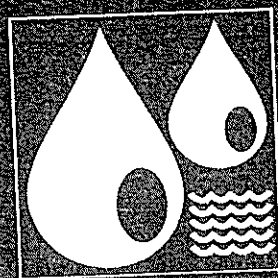


Comprehensive Basic Study of the Autonomous Region in Muslim Mindanao in the Republic of the Philippines

Final Report



WATER SUPPLY AND
SANITATION SECTOR

PROVINCE OF SULU

December 2003

PKII **ENGINEERS**
ENGINEERING CONSULTANT

IN ASSOCIATION WITH



ORIENT INTEGRATED DEVELOPMENT CONSULTANTS INC.

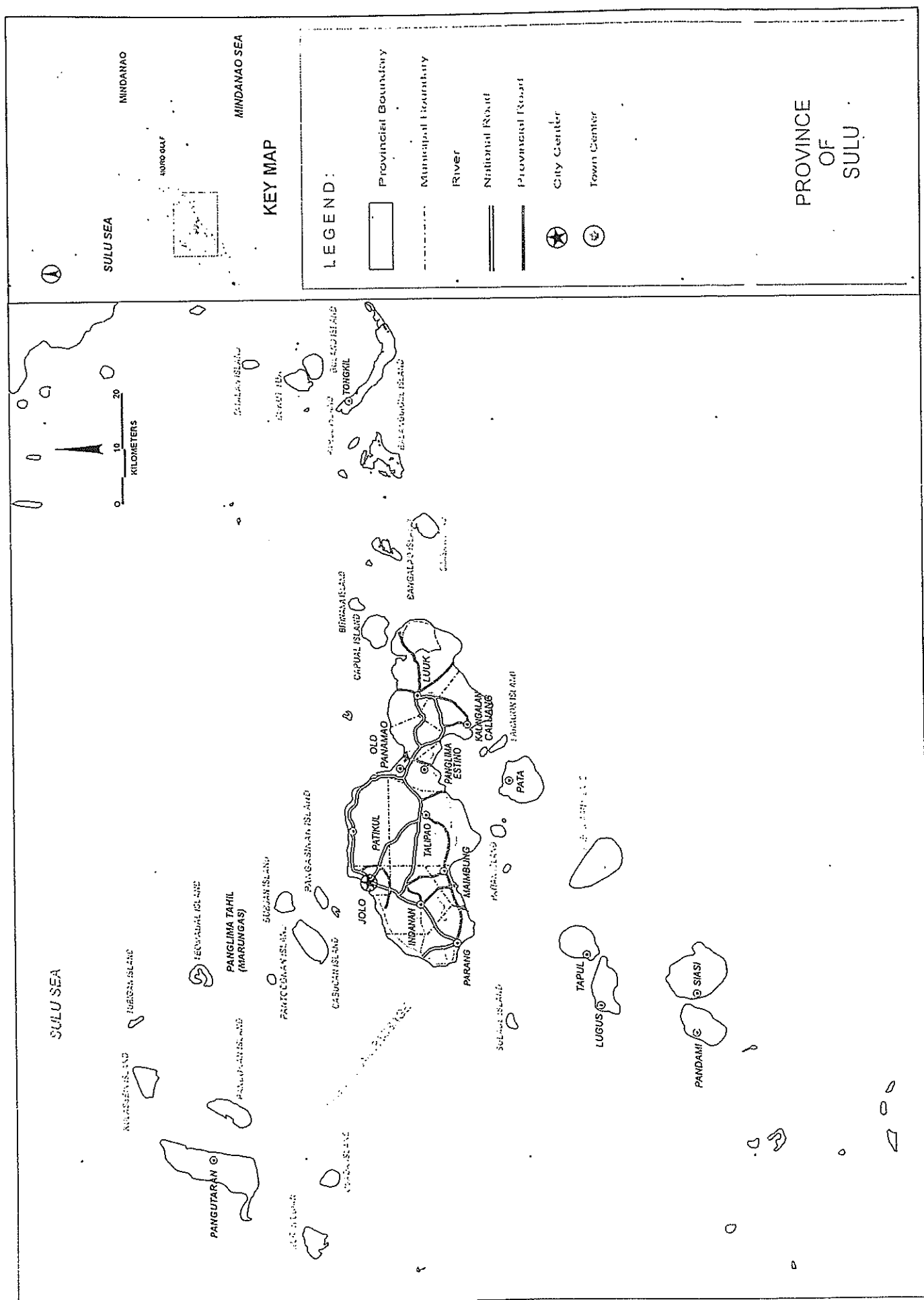
**COMPREHENSIVE BASIC SURVEY
OF THE AUTONOMOUS REGION
IN MUSLIM MINDANAO**

WATER SUPPLY AND SANITATION SECTOR

PROVINCE OF SULU

FINAL REPORT

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LIST OF ABBREVIATIONS

ADB	-	Asian Development Bank
AFMA	-	Agriculture and Fisheries Modernization Act
AIP	-	Annual Investment Plan
ARG	-	Autonomous Regional Committee
ARMM	-	Autonomous Region in Muslim Mindanao
CBOS	-	Community-based Organization
COA	-	Commission on Audit
CPSO	-	Central Project Support Office
CSC	-	Civil Service Commission
DBM	-	Department of Budget and Management
DILG	-	Department of Interior and Local Government
DOF	-	Department of Finance
DOH	-	Department of Health
DPWH	-	Department of Public Works and Highways
IEC	-	Information Education Campaign
IMR	-	Infant Mortality Rate
IRA	-	Internal Revenue Allotment
JICA	-	Japan International Cooperation Agency
KFI	-	Kasanyangan Foundation, Inc.
LCE	-	Local Chief Executive
LGU	-	Local Government Unit
LWUA	-	Local Water Utilities Administration
MBUSSP	-	Mindanao Basic Urban Services Sector Project
MGB	-	Mines and Geoscience Bureau
MNLF	-	Moro National Liberation Front
MPDO	-	Municipal Planning and Development Office
NAMRIA	-	National Mapping and Resources Information Administration
NAPOLCOM	-	National Police Commission
NEDA	-	National Economic Development Authority
NSCB	-	National Statistics and Coordination Board
NSDW	-	National Standards for Drinking Water
NSO	-	National Statistics Office
NWRB	-	National Water Resources Board
ORG	-	Office of the Regional Director
PDC	-	Provincial Development Council
PDDO	-	Provincial Planning and Development Office
PHO	-	Provincial Health Officer
POs	-	Peoples Organizations
PST	-	Provincial Sector Team
PWSO	-	Provincial Water and Sanitation Office
QV	-	Quaternary Volcanics
QVP	-	Pliocene to Recent Pyroclastic
REDBP	-	Regional Development and Planning Board
RLA	-	Regional Legislative Assembly
RLEDAC	-	Regional Legislative and Executive Development Advisory Committee

ROAC	-	Regional Development Administration Committee
RPDO	-	Regional Planning and Development Office
RPMEC	-	Regional Project Monitoring and Evaluation Committee
RRUC	-	Regional Reconciliation and Unification Council
SPOA	-	Southern Philippines Development Authority
TMS	-	Technical Management Services
TOR	-	Terms of Reference
WATSAN	-	Water Supply and Sanitation
WD	-	Water District

FOREWORD

The “Comprehensive Basic Survey of the Autonomous Region In Muslim Mindanao (ARMM)” in the Republic of the Philippines, hereinafter referred to as the “Survey”, was funded by the Japan International Cooperation Agency (JICA) of the Government of Japan. The Survey had commenced on August 4, 2003 and was for three (3) month duration. The sectors included in the Survey were:

- (1) Agriculture and Fisheries
- (2) Health and Medical Care
- (3) Education
- (4) Basic Infrastructure
- (5) Governance
- (6) Water Supply and Sanitation

All the information/data used in the survey was generated during the aforementioned survey period with the objective of gathering as much as possible the latest statistics available to provide an up-to-date picture of the current situation in the ARMM. What is therefore provided in these reports are the latest available data, though in some cases these already seemed outdated.

The difference between time period (year) reflected by the statistics and the period (year) of the conduct of this Survey shows the inadequacy in the availability of updated information. In instances wherein the desired information/data were not available, the Survey had to generate the necessary information itself through field surveys.

EXECUTIVE SUMMARY

1. Overview of the Water Supply and Sanitation Sector

The provision of safe and potable water is a pressing need in the ARMM, where most of the communities are forced to utilize any form and means of water sources to sustain for domestic needs. Many of these communities have utilized brackish and saline groundwater, collected and stored rainwater, and bulk-hauled untreated water transported by barge or other sea transport from mainland Mindanao.

Based on data furnished by ARMM, in 1992 the Region had a total population of 2.02 million corresponding to about 295,242 households and had grown to 2.808 million in the year 2000. During this said year, the ARMM Socio-Economic Report indicates that accessibility to potable water is estimated at 38% of the regional population, which corresponds to 456,263 households. Figure 1-1 shows the distribution by provincial level.

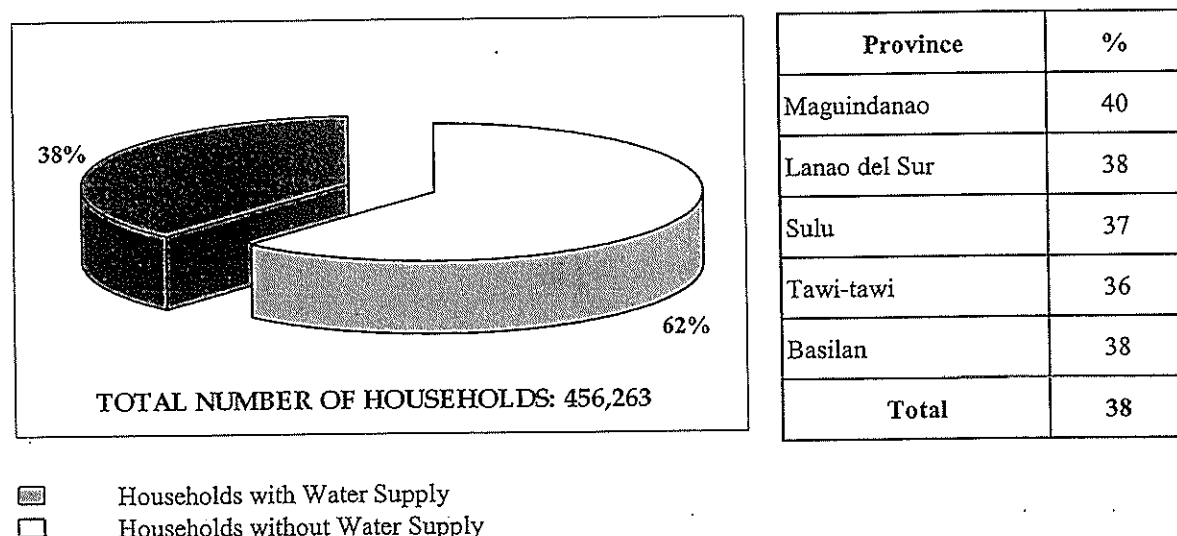


Figure ES-1 Households in ARMM with Access to Water Supply, as of 2000

At present, the percentage to access to potable water has a marginal increase which could be traced to assistance from various institution. Based on the data of present existing water supply facilities, analysis showed that about 40% of ARMM projected 2003 population have access to water supply. These data, however, is still far from acceptable level of providing safe and potable water within the community, thus the need to further impart technical and financial assistance to the Region in terms of water supply development.

2. Introduction

Background and Objectives

The preparation of the master plan for the Water Supply and Sanitation Sector Plan was undertaken by the Consultant thru the assistance of Japan International Cooperation Agency (JICA). Past reports such as the PW4SP was made as reference and basis to come-up with the sector development plan for possible financing thru sector loan(s) by foreign donors, LGU's counterpart including internal revenue allotment from the National Government and private sector investments.

This Study covers a Medium-Term Investment Plan (2005-2010) as well as a Long-Term Development Plan (2010-2015) to attain the provincial targets of water supply and sanitation sector. The plan includes development cost to cover the construction of water supply and sanitation improvement in the ARMM covered provinces. The Study likewise includes institutional strengthening, to assure that community based operational framework and capability could be sustained in the future.

As part of the initial move to familiarize the different LGUs and evaluate their respective sector management capability, the Study undertook workshops and consultation with local officials and planning managers.

Coverage of Study Area

Based on the Terms and Reference provided to the Consultant, the sector evaluation and analyses shall cover the ARMM which is composed of the following provinces and city:

- ♦ Maguindanao
- ♦ Lanao del Sur
- ♦ Basilan
- ♦ Sulu
- ♦ Tawi Tawi
- ♦ Marawi City

The Provinces of Maguindanao, Lanao del Sur and Marawi City are found in mainland Mindanao while the Provinces of Basilan, Sulu and Tawi Tawi are island provinces.

Approach and Methodology

The primary bases of this Study are the sector policies and strategies, as well as existing legislations and regulations pertaining to water supply and sanitation development, and guidelines for setting the provincial sector targets. In conjunction to these policies, reference was likewise made in the current sector policies and strategies to ensure:

- ◆ self-reliance and local community management services
- ◆ integrated approach to water, sanitation and hygiene education
- ◆ financial arrangement and, operation and maintenance
- ◆ participation of private sector and NGOs
- ◆ integrated water resources strategy

The methodology and work approach in undertaking the Study is also patterned in accordance to the previous water supply and sanitation studies prepared for JICA, like the PW4SP Feasibility Study reports.

All other technical criteria and standards are based on other sector agencies such as Local Water Utilities Administration (LWUA), National Water Resources Board (NWRB), Department of Public Works and Highways (DPWH), Sanitary Code of the Philippines and the Philippine National Standards for Drinking Water (PNSDW).

Report Composition

Five (5) study reports were prepared covering the respective provinces as previously mentioned (Marawi City is included in the Lanao del Sur report). The analyses, evaluation and relevant information form part of the individual report consisting of 10 chapters.

3. Provincial Profile

The Province of Sulu is an island-group province that lies between the the Province of Basilan to the south and the Province of Tawi Tawi in the northern part. The capital town is Jolo which is the center of trade, commerce and government center. The province is composed of 18 municipalities comprising 412 barangays classified by National Statistics Office (NSO) into 57 urban and 355 rural. The province is classified as 4rd class in terms of income generation. At the municipal level only one (1) municipality which is the municipality of Jolo ais classified to 3nd class while the rest are classified as 5th and 6th classes. The provincial population in year 2000 was 619,668 with an average annual growth rate of 3.15 percent between the period 1995 to 2000.

Physical Features

The Sulu Archipelago is dominated by mountain ranges which traverse the mid-section of the main island of Jolo, along its east to west direction. The mountain chains includes Mt. Tumantangis (about 248 m.), Mt. Pula (about 86 m.), Mt. Kangangan, (about 202 m.), and Mt. Datu (about 303 m.). This mountain range(s) mainly consist of volcanic materials. The island groups are Siasi which is also hilly, while Pangutaran, Pata, and Tongkil are mainly coral formation resulting to low, swampy, flat and forested areas.

The province has a Type IV climate (classified from Modified Corona's Classification System). This type of climate is characterized by more or less evenly distributed rainfall throughout the year. The Sulu Archipelago is outside of the Philippine typhoon belt, and its climate is mostly warm, moist and humid. February is considered the coldest month while May to August are the hottest months. From the rainfall data map it can be inferred that Sulu receives an annual average rainfall of 178 to 229 mm.

Socio-economic Aspects

Agriculture and fishery are the major economic activity in the province. The main products includes rice and corn while the minor produce are coffee, mongo, cassava, abaca, cacao and coconut. Livestock and poultry production are mostly cattle, chicken and ducks. Municipal waters provide residents source of livelihood thru fishing. The Sulu seas are grounds to edible species such as grouper, tuna, squid, octopus and marlin, while inland fishponds are stocked with milkfish, prawns and shrimps.

To date, at least six(6) municipalities in mainland Jolo have power supply, while the other island municipalities are provided with individual power generating sets. Telecommunication system is adequately provided only in the town capital of Jolo. Landline telecommunication is still very limited to the densely populated areas of main island and other island municipalities. While this deficit in telecommunication exist, large part of the mainland is covered by cellular phone system operated by Smart and Globe. Land transportation, such as jeepneys and busses are the available means to move people and goods within the island. Commercial bank transaction could only be done in the capital town of Jolo, since no other banks are located within the mainland Jolo and island municipalities.

4. Existing Facilities and Service Coverage

The present water supply system for each of the municipally comprising the province of Sulu was surveyed to assess the conditions and the needs of the people in the locality. Other water supply system parameters such as, service areas, service area population, served population, water service level, water quality of present sources, present distribution system (for level II and III) were also assessed to define the necessary measures to be planned for the improvement of the water supply system of each municipality.

Water Supply

The province have two (2) Level III water systems being operated by their respective Water District, namely: Jolo Mainland and Siasi. Spring water and shallow wells are being utilized respectively in the mentioned areas, and are treated and disinfected prior to distribution to the consumers. Based on the data furnished by the Water Districts, service coverage within their respective franchise areas average to about 24% to 30% only. The deficit in service could be traced to lack or limited financial resources to expand and reach-out the rest of the franchise service areas.

There are 12 Level II systems that are being operated and managed by BWSAs. Most of these systems utilize spring as water source. In most of the areas that were surveyed, it was observed that installation of lateral pipes and communal faucets are inappropriately done due to lack of technical skills, resulting to decrease in water pressure and quantity. Likewise, inadequate maintenance of spring boxes and transmission pipeline adds up to the problem.

About 75% of the Level II systems have a flat rate water charge and the remaining is given free to the consumers. This practice makes it hard for the BWSAs to cope-up with their obligations in the operations and maintenance of the system and results to cost recovery over-runs.

Level I water system(s) are found in the other areas of the municipalities, that are not being served by either Level II or Level III systems. Level I system commonly utilize shallow well(s) as water source and are equipped with hand pumps, but for those who have the means and financial resources, they use motorized water pump to withdraw water. There are also areas where they tapped spring as their point source. Water from the spring is conveyed directly to their households by connecting series of pipes (polyethylene or galvanized iron). Other households get their water from nearby river channel for domestic use and rainwater (stored in individual water tank) for drinking.

Sanitation

The present sanitation condition of the municipalities covered by the province of Sulu was also assessed to evaluate the present sanitary needs and to integrate measures with the water supply plan. Majority of the areas that were visited during the survey indicates that the common problem to sanitation is the lack of adequate water supply. Since water supply and sanitation are complimentary to each system one of the gateway to progress of every municipality is a reliable and safe sanitary/environmental facility. In providing safe and reliable water supply vis-à-vis the improvement in sanitation condition follows.

The household toilets are categorized into two types. These are the sanitary and unsanitary toilets. The sanitary toilets (which are the approved ones) are defined as, water sealed toilet, flush type or pour-flush type with receiving pit or septic tank or septic vault, with ventilation. The unsanitary toilets include the types of facilities used for disposing human waste which do not fall under the category of the approved type.

Sanitation data furnished by the PPDO and MPDC's could not be use to make a conclusive picture of the present sanitation condition of all the eighteen (18) municipalities comprising the province of Sulu, since only four(4) municipalities (Jolo, Panglima Tahil, Parang and Pangutaran) have submitted the data. Based on these data obtained, the present condition can be deduced as follows. Based on the submitted data coming from the 4 municipalities, existing household sanitation facilities range from 30% to 45% of the total municipal population. On

this basis, an average of 40% of the total municipal population is assumed to have adequate sanitation facilities.

The above data is only an indicative ratio that may clearly demonstrate the need to improve the sanitary facilities of the Province of Sulu. The low value can be attributed to lack of water supply facilities (that will render the residents to provide sanitary provisions) and the capability of the rural households to construct the approved type of sanitary facilities.

5. Existing Sector Arrangements and Institutional Capacity

The ARMM Local Government Units (LGUs) have the distinct advantage over non-ARMM LGUs on that certain basic services have been retained by the Regional Government and continue to be provided by them, i.e. health, social services, agriculture. This results in more financial resources being available for other basic services that could be provided by the LGU, such as water supply for instance.

In general, the ARMM Regional Government also undertakes water supply related projects but this does not seem to be a priority. Only a minimal amount of the ARMM infrastructure budget has been allocated to water supply.

The ARMM offices involved in water supply include the Department of Public Works and Highways, Department of Health, Department of the Interior and Local Government and all LGU's.

6. Past Financial Performance in Water Supply and Sanitation

Given the limited financial resources of the ARMM Regional Government, the LGUs have taken greater responsibility in the provision of basic infrastructures. With their Internal Revenue Allotment (IRA) increasing over time, the available 20% Development Fund has also increased. This means that LGUs have more financial resources that could be parlayed into funding water supply projects. However, based on the amount allocated to various infrastructures, local roads/bridges enjoy a higher priority.

Most LGUs have repeated surpluses in their financial operations.

7. Water Source Development

The geology of Sulu Island consists of Pliocene to Quaternary volcanics and its erosional by-products. The volcanic mounds, lava domes, vents, cinder cones and other peaks are made up of Quaternary volcanic rocks (QV). The Quaternary Pyroclastics (QVP) overlies the Quaternary Volcanics

Recent deposits (R) includes limited alluvial deposits, beach and swamp deposits, residual clays and corals.

The small islands are made up of either Quaternary Volcanics or limestone/corals. Geologic information indicates that the Quaternary Volcanic Plains (QVP) can be considered as important groundwater reservoir while the Quaternary Volcanics along the mountain slopes are generally hard and massive and therefore too tight to contain and yield significant amount of water.

