingly, in low water supply service coverage (Malungon, Glan), low sanitation coverage also occurs. This can be attributed by the fact that the development of water supply almost always follows the upgrading of the household sanitation facilities because of access to water.

In urban areas, approximately 62% of the total households are served. A much lower served households of 44% 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.

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

| Municipality            | Households, 1997 |               |               | Household Toilets Facilities and Service Coverage |           |                         |           |                                |           |                         |           |                                |                         |               |           |
|-------------------------|------------------|---------------|---------------|---------------------------------------------------|-----------|-------------------------|-----------|--------------------------------|-----------|-------------------------|-----------|--------------------------------|-------------------------|---------------|-----------|
|                         | Urban            | Rural         | Total         | Urban                                             |           |                         |           | Rural                          |           |                         |           | Municipal Total                |                         |               |           |
|                         |                  |               |               | HHs Served by Sanitary Toilets                    |           | Underserved/Unservd HHs |           | HHs Served by Sanitary Toilets |           | Underserved/Unservd HHs |           | HHs Served by Sanitary Toilets | Underserved/Unservd HHs |               |           |
|                         |                  |               |               | Number                                            | % of HHs  | Number                  | % of HHs  | Number                         | % of HHs  | Number                  | % of HHs  | Number                         | % of HHs                | Number        | % of HHs  |
| Alabel (Capital)        | 2,644            | 7,277         | 9,921         | 2,547                                             | 96        | 97                      | 4         | 6,234                          | 86        | 1,043                   | 14        | 8,781                          | 89                      | 1,140         | 11        |
| Glan                    | 3,250            | 11,263        | 14,513        | 1,832                                             | 56        | 1,418                   | 44        | 3,688                          | 33        | 7,575                   | 67        | 5,520                          | 38                      | 8,993         | 62        |
| Kiamba                  | 2,509            | 5,829         | 8,338         | 1,353                                             | 54        | 1,156                   | 46        | 3,724                          | 64        | 2,105                   | 36        | 5,077                          | 61                      | 3,261         | 39        |
| Maasim                  | 1,762            | 4,526         | 6,288         | 1,351                                             | 77        | 411                     | 23        | 1,892                          | 42        | 2,634                   | 58        | 3,243                          | 52                      | 3,045         | 48        |
| Maitum                  | 1,924            | 4,977         | 6,901         | 1,132                                             | 59        | 792                     | 41        | 2,508                          | 50        | 2,469                   | 50        | 3,640                          | 53                      | 3,261         | 47        |
| Malapatan               | 4,838            | 4,699         | 9,537         | 2,788                                             | 58        | 2,050                   | 42        | 1,325                          | 28        | 3,374                   | 72        | 4,113                          | 43                      | 5,424         | 57        |
| Malungon                | 4,877            | 13,960        | 18,837        | 2,429                                             | 50        | 2,448                   | 50        | 3,747                          | 27        | 10,213                  | 73        | 6,176                          | 33                      | 12,661        | 67        |
| <b>Provincial Total</b> | <b>21,804</b>    | <b>52,531</b> | <b>74,335</b> | <b>13,432</b>                                     | <b>62</b> | <b>8,372</b>            | <b>38</b> | <b>23,118</b>                  | <b>44</b> | <b>29,413</b>           | <b>56</b> | <b>36,550</b>                  | <b>49</b>               | <b>37,785</b> | <b>51</b> |

**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 988 toilet units found in 177 schools. Sanitary toilets adequately serve only 47% of the students. The rest, 53% is underserved or unserved. Meanwhile, sanitary toilets adequately serve about 46% 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 85 students per sanitary toilet, more than double the standard level. A number of school toilets 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 51 public toilets found in public markets, bus/jeepney terminals and parks/playgrounds in the province. All these public utilities have sanitary public toilets resulting to 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.

**Table 4.2.2 School Toilet Service Coverage by Municipality**

| Municipality     | Number of School | Total No. of Student | Number of Toilet |            | Service Coverage |        |          |        |    |
|------------------|------------------|----------------------|------------------|------------|------------------|--------|----------|--------|----|
|                  |                  |                      | Sanitary         | Unsanitary | Served           | %      | Unserved | %      |    |
| Alabel (Capital) | Public           | 18                   | 10,410           | 73         | 21               | 2,920  | 28       | 7,490  | 72 |
|                  | Private          |                      |                  |            |                  |        |          |        |    |
|                  | Total            | 18                   | 10,410           | 73         | 21               | 2,920  | 28       | 7,490  | 72 |
| Glan             | Public           | 36                   | 16,671           | 176        |                  | 7,040  | 42       | 9,631  | 58 |
|                  | Private          | 2                    | 602              | 6          | 2                | 240    | 40       | 362    | 60 |
|                  | Total            | 38                   | 17,273           | 182        | 2                | 7,280  | 42       | 9,993  | 58 |
| Kiamba           | Public           | 18                   | 8,112            | 150        |                  | 6,000  | 74       | 2,112  | 26 |
|                  | Private          | 3                    | 921              | 19         |                  | 760    | 83       | 161    | 17 |
|                  | Total            | 21                   | 9,033            | 169        |                  | 6,760  | 75       | 2,273  | 25 |
| Maasim           | Public           | 15                   | 7,190            | 51         |                  | 2,040  | 28       | 5,150  | 72 |
|                  | Private          | 1                    | 233              | 3          |                  | 120    | 52       | 113    | 48 |
|                  | Total            | 16                   | 7,423            | 54         |                  | 2,160  | 29       | 5,263  | 71 |
| Maitum           | Public           | 17                   | 6,007            | 152        |                  | 6,007  | 100      |        |    |
|                  | Private          | 2                    | 385              | 15         |                  | 385    | 100      |        |    |
|                  | Total            | 19                   | 6,392            | 167        |                  | 6,392  | 100      |        |    |
| Malapatan        | Public           | 15                   | 9,202            | 83         | 28               | 3,320  | 36       | 5,882  | 64 |
|                  | Private          |                      |                  |            |                  |        |          |        |    |
|                  | Total            | 15                   | 9,202            | 83         | 28               | 3,320  | 36       | 5,882  | 64 |
| Malungon         | Public           | 45                   | 16,914           | 169        | 14               | 6,760  | 40       | 10,154 | 60 |
|                  | Private          | 5                    | 1,250            | 24         | 2                | 960    | 77       | 290    | 23 |
|                  | Total            | 50                   | 18,164           | 193        | 16               | 7,720  | 43       | 10,444 | 57 |
| Provincial Total | Public           | 164                  | 74,506           | 854        | 63               | 34,087 | 46       | 40,419 | 54 |
|                  | Private          | 13                   | 3,391            | 67         | 4                | 2,465  | 73       | 926    | 27 |
|                  | Total            | 177                  | 77,897           | 921        | 67               | 36,552 | 47       | 41,345 | 53 |

**Table 4.2.3 Public Toilets Facilities and Service Coverage in 1997**

| Municipality     | 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 |                            | Number of Sanitary Toilets | %   | Number of Unsanitary Toilets | % |
| Alabel (Capital) | 2                          | 1                     | 1                |                              |                       |                  | 4                          | 4                          | 100 |                              |   |
| Glan             | 11                         | 1                     | 2                |                              |                       |                  | 14                         | 14                         | 100 |                              |   |
| Kiamba           | 3                          | 3                     |                  |                              |                       |                  | 6                          | 6                          | 100 |                              |   |
| Maasim           | 2                          | 1                     | 1                |                              |                       |                  | 4                          | 4                          | 100 |                              |   |
| Maitum           | 2                          | 1                     |                  |                              |                       |                  | 3                          | 3                          | 100 |                              |   |
| Malapatan        | 1                          | 1                     |                  |                              |                       |                  | 2                          | 2                          | 100 |                              |   |
| Malungon         | 15                         |                       | 3                |                              |                       |                  | 18                         | 18                         | 100 |                              |   |
| Provincial Total | 36                         | 8                     | 7                |                              |                       |                  | 51                         | 51                         | 100 |                              |   |