Brackish or salt water is to be expected in some localities particularly those near the coast.

Groundwater Availability in the Province

Based on the result of the study (as discussed in Chapter 6), the different rock units in the province can be classified into the following, in terms of groundwater availability. It should be noted that there are rock units wherein groundwater occur both in unconfined and confined conditions and can be classified as both shallow and deep well areas like those underlain by the pyroclastics (QVP).

- ♦ *Shallow well areas.* By definition these are areas having water-bearing formations where water can be withdrawn up to the depth of not more than 20 m from the ground surface. These are the areas underlain mostly by Recent Alluvium, Recent limestone/corals and Pliocene to Recent Pyroclastics (QVP).
- ♦ *Deep well areas.* In deep well areas, the aquifers exist to depth of more than 20 m from the ground surface. These can be found in areas underlain by QVP.
- ♦ *Difficult areas.* These are areas not suitable for well development. In the province the areas under this category are underlain by the Quaternary Volcanics (QV).

8. Future Requirements in Water Supply and Sanitation Improvement

Physical Targets and Service Coverage

The future requirements of each municipality within the province of Sulu was evaluated base on its current condition of existing water supply system and sanitation facilities. The proposed development was also based on respective LGU's priority service areas, water source(s) availability, and service area population. For other LGUs with no data generated, evaluation was made based on LGUs similar case and profile.

The master plan aims to provide a ten-year design period for water and sanitation project in the Province of Basilan. Implementation of the project is assumed to be undertaken in two phases, Phase I will cover the needs of the province from year 2005 to 2010, and the second Phase from 2010 to 2015.

Sub-sector	Base Year Service Coverage	Additional Population/Facility to be Served	
		Phase I	Phase II
Sub-sector			
Water Supply			
Urban Area	74,060	38,555	31,991
Rural Area	110,369	121,760	69,123
Sanitation			
Household Toilets	35,597	19,288	54,100
School Toilet	370	49	36
Public Toilet	15	30	22

Required Facilities to Meet Target Services

Water Supply

The required facilities for each water level service were estimated based on the existing condition and the projected served population for all service areas and broken down into two (2) phases of implementation. The number of service connections (Level III), public faucets (Level II), and shallow/deepwells as point source (Level I) are presented in the table below.

Executive Summary

Municipality	Phase I (2005-2010) Requirement					Phase II (2010-2015) Requirement		
	Level III		Level II		Level I	Level III	Level II	Level I
	Mode of Project	No. of Conn.	Mode of Project	No. of stand faucets	Total No. of wells	No. of Conn.	No. of stand faucets	No. of add'l wells
1 Indanan	New and Expansion	134	New	163	163	502	60	49
2 Jolo	Expansion	1,688	New	0	0	2,541	0	0
3 Kalingalan Caluang	New	745	New	606	14	467	26	0
4 Luuk	New	627	New	100	43	666	52	13
5 Maimbung	New	391	New	24	57	207	13	30
6 Panamao	New	537	New	21	74	442	62	26
7 Panglima Tahil	None	0	New	48	0	31	31	0
8 Panglima Estino	New	441	New	1,642	17	337	7	12
9 Pangutaran	None	0	New	166	24	0	124	9
10 Pandami	None	0	New	62	52	0	33	27
11 Parang	New	0	New	153	148	447	48	60
12 Pata	None	0	New	84	9	0	53	5
13 Patikul	New and Expansion	280	New	102	55	313	38	33
14 Siasi	New and Expansion	1,136	New	101	159	391	93	67
15 Talipao	New	663	New	158	168	605	55	99
Total		6,643	New	3,430	982	6,947	694	431

Sanitation

Future requirements on the number of household toilets were estimated based on the additional number of households to be served both for urban and rural population by municipality. Likewise the future requirements for public school and public toilets were estimated based on the projected increase in the number of public school and public utilities. Table below shows the required sanitary facilities.

Municipality	Phase I (2005-2010) Requirement			Phase II (2010-2015) Requirement		
	No. of Household Toilet	No. of Public School Toilet	No. of Public Toilet	No. of Household Toilet	No. of Public School Toilet	No. of Public Toilet
1 Indanan	2,072	4	1	5,812	3	0
2 Jolo	1,418	9	2	8,155	4	1
3 Kalingalan Caluang	911	4	3	2,649	3	1
4 Luuk	1,364	1	1	3,966	3	1
5 Maimbung	1,024	1	2	2,495	3	2
6 Panamao	1,321	1	2	3,604	2	2
7 Panglima Tahil	177	2	2	514	1	1
8 Panglima Estino	741	4	2	2,054	3	1
9 Pangutaran	1,016	3	2	2,955	2	1
10 Pandami	886	2	2	2,159	2	1
11 Parang	2,135	4	3	5,203	3	2
12 Pata	457	1	1	1,303	1	1
13 Patikul	1,337	5	2	3,780	2	1
14 Siasi	2,646	4	3	5,092	4	2
15 Talipao	1,785	4	3	4,360	3	2
Total	19,288	49	30	54,100	36	22

9. Institutional Strengthening for Medium-Term Plan

The failure of barangay/rural water service associations have resulted in the discontinuation of potable water supply availability. This might be due to the failure to properly train the community in the management, operation and sustenance of their systems. Unfortunately, the diversity of cultures in the area have resulted in the inability to organize working/effective associations to oversee water supply service operations. In addition, the deteriorating security, peace and order situation and frequent clan wars have further resulted in the dismantling of these associations.

In any institutional-strengthening and capability-building activities for water supply projects, cultural diversity must be of paramount consideration in sustaining these projects.

10. Cost Estimates for Future Sector Development

The total investment cost required for the two phased implementation as identified in Chapters 7 and 8 is defined to include direct costs for construction of required facilities and sector

management, as well as physical and price contingencies. Cost requirements for the equipment and vehicle are considered for O& M and long-term development.

Conditions and assumptions used to come up with investment costs covering all sub-sector components were established in coordination with concerned provincial and municipal LGUs and to current standards of relevant sector agencies like the DILG, LWUA, DOH and DPWH.

With regards to construction cost, unit costs per person/household facility were prepared under contract-out basis for respective sub-sector component facilities in current 2003 price levels.

The required development cost for water supply and sanitation facilities covering Phase I (2005-2010) and Phase II (2010-2015) will amount to ₱981,985 million and ₱676,768 million, respectively.

CHAPTER 1
INTRODUCTION

1. INTRODUCTION

1.1 Background of the Project

Being an archipelago, the Philippines has to cope with ethnic cultural differences such as dialects and customs to the more sensitive are like religion. Although touted as the only predominantly Christian country in Southeast Asia, Philippine Muslims were once a dominant group in the country. Presently concentrated between the western portion of Mindanao and the Sulu Archipelago, Philippine Muslims have 500 years of political history behind them; the longest political experience compared to other groups in the Philippines.

Philippine history had witnessed the Muslims steadfastness, unwilling to succumb to foreign hegemony since the time of the Spanish colonization. They have thrived and preserved their unique culture and identity through 11 ethnic tribes: Maranao, Maguindanao, Iranun, Tausug, Yakan, Sama, Sangil, Kaangan, Kolibugan, Palawan or Panimusan, and Molbog.

The inaccessibility and neglect that was born out of a confluence of political, ideological, geological and cultural differences has stirred unrest with Philippine Muslims. For more than two decades, the political unrest in the region has given a devastating blow to the already delicate economy of Mindanao.

To quell this unrest, the Philippine government has conducted a number of negotiations and concluded agreements with the Muslim separatist groups. This culminated with the creation of the Autonomous Region in Muslim Mindanao (ARMM). Still, distrust in the government's efforts for lasting peace has continued, not due only to cultural differences but also because of a high level of dissatisfaction on the government among Philippine Muslims. Such distrust then can only be outweighed by a sincere effort to uplift the socio-economic conditions of Philippine Muslims and only then could lasting peace and development be achieved in the ARMM.

Towards this end, the Japan International Cooperation Agency (JICA) intends to contribute its share to the development and growth of the ARMM. The conduct of the "Comprehensive Basic Survey of Autonomous Region in Muslim Mindanao" would be the initial stage of its involvement in turning Mindanao from a "Land of Promise" to a "Land of Realized Dreams". Through the basic survey, a comprehensive look into the current reality within the ARMM region in terms of socio-economic conditions, delivery of basic services, resources and

infrastructure would be made. This will help identify gaps in the programs and local policies inherent to the approaches currently being applied. The collection and analysis of primary data on sectors directly affecting the ARMM residents is indispensable if one is to come up with a responsive and sustainable developmental approach for the ARMM. Needless to say, the developmental approach will take into account the ARMM Development Framework Plan for 2003-2004 which prescribes the direction towards which the ARMM government has set its sights in the promotion of peace and security, social development, economic development, infrastructure development, and development of administration and finance. Eventually the analyzed data will aid in identifying the various issues and problems for the sectors reviewed leading towards the identification of appropriate intervention (policies, programs or projects) for both the short and long term.

Overall, the surveys should help in creating a complete and accurate picture of the ARMM as determined from the stakeholders themselves. This democratizes the process of development by creating a participatory atmosphere.

1.2 Survey Objectives

To reiterate, the basic study for the ARMM was conducted to achieve the following objectives:

1. Study and analyze the existing conditions in the region, e.g. socio-economic, policy/program, institutions, donors trend etc.;
2. Analyze the existing conditions, problems and needs of the sectors on health and medical care, education, water supply, infrastructure, agriculture and fisheries, and governance; and
3. Formulate the programs/projects that JICA can promote, considering both aid strategy and viable approaches specifically tailor-fit for the ARMM.

The objectives defined the sectors that need to be addressed if the ARMM is to succeed in its quest for self-determination and envisioning a peaceful and progressive society through social justice, human equity, responsive governance while preserving its unique identity in establishing international amity in enjoying the freedom to chart its own destiny.

1.3 Approach and Methodology

1.3.1 Approach to the Survey

The Scope of Work defined in straightforward fashion the required activities to produce a reliable database of basic data, a profile of administrative systems and identification of issues or problems and list of recommendations for JICA's possible assistance.

The stated objectives are immediate and more appropriately understood as purposes as they describe the activities that were conducted and what shall be produced in physical terms, which included:

Activities	Output
Collection of basic data covering six (6) major sectors: health and medical care, education, agriculture and fishery, basic infrastructure (roads and bridges), governance and water supply	Additional new field data and/or data that confirmed or validated existing documented data; prepare the findings of the sector survey and official data in a consolidated database report
Review of the administration systems of concerned ARMM regional line agencies (i.e., DOH, DepEd, DA, DPWH/DILG, ARMM Government);	Consolidated report
Identification and analysis of issues and problems	Consolidated report
Identification of potential programs and projects for JICA's possible cooperation	Consolidated report

Multi-Sectoral Participatory Approach. One of the most critical components of the plan were the inputs of the stakeholders in the plan which provided their insights, visions and aspirations, future directions and purpose. These stakeholders consisted of the Provincial and Municipal government officials, line agencies, non-government organizations, women organizations, people's organization, and the private sector, which had the opportunity to actively participate in the process.

Computerized Information System. A systematic handling and management of voluminous sets of information is a requisite for any data collection exercise. It was expected that the process will generate masses of information from both primary and secondary sources. The

multi-sectoral approach combining the aspects of social, economic, cultural, environment, physical and market generated complex sets of data, which need to be integrated and correlated.

This process expedited data compilation and analysis allowing more effective and efficient use of project time for the Consultant as well as better basis for drawing up analysis and strategies.

Utilization of Mindanao-based Support Staff. The associated firms sourced the required support staff from two Mindanao-based Non-Government Organizations with which we have partnered in past engagements. This set-up facilitated data gathering but data collection at the field level was still problematic. These firms are the following:

- ♦ *Kasanyangan Foundation, Inc. (KFI)* is a non-stock, non-profit organization based in Zamboanga City. A social development agency for a period of twelve years, KFI staff has the necessary expertise in Community and Institution Organizing and Building, Enterprise Development and Management, Agricultural Services, Policy Research and Advocacy, and Local Governance Capacity Building.
- ♦ *MinPhil International Consultants* is a service institution, which provides technical assistance to private firms, government owned and controlled corporations, non-government organizations, national government agencies, local government units and development agencies. Its services include training, policy analysis and research, feasibility and market studies, and project design, implementation and evaluation. MinPhil is based in Davao City.

1.3.2 Methodology

An Overall Study Framework for the Conduct of the Survey was developed and served as the road map that guided the Survey Team in the conduct and completion of the Survey consistent with JICA's objectives for the Survey and the quality of Survey outputs.

The Framework is given as Figure 1-1.

The Project Organization is given as Figure 1-2.

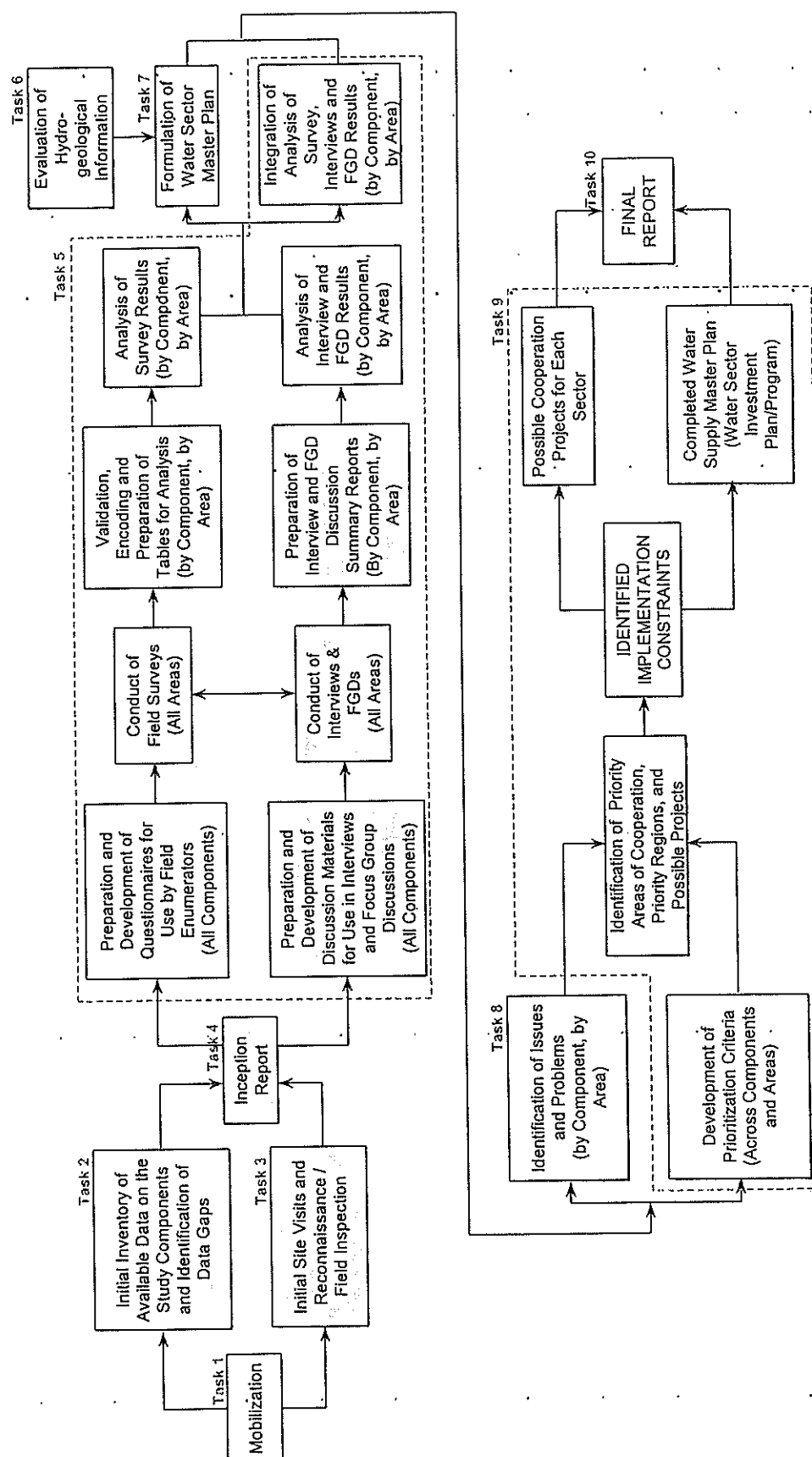


Figure 1-1 Overall Study Framework for the Comprehensive Basic Survey of ARMM

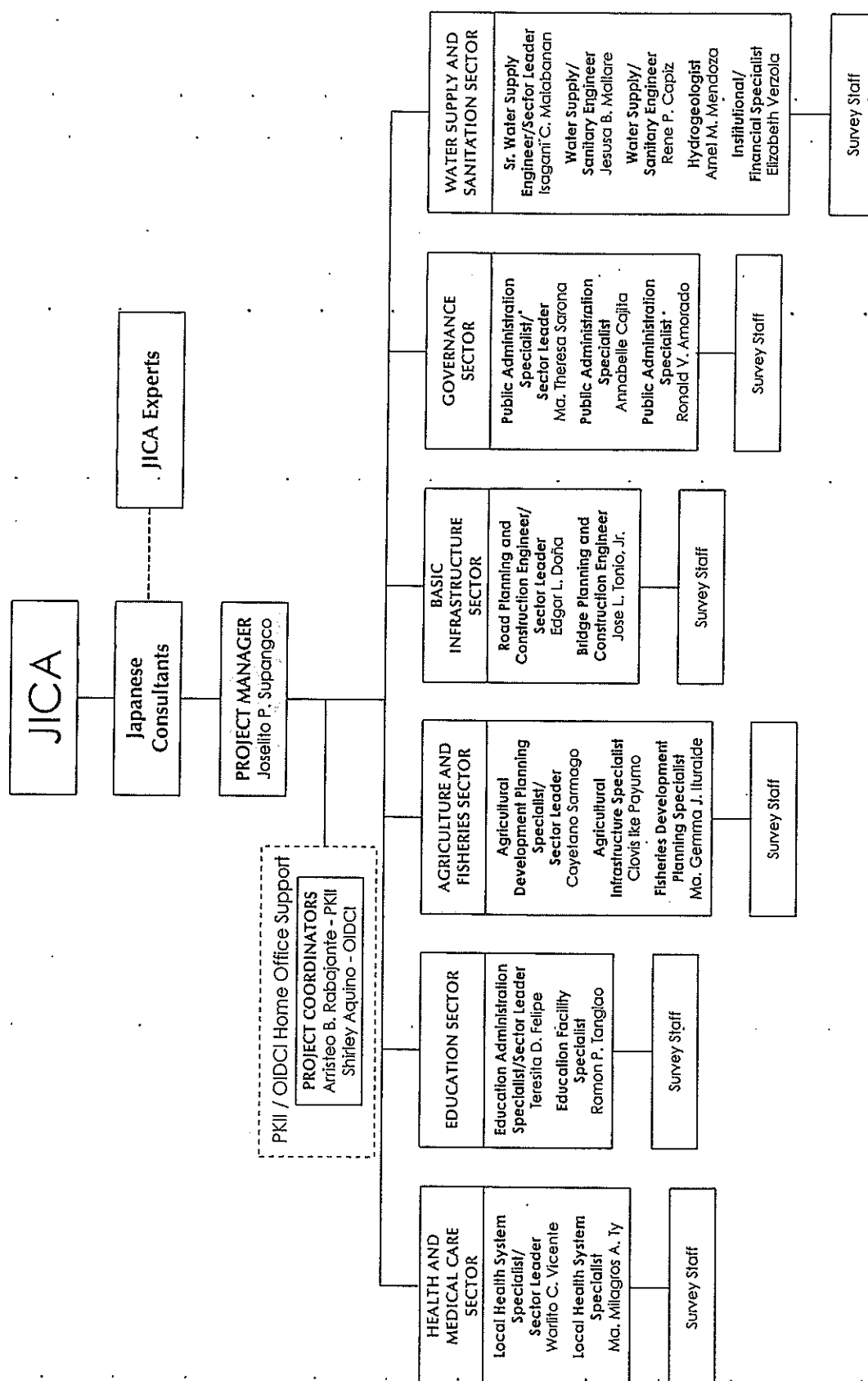


Figure 1-2 Project Organizational Chart

1.3.3 Conduct of Workshops, Meetings, Focus Group Discussions and Other Participatory Activities

Provincial Workshops. An important component of the Survey was the conduct of the Provincial Workshops which were intended to facilitate the collection of information from the various stakeholders and to allow the participants to vent issues and problems related to their specific sectors. The preparatory activities for the conduct of the Workshops were facilitated by the Provincial Government through the Offices of the Provincial Administrator and the Provincial Planning and Development Coordinator. The conduct of the Workshops were still delayed as it required a significant amount of time to invite the targeted participants. While attendance was significant, some of the major stakeholders did not attend for various reasons. The structure of the workshops were simplified due to time constraint, as the Study Team members still had to meet the various key informants in their offices to collect whatever data was required by the Survey.

Thus, the Provincial Workshops started with the usual traditional program followed by the introduction of the participants and the introduction of the Survey and its objectives. The participants were then divided into the six sector groupings of the Study for the conduct of the Focus Group Discussions facilitated by the Specialists concerned. The focus questions were:

- a) What operational and statistical data are available in the various offices of the participants? (This included the method of data collection, forms used, data validation, frequency of data collection and problems the agency faced in data collection)
- b) What are the various issues and concerns faced by the sector in the area? (This also included what the suggested solutions are and how these solutions should be implemented.)