#### 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.

Chapter

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**EXISTING SECTOR ARRANGEMENT  
AND INSTITUTIONAL CAPACITY**

**5**

## 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, which 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.



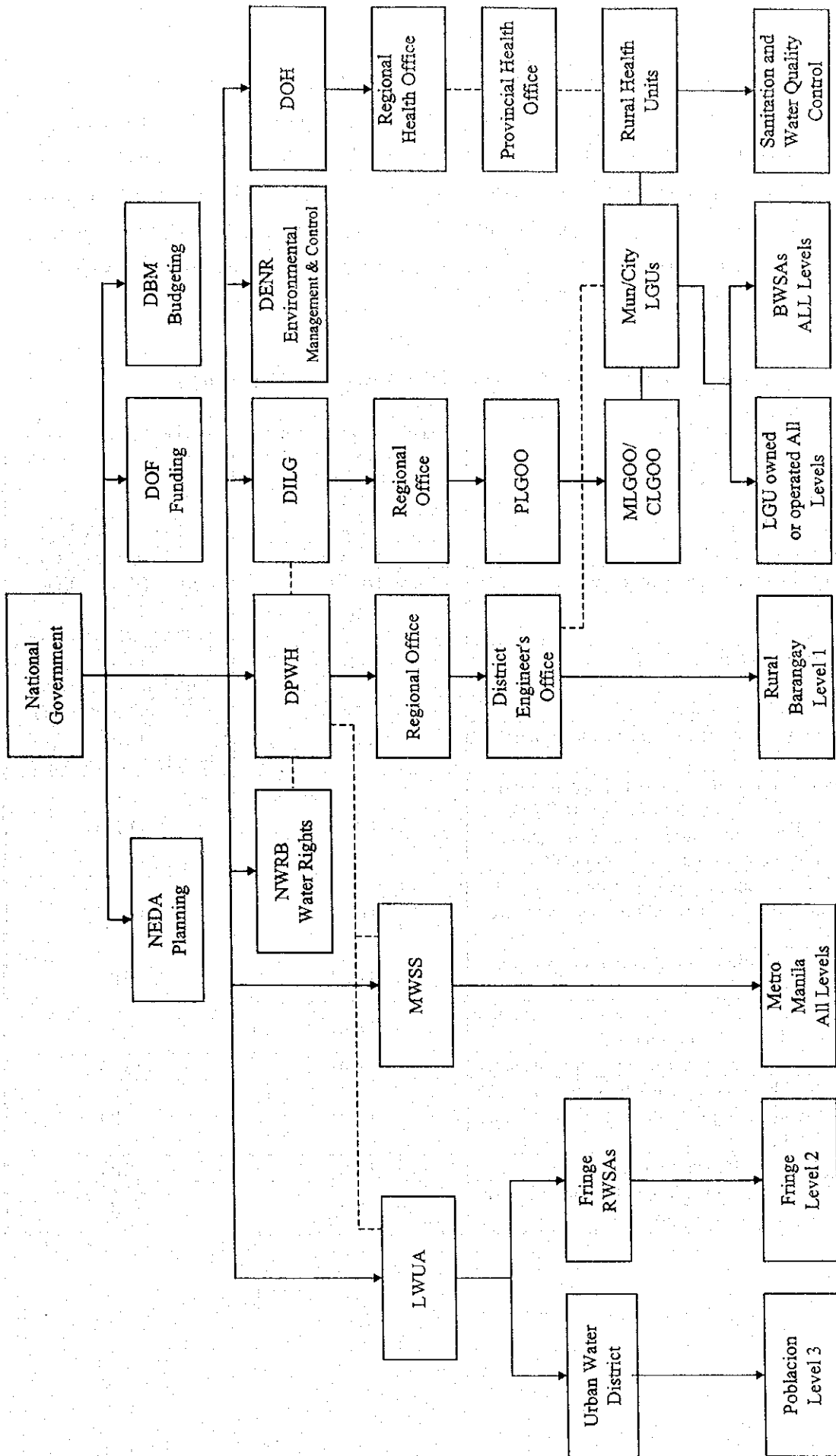


Figure 5.3.1 Functional Relationships

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 WATSAN projects is now the responsibility of DILG.

**Table 5.3.1 Transition Functions of the DPWH, DILG and DOH**

| <b>Activities</b>                                                                                                                                                                      | <b>Previous Involvement<br/>(Before NEDA Board Resolution No.4 in 1994)</b> | <b>Present Involvement<br/>(After NEDA Board Resolution No.4, s. of 1994)</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 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<br>with DILG assistance                                                  |
| Train BWSAs on O&M                                                                                                                                                                     | DPWH                                                                        | LGUs<br>with DILG assistance                                                  |
| Procure/supply materials/spare parts                                                                                                                                                   | DPWH                                                                        | LGU (PGSO/MGSO)                                                               |
| Sector/Project monitoring and data-management                                                                                                                                          | DPWH                                                                        | LGUs<br>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 which need improved water supply and households, which 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 and provincial levels.

## (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 admini-

stration. 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 protec-

tion 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 provincial 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 Treasury Office (PTO), the Provincial General Services Office (PGSO), the Provincial Budget Office (PBO), and the Provincial Accountant's Office (PAccO).

#### 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 to support plan formulation and promotes people participation in its planning activities. It likewise integrates and coordinates sectoral plans and studies undertaken by different functional groups or agencies, and monitors and evaluates the implementation of development programs/projects and activities. The office is composed of 3 divisions, details of which are shown below (refer to Organization Chart Figure 5.5.1, Supporting Report):

- Administrative Division – The function is to provide efficient administration and timely and adequate support services. It has 4 staff members at present.
- Plans and Programs Division - This division is responsible for planning and programming the various sector development activities: agriculture, social, water source, investments, trade and industry, tourism, capital improvements and annual implementation. At present, it has 6 regular personnel.
- Evaluation, Research and Statistics Division – This division conducts field surveys and inspection of proposed projects. It prepares statistical reports and other documents necessary for the evaluation, planning, programming and implemen-

tation of projects. It likewise supports the plans and programs division in the preparation of needed documents. It has a total staff complement of 5.

The PPDO implements special projects of the Office of the Provincial Governor. As indicated above, the PPDO has only 15 personnel to man its 3 divisions; these personnel also undertake the special projects which include among others the province-wide Barangay Development Planning; Provincial Forestland Use Planning; implementation of Community-Based Forest Management (CBFM); Provincial Water Resources Management; and others.

## 2) Provincial Engineering Office (PEO)

The PEO is responsible for the administration, coordination, supervision, and control of construction, maintenance, improvement, and repair of roads, bridges, and other engineering and public works projects of the provincial government. It formulates policies and objectives, plans and programs, techniques and procedures and practices in infrastructure development. It also provides engineering services such as investigation and survey, designs, feasibility studies, and project management. The office provides technical supervision over all engineering offices of component municipalities. It has 4 divisions as follows: (Refer to Organization Chart Figure 5.5.2, Supporting Report):

- Administrative Division – This division's function is to provide efficient administration and timely and adequate support services for the whole PEO.
- Planning, Designing and Programming Division - This division is responsible for formulating and integrating general plans, programs and projects of the provincial government. It conducts designing, planning and programming of provincial/national projects assigned to the office. Under this division, a quality control unit undertakes and directs the conduct of laboratory tests on the durability and practicability of locally available materials and evaluate/assess the acceptability. At present, there are 18 staff assigned to this division.
- Construction and Maintenance Division – This division provides technical supervision overall activities related to construction and maintenance of water supply projects, river flood control and seawall, roads and bridges, and drainage systems along provincial roads as well as some public buildings. It also prepares estimates of construction cost and program construction operations including equipment requirements. It has a total staffing component of 12.
- Motorpool Division – The task of this division is to undertake repair, maintenance and rehabilitation of heavy equipment owned by the provincial govern-



ment. There are 16 personnel at present.

3) Provincial Health Office (PHO)

The PHO formulates and implements policies, plans, programs and projects that promote the health of the people in the province. It provides technical assistance to the Rural Health Units (RHU) and Barangay Health Stations (BHS) and assists in the promotion of public sanitation. The office is also tasked with conducting health information campaigns and rendering health intelligence service (refer to Organization Chart Figure 5.5.3, Supporting Report). The office consists of the following services:

- Technical Service Unit – This unit provides health services in the hospital and supervises implementation of program activities in the field. Under this service are 9 units, 2 of which are directly involved in the conduct of WATSAN activities. Furthermore, this unit coordinates with program managers in launching training and monitoring of health programs and monitors the continuance of household teaching classes. It also distributes IEC materials and coordinates with GOs and NGOs. There is only 1 person in this unit.
- Environmental Sanitation (EVS) Unit - The EVS is responsible for formulating plans and programs on environmental sanitation, and collecting and analyzing necessary data thereof. It also supervises all RSIs in the implementation of environmental sanitation activities and provides technical assistance/response for any environmental sanitation related problems. In addition, this unit is tasked to conduct water quality control tests and surveillance. At present, only 1 person, a supervising sanitary inspector, mans this unit.

4) Provincial Treasurer's Office (PTO), Provincial Budget Office (PBO), Provincial Accountant's Office (PAccO), 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 support the general appropriation ordinance. The office maintains and updates the tax information system of the LGU and provides supervision over all treasury offices of component municipalities. It also conducts periodic tax education information/collection campaigns and trains barangay treasurers and officials in the methods of collecting real property taxes and 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 co-

ordinates 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 PAcco supports the Local Government Unit through the provision of accurate, relevant and timely financial information and installation of a control system for effective and efficient management of resources. It 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 and furnishes different offices vital information, particularly on the financial condition and operation 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 of 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 the 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 Steering Committee (PSC) for all External Assisted Projects

The PSC for all external assisted projects facilitates and oversees the implementation of all external assisted projects in Sarangani province. At present, external funding agencies such as USAID, CIDA, UNICEF and AusAID have existing projects/programs in the province. These are Governance and Local Democracy (GOLD), Coastal Resources Management Program (CRMP), Natural Resources Management Program (NRMP), Local Government Support Program (LGSP), Fourth Country Program for Children (CPC IV), Provincial Agri-Industrial Center (PAIC), and Southern Mindanao Agricultural Program (SMAP).

6) Provincial Development Council (PDC)

The main function of the PDC is to formulate a long term, medium term and annual socio-economic development plan. It formulates policies as well as an investment program for the province. The PDC is headed by the Governor and is composed of the following members: representatives of the congressmen; chairman of the Sang-

guniang Panlalawigan's Committee on Appropriations; municipal mayors, representatives from NGOs; and the president of the association of barangay captains. The PPDO serves as the secretariat of the PDC.

7) Provincial Project Monitoring Committee (PPMC)

The PPMC is headed by the provincial governor and has the following members: the provincial budget officer; a DILG representative; the provincial engineer; the provincial information officer; and 2 NGO representatives who are member of the PDC. The PPDO also serves as the secretariat of the PPMC.

The PPMC monitors projects implemented by and through the provincial government system. The technical bases of monitoring are the programs of work and the detailed plans and specifications, including the socio-economic impact of the project. Monitoring covers activities from project inception to completion, and covers all projects implemented by or through contract, Memorandum of Agreement, or administration.

Monitoring reports are prepared after every project. The monitoring report under the Regional Project Monitoring and Evaluation System consists of Physical and Financial Targets for Capital Investments (prepared at the beginning of each year) and Physical and Financial Accomplishments for Capital Investments (prepared quarterly). The latter are consolidated into a semestral project monitoring report for endorsement to the RDC for information and reference.

(2) Municipal and Barangay Level

The municipal government coordinates the delivery of basic, regular and direct services to the inhabitants within its territorial jurisdiction. Its organization structure is similar to its that of the provincial government. For WATSAN projects, the following offices are directly involved.

1) Municipal Planning and Development Office (MPDO)

The MPDO is in charge of all municipal planning and development activities. This mandated to formulate an integrated economic, social, physical, and development plan and corresponding policies for consideration of the Municipal Development Council. Its regular activities include the preparation of planning documents and monitoring and evaluation of projects.

2) Municipal Engineer's Office (MEO)

The MEO regularly performs engineering surveys to acquire data for designs, layout, and constitution of waterworks systems, sanitation facilities and other infrastructure projects. It also inspects works of contractors based on presented plans and specifications.

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. The barangay councils are empowered to enact tax and revenue ordinances as may be necessary to discharge the responsibilities conferred upon them by law and to promote the general welfare of its inhabitants. These revenues are in addition to the barangay's share in the IRA from the National Government. The BCs are also tasked to provide/solicit funds for the construction of barangay water 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 the respective municipalities since the MHO is tasked to deliver 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 the planning, design and construction, and monitoring of public works programs and projects within the district. It coordinates with other departments, agencies, institutions and LGUs within the district in the implementation of infrastructure projects. The Construction Division at the DEO is responsible for the implementation of water supply projects funded out of CIA or CDF, Senatorial Fund, Presidential Social Fund, and foreign-assisted projects.

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 and general governance and development. At the province level, the PLGO officer is assigned as head of the Office while MLGO officers are assigned to municipalities.

3) NEDA Regional Office and Regional Development Council

Various private and public sector organizations/institutions are tasked to coordinate with DILG to establish the system for regional sector master planning and the corresponding monitoring system. The NEDA is the Secretariat of the Regional Development Council, and it ensures that sector plans are consistent with regional and national priorities. It accepts project proposals/plans and programs from various Provincial Development Councils (PDCs) in the region.

(4) Water Districts (WDs)

A 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 by LWUA to WDs. LWUA also exercises regulatory functions vis-a-vis the water districts. To be self-sufficient, a WD 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. There are 2 WDs operating in Sarangani province.

(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 whose 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 proper operation and maintenance of the Level I facilities. The organizational size of a BWSA depends on the number of facilities, needs, culture and situation in a particular barangay. However, its structure is quite simple as it consists merely of the officers, a bookkeeper, and a caretaker/s. A creation of a BWSA typically involves three phases: pre-formation/ social preparation, formation, and post formation. During the formation phase, pre-membership training and election of officers are held. In this phase,

individual member's interests and community commitments are manifested through applications for membership and the signing of a Manifesto Resolution.