The problems usually encountered in the conduct of the workshops were as follows:

- a) *Communication and Scheduling the Workshops.* In spite of advances in communication technology, there was great difficulty in contacting the appropriate persons responsible for inviting the targeted participants, arrangement of the venue and the scheduling of the workshops itself. The provinces usually had a lot of intervening activities such as trainings, meetings, and other activities that usually involved the

targeted participants. This had caused difficulty in scheduling the date of the workshops.

- b) *Attendance of Participants.* While the provincial government, through the office of the governor, expedited the identification of the participants and the distribution of the invitations, a significant number of the identified key informants were still unable to attend due to other activities within and outside the province.
- c) *Level of Participants.* Sometimes, when the invitees are unable to attend, representatives were sent. Oftentimes, the representatives were not well versed in the operations of their offices or the type of information that was being generated by their offices. Thus, they could not effectively participate in the discussions during the workshops.
- d) *Distance of the Venue.* While the venues of the workshops were usually in the provincial capitol, some of the participants, especially those from the LGUs had to travel long distances just to attend the workshop. This also meant that they had to leave early in order to catch the last trips to their LGUs, which were usually early in the afternoon.

The Provincial Workshops did serve the purpose intended in terms of: (a) expediting the gathering of information from the participants' offices; (b) generating key informants and stakeholders' viewpoints on issues and problems in their sector; and (c) assisting the specialists in the site investigations that usually followed the conduct of the workshops.

The date, location and number of participants in these workshops are summarized below.

Table 1-1 Venue, Date and Number of Participants in Provincial Workshops

Province	Venue	Date	Number of Participants
Tawi-Tawi	Rachel Halipa Hotel and Restaurant, Bongao, Tawi-Tawi	8 Sept. 2003	39
Basilan	Provincial Livelihood Center, Isabela, Basilan	10 Sept. 2003	37
Sulu	Honeybee Foods and Apartelle, Jolo, Sulu	11 Sept. 2003	29
Lanao del Sur/ Marawi City	Cafe Hermoso, Iligan City, Lanao del Norte	17 Sept. 2003	46
Maguindanao	Estosan Hotel, Cotabato City, Maguindanao	24 Sept. 2003	24

Special Consultation Workshops for the Office of the Regional Governor. In agreement with the Regional Planning and Development Office (RPDO) and the Technical Management Services (TMS) of the Office of the Regional Governor (ORG), two sets of consultation workshops were conducted. The objectives of these two additional workshops were:

- a) To identify the emerging trends since the implementation of the Organic Act as amended in the following areas;
 - i. Development Directions for ARMM
 - ii. Budget and Funds Flow
 - iii. Resource Mobilization
 - iv. Devolution
 - v. Operating Systems and Procedures
 - vi. Delivery of Basic Services
 - vii. Intergovernmental and Non-Governmental Relations
 - viii. Legislation
- b) To identify the constraints in the implementation of the Organic Act; and
- c) To identify the strategic interventions in governance and development administration.

The consultation workshop used a combination of small group discussions and the technology of participation (TOP) approach. The participants were divided into small groups where greater participation was maximized.

At the end of each session, it was expected that there would be agreements reached in terms of emerging trends, constraints and strategic interventions on governance.

The first set of workshop was for the offices within the Office of the Regional Governor (ORG), which was preliminary activity before the final consultation workshop. There was an expressed interest from these offices to be involved since they felt that the ultimate beneficiaries need to be consulted.

The second and final consultation workshop was attended by the members and additional agencies of the Regional Development Administration Committee (RDAC), the Planning

Committee tasked to coordinate Development Administration, including governance matters for the ARMM.

The Preliminary Consultation Workshop was attended by the Division Chiefs of the different offices and services in the Office of the Regional Governor. The final Consultation Workshop was attended by the members of the Regional Development Administration Committee (RDAC) and additional participants.

One-on-One Meetings. For the actual data collection at site, the different specialists were fielded in the ARMM. They met, whenever available, the different key informants and officials at the municipal, provincial, local officials of national agencies, regional government and officials of different funding institutions involved in the ARMM. The detailed fieldwork was quite extensive, although the data that was actually collected from these were less than targeted. In the end, there were still substantial data gaps that prevailed across sectors and therefore could not be filled. This became a major constraint of the Survey.

1.4 Organization of Report

The sector plan will discuss existing situation of the water supply and sanitation sector in the Province of Sulu in terms of facilities and coverage, sector arrangements and institutional capacity, past financial performance and water source development. Based on the analysis of the existing situation and conditions of the province, future requirements in water supply and sanitation improvement will be projected. Costs for future sector development will be estimated, a sector management plan will also be drawn up including financial arrangements and monitoring and evaluation for the sector and the project. Selection criteria to identify priority projects/ area will also be established.

CHAPTER 2
PROVINCIAL PROFILE

2. PROVINCIAL PROFILE

2.1 Brief History

The ancient name of Sulu was Suug, which means "current" in Tausug. The language of the Tausug is very similar to Butuanon and anthropologists believe that the Tausug may have been descended from settlers who came into Sulu from Northern Mindanao. Samal folklore, on the other hand, holds that their people migrated from the vicinity of Johore and settled in Sulu. Due to the strategic location of the island, it was actively trading with the Chinese and nearby Southeast Asian nations before the coming of the Spaniards in the 16th century.

Islam was introduced into Sulu in 1280 by Tuan Masha'ika, who established the first Muslim community in the archipelago. Missionary work began in the early 14th century with the arrival of Karim ul-Makhdum and the Sultanate was established in the 15th century by Rajah Baginda. By the end of the 15th century, Islamic political institutions had firmly taken root in Sulu. Before the Spaniards arrived in the 16th century, Sulu's influence as a religious and commercial center had extended to as far north as Manila.

In 1597, the Spaniards tried to seize Jolo in the first of several attempts to force the sultanate into submission. The Sulu people retaliated by launching raids on territories subject to Spanish rule that continued, with varying degrees of intensity, until the mid-19th century. Spanish attempts to force the Sulus to submission were largely futile. In 1638, the Spaniards gained a temporary foothold in Jolo, but the fort was abandoned in 1646. The sultanate's power reached its zenith in the late 18th century when its realm stretched from the coast of Sabah in Borneo, to portions of Zamboanga peninsula and Palawan.

Towards the mid-19th century, the Spaniards intensified attempts to force the Sulus into submission. The island of Balanguigui was razed, and its inhabitants brought into captivity by the Spaniards in 1848. In 1851, the Spaniards began the occupation of Jolo, forcing the Sultan to retire to Maimbung. The Spaniards razed Jolo in 1876 and built a protected settlement in the town. By 1878, the Sultan acknowledged vassalage to Spain but retained vast political and religious powers.

The town of Jolo was evacuated by the Spaniards in May 1899 and turned over to the American military forces. In August 1899, the Americans negotiated the Bates Treaty that established

nominal control over the Sultanate. However, resistance to American efforts to enforce control over the sultanate resulted in armed resistance and war. The Sulus made a heroic stand against the Americans in the Battle of Bud Dajo in 1906. In 1915, the Sultan of Sulu signed into an agreement with the Americans relinquishing all political powers in Sulu and paving the way for its incorporation into the Philippines as a province.

The Spaniards first established a politico-military district for Jolo in 1878 and another for the town of Siasi in 1882. In 1903, Sulu became a district of the Moro Province and in 1914 became a province of the Department of Mindanao and Sulu.

Sulu was a hotbed of Moro secessionists in the 1970s. In February 1974, the town of Jolo burned as a result of fierce fighting between government forces and armed rebels who attacked the town. Hundreds of residents fled Sulu as a result of continued fighting. Sulu became part of an autonomous regional government in Western Mindanao in 1979 and in 1989, became one of the first four provinces to constitute the ARMM.

2.2 Location and Accessibility

Sulu lies midway between Basilan and Tawi-Tawi in southern Mindanao. It is surrounded by the Sulu Sea on the north and west, the Mindanao Sea on the east, and the Celebes Sea on the south.

The province is accessible through regular air links between Zamboanga and Sulu. Ferry boats also run the route from Zamboanga and Basilan to Jolo. The communication and postal services of Sulu consist of four private radiotelegraph stations, 17 telecommunications offices, 18 post offices and one telephone system.

2.3 The Land

The province consists of four island groups (Jolo, Pangutaran, Tapul and Samales) that cover 157 islands and islets.

Jolo is the name of the capital town, the island on which the town is located, and the group of islands to which belongs Joló Island is mountainous, being volcanic in origin.

Siasi Island in the Tapul Group has a hilly interior. Other big islands are also of volcanic origin. The rest of the islands are coral and reef formations with low-forested and swampy areas.

The National Statistics and Coordination Board (NSCB) reports that Sulu has a land area 1,600.4 km². The Department of Budget and Management (DBM), in its 2003 Internal Revenue Allotment, reports a total land area of 2,135.05 km². As of 2003, there are 18 municipalities, 410 barangays, and a congressional district in the province.





2.3.1 Topography and Drainage

The Sulu archipelago is marked by a number of mountain ranges that traverse the mid-section of the island of Jolo from east to west. The mountain chain includes Mt. Tumantangis (about 248 m), Mt. Pula (about 86 m), Mt. Kangangan (about 202 m), and Mt. Datu (about 30 m). Siasi Island is also hilly. The other islands, such as Pangutaran are coral formation resulting to low, swampy, flat and forested areas. However, numerous places around the reef-surrounded island afford anchorages.

2.3.2 Climate

While the climate of the entire Philippines may be classified into four types following the Modified Corona's Classification System, only three types are observed in Mindanao and only two of these are observed in the ARMM area. Figure 2-1 presents the classification of climate within the entire island of Mindanao and within the coverage of ARMM.

LEGEND:

	TYPE I	Two pronounced seasons, dry from December to May and wet from June to November. Maximum rain period is from June to September.
	TYPE II	No dry season with a very pronounced maximum rain period in winter. Maximum rainfall generally occur in Dec. and January, although there is not a single dry month.
	TYPE III	No very pronounced maximum rain period, with a short dry season lasting only from 1 to 3 months.
	TYPE IV	Rainfall is more or less evenly distributed throughout the year.

SOURCE: PAG-ASA



Figure 2-1 Climate Map of Mindanao

The Sulu Archipelago is outside the typhoon belt, and its climate is mostly warm, moist and humid, but rainfall is constant throughout the year. February is considered the coldest month, while May to August are the hottest with a mean relative humidity of 86%, and January to April is considered the dry period with a monthly average of 178 to 229 mm of rainfall.

2.3.3 Land Classification

The land classification in the province is shown below:

Table 2-1 Land Classification as of December 2000

CLASSIFICATION	Area, km ²	Percent of Province	Percent of ARMM
Total Land Area	1,600.38	100.00	12.37
Alienable and Disposable	476.87	29.80	7.59
Total Forest Area	1,123.51	70.20	16.89
Unclassified Forest Land	662.84	41.42	65.87
Total Classified Public Forest	460.67	28.79	8.16
<i>Forest Reserves</i>	0.00	0.00	0.00
<i>Established Timber Land</i>	448.98	28.05	8.99
<i>National Park (GRBS/WA)</i>	2.13	0.13	0.65
<i>Area for Fishpond Development</i>	9.56	0.60	12.33

Source: Bureau of Census and Statistics, Statistical Yearbook 2002

2.4 Socio-Demographic Profile

The Tausugs dominate the Sulu archipelago. They are referred to as “people of the current”, reflective of their close ties to the sea. They are known for their bravery, independence, and love for adventure. They are also an extremely proud people, shrewd traders, and excellent sailors and fighters. Protecting the family name is very important to the Tausugs. They would never tarnish their family honor with cowardice.

The Tausugs were among the first Filipinos to embrace Islam as a religion and a way of life. Their traditional religio-political structure is the sultanate. The sultan is the head of all ranks within the sultanate. Succession is by election by his staff although patrilineal succession is the ideal.

Total Population. The results of the 2000 Census of Population and Housing showed that Sulu registered a total population of 619,668 persons (Table 2-2), higher by 83,467 persons over the 1995 Census of Population results. This figure recorded a 3.15 percent growth rate, from a growth rate of 2.50 percent in the 1990 to 1995 period. A corresponding increase on the number of households was also recorded at 19,151 households, higher by 1,437 households over the 1995 figure. This resulted to an average household size of 6.31 persons, higher than the average household size recorded in 1995 (5.54 persons).

Table 2-2 Population Distribution of Sulu, 2000

MUNICIPALITY / CITY	Total Population	Percent
1. Indanan	53,425	8.62
2. Jolo (Capital)	87,998	14.20
3. Kalingalan Caluang	22,688	3.66
4. Luuk	38,819	6.26
5. Maimbung	24,982	4.03
6. Hadji Panglima Tahil (Marunggas)	5,314	0.86
7. Old Panamao	35,906	5.79
8. Pangutaran	26,211	4.23
9. Parang	54,994	8.87
10. Pata	11,791	1.90
11. Patikul	34,396	5.55
12. Siasi	59,069	9.53
13. Talipao	73,015	11.78
14. Tapul	14,881	2.40
15. Tongkil	15,933	2.57
16. Panglima Estino (New Panamao)	21,443	3.46
17. Lugus	18,839	3.04
18. Pandami	19,964	3.22
TOTAL	619,668	100.00

Source: NSO, 2000 Census of Population and Housing

Jolo (provincial capital) was the largest among the 18 municipalities in Sulu. It registered a population of 87,998 or 14.20 percent of the total population of the province. It was followed by Talipao (11.78 percent), Siasi (9.53 percent), Parang (8.87 percent), and Indanan (8.62 percent). Hadji Panglima Tahil (Marungas), on the other hand, had the smallest population with 0.86 percent.

Sulu ranked third in terms of population among the five ARMM provinces with 22.05 percent of the 2.8 million persons in the region. At the national level, the province contributed 0.81 percent to the total population of 76.5 million.

Population Distribution. As shown in Table 2-3, Sulu had a median age of 19 years, slightly higher than the 1995 median age of 18 years. This meant that half of the population was below 19 years old.

Table 2-3 Total Population by Age Group, Sex and
Sex Ratio: Sulu, 2000

Age Group	Total Population	Male	Female	Sex Ratio
Sulu	619,668	303,763	315,905	96.16
Under 1	4,514	2,155	2,359	91.35
1 to 4	52,441	25,103	27,338	91.82
5 to 9	87,016	43,344	43,672	99.25
10 to 14	86,939	43,577	43,362	100.50
15 to 19	90,438	44,161	46,277	95.43
20 to 24	60,204	28,932	31,272	92.52
25 to 29	45,303	21,197	24,106	87.93
30 to 34	36,445	16,931	19,514	86.76
35 to 39	42,624	20,115	22,509	89.36
40 to 44	32,798	16,602	16,196	102.51
45 to 49	26,824	13,148	13,676	96.14
50 to 54	19,661	10,305	9,356	110.14
55 to 59	13,463	6,997	6,466	108.21
60 to 64	9,636	5,269	4,367	120.65
65 to 69	5,339	2,775	2,564	108.23
70 to 74	3,244	1,777	1,467	121.13
75 to 79	1,164	601	563	106.75
80 & Over	1,615	774	841	92.03

Source: NSO, 2000 Census of Population and Housing

There were 303.7 thousand males and 315.9 thousand females in Sulu. This gave a sex ratio of 96.16 males for every 100 females. There were more males in the age groups 10 to 14, 40 to 44, and 50 to 79 years.

About 60.9 percent belonged to the economically active population aged 15 to 64 years. About 37 percent were young dependents (aged 0 to 14 years) while 1.83 percent were old dependents (aged 65 years and above). The overall dependency ratio in 2000 was 64.2, lower than the 1995 ratio of 69.84. This meant that for every 100 persons aged 15 to 64 years, there were about 64 dependents, i.e., 61 young dependents and 3 old dependents.

Housing. From Table 2-4, in 2000, most (92.16 percent) of the housing units in Sulu were single houses, lower than the 98.62 percent recorded in 1990. About three out of five of the occupied housing units needed no repair or if needed one, with minor repair only. About 17.35 percent needed major repair.

Out of 95,662 occupied housing units in Sulu, more than one out of five (21.68 percent) had floor area of 20 to 29 m². This was followed by housing units with floor area of 10 to 19 m² (21.10 percent) and with less than 10 m² (18.25 percent). Only 2.63 percent had 120 m² or more.

Table 2-4 Occupied Housing Units by Construction Materials of Outer Walls and Roof: Sulu, 2000

CONSTRUCTION MATERIALS OF THE OUTER WALLS	Total Occupied Housing Units	CONSTRUCTION MATERIALS OF THE ROOF						
		GI/ Aluminum	Tile/ Concrete/ Clay Tile	Half GI/Half Concrete	Wood	Cogon/ Nipa/ Anahaw	Makeshift/ Salvaged/ Improvised Materials	Asbestos/ Others/Not Reported
Sulu	95,662	25,843	402	1,526	6,519	54,249	366	6,757
Concrete/Brick/Stone	2,521	2,189	85	99	41	79	6	22
Wood	30,900	15,150	126	279	4,630	10,596	37	82
Half Concrete/ Brick/Stone and Half Wood	2,671	1,695	55	658	100	139	6	18
Galvanized Iron/ Aluminum	564	250	20	70	93	117	7	7
Bamboo/Sawali/Nipa	51,102	6,295	-	364	1,476	42,771	111	85
Asbestos	132	26	11	8	8	-	-	79
Glass	79	36	12	4	10	-	-	17
Makeshift/Salvaged/ Improvised Materials	257	8	-	2	4	38	198	7
Others/Not Reported	7,376	175	90	39	152	483	1	6,436
No walls	60	19	3	3	5	26	-	4

Source: NSO, 2000 Census of Population and Housing

About 56.71 percent of the occupied housing units had roof made of cogon/nipa/anahaw, lower than the 1990 figure of 83.78 percent. On the other hand, roof made of galvanized iron/aluminum increased from 9.27 percent in 1990 to 27.01 percent in 2000. As to construction material of the outer walls, the proportion of wood rose from 9.38 percent in 1990 to 32.30 percent in 2000.

2.5 Commerce and Industry

The main products of the province are rice and corn while the minor products include coffee, mongo, cassava, abaca, cacao bananas and coconuts. Livestock and poultry production are mostly cattle, chicken and ducks. Municipal waters provide local residents a source of livelihood.

The trade and investment opportunities include the strengthening of traditional crafts such as the weaving of hats, mats, and baskets, wood carving, *kumpit* (boat) making, production of pots and weapons. Marine based industries such as fishing and the processing of fish based products and the production of carageenan are also attractive ventures waiting for additional investments. Sulu's mild climate and fertile soil is also ideal for fruit production like durian, lanzones, mangosteen and bananas.

2.6 General Health Profile

The health status of a population reflects progress in efforts to promote equitable human development where everyone lives in a society where there is equal opportunity and chance to succeed in life.

The scenario in ARMM provides a real challenge since access to health services is not only affected by geographic constraints but even more so because of the armed conflict in various parts of ARMM.

2.6.1 Vital Health Indices

It is widely acknowledged that the ARMM is among the poorest regions in the country. Consequently, its health indices bear witness to this: the Infant Mortality Rate (IMR) for the region is 63% higher than the national rate, maternal mortality rate is almost double that of the national rate, crude birth is slightly higher and the crude death rate is 61% higher than the national figure (see Table 2-5).

2.6.2 Ten Leading Causes of Mortality

The data on the ten leading causes of mortality in 2001 (Table 2-6) lists "Unknown/Senility" as the number one (1) cause of death in ARMM, which is quite unusual and may reflect an error in reporting. It is also not clear whether "Accident, all forms" which ranks second is significantly different from "Trauma/GSW". The 2002 data on leading causes of death presents a different picture. "Trauma" is now ranked first followed by "Unknown Causes" and "Cardiovascular Diseases" as shown in Figure 2-3.