When DPWH was still constructing water supply facilities, DPWH staff themselves organized BWSAs. However these associations were not sustained and became nonfunctional as their water facilities had become non-operational. Today, most of the barangays in Sarangani province with Level I water supply facilities have no water associations. They no longer pay fees for water services and they rely on barangay and municipal/provincial governments to maintain and operate the facilities. Most Level II systems in the province are operated and managed by the barangay council, a community association, or a barangay cooperative. There is only 1 community association-managed/operated Level II system while there are 5 functional BWSA-operated Level II systems in the province. More BWSAs are currently being organized by an assisting NGO. Level III systems not covered by WDs are managed/operated by the LGU or by a cooperative.

#### (6) Private Sector

The private sector has been involved in water supply development through the provision of investments, technical studies, community mobilization, and construction of water supply and sanitation facilities. NGOs have also demonstrated capability to undertake project development and implementation with community participation. For example, the Institute of Primary Health Care- Davao Medical School Foundation, Inc. assisted the province through the barangays community development and mobilization and through the construction of water system facilities. The Business Resource Center of Notre Dame of Dadiangas College was also engaged in community mobilization activities throughout the province, particularly in health and sanitation projects with tribal communities as major beneficiaries.

### 5.6 External Support Agencies Active in the Sector

#### (1) Multilateral Agencies

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, which 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, including 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 Fourth 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 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 (including Sarangani province). This was compelled by the sudden and 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 ten- (10) provinces. With DPWH, rural water supply systems were constructed at the evacuation centers for the Pinatubo refugees. JICA also supported the ground water 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 P 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 Regional Development Council 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 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**

With reference to project management 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 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. Perceived needs were based on the results of the Integrated Rural Accessibility planning (IRAP) Survey Data undertaken through ILO and DILG. Water supply ranks no. 1 of the ten most priority projects to be undertaken by the province. However, some barangay councils submit barangay resolutions to the province to fund project proposals. These proposals are endorsed by the MDC to the PDC for consideration and subsequently to the Sangguniang Panlalawigan (SP) for adoption, approval and appropriate funds.

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

The PPDO plays a crucial role in identifying project needs. The activities cover a series of meetings and consultations with the barangay people, conducting barangay profile survey through IRAP, and Barangay Development Planning (BDP). The need for WATSAN facilities is almost always identified. The barangay officials become aware of the project needs and their roles by attending workshops, meetings or KASFALA, assisting surveys and identifying the project/s.

At the municipal level, the MDC through its 4 sectoral committees (e.g., the Macro, Economic, Social and Infrastructure Committees) reviews and gives recommendations to the plan. This is endorsed to the SB and further to the PDC. The MDC is composed of the municipal mayor, one SB member, all barangay chairmen, and representatives from accredited NGOs (which is 25% of the total membership). The chairman of the committee of appropriation of the SB is the representative of the SB to the MDC.

At the provincial level, the PDC integrates and adopts development plans of the component (municipalities) and the various sectoral plans of departments. This is then endorsed to the SP for final adoption and approval as well as the appropriation of the necessary funds for project implementation.

3) Priority criteria for selection of the projects

Generally, selection of projects prioritized for funding is based on the Priority Program Thrusts identified and or to be pursued by the province annually.

Specifically, projects are selected based on the following criteria:

- Those identified/prioritized in the approved Barangay Development Plans;
- Those with barangay and or municipal counterpart fund;
- Those which are consistent with and/or support the major plans/programs of the province, i.e. Tourism, Food Security, Water Resource Management, KDA-SRA-MBN and other programs;
- Those which impact a greater number of the population with least cost;
- Those which improve functioning of urban and rural interactions (dispersed concentric development strategy);
- Those which are sustainable (e.g., maintenance scheme/design);
- Those with expressed support for community project implementation (i.e. road-right-of-way guaranteed, deed of donation, oversight, etc.);
- Those which promote and enhance inter-barangay & inter-municipal effective functioning & relations.

4) Technical considerations applied for identification and prioritization

Technically, the barangay profile survey is conducted. The barangay profile includes technical matters regarding water supply and toilet facility fabrication; brief description of water sources; etc.

To further promote sustainability of the project, it is essential to involve the people, starting from demand identification and the basic survey stage. This is especially true for Level I water supply system. Accordingly, a simplified mechanism showing responsibilities/activities required among concerned parties is necessary. A 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 procedures including identification, validation and prioritization is executed by the concerned LGUs. These results in considerable time consumed to finalize the funding. The LGUs must seek a simpler and more systematic procedure.

With reference to the implementation of the medium-term target plan, review and modification of selection/prioritization criteria shall be made by LGUs taking account the said barangay profile. The LGUs together with barangay people shall prepare the requirements (including barangay profile) in a timely 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 Regional Office is currently preparing the Regional Master Plan (1998-2008). With reference to this activity, the staff of the PPDO is undertaking part of the M/P, 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

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

3) F/S of Level II and III systems

The F/S for the development of Level II systems is usually done by the PEO. In addition to the preliminary study on the said water source development, water production and the water demand are determined to conform to project needs. Tentative locations of communal faucets are also identified in a Level II system. Hydraulic profile (pipe size, length) and size of intake box / reservoirs are determined. The BWP design standard is also applied in this case. Finally, cost estimate is made for the required facilities. The F/S report is then submitted to the PPDC for evaluation and recommendations before approval.

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

The D/D of WATSAN facilities is also prepared by the PEO based on the F/S report. It must also be within the available budget. Designs of pipeline and structure are based on the standard design prepared by BWP, while well design is based on the DPWH design standard. The PEO has no experience in planning and designing large waterworks facilities including pumping station/water treatment facilities.

The provincial office also does not have any experience in contracting-out facility construction to the local private sector. However, it has experience in the procurement of materials, such as cement, sand, reinforced bar and fittings.

There is a case of limited water supply services (scheduled supply for 4 hours every other day in Waterworks) even though a sufficient spring source was tapped. This problem arose because of insufficient capacity of distribution facilities. The problems can be traced back to planning/designing in F/S and D/D.

Future water supply system/s may require water treatment facilities when using surface water sources. Knowledge/practice not only in hydraulic analysis but also in structural calculation and water treatment technology may be necessary. Thus countermeasures to increase the capacity of LGUs' technical staff in planning and designing shall be sought. Utilization of consulting services shall also be taken into account.

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

1) Experiences in force account work for construction of facilities

Some of the materials for WATSAN projects need to be procured. Terms of reference for the procurement are prepared by the PPDO and bid documents are prepared by the PGSO. After bidding the PA issues the purchase order and the procurement is

done by the PGSO. Consultancy services are also procured through bidding.

A huge work will be required for the implementation of the Medium-Term Development Plan including the preparation of the required tender documents, evaluation of pre-qualification documents, managing the contract procedure. At present, with the limited volume of the work/projects, the procurement procedure already requires a lot of time and any delay always affects project implementation. The provincial government should examine the current procurement system so that it could handle/manage the forthcoming projects more efficiently.

## 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 MPDO and MEO manage project implementation by assisting the barangay officials in hiring skilled laborer. In the WATSAN-UNICEF projects, the DEOs-DPWH provided the drilling machine for construction of wells as an inter-agency assistance. The PEO and/or MEO personnel supervised the construction work. The Research, Monitoring and Evaluation Division of the PPDO conducts monitoring of 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 for coordination and supervision of the future projects.

With regards to rehabilitation of the Level I facilities, some work has been conducted by employing skilled labor but only upon request from waterworks/beneficiaries. These 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 are supposed to 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. This problem arises 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 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.

RWSA/municipal/barangay government manages Level II and III systems that are rather small in size. The required staff (permanent/casual) are designated to operate/maintain the facilities. There have been some cases, however, where expansion of distribution pipelines and additional service connections were undertaken without due consideration of the technical aspects, e.g., capacities of water sources and distribution facilities. F/S and D/D should be prepared on a timely basis by the qualified engineer/s to avoid the decrease of supply pressure and quantity. Preventive maintenance of the system cannot be undertaken due to the shortage of major spare parts stored/furnished, which is in turn due to budgetary constraints.

2) Communication mechanism practiced in case of facility breakdown

In cases where major repair is required (non-functioning of hand pump parts, etc. for Level I), the BWSA or barangay council passes a resolution to the municipality/PEO for the immediate repair of the facility. However, most barangays (particularly those without BWSAs) have no communication mechanism. Majority of the BWSAs lacks know how on dealing with either the LGUs or the private sector in case of a major facility break down. It is common that the request for repair is sometimes improperly addressed. A communication system should be prepared and put into practice.

For major repair (burst pipe/leakage) of Level II and III system, the permanent/ casual staff takes responsibility for restoration/repair. In case budget is not enough, the waterworks/RWSAs submit a request letter for funding to the municipal government concerned. 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 water system.

## (5) Water Quality Examination

1) The Rural Sanitary Inspectors (RSIs) of MHOs conduct the water sampling of Level II & Level III facilities. The samples are forwarded to the Regional Health Office in Davao City for examination in terms of bacteriological content and physical and chemical parameters. This happens due to the absence of a water laboratory in the province. Water sampling and testing by municipalities are not done periodically/regularly. However, RSIs conduct periodic inspections on Level I, II & III water supply facilities and sources. RSI inspection covers the following: i) distance of water sources from pollution agents/sources, e.g. cemetery, ponds, animal pasture areas, etc.; ii) activities such as washing of clothes or bathing in nearby sources; and iii) existence of toilets. They also conduct periodic disinfection of the water supply through chlorination. Private shallow wells are not sampled and analyzed but are considered doubtful sources of drinking water based on the National Drinking Water Standards.

### 3) Water quality condition

Due to the absence of a laboratory in the province, the PHO assumes that all Level I deep well & spring sources are safe for drinking, while infiltration dug wells are unsafe. It has been determined that thirty percent (30%) of the total functional shallow wells are unsafe for drinking. In the case of Level II & III facilities, bacteriological examination of spring sources and deep wells showed unsatisfactory results due to the presence of *Pseudomonas aeruginosa* or *Citrobacter freundii*. Chlorination and boiling of water are done in these areas. For water facility and source with fecal contamination, proper treatment of water has been initiated. In cases when there are epidemics or outbreaks in the barangays, container chlorination and boiling of water are also conducted/initiated to prevent the incidence of water-borne diseases.

Water quality problems usually occur during floods. This is further aggravated by poor sanitation condition in most villages – lack of sanitary toilet facilities, improper construction of depositories/latrines, lack of sludge/sullage disposal management, and absence of drainage facilities. To address these problems, the PHO recommended the installation of a water laboratory manned by trained personnel in the province.

### 4) Budgetary support

The amount of P 100,000 is allotted annually to the PHO for environmental and

sanitation activities/projects. This is considered insufficient to meet the needs/ requirements of the said program. Meanwhile, the incidence of water-borne/related diseases resulting from contamination of water sources is high and affects the health condition of the populace. A substantial budget for water quality surveillance is deemed necessary.

(6) Private Sector Capability for the Sector Project

The capability of existing local contractors for WATSAN projects is very limited. The need to complement local-based contractors with qualified and experienced contractors to sustain implementation of large-scale projects is imperative. These contractors have their offices located in cities like General Santos, Davao, Cebu and Manila. It is necessary to prepare a list of highly competent contractors for reference.

**5.7.2 Institutional Aspect**

(1) Linkages among Concerned Parties/Departments

Being the lead provincial office responsible for the implementation of WATSAN projects, the PEO works either directly or indirectly with national government local offices, municipalities, and other provincial offices (refer to Table 5.7.2, 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

BHWs conduct briefings and orientation of end-users on proper health and hygiene and on the proper operation of the water supply facilities during barangay consultations. However, due to shortage of financial support and manpower by the PHO and PEO, the magnitude and coverage of the said activities are limited. It is recommended that LGUs give more attention to this need in order to ensure sustainability of project implementation in the future.

(3) Training

1) Planning and engineering for LGU staff

PEO staff members who are sent to training do not directly engage in the actual program of work preparation and in the detailed designing of the project. These activi-



ties are delegated to lower ranking staff. The PPDO/PEO staff needs further technical training on planning and engineering and O&M of water supply facilities to ensure efficient and effective implementation of projects.

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

Though there are staff in the different provincial offices who have been trained in community organizing, social mobilization and community development works, these people are not involved in the implementation of WATSAN-related activities. Furthermore, while there is an existing task force to undertake gender-related training and gender sensitivity seminars at the municipal or barangay level, their efforts are intended for general development applications and not specifically for WATSAN projects. Efforts must be made to utilize the verified expertise of LGU staff in WATSAN and other infrastructure projects.

3) Organizing the association at barangay level

The municipal and provincial staffs are not trained in the formation of BWSAs. This activity was previously performed by the DPWH as part of its project implementation process. Relevant and pertinent policies and information should be provided to the BWSAs before construction starts. So that BWSAs will not become non-functional after the facilities are turned-over to them.

In the case of NGO (IPHC) and UNICEF/UNDP-initiated water supply projects, however, the active participation of the beneficiaries was sought. They were urged to take part in the implementation stage and in the O&M aspects of the project. This was in keeping with the current trend towards demand-driven compared to the previous supply-driven approach. For LGU-funded projects, however, it was observed that the participation of community-beneficiaries was not given much consideration.

4) O&M for users

For projects funded by the provincial government, provision for O&M aspect was not considered. In principle, the barangay beneficiaries are responsible for the performance of O&M activities. In cases of facility breakdown, barangay officials or BWSAs request the LGUS (provincial /municipal) for assistance, particularly, for the repair and replacement of spare parts. While it is true that the implementing office (PEO/MEO) conducts briefings for end users on the proper operation and maintenance of facilities, there is a dire need to further enhance the capability of the barangays in the latter and institute mechanisms for the same to achieve sustainability.

Although technical training has been extended to BWSAs/beneficiaries, O&M of Level I facilities is commonly neglected. The fact is, however, that the barangays are willing to undertake further training for O&M of the facilities. This highlights the need for more community development achieved by LGUs that will ensure implementation of demand-driven and responsive projects.

### 5.7.3 Financial Aspect

#### (1) Budgetary Allocation to the Sector

The provincial government of Sarangani regularly prepares and implements the annual budget of its operation. The Sangguniang Panlalawigan through an ordinance enacts this budget. The preparation is usually done during the last quarter of the preceding year. All offices of the province are required to submit their respective budget proposals, to the Provincial Budget Office (PBO) for consolidation, halfway into the year.

The water and sanitation sector obtains an allotment from the Local Development Fund (LDF). As mandated, at least twenty percent (20%) of the total Internal Revenue Allotment (IRA) is allotted for the development fund of the LGUs. The Local Finance Committee (LFC) predetermines the amount. The development fund is intended primarily to finance various projects of the LGUs, as embodied in the Annual Investment Program (AIP). The AIP is prepared/consolidated/adopted by the PDC through the PPDO, and is endorsed to the Sangguniang Panlalawigan for final approval.

For the past years, Sarangani province spent more than of its 20% of its IRA to finance its local development projects. However, the implementation of the projects is sometimes delayed due to the usual bureaucratic red tape. Moreover, the WATSAN sector is given much emphasis. There is no established policy, standard or percentage on how much should be allocated for the implementation of WATSAN projects. A substantial share, between 12 to 16% of the total amount allocated for local development projects, has been allotted for WATSAN projects.