Table 2-5 The Vital Health Indicators – National vs. ARMM

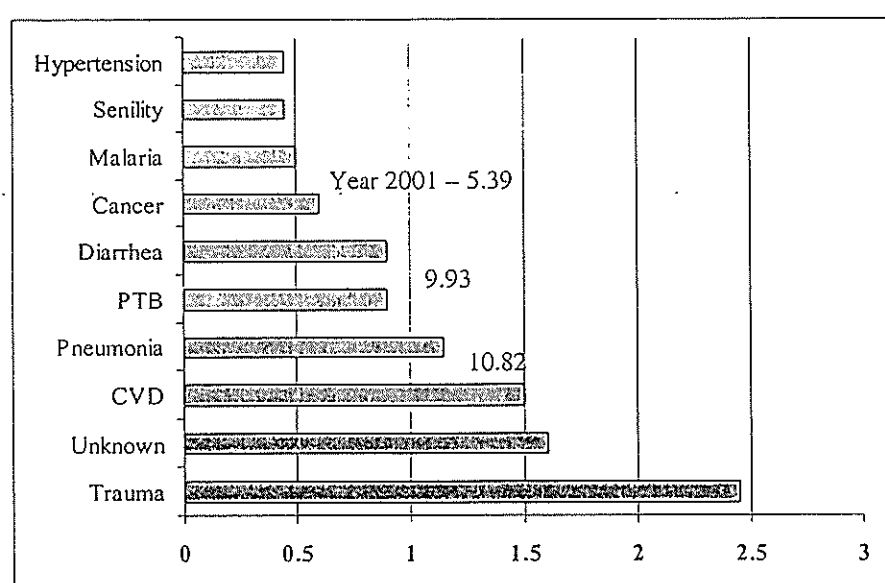
Indicator	National	ARMM
Population Growth Rate (2000)	2.36	3.86
Life Expectancy at Birth (2000)	67.2	57.2
Maternal Mortality Rate (2000)	0.6/1,000 LB	1.1/1,000 LB
Infant Mortality Rate (2000)	30/1000 LB	55.1/1000 LB
Crude Birth Rate (2000)	26.78 (/ 1000)	27.36
Crude Death Rate (2000)	5.89	9.51

Source: DOH-ARMM (Consolidated data- various years in bracket)
(LB – live birth)

Table 2-6 Ten Leading Causes of Mortality per 100,000 Population in ARMM, 2001

CAUSES	NUMBER	RATE
1. Unknown, senility	445	19.81
2. Accident, all forms	404	17.99
3. Hypertension	278	12.38
4. Pneumonia	243	10.82
5. PTB	223	9.93
6. Trauma/GSW	214	9.53
7. Diarrhea	190	8.46
8. Cardiovascular Disease	168	7.48
9. Cancer, all forms	121	5.39
10. Diseases of the heart	79	3.52

Source: MFHSIS



Note: X axis times 10

Source: DOH-ARMM

Figure 2-2 Ten Leading Causes of Deaths Per 100,000 Population – ARMM (2002)

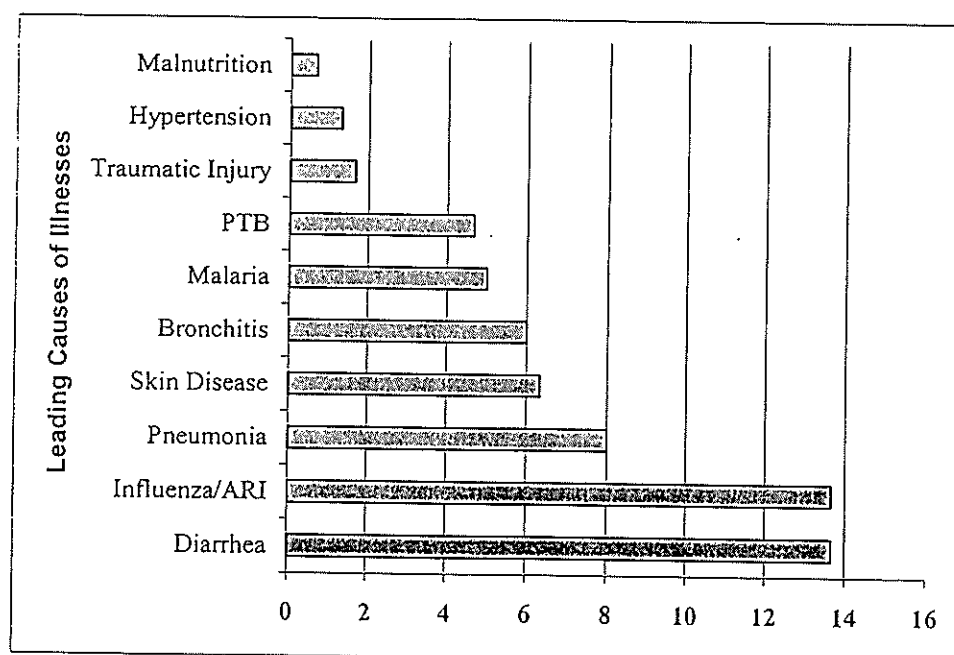
2.6.3 Leading Causes of Morbidity

The top three causes of morbidity or illness (Table 2-7 and Figure 2-4) are all infectious in nature. Diarrhea, which is ranked first, correlates well with the focused group discussion results, which indicate that potable water is a big problem in ARMM. The same result also correlates well with the report on notifiable diseases. There is no significant difference between the 2001 and the 2002 data.

Table 2-7 Ten Leading Causes of Illnesses per 1000 Population – ARMM-2001

CAUSES	NUMBER	RATE
1. Diarrhea	35,040	15.60
2. Influenza/ARI	34,864	15.52
3. Pneumonia	17,576	7.82
4. Bronchitis	14,120	6.29
5. Skin Diseases	9,612	4.28
6. Diseases of the Heart	6,984	3.11
7. PTB	3,674	1.64
8. Hypertension	3,361	1.50
9. Parasitism	2,533	1.13
10. Malaria	2,328	1.04

Source: MFHSIS- 2001



Source: DOH-ARMM Report

Figure 2-3 Ten Leading Causes of Illnesses per 1,000 Population – ARMM (2002)

CHAPTER 3
EXISTING FACILITIES AND SERVICE COVERAGE

3. EXISTING FACILITIES AND SERVICE COVERAGE

3.1 Water Supply

3.1.1 General

The present water supply system for each municipality was surveyed to assess the condition and the need of the people in the locality. Other water supply system parameters such as, service areas, service area population, served population, water service level, water quality of present sources, present distribution system (for level II and III) were also assessed to define the necessary measures to be planned for the improvement of the water supply system of each municipality.

3.1.2 Types of Facilities and Definition of Service Level Standard

Composition of Water Supply System and Facility. The service level and components of the water supply system and facilities are shown below.

Table 3-1 Composition of Water Supply System and Facility

Facility	Level I	Level II	Level III
1. Water Source	Drilled shallow well Drilled deep well Spring Dug well Rain Collector	Drilled shallow well Drilled deep well Spring Infiltration gallery	Drilled shallow well Drilled deep well Spring Infiltration gallery Surface water intake
2. Water Treatment	Generally none. Local health authorities conduct disinfection of well periodically.	Disinfection facility is sometimes not provided.	Disinfection facility is provided. Systems with surface water source have treatment facilities.
3. Distribution	None	Pipe system provided with reservoir	Extensive distribution system, and reservoir
4. Delivery and Service level	Generally none.	Communal faucet shared by houses within 25 m radius	Individual metered house connection.
5. Consumption Rate	At least 20 lpcd	At least 60 lpcd	At least 100 lpcd

Safe and Unsafe Classification of Water Sources. Generally, all water sources cannot be assumed to be safe for drinking unless the chemical and bacteriological properties are analyzed. However, we can initially classify the sources that maybe considered as safe and unsafe in relation to their physical condition and accessibility of source to contamination.

Safe Sources

Protected deep well
 Protected shallow well
 Improved/covered dug well
 Developed spring

Unsafe Sources

Unprotected deep well
 Unprotected shallow well
 Open dug well
 Unprotected Rain Collector

Service Level Standard. The water supply system has three (3) service levels. Normally, the number of households served for each level is sometimes beyond the standard set. The ideal service level standards are shown below.

Level I	15 households per point source 1 household per private well
Level II	4 to 6 households per communal faucet
Level III	1 household per connection

3.1.3 Level III Water Supply Systems

The level III water system is usually operated by the Water District or by the municipal waterworks. In the province of Sulu, four municipalities are served by Level III systems. The Mainland Jolo Water District operates and manages the water system in the municipality of Jolo and extends to each barangay in the municipality of Indanan and Patikul. The Siasi Water District operates and manages the water system in the municipality of Siasi. Table 3-2 shows the available data of the existing Level III water supply system for the said municipalities.

3.1.4 Level II Water Supply System

The level II water systems, defined as communal faucets, are designed to serve barangays at specified service points. The systems are usually operated by the Barangay Waterworks System Association (BWSA). In the province of Sulu, Level II water systems service the municipalities of Indanan, Patikul, Panamao, and Panglima Tabil. Table 3-3 shows the details in the areas covered by Level II water systems.

Table 3-2 Existing Level III Water System

Municipality	Water service provider	Service Area		No. of connections	Water source	Estimated unit water cons. (lpcd)
		Barangay	2000 HH Pop			
Jolo	Mainland Jolo Water District	1. Alat 2. Asturias 3. Bus-Bus 4. Chinese Pier 5. San Raymundo 6. Takut-Takut 7. Tulay 8. Poblacion (Walled City)	41,428	6,100	Spring	120
Indanan	Mainland Jolo Water District	1. Kajatian	1,986	330	Spring	120
Patikul	Mainland Jolo Water District	1. Anuling 2. Gandasuli	4,651	775	Spring	120
Siasi	Siasi Water District	1. Laud Norte 2. Poblacion	1,382	230	Shallow Well	80

Table 3-3 Existing Level II Water System

Municipality	Water service provider	Barangay Served	Estimated household served	No. of Communal faucets	Water source	Estimated unit water cons. (lpcd)
Indanan	BWSA(s)	1. Tagbak 2.. Timbangan	120	No data	Spring Shallow wells	80
Patikul	BWSA(s)	1. Igasan 2. Mampallam 3. Taglibi	100	No data	Spring Shallow wells	80
Panamao	BWSA(s)	1. Poblacion 2. Su-uh	730	No data	Spring	80
Panglima Tabil	BWSA(s)	1. Bangas 2. Bubuan 3. Kabuukan 4. Pagasinan 5. Teomabal	280	No data	Spring and shallow well	80

3.1.5 Level I Water Supply System

Level I water systems are found in areas that are not being served by either Level II or Level III systems. The areas covered by this system is listed in Table 3-4. Level I systems commonly utilize shallow wells as water source and are equipped with hand pumps, but for those who have the means and financial resources, they use motorized water pump to withdraw water. There are also areas where they tapped spring as their point source. Water from the spring is conveyed directly to their households by connecting series of pipes (polyethylene or galvanized iron).

Other households get their water from nearby river channel for domestic use and rainwater (stored in individual water tank) for drinking.

Table 3-4 Existing Level I Water System

Municipality	Water service provider	Barangay Served				Water source	Estimated unit water cons. (lpcd)
		Barangay Served	Class	2003 Served Pop'n.	No. of Communal faucets		
Indanan	BWSA(s)	1 Adjid	Urban	484	No data furnished	Springs and shallow wells w/no actual location furnished	80
		2 Bangalan	Urban	366			
		3 Bato-bato	Urban	1,036			
		4 Buanza	Urban	915			
		5 Bud-Taran	Urban	271			
		6 Bunut	Urban	522			
		7 Jati-Tunggal	Urban	333			
		8 Kabbon Maas	Urban	477			
		9 Kagay	Urban	635			
		10 Kan Islam	Urban	468			
		11 Kandang Tukay	Urban	372			
		12 Karawan	Urban	363			
		13 Katian	Urban	275			
		14 Kuppong	Urban	433			
		15 Lambayong	Urban	326			
		16 Langpas	Rural	652			
		17 Licup	Urban	396			
		18 Malimbaya	Rural	286			
		19 Manggis	Urban	403			
		20 Manilop	Urban	377			
		21 Paligue	Urban	362			
		22 Panabuan	Urban	693			
		23 Panglima Misuari (Sasak)	Urban	149			
		24 Pasil	Rural	514			
		25 Poblacion (Indanan)	Urban	576			
		26 Sapah Malaum	Urban	448			
		27 Sawaki	Rural	377			
		28 Sionogan	Urban	748			
		29 Tubig Dakulah	Urban	287			
		30 Tubig Parang	Urban	471			
		31 Tumantangis	Urban	394			
		Total	Urban	14,408			
			Rural	1,828			
Kalingalan (Caluang)	BWSA(s)	1 Kambing	Rural	684	No data furnished	Springs and shallow wells w/no actual location furnished	80
		2 Kanlagay	Rural	601			
		3 Karungdong (Pob.)	Rural	1,974			
		4 Masjid Bayle	Rural	489			
		5 Masjid Punjungan	Rural	499			
		6 Pang	Rural	696			
		7 Pangdan Pangdan	Rural	479			
		8 Pitogo	Rural	949			

CHAPTER THREE

Existing Facilities and Service Coverage

Municipality	Water service provider	Barangay Served				Water source	Estimated unit water cons. (lpcd)
		Barangay Served	Class	2003 Served Pop'n.	No. of Communal faucets		
		9 Tunggol	Rural	818			
		Total	Urban	0			
			Rural	7,189			
Luuk	BWSA(s)	1 Andalan	Rural	188	No data furnished	Springs and shallow wells w/no actual location furnished	80
		2 Angilan	Rural	350			
		3 Bual	Rural	594			
		4 Capual Island	Rural	1,710			
		5 Guimbaun	Rural	342			
		6 Huwit-huwit	Rural	389			
		7 Kan-Bulak	Rural	514			
		8 Kan-Mindus	Rural	479			
		9 Lahing-Lahing	Rural	319			
		10 Lambago	Rural	337			
		11 Lianutan	Rural	596			
		12 Lingah	Rural	325			
		13 Mananti	Rural	566			
		14 Niangkaan	Rural	482			
		15 Niog-niog	Rural	580			
		16 Sucuban	Rural	556			
		17 Tandu-Bato	Rural	428			
		18 Tangkuan	Rural	388			
		19 Tubig-Puti (Pob.)	Urban	2,616			
		20 Tulayan Island	Rural	541			
		Total	Urban	0			
			Rural	12,301			
Maimbung	BWSA(s)	1 Anak Jati	Rural	147	No data furnished	Springs and shallow wells w/no actual location furnished	80
		2 Bato Ugis	Rural	311			
		3 Bualo Lahi	Rural	115			
		4 Bualo Lipid	Rural	279			
		5 Bulabog	Rural	149			
		6 Datag Limbon	Rural	106			
		7 Duhol Kabbon	Rural	105			
		8 Gulangan	Rural	78			
		9 Ipil	Rural	152			
		10 Kandang	Rural	131			
		11 Kapok-Punggol	Rural	249			
		12 Kulasi	Rural	1,625			
		13 Labah	Rural	155			
		14 Lagasan Asibih	Rural	265			
		15 Lantong	Rural	252			
		16 Lapa	Rural	93			
		17 Laud Kulasi	Rural	579			
		18 Laum Maimbung	Rural	240			
		19 Lower Tambaking	Rural	81			
		20 Lunggang	Rural	103			
		21 Matatal	Rural	249			
		22 Patao	Rural	217			

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Existing Facilities and Service Coverage

Municipality	Water service provider	Barangay Served				Water source	Estimated unit water cons. (lpcd)
		Barangay Served	Class	2003 Served Pop'n.	No. of Communal faucets		
		23 Poblacion (Maimbung)	Urban	280			
		24 Tabu-Bato	Rural	113			
		25 Tandu Patong	Rural	243			
		26 Tubig-Samin	Rural	153			
		27 Upper Tambaking	Rural	125			
		Total	Urban	280			
			Rural	6,317			
Panamao	BWSA(s)	1 Asin	Rural	420	No data furnished	Springs and shallow wells w/no actual location furnished	80
		2 Bakud	Rural	121			
		3 Bangday	Rural	175			
		4 Baunoh	Rural	191			
		5 Bitanag	Rural	109			
		6 Bud Seit	Rural	117			
		7 Bulangsi	Rural	212			
		8 Datag	Rural	122			
		9 Kamalig	Rural	409			
		10 Kan Asaali	Rural	232			
		11 Kan Ukol	Rural	300			
		12 Kan-Dayok	Rural	391			
		13 Kan-Sipat	Rural	186			
		14 Kawasan	Rural	121			
		15 Kulay-kulay	Rural	628			
		16 Lakit	Rural	148			
		17 Lower Patibulan	Rural	269			
		18 Lunggang	Rural	200			
		19 Parang	Rural	133			
		20 Pugad Manaul	Rural	204			
		21 Puhagan	Rural	164			
		22 Seit Higad	Rural	151			
		23 Tabu Manuk	Rural	386			
		24 Tandu-tandu	Rural	132			
		25 Tayungan	Rural	186			
		26 Tinah	Rural	110			
		27 Tubig Gantang	Rural	141			
		28 Tubig Jati	Rural	150			
		29 Upper Patibulan	Rural	239			
		Total	Urban	0			
			Rural	6,347			
Pandarni	BWSA(s)	1 Baligtang	Rural	330	No data furnished	Springs and shallow wells w/no actual location furnished	80
		2 Bud Sibaud	Rural	322			
		3 Hambilan	Rural	197			
		4 Kabbon	Rural	106			
		5 Lahi	Rural	425			
		6 Lapak	Rural	278			
		7 Laud Sibaud Island	Rural	153			
		8 Malanta	Rural	253			
		9 Mamanok Jadjaira-Haira Island	Rural	150			

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Existing Facilities and Service Coverage

Municipality	Water service provider	Barangay Served				Water source	Estimated unit water cons. (lpcd)
		Barangay Served	Class	2003 Served Pop'n.	No. of Communal faucets		
		10 North Manubul Island	Rural	256			
		11 Parian Dakula	Rural	911			
		12 Sibaud Proper	Rural	343			
		13 Siganggang	Rural	373			
		14 South Manubul Island	Rural	500			
		15 Suba-suba	Rural	350			
		16 Tenga Manubul Island	Rural	321			
		Total	Urban	0			
Panglima Estino	BWSA(s)		Rural	5,272	No data furnished	Springs and shallow wells w/no actual location furnished	80
		1 Gagguil	Rural	268			
		2 Gata-gata	Rural	406			
		3 Jingga	Rural	521			
		4 Kamih-Pungud	Rural	858			
		5 Lihbug Kabaw	Rural	402			
		6 Likbah	Rural	396			
		7 Lubuk-lubuk	Rural	486			
		8 Marsada	Rural	414			
		9 Paiksa	Rural	363			
		10 Pandakan	Rural	490			
		11 Punay (Pob.)	Urban	897			
		12 Tiptipon	Rural	371			
		Total	Urban	897			
Pangutaran	BWSA(s)		Rural	4,975	No data furnished	Springs and shallow wells w/no actual location furnished	80
		1 Alu Bunah	Rural	143			
		2 Bangkilay	Rural	453			
		3 Kawitan	Rural	342			
		4 Kehi Niog	Rural	531			
		5 Lantong Babag	Rural	545			
		6 Lumah Dapdap	Rural	709			
		7 Pandan Niog	Rural	873			
		8 Panducan	Rural	669			
		9 Panitikan	Rural	452			
		10 Patutol	Rural	225			
		11 Simbahan (Pob.)	Urban	1,289			
		12 Se-ipang	Rural	416			
		13 Suang Bunah	Rural	315			
		14 Tonggasang	Rural	341			
		15 Tubig Nonok	Rural	415			
		16 Tubig Sallang	Rural	588			
		Total	Urban	1,289			
			Rural	7,017			
Parang	BWSA(s)	1 Alu Layag-Layag	Rural	1,164	No data	Springs and shallow wells w/no actual location furnished	80
		2 Alu Pangkoh	Rural	592			
		3 Bagsak	Rural	284			
		4 Bawisan	Rural	782			
		5 Biid	Rural	274			
		6 Bukid	Rural	202			

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Existing Facilities and Service Coverage

Municipality	Water service provider	Barangay Served				Water source	Estimated unit water cons. (lpcd)
		Barangay Served	Class	2003 Served Pop'n.	No. of Communal faucets		
		7 Buli Bawang	Rural	147			
		8 Buton	Rural	207			
		9 Buton Mahablo	Rural	274			
		10 Danapa	Rural	140			
		11 Duyan Kabao	Rural	259			
		12 Gimba Lagasan	Rural	321			
		13 Kaha	Rural	890			
		14 Kahoy Sinah	Rural	395			
		15 Kanaway	Rural	475			
		16 Kutah Sairap	Rural	387			
		17 Lagasan Higad	Rural	244			
		18 Lanao Dakula	Rural	366			
Parang	BWSA(s)	19 Laum Buwahan	Rural	126	No data	Springs and shallow wells w/no actual location furnished	80
		20 Laum Suwah	Rural	225			
		21 Liang	Rural	332			
		22 Linuho	Rural	130			
		23 Lipunos	Rural	490			
		24 Lower Sampunay	Rural	274			
		25 Lumbaan Mahaba	Rural	427			
		26 Lungan Gitong	Rural	329			
		27 Lupa Abu	Rural	509			
		28 Nonokan	Rural	421			
		29 Paugan	Rural	100			
		30 Payuhan	Rural	512			
		31 Piyahan	Rural	318			
		32 Poblacion (Parang)	Urban	536			
		33 Saldang	Rural	195			
		34 Sampunay	Rural	257			
		35 Silangkan	Rural	494			
		36 Taingting	Rural	353			
		37 Tikong	Rural	266			
		38 Tukay	Rural	133			
		39 Tumangas	Rural	353			
		40 Wannu Piyanjihan	Rural	339			
		Total	Urban	536			
			Rural	13,984			
Pata Island	BWSA(s)	1 Andalan	Rural	120	No data furnished	Springs and shallow wells w/no actual location furnished	80
		2 Daungdong	Rural	392			
		3 Kamawi	Rural	143			
		4 Kanjarang	Rural	213			
		5 Kayawan (Pob.)	Rural	238			
		6 Kiput	Rural	318			
		7 Likud	Rural	303			
		8 Luuk-tulay	Rural	230			
		9 Niog-niog	Rural	146			
		10 Patian	Rural	146			
		11 Pisak-pisak	Rural	227			