#### (2) Access to External Funds

The province is a recipient of various WATSAN projects of foreign and local institutions during the past years. In 1994, the Overseas Development Cooperation Fund (OECD) financed 18 Level I water system projects throughout the province, 10 deep wells and 8 shallow wells. These were implemented by the DPWH-DEO at a total cost of P 896,000. The UNDP has extended financial assistance for the construction of several spring devel-

opment projects in selected barangays since 1996.

NGOs have also contributed to the strengthening of water and sanitation activities in the province. Since 1996, two (2) institutions have actively extended financial assistance for the WATSAN sector, including the installation of Level I water systems and the rehabilitation/expansion and installation of some Level II water systems particularly in the western municipalities of the province.

The DOH has also extended minimal assistance since 1993 in terms of sanitation facilities. During 1996 and 1997, the DOH also extended assistance in terms of the provision of construction materials for the installation of Level II spring development projects in the municipalities.

At present, the financial resources of the province are too meager to finance its various WATSAN development needs. As of now, the province is exploring possible means of accessing additional funds from external sources. It is planning joint venture arrangements with other local or foreign agencies for implementation of WATSAN projects.

### (3) Cost Recovery Practices by LGUs and by Users

During the period that the DPWH was constructing Level I water supply facilities, the DPWH formed many BWSAs. Most of these BWSAs are, however, no longer functioning, resulting in no water fee collection. As a consequence, the users have to go to the government (usually barangay or municipal) to address any problems. In some cases, the users also 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.

The provincial government has financed a large number of water system projects. The implementation was done either by the administration (directly undertaken by the provincial government through the PEO) or by a private sector contractor through a contract. Most of the projects were installed without any counterpart funding from the recipients, be it labor or in other forms. After completion of the construction, the project is then turned over to the recipient barangay.

Over the years, the communities/users relied mainly on the government for repair and maintenance of the system even for those minimal defects. A "dole-out" mentality still dominates the behavior of most of the beneficiaries/users in this regard.

Cost recovery on capital cost is dependent on how the community or the clientele perceives their role in the Sector. To the extent that the beneficiaries experience a sense of ownership of the facilities, they will contribute to the sustainability of the facilities. In the case of capital expenditures, the provision of a counterpart from the beneficiaries in terms of labor gives the beneficiaries a sense of ownership for the facilities and hence a sense of responsibility for the sustainability of the system.

Similarly, for O&M cost recovery, the extent that the beneficiaries contribute to the sustainability of the water supply facilities (through monthly contributions) is an indication of the extent of ownership and responsibility towards the maintenance of the system. The government should initiate community empowerment programs and encourage active participation even at the construction period in order to promote a sense of ownership.

In view of the above, the provincial government instituted measures and policies to ensure project sustainability. It strengthened community organization and mobilization activities and instituted fund augmentation policy, i.e., 70% of total project cost comes from the provincial government, 20% from the municipalities, and 10% from the barangays.

#### **5.7.4 Institutional Arrangements/Capability of the Municipal Government**

##### **(1) General scheme in WATSAN project implementation**

The municipalities are responsible for the construction of infrastructure facilities to service the needs of the residents. However, some projects are funded by the provincial government and are directly implemented by barangays. These projects are still subject to the general supervision of the PEO with periodic inspections conducted by the MEO. Other projects are implemented through contracts with private construction firms. The PPMC monitors and evaluates the project implementation.

For WATSAN projects that barangay itself is not able to fund, the BDC requests the municipality for funding. The municipality finances the project if funds are available, usually by providing technical and material support. In case that the municipality cannot also provide funding, the request is endorsed to the province for funding.

The municipality, through the MPDO, prepares municipal development plans and formulates an integrated economic, social and physical development plan in which priority water projects are included. MEO provides technical services, which include conduct of in-

investigation and survey, preparation of engineering designs, feasibility studies and provision of project management. Organizing and training of the BWSAs are to be done by the MEO but due to lack of manpower and training, the conduct of this vital community development has been foregone.

(2) Experiences in project implementation

The sector-related information gathered from the Municipality of Alabel revealed the following findings regarding existing LGU project implementation capabilities: (refer to 5.7.4, Supporting Report).

1) Existing water supply system

In the municipality of Alabel, there are three Level III water systems, which cover 2 barangays. One of these 3 waterworks is managed and operated by the municipal government and serves 249HHs/consumers. The others are managed by two cooperatives and serve 72 and 189 HHs/consumers.

2) Management of the municipal waterworks

The municipal government of Alabel founded and constructed its water supply system in 1995. This is located in the Poblacion. To date, it has a total investment of about ₱3.7 million. Prior to the commencement of the project, the beneficiaries were consulted regarding the proposed construction. Implementation of the project started in 1995. The project was financed through a loan of ₱2.4 million payable in 3 years negotiated by the municipal government with the Land Bank of the Philippines. The LGU counterpart was the provision of funds for the cost of labor.

The municipality has yet to decide whether or not to make the operations of the waterworks autonomous from that of the LGU. Meanwhile, O&M and accounting of income and expenditures are still part of the regular functions of the municipal government. Thus O&M requirements are still subsidized by the LGU.

3) O&M and cost recovery practiced at the waterworks

There is a Level II (spring development) system managed by a BWSA with a total of 28 communal faucets without meters servicing an average of 5 households per faucet. Member-users pay monthly water charges at a flat rate of ₱40/HH. The users provided labor during construction.

For LGU-Level III services, the water rate is charged based on the volume consumed but with a minimum charge.

4) Existing Level I water supply facilities

The implementation of Level I systems were and shall be done through: i) formulation of the BWSA as a component of the project; ii) signing of a MOA between the association and the LGU for operations and maintenance. The association is responsible for the collection of water bills/charges for O&M and for future rehabilitation of the facility.

## 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 Sarangani 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 (details are referred to the Supporting Report); 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 benefi-

aries 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 (refer 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 21<sup>st</sup> 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.

In 1995, the Province of Sarangani was a recipient of the Partnership for Community Health Development (PCHD) health-related projects that benefited four municipalities through the construction and/or rehabilitation of water facilities that served close to 700 households. This particular project provided the province the opportunity to establish local partners and build institutional capabilities of both partners and beneficiaries in the project communities. It also furnished a mechanism of involving or getting the participation of the beneficiary communities – its leaders and its people – in project planning and implementation.

The active and genuine people's participation in matters of local governance and development management is the foundation of the sustainable development of the Province of Sarangani. This organizational philosophy can, at best, be described as a democratic, participatory and a bottom-up approach to development planning. It has become the basis for coming up with barangay development plans utilizing a resource-based and area-focused approach.

Thus, in May 1997, the province conducted the first People-Based Agro-ecosystem Development Planning Workshop, a prelude to the conduct of barangay development planning activities. The Provincial Barangay Development Planning Task Force then trained and organized the Municipal BDP Task Force, which in turn conducted said barangay planning in their own respective municipalities. The Barangay Development Plan (BDP), which embodies the needs of the people as articulated by them and the resources to bring about a solution and/or the realization of these needs, was the concrete result of the participative and collaborative involvement of the provincial, municipal, barangay, and other community volunteers. The BDP contained a detailed barangay profile and a strategic plan consisting of an organizational development system, a community development system and an agro-ecosystem mapping of the community.