CHAPTER THREE

Existing Facilities and Service Coverage

Municipality	Water service provider	Barangay Served				Water source	Estimated unit water cons. (lpcd)
		Barangay Served	Class	2003 Served Pop'n.	No. of Communal faucets		
		12 Saimbangan	Rural	397			
		13 Sangkap	Rural	362			
		14 Timuddas	Rural	442			
		Total	Urban Rural	0 3,677			
Patikul	BWSA(s)	1 Bakong	Rural	211	No data furnished	Springs and shallow wells w/no actual location furnished	80
		2 Bangkal	Rural	618			
		3 Bonbon	Rural	191			
		4 Buhanginan (Darayan)	Rural	512			
		5 Bungkaung	Rural	201			
		6 Danag	Rural	328			
		7 Kabbon Takas	Rural	286			
		8 Kan Ague	Rural	286			
		9 Kaunayan	Rural	172			
Patikul	BWSA(s)	10 Langhub	Rural	229	No data furnished	Springs and shallow wells w/no actual location furnished	80
		11 Latih	Rural	129			
		12 Panglayahan	Rural	120			
		13 Pansul	Rural	106			
		14 Patikul Higad	Rural	243			
		15 Sandah	Rural	183			
		16 Tandu-Bagua	Rural	236			
		17 Tanum	Rural	153			
		18 Taung	Rural	180			
		19 Timpok	Rural	122			
		20 Tugas	Rural	207			
		21 Umangay	Rural	301			
		Total	Urban Rural	0 5,013			
Siasi	BWSA(s)	1 Bakud	Rural	128	No data furnished	Springs and shallow wells w/no actual location furnished	80
		2 Buan	Rural	483			
		3 Bulansing Tara Island	Rural	170			
		4 Bulihkullul Island	Rural	160			
		5 Campo Islam	Rural	297			
		6 Duggo	Rural	143			
		7 Duhol Tara Island	Rural	207			
		8 East Kungtad	Rural	237			
		9 East Sisangat	Rural	177			
		10 Ipil	Rural	169			
		11 Jambangan	Rural	86			
		12 Kabubu	Rural	197			
		13 Kong-Kong Island Laminusa	Rural	250			
		14 Kud-kud Island	Rural	209			
		15 Kungtad West	Rural	213			
		16 Latung	Rural	542			
		17 Luuk Laminusa Island	Rural	174			
		18 Luuk Tara Island	Rural	211			
		19 Manta	Rural	180			

CHAPTER THREE

Existing Facilities and Service Coverage

Municipality	Water service provider	Barangay Served				Water source	Estimated unit water cons. (lpcd)
		Barangay Served	Class	2003 Served Pop'n.	No. of Communal faucets		
		20 Minapan	Rural	515			
		21 Nipa-nipa	Rural	144			
		22 North Manta	Rural	111			
		23 North Musu Laud Island	Rural	99			
		24 North Silumpak Island	Rural	108			
		25 Pislone	Rural	162			
		26 Punungan Island	Rural	190			
		27 Puukan Laminusa Island	Rural	185			
		28 Ratag	Rural	367			
		29 Sablay	Rural	96			
		30 Sarukot	Rural	180			
		31 Siburi	Rural	139			
		32 Singko	Rural	165			
		33 Siolakan	Rural	173			
Siasi	BWSA(s)	34 Siowing	Rural	204	No data furnished	Springs and shallow wells w/no actual location furnished	80
		35 Sipanding	Rural	162			
		36 Sisangat Island	Rural	163			
		37 Siundoh	Rural	110			
		38 South Musu Laud Island	Rural	96			
		39 South Silumpak	Rural	131			
		40 Southwestern Bulikullul Island	Rural	96			
		41 Subah Buaya	Rural	553			
		42 Tampakan Laminusa Island	Rural	417			
		43 Tengah Laminusa Island	Rural	317			
		44 Tong Laminusa Island	Rural	559			
		45 Tonglabah Island	Rural	212			
		46 Tong-tong	Rural	339			
		47 Tubig Kutah	Rural	164			
		48 Tulling	Rural	344			
		Total	Urban Rural	0 4,701			
Talipao	BWSA(s)	1 Andalan	Rural	653	No data furnished	Springs and shallow wells w/no actual location furnished	80
		2 Bagsak	Rural	391			
		3 Bandang	Rural	401			
		4 Bilaan (Pob.)	Urban	312			
		5 Bud Bunga	Rural	356			
		6 Buntod	Urban	774			
		7 Buroh	Rural	261			
		8 Dalih	Rural	320			
		9 Gata	Rural	415			
		10 Kabatuhan Bilaan	Rural	295			
		11 Kabatuhan Tiis	Rural	350			

CHAPTER THREE

Existing Facilities and Service Coverage

Municipality	Water service provider	Barangay Served				Water source	Estimated unit water cons. (lpcd)
		Barangay Served	Class	2003 Served Pop'n.	No. of Communal faucets		
		12 Kabungkol	Rural	365			
		13 Kagay	Rural	312			
		14 Kahawa	Rural	328			
		15 Kandaga	Rural	246			
		16 Kanlibot	Rural	476			
		17 Kiutaan	Rural	284			
		18 Kuhaw	Rural	408			
		19 Kulamboh	Rural	279			
		20 Kuttong	Rural	198			
		21 Lagtoh	Rural	425			
		22 Lambanah	Rural	429			
		23 Liban	Rural	317			
		24 Liu-Bud Pantao	Rural	265			
		25 Lower Binuang	Rural	375			
		26 Lower Kamuntayan	Rural	298			
		27 Lower Laus	Rural	302			
		28 Lower Sinumaan	Rural	478			
		29 Lower Talipao	Rural	462			
Talipao	BWSA(s)	30 Lumbayao	Rural	378	No data furnished	Springs and shallow wells w/no actual location furnished	80
		31 Lumping Pigih Dahon	Rural	335			
		32 Lungkiaban	Rural	594			
		33 Mabahay	Urban	374			
		34 Mahala	Rural	554			
		35 Mampallam	Rural	280			
		36 Marsada	Rural	587			
		37 Mauboh	Rural	410			
		38 Mungit-mungit	Rural	342			
		39 Niog-Sangahan	Rural	326			
		40 Pantao	Rural	345			
		41 Samak	Rural	286			
		42 Talipao Proper	Rural	354			
		43 Tampakan	Rural	418			
		44 Tiis	Rural	374			
		45 Tinggah	Rural	422			
		46 Tubod	Rural	284			
		47 Tuyang	Rural	395			
		48 Upper Binuang	Rural	347			
		49 Upper Kamuntayan	Rural	306			
		50 Upper Laus	Rural	256			
		51 Upper Sinumaan	Rural	299			
		52 Upper Talipao	Rural	237			
		Total	Urban	0			
			Rural	10,745			

3.1.6 Water Supply System Coverage

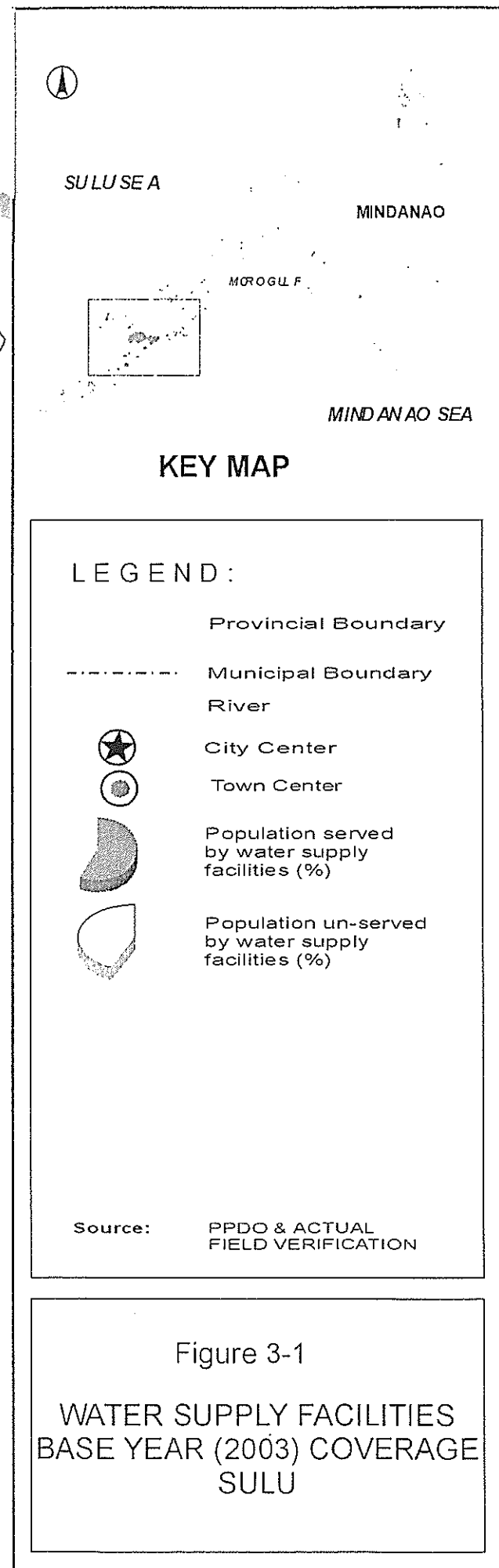
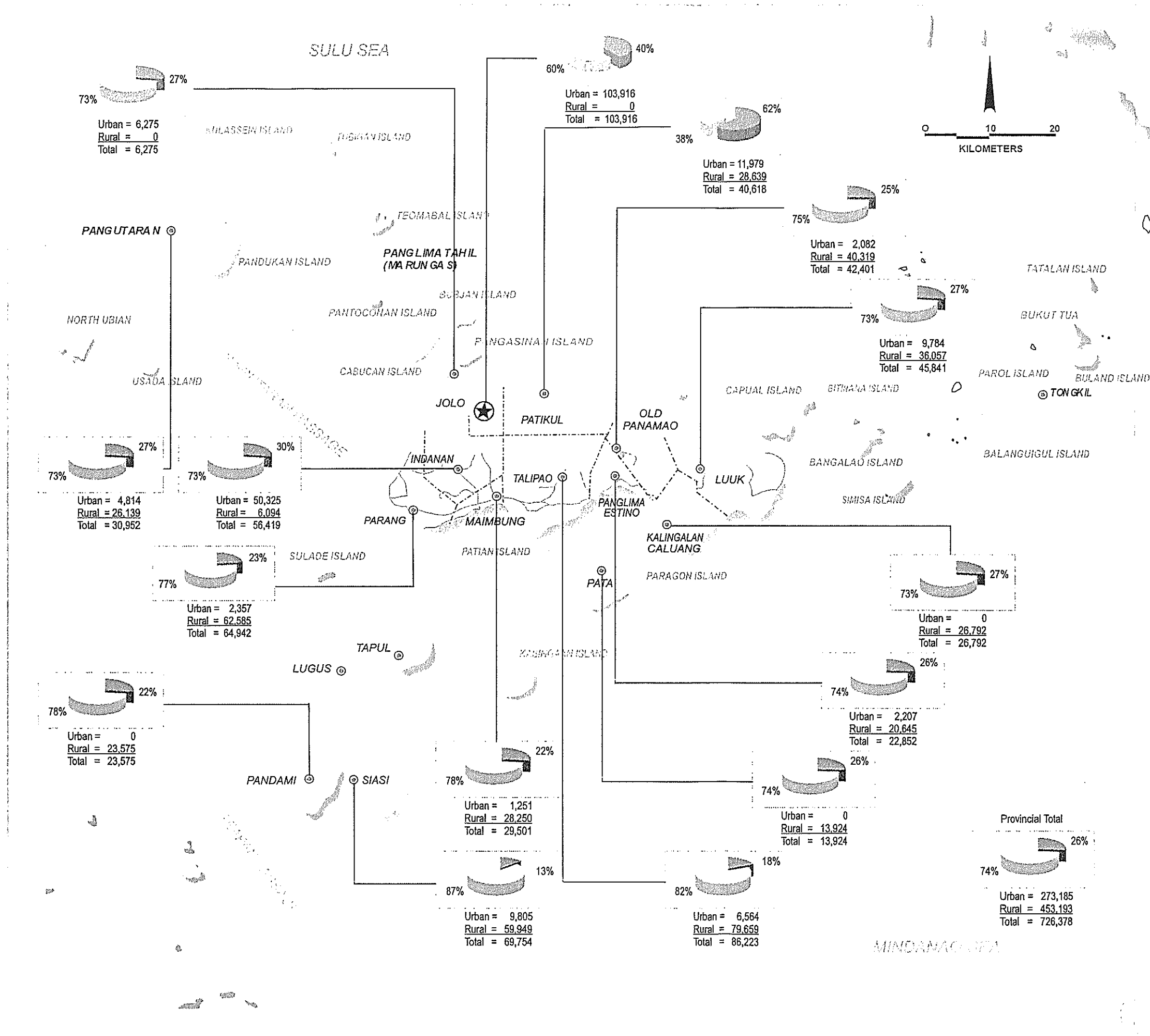
As discussed in the previous section, there are 4 areas that are served with Level III water system and these are located in the municipalities of Jolo, Indanan, Patikul and Siasi. The service coverage ranges from about 2% in Siasi to about 45% in Jolo. Also, there are municipalities with Level II water system which serves the Poblacion, while all other municipalities have Level I system. Listed in Table 3-5 is the municipal percentage distribution of population coverage in each level of water system, and shown in Figure 3-1.

Table 3-5 System Level Coverage

Municipality	Population (2003)	Population Served by 2003 Facilities				
		Level III	Level II	Level I	Total	% Coverage
1 Indanan	56,419	1,986	722	14,408	17,116	27%
2 Jolo	92,952	41,828	0	0	41,828	40%
3 Kalingalan Caluang	23,963	0	0	7,189	7,189	27%
4 Luuk	41,003	0	0	12,301	12,301	27%
5 Maimbung	26,388	0	0	6,597	6,597	22%
6 Panamao	37,915	0	4,385	6,347	10,731	25%
7 Panglima Tahil	5,613	0	1,684	0	1,684	27%
8 Panglima Estino	19,573	0	0	5,872	5,872	26%
9 Pangutaran	27,686	0	0	8,306	8,306	27%
10 Pandami	21,088	0	0	5,272	5,272	22%
11 Parang	58,077	0	0	14,519	14,519	23%
12 Pata	12,455	0	0	3,677	3,677	26%
13 Patikul	31,328	6,332	4,224	9,753	20,309	50%
14 Siasi	62,390	1,382	0	7,603	8,984	13%
15 Talipao	61,195	0	0	15,299	15,299	18%
Provincial Total	578,042	51,528	11,015	117,141	179,683	27%

The present provincial coverage for ARMM was compared to the national and other regional data in the country. Table below shows the comparison between ARMM with other regions, which demonstrates very low coverage within the sector.

From the table it could be observed that access to Level III & II water system is lowest in ARMM. Likewise remedial means to obtain potable water from rain collector, private vendor and other sources, which shows highest values for ARMM indicates the lack of adequate standard water source.



The above data is only an indicative ratio that may clearly demonstrate the need to improve the sanitary facilities of the Province of Sulu. The low value can be attributed to lack of water supply facilities (that will render the residents to provide sanitary provisions) and the capability of the rural households to construct the approved type of sanitary facilities. Figure 3-2 shows the distribution by municipality of the sanitary facilities.

Number of Families Main Source of Water Supply (2002)

Region	Total Families	Main Source of Water Supply											
		Level III		Level II		Level I		Rain Collector		Private Vendor		Others	
		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
PHILIPPINES	15,925,454	5,194,864	33	2,626,307	16	7,393,385	46	61,513	0.4	573,598	4.0	75,787	0.5
ARMM	388,437	22,549	6	26,657	7	299,895	77	12,456	3.0	24,172	6.0	2,708	1.00
Ilocos Region	849,081	164,955	19	82,758	10	597,765	70	0	0.0	3,440	0.4	163	0.02
Eastern Visayas	774,958	172,869	22	282,421	36	308,072	40	1,011	0.1	9,177	1.0	1,408	0.18
Western Mindanao	637,944	165,860	26	161,173	25	299,617	47	0	0.0	7,091	1.0	4,203	0.66
Central Mindanao	694,91	136,540	20	65,586	9	475,113	68	566	0.08	10,550	2.0	6,557	0.94

Source: National Statistics Office, 2002 Annual Poverty Indicators Survey (APIS)

3.2 Sanitation

3.2.1 General

The present sanitation condition of the municipality was also assessed to evaluate the present sanitary needs and to integrate measures with the water supply plan. Majority of the areas that were visited during the survey indicates that the common problem to sanitation is the lack of adequate water supply. Since water supply and sanitation are complimentary to each system one of the gateway to progress of every municipality is a reliable and safe sanitary/environmental facility. In providing safe and reliable water supply vis-à-vis the improvement in sanitation condition follows.

3.2.2 Types of Facilities and Definition of Service Level Standard

The household toilets are categorized into two types. These are the sanitary and unsanitary toilets. The sanitary toilets (which are the approved ones) are defined as, water sealed toilet, flush type or pour-flush type with receiving pit or septic tank or septic vault, with ventilation. The unsanitary toilets include the types of facilities used for disposing human waste which do not fall under the category of the approved type.

3.2.3 Sanitation Facilities and Service Coverage

Sanitation data furnished by the PPDO could not be used to make a conclusive picture of the present sanitation condition of all the 18 municipalities comprising the province of Sulu since only four municipalities (Jolo, Panglima Tahil, Parang and Pangutaran) have submitted the data. However, based on the submitted data coming from the four municipalities, existing household sanitation facilities range from 30% to 45%. On this basis, an average of 40% of the total municipal population is assumed to have adequate sanitation facilities.

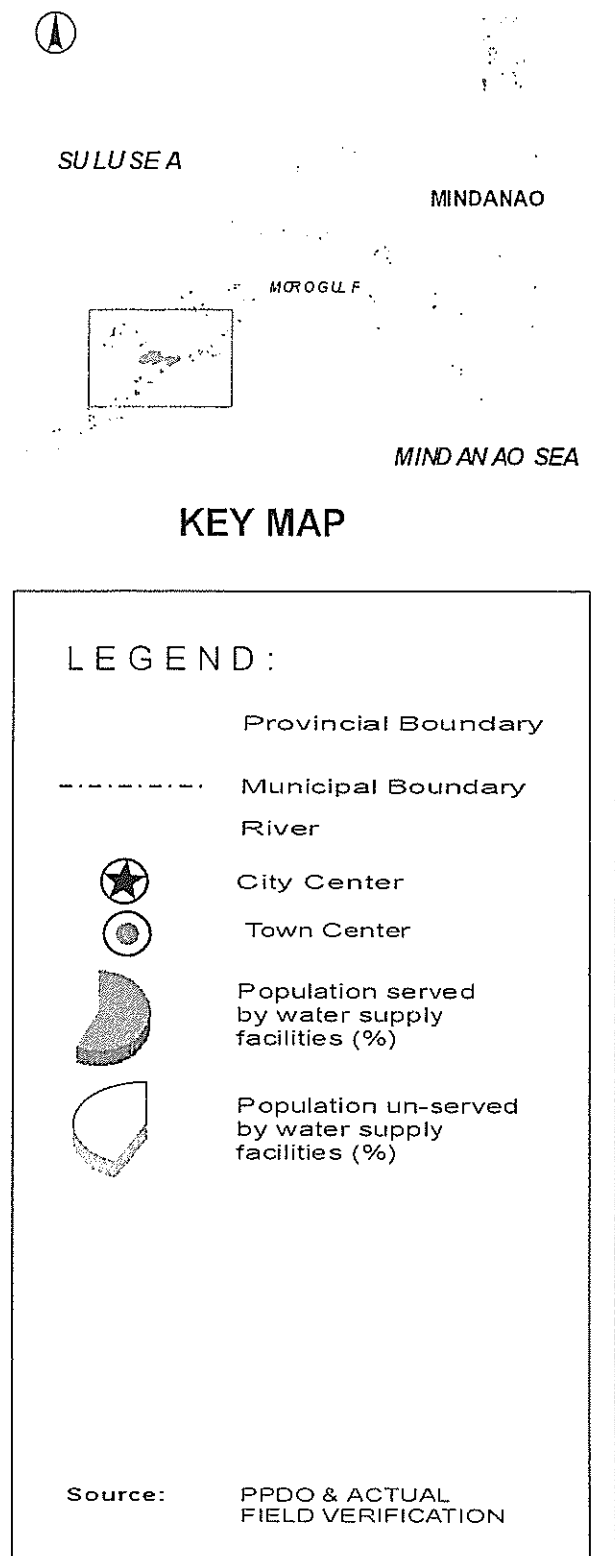
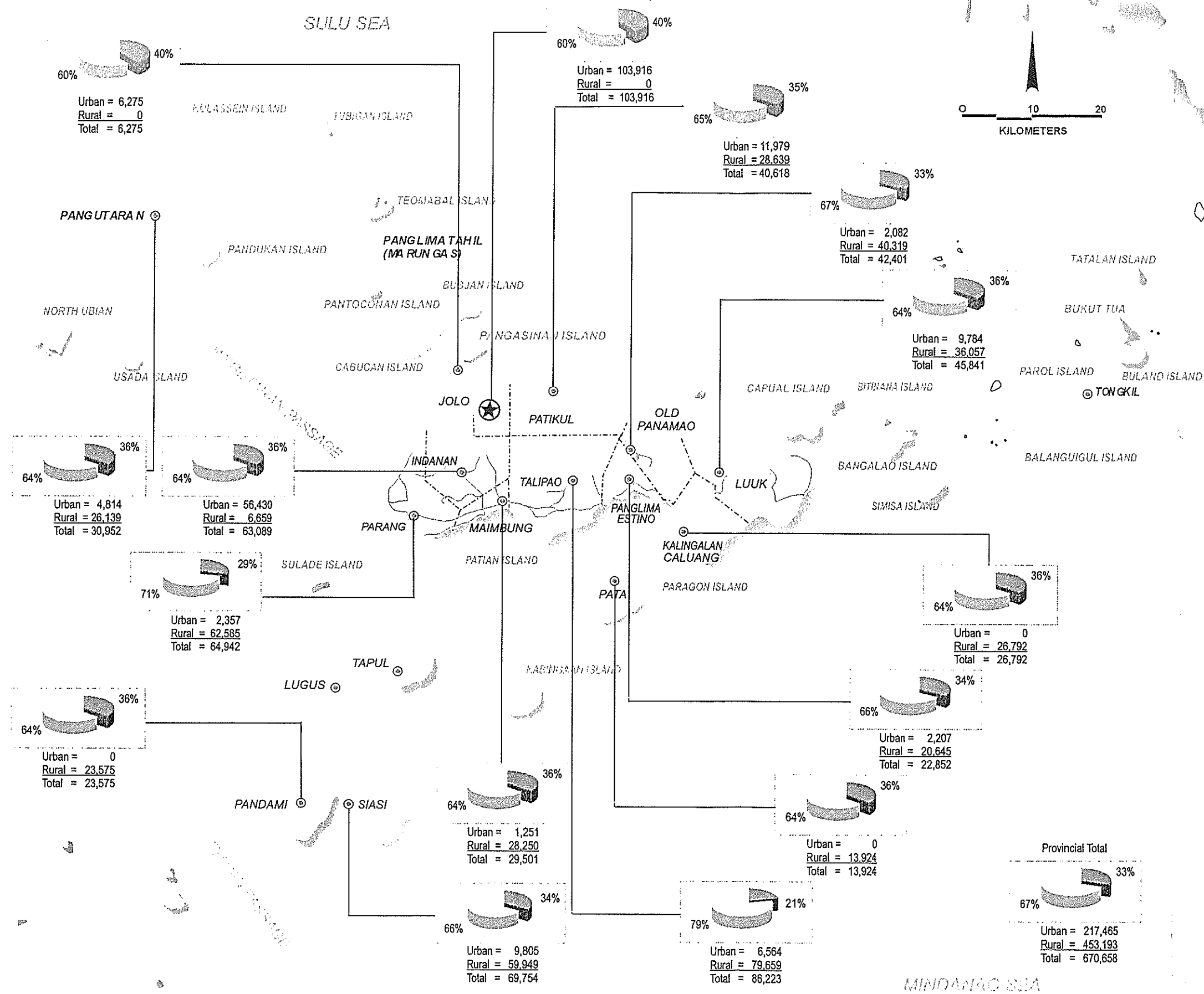


Figure 3-2
SANITATION FACILITIES
BASE YEAR (2003)
COVERAGE
SULU

CHAPTER 4
EXISTING SECTOR INSTITUTIONS AND
ARRANGEMENTS

4. EXISTING SECTOR INSTITUTIONS AND ARRANGEMENTS

4.1 General

The existing sector institutional arrangements in the ARMM is determined largely by two laws: the Act Providing for the ARMM (RA No. 6734), which has been subsequently amended by the Act to Strengthen and Expand the Organic Act for the Autonomous Region in Muslim Mindanao (RA 9054) and the Local Government Code of ARMM, Mindanao Muslim Autonomy # 25 Book III. These laws have resulted in substantially different inter-agency relationships than those currently existing between the national government and the regions other than the ARMM.

4.2 Policies and Development Plan on ARMM

4.2.1 National Government Policies and Plan on ARMM

1) National Government Policies on ARMM

RA 9054 defines the national government policies on the ARMM as follows:

- ♦ ARMM remains an integral and inseparable part of the national territory as defined by the Constitution and existing laws;
- ♦ Policy of settlement of conflicts by peaceful means;
- ♦ Guaranteed recognition and protection of the beliefs, customs and traditions of the people in the ARMM and the free exercise of their religions;
- ♦ Perpetuation of Filipino and Islamic values and ideals;
- ♦ Improved status of the marginalized; and
- ♦ Enhancement of the quality of life, protection of women and children and preferential rights of the inhabitants.

2) National Government Plan on ARMM

The Medium Term Philippine Development Plan 2001-2004, while defining the development aspirations for the country as a whole, puts special attention and focus on securing peace and

development in Mindanao. With reference to Mindanao, the Plan states the policy framework towards national government's approach to its development, to wit – aim at securing peace while accelerating development in conflict and non-conflict areas to attain political and socio-economic stability as well as cultural harmony, in conformity with the rule of law and in accordance with constitutional processes.

The development strategies for Mindanao include the following:

- ♦ Peace building efforts through confidence building measures to create a favorable environment for resuming peace talks with the MILF and rehabilitation of communities damaged by the armed conflict with the MILF and return of affected population to their communities; and
- ♦ Socio-economic upliftment through the provision of basic services such as food and nutrition, health, *water and sanitation*, basic education/literacy and employment/livelihood opportunities.

Thus, water and sanitation is considered as a priority development sector in Mindanao in general. Among the identified projects directed towards the sector is the ADB-funded Mindanao Basic Urban Services Sector Project (MBUSSP) intended to provide basic infrastructure such as water supply for urban centers and urbanized municipalities in Mindanao.

3) Water Supply and Sanitation Sector Reforms - National

The national government has endorsed the major recommendations of the Water Supply Sector Reform Study and the National Urban Sewerage and Sanitation Strategy Study as evidenced by NEDA Board Resolution Nos. 4, 5 and 6. These resolutions have been enforced in the sector for more than five years with the transition process still ongoing particularly at the provincial level where the community-based demand-driven approach is being handed over to the LGUs.

The following are the aforementioned NEDA Board resolutions that provide the operating and regulatory policies for the sector as a whole and have been followed by the recently completed ADB-funded RW3SP (Rural Water Supply and Sanitation Sector Project) implemented by DILG jointly with the DOH and LGUs of the 20 poorest provinces covered by the Social Reform Agenda of the 1990s.

(a) NEDA Resolution Nos. 4 (series of 1994)

In the context of the national and ARMM Local Government Codes, LGUs in general, now play the lead role in basic services delivery. The resolution allows the 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 this resolution, its Implementing Rules and Regulations (IRR) was prepared by the DILG and approved by the NEDA Board in 1998. It delineates the responsibilities of government agencies involved in the sector and defines the role of LGUs in the provision of water supply and sanitation services, including operation and maintenance (O&M) of the facilities.

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

This resolution designates the LGUs as primary implementers of the sanitation/sewerage programs and 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.

(c) NEDA Resolution No.6 (series of 1996)

This resolution defines the extent of national government assistance to LGUs in the implementation of devolved infrastructure activities/facilities under the LGC in support of national priority programs in order to ensure efficiency, effectivity and more focused implementation. It affirms DILG's responsibilities for overseeing and administering national government assistance to LGUs including institutional capability building of the LGUs.

4.2.2 ARMM Plans

The Development Framework Plan 2002-2004 (or the Regional Executive Agenda for Peace and Development) sets the policy guidelines and development directions in the ARMM for the indicated period. In general, these include the following:

- ◆ Support to the peace process through (i) completion of the 1996 GRP-MNLF Peace Agreement; (ii) sustained efforts to further peace building and stability; and (iii) national

reconciliation including peaceful reconciliation/reconstruction and rehabilitation of the communities affected by the armed conflict;

- ◆ Social reforms through (i) delivery of basic services including *potable water supply and sanitation*, health care and nutrition; (ii) focus on education and manpower skills training; and (iii) development of comprehensive social protection package which includes safety nets and conflict prevention components;
- ◆ Economic reforms through (i) fast tracking the implementation of livelihood projects complemented with resources of microfinance to enable the marginalized communities to undertake economic activities; (ii) refocus strategic intervention from Agriculture and Fisheries Modernization Act (AFMA) to modernize agriculture and fisheries; (iii) formulation of comprehensive economic plan focusing on providing strategic infrastructures; and (iv) improving the business policy environment and building the capacity of the private sector for small-medium enterprises (SMEs);
- ◆ Political reforms by (i) establishing strong partnerships between the legislative and administrative departments; and (ii) establishing mechanisms for greater collaboration between the regional and local governments; and
- ◆ Institutional reforms through (i) the formulation of a code of ethical conduct for all public servants in ARMM; (ii) restructuring and reorganization of the ARMM bureaucracy; and (iii) acceleration and improvement in the use of ODA-funded projects.

Access to potable water is one of the key strategic issues viewed as a major stumbling block in attaining sustainable peace and development in ARMM. As a result, one of the more significant objectives for infrastructure development was the development of water resources both for agricultural development and water supply and for social development was the improved delivery of basic services. To achieve these objectives, the sectoral strategies include (i) intensification of massive Information/Education Campaign (IEC) and capability building among stakeholders to ensure the effective and efficient delivery of basic services [social development]; and (ii) building the capacity of LGUs to implement projects and involving the private sector in infrastructure planning, implementation, monitoring and evaluation [infrastructure development].

However, as a priority economic agenda, water and sanitation facilities and services seems to lag compared to other strategic infrastructure facilities.

4.2.3 Provincial Plans and Sector Programs

The provincial plan aims to pave the way for greater access to economic opportunities and community services, promote and ensure sustainable use of land resources and provide protection to environmentally critical areas, and provide avenues for implementation of infrastructure support facilities and community services. These specific objectives include the following:

- a. Increase in the employment rate in both industrial and service sectors;
- b. Improve/augment accessibility to the primary urban centers/ urbanizable centers; and
- c. Increase/hasten urbanization.

For infrastructures, the plan aims to provide/improve and/or upgrade physical infrastructure facilities and utilities by maximizing accessibility.

For water supply, the provincial action plan envisions the tapping and development of potential water sources to expand water system services in the province and construction of water tanks in the island municipalities of the province. The infrastructure requirements for the 2004-2012-plan period are as follows:

Project Type	Description	Location
Level III Gravity Fed Water Supply	Provision of potable water supply through the construction of concrete box/ gravity fed system	Mainland Jolo, Talipao, Parang, Maimbung, Luuk and Panamao and the island municipality of Siasi

Source: *Ten-Year Comprehensive Provincial Physical Framework/Land Use Plan (2003-2012)*
Provincial Development Council/Provincial Planning and Development Office.

4.2.4 ARMM Institutions Involved in Water Supply and Sanitation

1) The ARMM Government

The creation of the Autonomous Region evolved through a series of steps taken by the national leadership to resolve what was commonly shown as the “*Mindanao Problem*”, a simmering unrest caused by decades of neglect and discrimination, which resulted in the period of fratricidal conflict.

President Corazon C. Aquino signed the first Organic Act for the Autonomous Region in Muslim Mindanao into law as Republic Act 6754 on August 1, 1989. This was then amended by RA 9054 “An Act to Strengthen and Expand the Organic Act for ARMM, passed in February 7, 2001 and became a law on March 31, 2001 in accordance with Article VI, Section 27 (i) of the Philippine Constitution.

Republic Act 6734 as amended by RA 9054 provides for the establishment of the Executive Department (Article VII) and the Legislative Department (Article VI) in the ARMM Regional Government. These enactments also provide for the administration of Justice (Article VIII). The over-all organizational structure and the relationship with each other are shown in Figure 4-1.

The Regional Government exercises its powers and functions necessary for or incidental to the proper governance and development of all the constituent units within the autonomous region. Specifically mentioned in the Organic Act are:

- ◆ Creation of its own sources of revenues and to levy taxes, fees and charges, subject to the provisions of the Constitution and the Republic Act (Article IX);
- ◆ Protection of the ancestral domain, ancestral lands and agrarian reform (Article X);
- ◆ Promotion of urban and rural planning and development (Article XI);
- ◆ Promotion of regional economy and patrimony consistent with the Constitution and existing laws (Article XII);
- ◆ Maintenance and preservation of law and order (Article XIII);

- ♦ Establish, maintain and support education, science and technology, arts and sports (Article XIV); and
- ♦ Promotion of social justice, services, institutions and other concerns (Article XV).

The Executive and Legislative Departments carry out these powers and functions with the administration of justice provided by the Regular Trial and Shari'a courts, directly supervised by the Supreme Court of the Philippines. The President of the Republic of the Philippines provides general supervision over the Autonomous Regional Government (ARG) through the Regional Governor.

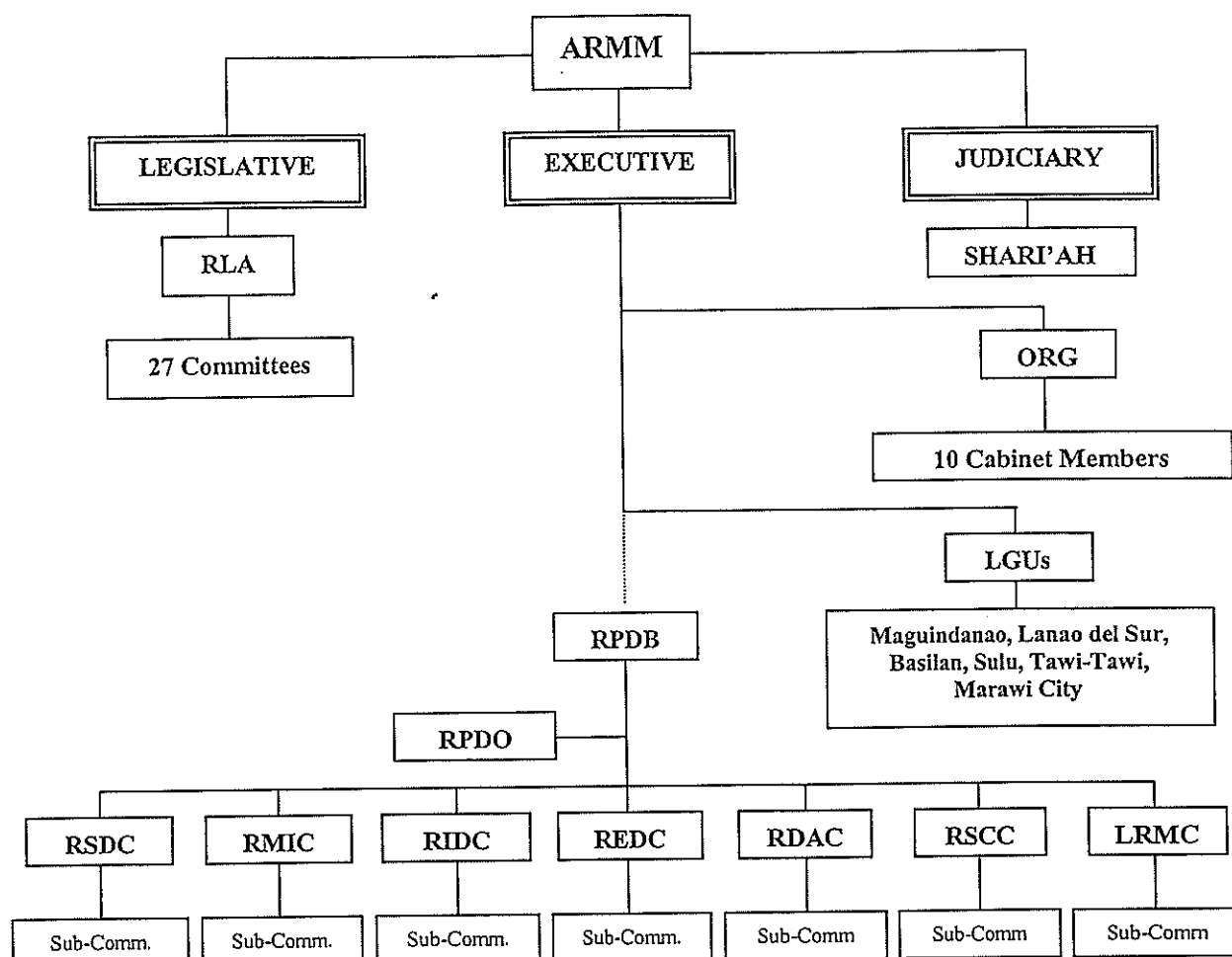
The Regional Legislative and Executive Development Advisory Committee (RLEDAC) was recently created to provide the venue for both Departments to inter-act on development matters affecting the ARG.

2) The Executive Department

The Executive power in ARMM is vested in the Regional Governor, who is elected by the qualified voters of the Autonomous Region (Article VII, Section 1).

Composition of the Executive Department

The Regional Governor, the Vice Governor, the three Deputy Regional Governors, the Cabinet Secretaries and the Local Chief Executives of the Provinces, City and Municipalities covered by the ARMM Region represent the Executive Department.

Figure 4-1 ARMM Organizational Structure¹

Source: Regional Planning and Development Office (RPDO)-ARMM

Table 4-1 Composition of the ARMM Executive Department
(As of October 2003)

Provisions of RA 9054 with respect to composition of the Executive Department	Status of Implementation
<p>1. The Regional Governor is the Chief Executive of the ARMM Regional Government (Article VII, Section 2)</p> <p>The term of office of the Regional Governor is for a period of three (3) years, which will begin at noon on the 30th day of September next following the day of the election and will</p>	<p>1.1 The incumbent Regional Governor assumed office after the first elections for the expanded autonomous region under RA 9054 in 2002. He is also the concurrent Regional Secretary of Department of Public Works and Highways (DPWH)-ARMM.</p> <p>1.2 He heads the Office of the Regional</p>

¹ RLA-Regional Legislative Assembly; ORG-Office of the Regional Governor; RPDB-Regional Planning and Development Board; RPDO-Regional Planning and Development Office; RSDC-Regional Social Development Committee; RMIC-Regional Macro-Intersectoral Committee; RIDC-Regional Infrastructure Development Committee; REDC-Regional Economic Development Committee; RDAC-Regional Development Administration Committee; RSCC-Regional Statistical Coordination Committee; LRMC-LGUs Regional Management Committee

Provisions of RA 9054 with respect to composition of the Executive Department	Status of Implementation
end at noon of the same date three (3) years thereafter. (Article VII, Section 7)	Governor (ORG) with an Executive Secretary and with 4 support services.
<p>2. The Regional Vice Governor takes over the position of the Regional Governor in case of permanent vacancy (Article VII, Section 11) and temporary vacancy (Article VII, Section 12).</p> <p>The Regional Vice-Governor may be appointed by the Regional Governor as a member of the Regional Cabinet without need of confirmation by the Regional Legislative Assembly (RLA).</p> <p>The term of office of the Vice Regional Governor is for a period of three (3) years, which will begin at noon on the 30th day of September next following the day of the election and will end at noon of the same date three (3) years thereafter. (Article VII, Section 7)</p>	<p>2.1 The incumbent Regional Vice-Governor also assumed office together with the Regional Governor in 2002. He is also the Department of Education (DepED)-ARMM Regional Secretary in a concurrent capacity.</p> <p>2.2 He heads the Office of the Regional Vice-Governor (ORVG).</p>
<p>3. Deputy Regional Governors: Executive Council</p> <p>This Council shall advise the Regional Governor on matters of governance of the Autonomous Region; The 3 Deputy Governors shall be Ex-Officio members of the Regional Cabinet with or without portfolio (Article VII, Section 6).</p>	<p>3.1 Three (3) Deputy Regional Governors representing the Christians, the Indigenous Cultural Communities and the Muslims in the Region were appointed. These officials are:</p> <ul style="list-style-type: none"> ▪ Honorable Gumbalia Gunsu representing the Lumads or the Indigenous Cultural Communities ▪ Honorable Abdul Sahrin, an MNLF member representing the Muslims ▪ Honorable Luis Olano representing the Christians <p>3.2 The ARMM Regional Government is requesting for the budgetary requirements of the 3 positions, their staff and operating budget from the Department of Budget and Management (DBM).</p>
<p>4. Cabinet Members</p> <p>The Regional Governor shall be assisted by a Cabinet not exceeding ten (10) members (Article VII, Section 2)</p>	<p>4.1 There are twenty (20) Cabinet Secretaries /Directors representing the Devolved Agencies under the direct supervision of the Regional Governor. The List of Cabinet Officials of these agencies is shown in Annex 2-2.</p>

Provisions of RA 9054 with respect to composition of the Executive Department	Status of Implementation
	<p>4.2 In addition to the Cabinet Secretaries of the Devolved Agencies, its own locally created offices also assist the Regional Governor. These offices are represented by the following officials:</p> <ul style="list-style-type: none"> ▪ The Executive Secretary under the Office of the Regional Governor ▪ The Acting Executive Director of the Bureau of Cultural Heritage (BCH-ARMM) ▪ The Executive Director of the Regional Planning and Development Office (RPDO-ARMM) ▪ The Regional Manager of the Regional Ports and Management Authority (RPMA) <p>4.3 National Government with field offices in ARMM are also tapped by the Regional Governor to participate in Cabinet meetings. These agencies are represented by the following officials:</p> <ul style="list-style-type: none"> ▪ The Director of the National Police Commission (NAPOLCOM) ▪ The Executive Director of the National Statistics Office (NSO) ▪ The Director of the Civil Service Commission (CSC) ▪ The Regional Manager of the Philippine Coconut Authority (PCA) ▪ The Administrator of the Southern Philippines Development Authority (SPDA)
<p>4. Local Chief Executives of the Provinces, City, Municipalities and Barangays</p> <p>The term limits in Republic Act No. 7160, the Local Government Code of 1991, will apply to the Governors of Provinces and Mayors of Cities, Municipalities and Punong Barangay in the Autonomous Region:</p>	<p>4.1 There are five (5) provinces, one (1) city, 98 municipalities and 4,445 barangays in the Autonomous Region. The five provinces are: Basilan, Lanao del Sur, Maguindanao, Sulu and Tawi-Tawi. The lone city is Marawi.</p>