### **5.8.3 Assignment of CD Specialist to Sector Projects**

Presently, there is a unit that implements or conducts community development (CD) work within the PPDO. While there are employees assigned to undertake CD work, they are not focused on water and sanitation projects alone because of the lack of a plantilla position. An-



other reason is that WATSAN is looked upon as a component of the over-all planning process and the actual implementation of WATSAN projects is a joint undertaking of the PEO, PHO and other agencies of government. The PHO, however, has a section assigned to undertake CD for health and environmental related activities but its staff is not solely focused on water and sanitation 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. The PHO, for example has 15 active community organizers who are assigned to different projects/areas. Therefore, this apparent lack of identified major responsible players on CD in the LGUs creates a serious gap to the critical linkage and support of WATSAN sector projects, from the provincial to the municipal and as far down as the barangay levels. Firstly, there is no institutionalized CD framework in place for the WATSAN sector and no permanent structure within the LGUs that serve as guideposts in doing CD work, except for the manner or experience done in the past projects such as the BWP, PCHD, IPHC-DMSF, BDP, to name a few.

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 WATSAN sector projects. It is apparent that the provincial government is fully aware of the importance of CD, judging from the number of projects that incorporate a CD component and the training undergone by its staff. However, the municipalities and barangays must share this same view and must translate this belief to actual financial, human and material support to WATSAN sector projects in their areas.

There are many currently trained, as well as those who have been trained on past on CD. Although there is no existing position for a WATSAN community development specialist in the province, or 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 efficiently 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 processes.

#### 5.8.4 Training on CD

The province has continuing training on CD that suits the present projects being planned and/or implemented. Thus, there is a need to supplement such training with one that deals particularly on WATSAN sector 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.

Past training programs with CD components participated in by the provincial/municipal level staff are as follows:

- 1) Community Mobilization Training conducted by the Ministry of Human Settlements Regional Trainers in 1985.
- 2) Community Organizing conducted by the Provincial Government of South Cotabato in October 1987.
- 3) Community Organizing through Participatory Action Research conducted by the Provincial Government of South Cotabato and the POPCOM from November-December 1992.
- 4) Community Development Planning System sponsored by Agri-Service Program Development Inc. (ASPDI) in 1992.
- 5) Goal Oriented Project Planning conducted by the Provincial Trainers of the Province of Sarangani in April 1994.
- 6) Provincial Trainers Training on Managing Programs for Effective and Efficient Development Planning) conducted by CIDA-LGSP, REFORM, Inc. and the Provincial Government of Sarangani in September 1995.
- 7) Fifth Training Programme in Social Mobilization for Development) conducted by the University of the Philippines College of Mass Communication and UNICEF in October 1995.
- 8) Seminar Workshop on Ancestral Domain sponsored by DSWD Region XI in April 1997.

9) Community Orientation and Mobilization for Community-based Forest Management (CBFM) Program Implementation Seminar Workshop conducted by DENR XI/NRMP-DAI and Institute for Primary Health Care (IPHC).

10) Barangay Development Planning Course: "People-based Agro-Ecosystem Development Planning Trainers Training Workshop with Practicum at Upper Lasang, Malapatan conducted by REFORM, Inc and the Provincial Government of Sarangani in May 1997.

As can be gleaned from the list, there has been various recent training conducted and/or received by the LGUs on CD. The knowledge and skills learned from these training programs can certainly be applied to the planning and implementation of WATSAN sector projects.

Water district personnel also attended various training and seminars conducted by the Local Water Utilities Administration (LWUA) and other private training institutes focused on administrative, financial and technical aspects of level III water supply systems. The varied skills that WD staff learned can also be applicable to small systems and therefore can be replicated or transferred to BWSA/RWSA personnel.

#### **5.8.5 Utilization of NGOs**

The provincial government considers non-government organizations or NGOs and POs as partners in the development in Sarangani and there are active organizations presently working for the promotion of WATSAN-related projects such as the IPHC-DMSF. While other NGOs may have other technical expertise other than water supply and sanitation, 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 Sarangani).

#### **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 BWSA for Level I systems, a RWSA or Barangay Water Cooperative for Level II systems and a water district or LGU waterworks for a Level III system 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 or site 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 are presently in operation because the WATSAN facilities have not been properly maintained, their water sources have dried up and very few users continue to pay their water fees. Thus, the LGUs are burdened with requests for O&M of the WATSAN facilities.

The Barangay Councils and a Barangay Water Cooperatives, on the other hand, mostly operate the Level II systems. Only a few are operated by water associations. Generally, these systems are better managed, operated and maintained because water fees are collected. However, LGUs assistance is also requested especially in the case of major breakdown of the facilities.

In the province of Sarangani the people's participation has been institutionalized in the Barangay Development Plan, which has become the most suitable and acceptable avenue that would allow the beneficiary communities the freedom and optimum opportunity in presenting their own ideas on what they feel is in the best interest of the WATSAN sector. The BDP greatly enhanced the manner and quality of the users' participation in identifying needed projects for the community.

Since the Province of Sarangani is composed of various tribal or indigenous people, it has come up with its own unique manner of periodic consultation with multi-sectoral leaders coming from the youth, women, elderly, farmers, fisherfolks, and the indigenous cultural communities. This is called KASFALA, a B'laan word which means "deliberation" or "talks," which achieves the need for a community-based approach to policy formulation and decision making. The objective here is to be able to acquire massive support from the people and mobilize local resources in solving their own communities' problems. Through KASFALA, inputs or recommendations to provincial development policies truly represent the conference leaders' constituents and/or members. However, KASFALA has

yet to be fully tapped as a forum for coming up with provincial, municipal and barangay WATSAN sector policy guidelines.

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 the WATSAN sector projects. They professed willingness to form themselves into water associations, the readiness to contribute cash, materials, and even sites for the construction of WATSAN facilities. In addition, they are already primed to assume higher responsibilities in managing, operating and maintaining the WATSAN facilities.

As for Level III systems, those operated and managed by the LGUs and Barangay Cooperatives are generally viable although their consumers/members are not regularly informed nor actively participate in its operations. 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 are given different types of training, such as pre-organizational teach-ins, pre-operational and post completion training and operation and maintenance seminars.

As for the barangay water cooperative, the pillars of its organization are the seven universal cooperative principles, which typify how CD is operationalized during its formation. The cooperative principles are the following: voluntary and open membership; democratic member control; members' economic participation; autonomy and independence; education, training and information; cooperation among cooperatives; and concern for commu-

nity. As a business concern, the barangay water cooperatives are actually an association of persons with a common bond of interest who voluntarily join together to achieve a lawful economic and social end; makes equitable contributions to capital required; accepts fair share of the risks and benefits; and operates under universally accepted principles.

For the PHO, the challenging tasks of CO and CD are augmented by the Family Health Care Workers, Barangay Health Workers (BHW) and the Barangay Nutrition Scholars (BNS). These people are visible and exposed to the communities they serve, aside from possessing the much-needed credibility which enables them to be effective CO workers. These health workers typically make home visits as well as train and empower family members in the barangay with knowledge of basic environmental and sanitation activities.

For the PPDO, typical also for the Province of Sarangani is CD work in the formulation of barangay development plans by eliciting community/people participation in planning their own projects based on the needs and requirements of the communities themselves, although this was not limited to WATSAN sector. The work is concerned with giving of assistance to the communities through the conduct of planning activities such as data gathering, community mapping, strategy formulation and project development, among others. Methods utilized are barangay assemblies and actual beneficiary participation in the gathering of baseline data for their own communities.