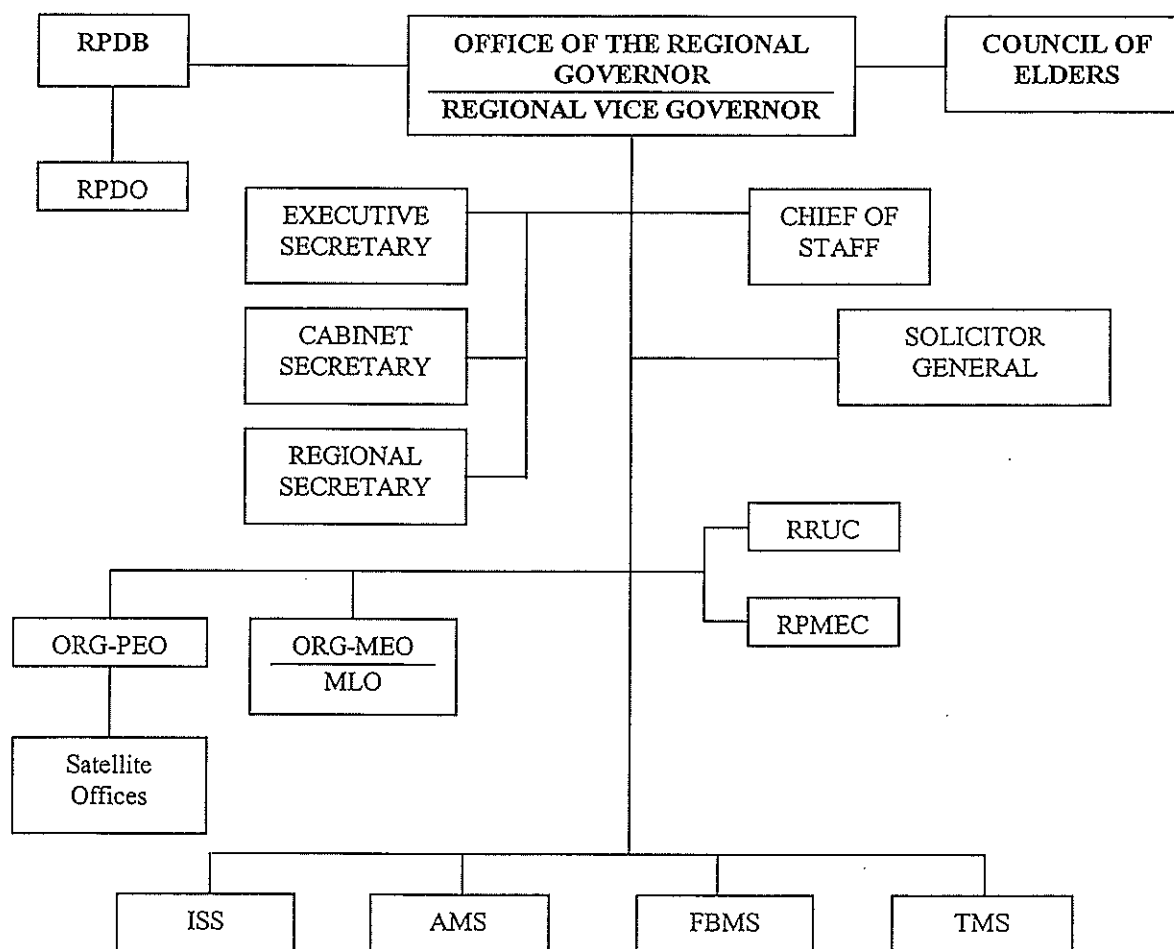
Sources: RA 9054 and various documents obtained from the Regional Planning and Development Office (RPDO)-ARMM

The Office of the Regional Governor (ORG) and Locally Created Offices

As mentioned, Offices of the Regional and Vice Governor were established, together with other locally created officers.

The Organizational Structure of the Office of the Regional Governor is shown in Figure 4-2 below:

Figure 4-2 Office of the Regional Governor Organizational Structure



LEGEND:

RPDB	- Regional Planning and Development Board
RPDO	- Regional Planning and Development Office
ORG-PEO	- ORG Provincial Extension Office
ORG-MEO	- ORG Manila Extension Office
RRUC	- Regional Reconciliation and Unification Council
RPMEC	- Regional Project Monitoring and Evaluation Committee
ISS	- Intelligence and Security Service
AMS	- Administrative Management Service
FBMS	- Finance and Budget Management Service
TMS	- Technical and Management Service

The Office of the Regional Governor is tasked to pursue programs and projects geared towards the proper governance and total development of all constituents within the 5 provinces and 1 city. This office provides for the supervision, implementation and execution of the Regional Development Plans, Policies and Programs.

In addition to its support services, there are three (3) Councils, Boards and Committees within the ORG, namely:

- Regional Economic Development and Planning Board (REDPB)

Providing secretariat support to the REDPB, the highest planning body of the Region is the Regional Planning and Development Office (RPDO). Five (5) Divisions support the RPDO, as shown in Figure 4-3.

Functions of the RPDO are similar to the National Economic and Development Authority Regional Offices (NROs) in the other Administrative Regions. These functions are:

- Evaluate and review proposed programs and projects for consideration by the regional planning and development board;
- Monitor and assess the programs and projects' implementation in the ARMM;
- Serve as the technical staff of the regional planning and development board in the ARMM;
- Provide technical assistance to implementing agencies in the autonomous region in identifying and developing regional programs and projects;
- Coordinate with the regional offices, other departments and agencies, and assist the local government units in the ARMM in the performance of their assigned tasks;
- Coordinate the implementation of foreign-assisted projects in the new autonomous region;

- Coordinate both foreign and local scholarship grants in the region; and
- With the creation of the Official Development Assistance (ODA) unit, the RPDO will need to work closely with said unit in the coordination of foreign-assisted projects.

Figure 4-3 Regional Planning and Development Office (RPDO) Organizational Structure



Source: Regional Planning and Development Office (RPDO)-ARMM

- Regional Reconciliation and Unification Council (RRUC)
- Regional Project Monitoring and Evaluation Committee (RPMEC)

The Manila Extension Office plays an active role as a liaison office in dealing with the National Government, Congress and ODA donors.

Other Locally Created Offices

Of the locally created offices in ARMM, the Office of the Regional Treasurer would be relevant to the sector since its main function is to evolve a system of sound and efficient management of ARMM financial resources and to ensure that said resources are generated and managed in accordance with the Regional Law and applicable existing national policies.

The Devolved Agencies

Article XVIII, Section 4 of the transitory provision of RA 9054 specifies that line agencies and offices of the National Government dealing with local government, social services, science and technology, labor, natural resources, and tourism, including their personnel, equipment, properties and budgets, are placed under the control and supervision of the Regional Governor.

While devolution continues from the National Government to the ARMM, the provision of RA 9054 Section 3 provides that the Regional Government shall adopt a policy on local autonomy whereby regional powers shall also be devolved to local government units particularly in areas of education, health, human resources, science and technology and people empowerment. This has not taken into effect as of this time.

One of the guiding principles and policies embodied in RA 9054 is the provision, maintenance and assurance of the delivery of, among other things, basic and responsive health programs, quality education, appropriate services, livelihood opportunities, affordable and progressive housing projects and water resource development (Article III, Section 11). In view of this provision, the different devolved agencies were created to implement the basic services required of the law.

There are 20 devolved agencies in ARMM, of which for water supply/sanitation, the Department of Public Works and Highways (DPWH-ARMM), the Department of Health (DOH-ARMM) and the Department of Interior and Local Government (DILG-ARMM) are the relevant agencies. The general functions and roles of these agencies involved in the water supply and sanitation (WATSAN) sector are shown in Table 4-2.

Table 4-2 Functions and Roles of Devolved Agencies Involved in WATSAN

Devolved Agencies	Functions and Roles
Department of Interior and Local Government (DILG-ARMM)	Assist the Regional Governor in the exercise of general supervision over the LGUs; develop and strengthen local government capability to promote local autonomy, decentralization, community empowerment through technical assistance and capability-building programs.
Department of Public Works and Highways (DPWH-ARMM)	Lead role in the provision and maintenance of highways, flood control and water resource development systems, and other public works within the ARMM.

Devolved Agencies	Functions and Roles
Department of Health (DOH-ARMM)	Lead role in the provision and maintenance of health, nutrition and sanitation services to the people.
Department of Environment and Natural Resources (DENR-ARMM)	Lead role in the conservation, protection and rehabilitation of the natural resources of the Region (forests, lands, environment, and other related services)

4.3 National Government Agencies with Field Offices in ARMM

Article XVIII, Section 4 of RA 9054 provides for the transfer of agencies and offices to the ARMM except for the following: Foreign Affairs, National Defense and Security, Postal Services, Coinage/Fiscal/Monitoring Policies, Administration of Justice except Shari'a, Customs and Tariff, Citizenship, Naturalization, Immigration and Deportation, General Auditing, National Elections, Maritime, Land and Air Transportation and Communication, Patents, Trademarks, Trade Names and Copyrights and Foreign Trade (Article IV, Section 3), national government offices and agencies in the ARMM are placed under the control and supervision of the Regional Governor pursuant to a prescribed schedule or within six (6) years from the re-organization of the Regional Government.

Agencies without physical presence in ARMM are represented by other Administrative Regions such as Regions IX and XII. These include: Department of Budget and Management (DBM) and Department of Finance (DOF).

4.3.1 Functions and Roles of National Government with Field Offices in ARMM

The functions and roles of non-devolved national government offices in the ARMM are the same as those of the other regions. These agencies coordinate with the Regional Governor when asked to participate in development planning activities of the REDPB and its Sub-committees, in Cabinet Meetings and in reporting major and significant accomplishments affecting ARMM. There are loose arrangements anchored on maintaining harmonious relationships between NGAs and ARMM.

4.4 Key Players in the Sector in ARMM

The key players in the water/sanitation sector and their nature of involvement are shown in Tables 4-3 and 4-4.

Table 4-3 Key Players Involved in the Water Supply and Sanitation Sector at the National Level and ARMM Government

Level	Offices/Agencies	Nature of Involvement
National Government	Department of Finance (DOF)/ Investment Coordination Committee (ICC)/ Municipal Development Fund Office (MDFO)	<ul style="list-style-type: none"> Development planning, implementation, monitoring and evaluation of WATSAN projects, approval of cost sharing arrangements and policies at the national level
	Local Water Utilities Administration (LWUA)	<ul style="list-style-type: none"> Technical and financial assistance to WDs
ARMM Government	Regional Economic Planning & Development Board (REPDB)/ Regional Planning & Development Office (RPDO)	<ul style="list-style-type: none"> Policy formulation, monitoring and evaluation, regional development planning
	Department of Interior and Local Government (DILG) - ARMM	<ul style="list-style-type: none"> Institutional Strengthening of LGUs (same as DILG National Office)
	Department of Health (DOH) - ARMM	<ul style="list-style-type: none"> Water quality monitoring and sanitation (Same as DOH National Office)

Table 4-4 Offices/Agencies Involved in the Water Supply and Sanitation Sector at the Local Level

Offices/Agencies	Nature of Involvement
Provincial Planning & Development Office	<ul style="list-style-type: none"> Development planning, implementation, monitoring and evaluation of WATSAN projects.
Provincial Engineering Office	<ul style="list-style-type: none"> Oversees and may undertake construction, operation and maintenance of the WATSAN facilities in the province including municipalities and barangays.
Provincial Health Office	<ul style="list-style-type: none"> Conducts water quality examination (thru Municipal Health Office) Provide toilet facilities

Offices/Agencies	Nature of Involvement
Barangay/Municipal governments (thru MPDO)	<ul style="list-style-type: none"> Identifies projects Provides counterpart support
Water Service Providers, BWSAs	<ul style="list-style-type: none"> Provides water supply coverage in urban areas Provides water supply coverage in rural areas
Provincial General Services Office	<ul style="list-style-type: none"> Responsible for the procurement of materials
Provincial Accounting, Budget, Treasury Offices	<ul style="list-style-type: none"> Undertakes administrative works in budgeting and funds releasing
Sangguniang Panlalawigan	<ul style="list-style-type: none"> Approves project implementation and appropriates funds (Provincial level)
Provincial Development Council	<ul style="list-style-type: none"> Initiates a comprehensive multi-sectoral plan of the province
NGOs, CBOs, POs	<ul style="list-style-type: none"> Provides consultancy services especially in CO/CD works
DILG-ARMM Provincial Director's and Municipal Local Government Office	<ul style="list-style-type: none"> Conducts/assists training especially on topics related to human resource development

4.4.1 Department of Public Works and Highways – ARMM (DPWH-ARMM)

The capability of the DPWH-ARMM and its implementing arm, the various District Engineers' Offices in the provinces' congressional districts, in planning and implementing water supply projects is quite limited. Its primary focus has been on roads and bridges and has essentially left the different local government units (LGUs) to plan and undertake their own water supply projects. In addition, the District Engineers' Offices have minimal construction equipment in their inventory, all of which are for the repair/maintenance of roads and bridges. However, given its previous experiences in water supply projects in terms of planning and implementation supervision, the District Engineers' Offices do assist the different LGUs in the aforementioned areas upon request.

For its Sulu Engineering District and Area Equipment Services, DPWH-ARMM has a total of 73 technical field personnel, while for DPWH-ARMM Regional Office, there are 44 technical personnel. However, as previously stated, their activities seem to be primarily concentrated in roads and bridges.

The budget of DPWH-ARMM for the implementation of projects is quite limited, as most of its budgetary appropriations are consumed by personnel services and maintenance, operating and other expenses. Actually, even the Department's MOOE are actually mostly spent for personal services. Table 4-5 gives the DPWH-ARMM actual budget from 1996-2003, while Table 4-6 gives the budget breakdown by major expenditure items from 2001-2003.

Table 4-5 Actual Budget of DPWH-ARMM (1996-2003)

Year	Actual Budget	% change
1996	190.85	
1997	192.26	0.74
1998	189.34	-1.52
1999	716.64	278.49
2000	171.80	-76.03
2001	177.38	3.25
2002	277.90	56.67
2003	281.90	1.44

Source: Regional Planning and Development Office, ARMM

Table 4-6 Breakdown of DPWH-ARMM Budget by Major Expenditure Items (2001-2003)

Expenditure Item	2001	% of Total	2002	% of Total	2003	% of Total
Personal Services	91.36	0.52	89.34	0.32	92.72	0.22
Automatic Appropriation	8.29	0.05	8.09	0.03	8.58	0.02
MOOE	77.73	0.44	180.48	0.65	180.61	0.43
Capital Outlay					136.54	0.33
Total	177.38	1.00	277.91	1.00	418.45	1.00

Source: Office of the Regional Governor, ARMM

The ARMM Public Investment Program for water supply in Sulu, which is implemented by DPWH-ARMM and is funded out of ARMM lump sum appropriations for the period 2004-2006 is given in Table 4-7. It shows the minimal amount that is allocated by the ARMM government to water supply for Sulu.

Table 4-7 ARMM Public Investment Program for Water Supply – Sulu (2004-2006)

Project	2004	2005	2006	Total
Construction of Level II Water System	-	6.0	6.0	12.0
Spring Development, Barangay Mampallam, Talipao	-	-	1.0	1.0
Construction and Installation of potable Water Supply and Distribution System:				
a. Angilan, Luuk		1.5		1.5
b. Kapual Island, Luuk		1.5		1.5
c. Luuk Passal, Tongkil	1.5			1.5
d. Karungdun, K. Caluang	1.5			1.5
e. Buansa, Indanan		1.5		1.5
f. Kawitan, Pangutaran	1.5			1.5
g. Bangas, P. Tahil		1.5		1.5
h. Sapa Malaum, Pata	1.5			1.5
i. Talipao Municipality		1.5		1.5
j. Patikul Municipality		1.5		1.5
k. Silangkan, Parang		1.5		1.5
l. Siasi Municipality	1.5			1.5
m. Pandami Island, Pandami	1.5			1.5
n. Panamao Municipality		1.5		1.5
o. Punay, P. Estino	1.5			1.5
p. Kalan, Tapul		1.5		1.5
q. Pagatpat, Tapul	1.5			1.5
r. Bulipongpong, Lugus	1.5			1.5
s. Lahud, Lugus		1.5		1.5
Construction of Surface Water Impounding Project/ Underground Weir for the island province				
Total Water Supply	13.5	21.0	7.0	41.5
Total Infrastructure	723.79	1,329.01	922.91	2,886.21
% water supply	1.87	1.58	0.76	1.44

Source: Regional Planning and Development Office, ARMM

The organizational charts of DPWH-ARMM and its District Engineers' Office in Sulu are given in Figures 4-4 and 4-5.

Figure 4-4 Organizational Chart – Department of Public Works and Highways
ARMM

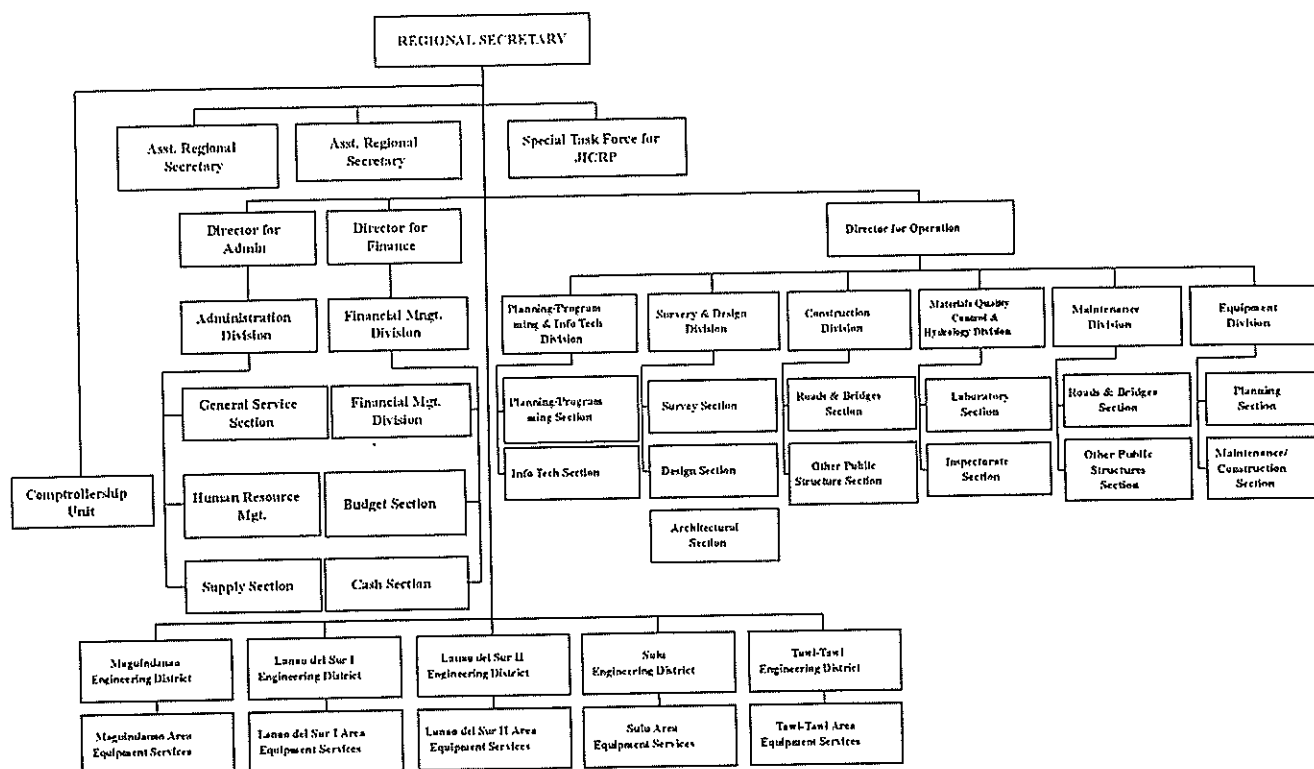
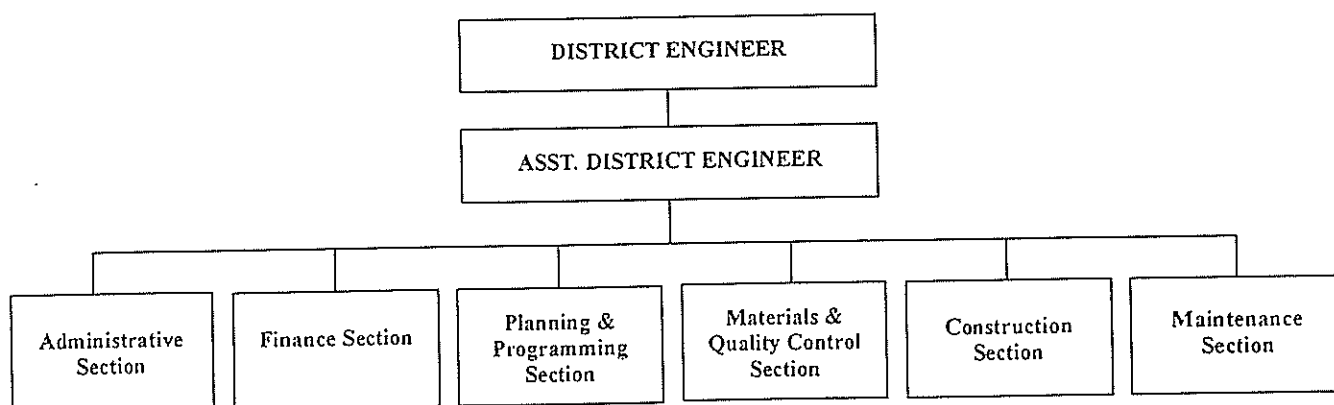


Figure 4-5 Organizational Chart – DPWH District Engineers' Office, Sulu



4.4.2 Department of the Interior and Local Government – ARMM (DILG-ARMM)

The activities of DILG-ARMM, compared to its national counterpart, has been severely hampered by budgetary constraints. While it is one of the few ARMM-devolved agencies that has substantial geographical coverage in all ARMM LGUs, it has been unable to extend any significant assistance to LGUs in water/sanitation activities/projects, in such areas as project development and institution/capability-building. The organizational chart of DILG-ARMM is given in Figure 4-6.