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 in order to gain the support of various publics, although this is being handled mainly by the PHO in coordination with the PPDO, the DILG, and the municipal and barangay LGUs. Information on sector policies, opportunities and programs are given through seminars, community assemblies, purok household visits, and the conduct of foodhandlers' classes. Information is also disseminated through the print (comics, brochures, posters, flip charts, and fliers) and the broadcast media. (airing of health and sanitation tips over DxDB and DxMB).

There are problems, however, that hamper the effectiveness of IEC program. Firstly, there is the question of socio-cultural acceptance of the need and use of new technologies in water supply and sanitation. Secondly, there is the political dimension that, at times, impedes the smooth flow of communication and information. Thirdly, the medium of communication and/or instruction in ethnic or indigenous communities' needs to be translated to the prevailing dialect as the literacy level of the indigenous people needs improvement. 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 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 bigger WDs within the province/region (the concept of Godfather Water District) or by the Public Affairs Office of LWUA. A region-wide Water Information Network has been established with all WDs as members. This network undertakes regular public information drive and helps smaller WDs to disseminate information.

### **5.8.8 Health and Hygiene Education**

The PHO, in coordination with all the rural health units (RHUs), implements a province-wide environmental sanitation program, which involves lecture-discussions and training of project beneficiaries. The program includes topics on water and sanitation, food sanitation and school sanitation.

The PHO also implemented projects in the last three years to improve health and hygiene although these projects did not have a CD component. These are the VIP Latrine Construction, the Water-sealed toilet bowl production, the Tubi-Ani Rainwater Collection and the FW4SP PTB Installation.

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 television. They also learned health education from 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 Sarangani 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 Sarangani administered to the officials of the select local communities; and (4) The Result of the Group Interviews for Sarangani 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 LGC 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. 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**

Last June 1997, Governor Priscilla L. Chiongbian signed Executive Order No 7, "Adoption of a Gender and Development Program and Organizing the Provincial Gender and Development (GAD) Technical Team for the Province of Sarangani." A Provincial Gender and Development Technical Team, headed by the Governor herself was created to make sure that GAD is institutionalized in the planning, programming and budgeting of all municipal and provincial agencies' programs, projects and activities. The Team also ensures that the developmental projects of the national government, including that of the LGUs, be gender sensitive..

As a result of EO #7, several GAD seminars and training on different gender issues and topics have been conducted by different groups for provincial and municipal officers and employees since 1996. Re-echo seminars are also underway to make sure that gender equality and gender-responsiveness is made an integral part of the province's development.

### **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 three barangays surveyed for the key informants, the total number of barangay council members is 32. Of this number, 21 were males and 11 females. All the barangay chairpersons are male. In the 2 barangay councils where the group interviews were conducted, the total number of barangay council members equaled 23, 17 males and 6 females. Again, all the barangay chairpersons were male.

According to the PPDO, this situation where the male is almost always the leader in organizations and associations is a reality in Sarangani. The province is composed of several indigenous peoples (IP) who are traditionally patriarchal thus, the males naturally emerge as leaders of formal or informal groups.

The respondents in the group interviews, on the other hand, composed of 24 females and 24 males, the majority of whom belong to the 15-45 age bracket. The level of education were fairly distributed from elementary to college levels with both the women outnumbering the men in having graduated from college and having pursued vocational courses. The occupation of a big majority of the male 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:

Most of the respondents of the group interview respondents in the 3 barangays surveyed revealed there were existing BWSAs/RWSAs in their barangays. Women outnumbered men in being a member of the BWSA/RWSA. The 2 barangays visited for the key informant survey, however, had no BWSAs in their communities. Both men and women indicated interest in becoming a member of the WATSAN association once it is formed in their respective barangays. They also indicated willingness to provide free labor or donate materials as their participation during the construction of WATSAN facilities.

In the group interviews, all the males respondents and the majority of female respondents were consulted on the past WATSAN projects and were 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. Actual participation during construction, however, came mostly from the male population.

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:

More than half of the respondents attended training programs geared toward barangay administration and leadership, health development, livestock and poultry raising, among others. More female respondents received a longer list of training programs compared to their male counterparts. As for sector-related training, 25 male respondents attended training courses with topics as caretakers training, repair and O&M, collection and finance compared to only 5 female respondents. However, all females showed willingness to attend WATSAN-related training programs compared to only half of the male respondents. Most desired that three days is sufficient period for WATSAN training.

On participation in health and hygiene:

Both male and female respondents equally recognized the importance of good health and hygiene practices, having had attended some health and sanitation training. More of the women attended; but of the total male respondents, only half attended and the other half were not interested in health training. On water-related illnesses, it was found out that women were more afflicted than women with diseases such as kidney trouble, schistosomiasis and gastro-enteritis.

On participation in operation and maintenance:

The men were more involved in WATSAN activities, particularly in the repair and maintenance of the facilities. In the communities where no WATSAN association existed, both the male and female respondents indicated that it is the women who are responsible for minor repairs on their facilities. However, both the men and women believe that they can participate in operating and maintaining the WATSAN facilities. They said that they could serve as officers of the association, do repair and maintenance of facilities. They also affirmed that they could help in cleaning water source and its surroundings.

(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

The majority of the male respondents said that the men (the husband and/or eldest son) are still the ones responsible for hauling drinking water for family use. None of the female respondents agreed, however, indicating that they do the job, together with their female children. Only a few of the female respondents said that their male children assisted in this task prompting them to ask others to do the job. The majority did not respond as to how long it takes to fetch water; but the rest of the male and female respondents indicated that they fetch water twice to thrice a day with a duration of about 10 to 20 minutes. More than half of the female respondents, however, indicated a longer fetching time of more than 30 minutes. All 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 offices and staff of DPWH, DOH, LWUA, DILG and NSO. Other agencies, including NEDA and the LGUs, use data from these agencies. Each of these agencies runs its own project and/or activity-monitoring system largely based on required reports from 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, while its "short form" is administered 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). Only projects handled by the local offices of central government agencies are monitored, focusing on physical accomplishments and capital expenditures of projects, by respective central government line agencies.

Monitoring activities under the Regional Development Council cover four components: Macro, Economic, Social welfare and Infrastructure. The monitoring report on foreign assisted infrastructure projects, including water supply projects, is submitted monthly by the 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 the 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 the ADB, WB, etc.

It was confirmed at the NEDA Regional office that there are some foreign assisted projects provided directly to the regional office (such as grass-root assistance with a limited amount). For such projects, the NEDA does not sign with the foreign donor. However, the reporting on the project is still made by the regional office to the central office of NEDA. The central office of NEDA sometimes overlooks such projects. It is therefore necessary to establish a 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.

Monitoring for WATSAN-related projects is conducted under the Regional Monitoring and Evaluation System (RPMES). The PPDO conducts monitoring from the start until the completion of the project. Projects that get negative feedback in terms of efficiency and effectiveness of implementation require close monitoring. The monitoring report covers the status of project implementation in terms of finance, percentage of accomplishment and slippage/problems, and evaluation and countermeasures. Figure 5.10.1 shows an example of an UNDP-assisted project illustrating the linkages among concerned agencies.

In both sector and project monitoring, the exchange of information between concerned agencies seems insufficient and unsystematic. Opportunities to improve the system, however, are feasible, particularly through the conduct of periodic meetings by the RDC with line offices and LGUs. In addition, the absence of a functional management information system increases workloads in the monitoring activity and causes to wide dissatisfaction among project implementers. The preparation of the monitoring report is considered a nuisance to performing one's job and is thus haphazardly done. This leads to the problem of reliability of information coming from the field. A clear mechanism and data management system is required to promote more coordination among relevant agencies.

Figure 5.10.1

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