As with DPWH-ARMM, its budget goes mostly to personal expenditures and MOOE. Table 4-8 gives the agency's budget from 1996-2003 and the budget breakdown by expenditure items is shown in Table 4-9.

Figure 4-6 Organizational Chart – Department of Interior and Local Government-ARMM

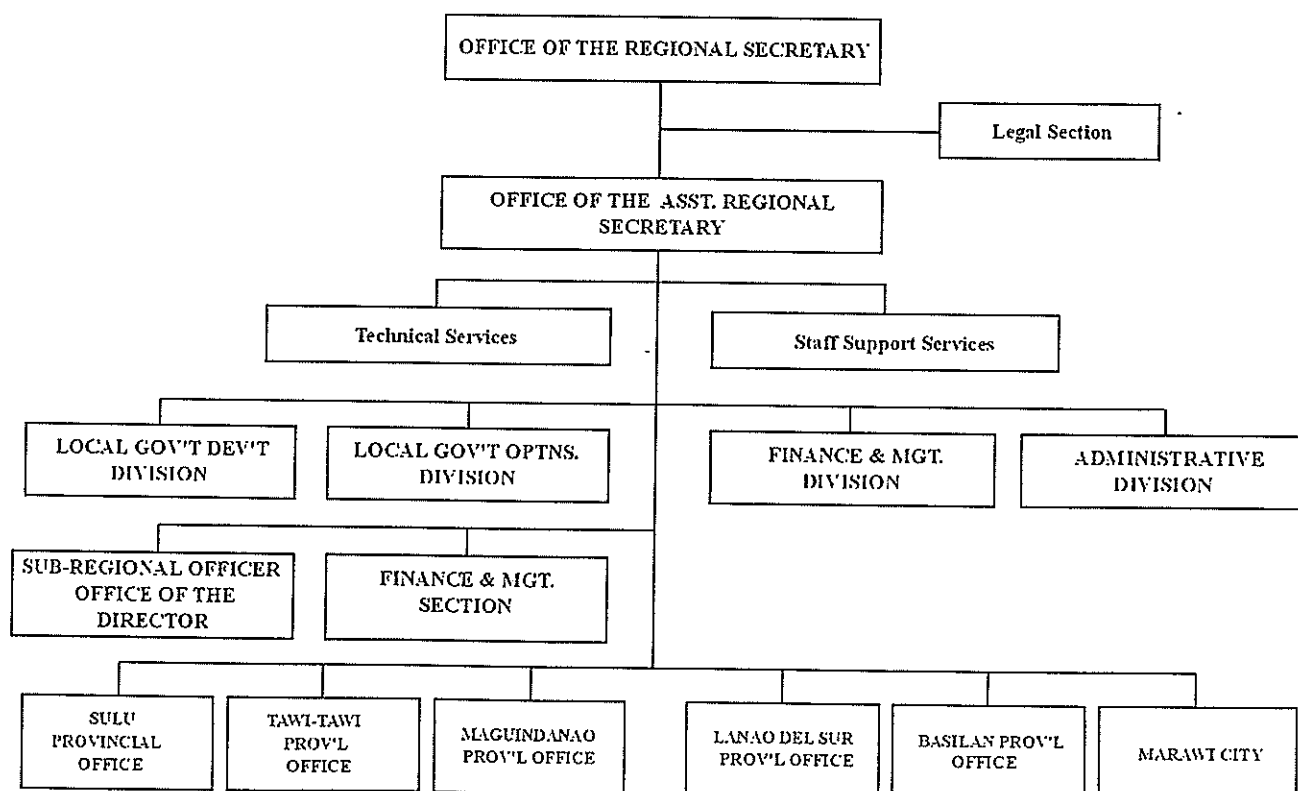


Table 4-8 Actual Budget of DILG-ARMM (1996-2003)

Year	Actual Budget	% change
1996	38.24	-
1997	44.34	15.95
1998	61.09	37.78
1999	67.45	10.41
2000	64.12	-4.94
2001	72.93	13.74
2002	68.02	-6.73
2003	71.27	4.78

Source: Regional Planning and Development Office, ARMM

Table 4-9 Breakdown of DILG-ARMM Budget by Major Expenditure Items (2001-2003)

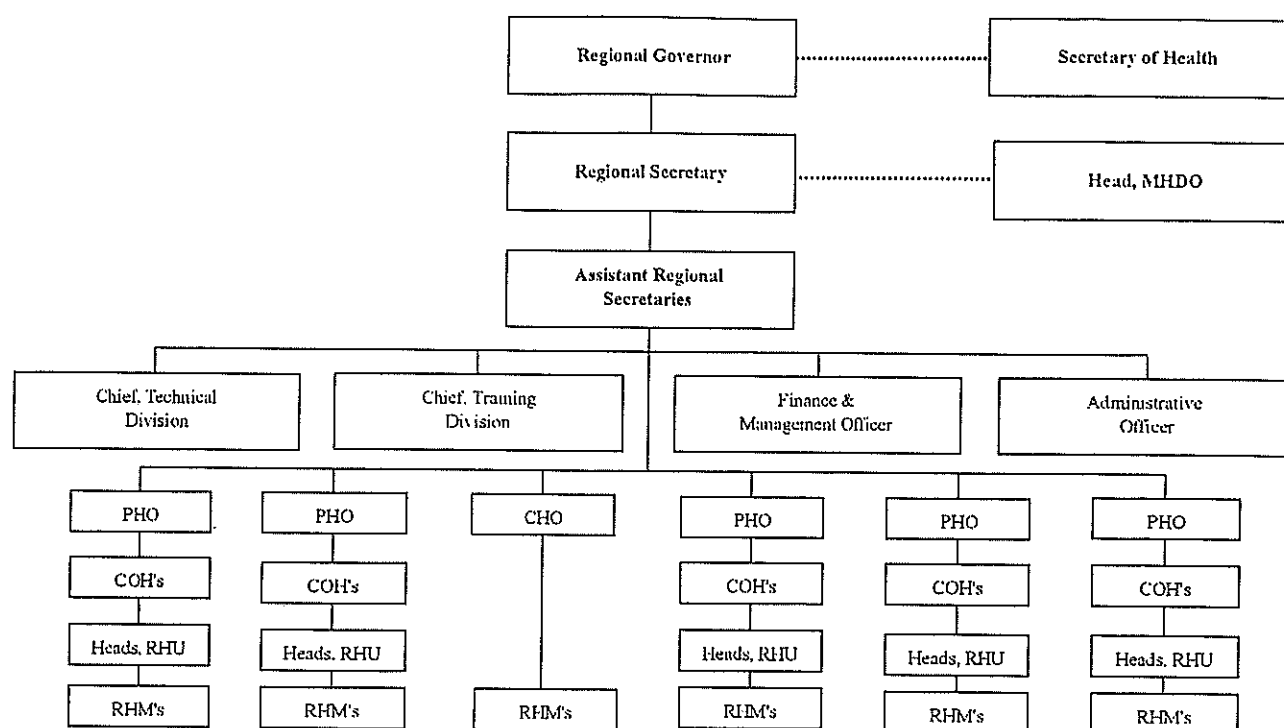
Expenditure Item	2001	% of Total	2002	% of Total	2003	% of Total
Personal Services	59.40	0.81	58.04	0.84	59.87	0.84
Automatic Appropriation	5.59	0.08	5.45	0.08	5.72	0.08
MOOE	7.95	0.11	5.53	0.08	5.68	0.08
Capital Outlay						
Total	72.94	1.00	69.02	1.00	71.27	1.00

Source: Regional Planning and Development Office, ARMM

4.4.3 Department of Health – ARMM (DOH-ARMM)

The DOH-ARMM continues to provide health services up to the LGU level, since it is one of the agencies which functions were not devolved in the ARMM Local Government Code. However, given current financial constraints of ARMM, its LGUs are participating in the financing and delivery of health services to its constituents. The organizational structure of DOH-ARMM is shown in Figure 4-7.

Figure 4-7 Organizational Chart – Department of Health-ARMM



As with the other two previous departments, DOH-ARMM's budget has declined as shown in Table 4-10 and may have already affected its delivery of health services. Furthermore, most of its budget goes to personal services and MOOE, as shown in Table 4-11.

Table 4-10 Actual Budget of DOH-ARMM (1996-2003)

Year	Actual Budget	% change
1996	230.34	-
1997	253.45	10.03
1998	331.18	30.67
1999	420.09	26.85
2000	394.76	-6.03
2001	410.91	4.09
2002	408.93	-0.48
2003	432.40	5.74

Source: Regional Planning and Development Office, ARMM

Table 4-11 Breakdown of DOH-ARMM Budget by Major Expenditure Items
(2001-2003)

Expenditure Item	2001	% of Total	2002	% of Total	2003	% of Total
Personal Services	292.07	0.71	292.69	0.72	318.25	0.74
Automatic Appropriation	24.77	0.06	24.21	0.06	25.96	0.06
MOOE	84.07	0.20	84.33	0.21	86.68	0.20
Capital Outlay	10	0.02	7.7	0.02	1.5	0.00
Total	410.91	1.00	408.93	1.00	432.39	1.00

Source: Regional Planning and Development Office, ARMM

4.5 Water Service Providers in Sulu

Sulu has two Water Districts, both of which are operational - one in Jolo and another in Siasi. BWSAs were formed during the Island Provinces and Second Island Provinces Rural Water Supply and Sanitation Projects, while other BWSAs were formed and trained under the on-going RW3SP. Per record, there are at least two functioning RWSAs, which manage and operate Level II systems in the province.

4.6 Institutional/Technical Capacity of WATSAN Agencies in ARMM

4.6.1 ARMM Government

Previously, the Project Management Office – Rural Water Supply at DPWH national in coordination with DOH national handled all WATSAN projects in Sulu through the District Engineers' Office (DEO). Trainings provided through the national projects were filtered down through the DEOs. As a result of NEDA Board Resolution No. 4, DILG national was given greater involvement in the sector.

With respect the ARMM Government, capacity building in WATSAN has not yet been undertaken for the ARMM agencies involved in the sector.

4.6.2 The Province

Sulu is a recipient of three consecutive water supply and sanitation projects since the 1980s, namely: Island Provinces and Second Island Provinces Water Supply and Sanitation Sector Projects and more recently, the Rural Water Supply and Sanitation Sector Project (RW3SP).

The Second Island Provinces Water Supply and Sanitation Sector Project and RW3SP both had extensive training components for the DEO and DILG/LGU of the province, respectively.

Under the RW3SP, the province had to create a Provincial Water and Sanitation Committee or Team which acted as the focal point for the WATSAN activities of RW3SP and as the coordinating arm with the DILG for site selection, BWSA organizing and training and implementation of the Project. The Committee is lodged with either the Provincial Engineers Office or the Planning and Development Office of the Province.

Since municipalities and barangays generally do not have any capacity to undertake WATSAN projects, it is the Sulu Provincial Engineers Office (PEO) that has been assisting these lower LGUs. While the equipment of the PEO seems to be primarily for road/bridge maintenance and construction (see Table 4-11), it has the complement of experienced engineers that assists the municipalities/barangays in implementing their WATSAN projects.

Table 4-12 Equipment Inventory of the Provincial Engineers Office (PEO-SULU)

Equipment Type	Brand	Number of Units
10 Wheeler Dump Truck	ISUZU	3
6 Wheeler Dump Truck	ISUZU	3
Backhoe	KOMATSU	2
Road Roller	KOMATSU	2
Road Grader	MITSUBISHI	2
Bulldozer	KOMATSU	2
Payloader	MITSUBISHI	1
Road Roller	DYNAPAC	1
Road Roller	SAKAI	1
Road Grader	FORD	1
Bulldozer	CUMMINS	1
Asphalt Paver	MITSUBISHI	1

Source: Provincial Engineers Office

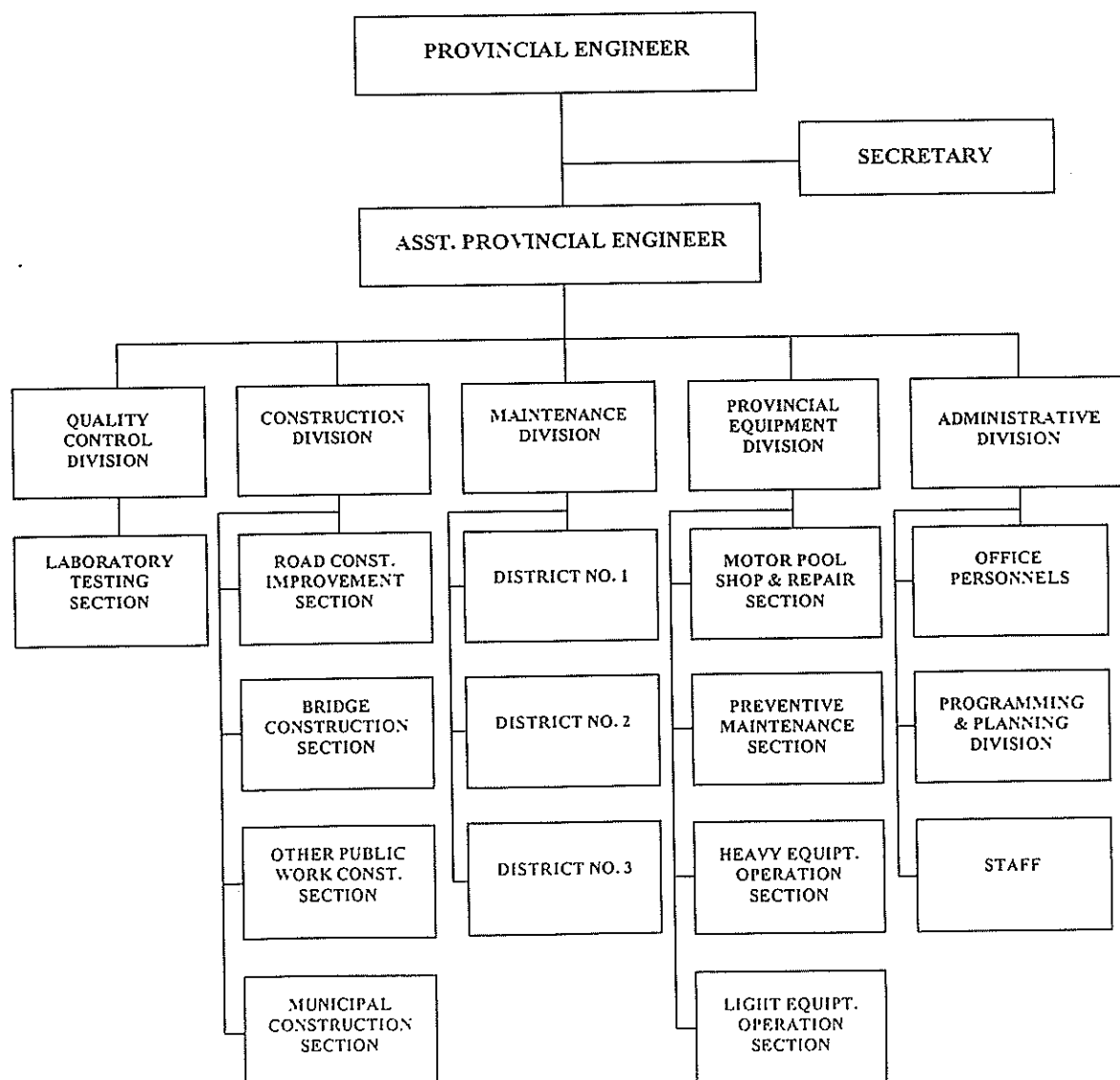
Pursuant to the ARMM Local Government Code, the functions of the PEO with reference to WATSAN are given below:

- ♦ Initiate, review and recommend changes in policies and objectives, plans and programs, techniques, procedures and practices in infrastructure development and public works in general;

- ♦ Administer, coordinate, supervise and control the construction, maintenance, improvement, and repair of roads, bridges, and other engineering and public works projects of the LGU;
- ♦ Provide engineering services to the LGU including investigation and survey, engineering designs, feasibility studies and project management; and
- ♦ Exercise technical supervision over all engineering offices of the component cities and municipalities.

The organizational structure of the Sulu PEO is given in Figure 4-8.

Figure 4-8 Organizational Structure of the Sulu Provincial Engineers Office



4.6.3 Community-Based Organizations or Associations

Community organizing in Sulu has to take into account religious and cultural norms, which are particular to the people and communities of this province. The practice of the family (clan) head as the decision-maker is practiced in most rural water supply organizations, e.g., RWSAs/BWSAs. There are no elections of officers as required of an association. The operations and maintenance of the system falls on the shoulder of the family. A clan is composed of many families in the same tribe and could comprise the population of a small barangay. The leaders in the community are chosen on the basis of their being the head of the clan or family.

4.6.4 External Support Agencies Active in the Sector

Sulu is a recipient of the Rural Water Supply and Sanitation Sector Project (RW3SP) funded by the Asian Development Bank (ADB). The project commenced in 1998 and was scheduled to be completed in 2002, although there are still activities on-going as of 2003.

The Project was based on a sector lending approach that supports the government's Social Reform Agenda (SRA) for the 20 poorest provinces of the country, of which Sulu was included at the time of project appraisal and still is. The project area covered about 3,000 communities with population ranging from 200 to 5,000 persons in the SRA provinces. The project provided capacity building to LGUs to enhance the delivery of social services, improved water supply and sanitation facilities, and aimed to reduce poverty through these interventions. The Project included comprehensive institutional capacity-building, community development program, provision of point source water supply systems (Level I) and public and household latrine facilities.

CHAPTER 5
PAST FINANCIAL PERFORMANCE

5. PAST FINANCIAL PERFORMANCE

5.1 General

One of the major problems usually encountered in ARMM in general and, more specifically, in the different local government units (LGUs) that compose the ARMM, is compliance to the financial reporting system of the national government. Thus, historical records of revenues and expenditures of the various ARMM LGUs are difficult to collect and, when available, the veracity of the information contained is usually questioned. Even the regular audit of these LGUs are often not undertaken due to security concerns for the Commission on Audit (COA) teams that would normally undertake the audits.

In addition, the procedural aspects of the LGU planning, programming, budgeting and expenditure process may have not been followed as required under the ARMM Local Government Code (ARMM-LGC). Thus, the reliability, consistency and truthfulness of the financial information of these LGUs should be considered seriously.

5.2 Financial Performance of the LGU

The provincial and municipals governments' financial performance for the period 1999 to 2001, which are the only available information, was generated from the Bureau of Local Government Finance database together with that of the Department of Budget and Management. At the LGU level, the results of the financial operations could not be released by the LGU Accountants unless clearance from the local chief executive (LCE) is given. In most instances, such clearance for the release of the financial information was not given and the Study Team had to find alternative sources to collect the needed information. could be looked into.

Data on the Internal Revenue Allotment (IRA) for the LGUs were readily available from the DBM, but this only provided information on financial resource availability, not use or allocation.

5.2.1 Sources and Uses of Funds

(a) Revenue Sources

The sources of income are the Internal Revenue Allotment (IRA), local tax revenues, non-tax revenues such as grants, aids and subsidies. At present, the IRA is the major funding source of the province and its municipalities.

As mandated in Article IX Section 9 of RA 9054, the sharing of Internal Revenue, Natural Resources, Taxes, Fees and Charges are as follows:

- (a) Thirty-five percent (35%) to the province or city:
 - i. The share of the province is apportioned as follows: 45% to the province, 35% to the municipality; and 20% to the barangays;
 - ii. The share of the city is distributed as follows: 50% to the city and 50% to the barangays.
- (b) Thirty-five percent (35%) to the regional government; and
- (c) Thirty percent (30%) to the central/national government.

There are no grants and subsidies reported by the province. However, there are national projects being contracted by the province, such as road repair/maintenance and construction with DPWH-ARMM.

Other income usually comes from economic enterprises, but the LGU receives minimal income from various fees and charges on certain services.

Table 5-1 presents the actual income and expenditures of the Province for the 1999-2001 period. Local revenues, which was less than 0.8% of the total revenues of the province, consisted of its share of real property tax, business taxes and licenses, and miscellaneous taxes. IRA's annual average share to total income was at least 99%, which indicates that the province has historically been dependent on IRA, given with its low tax and non-tax revenue collections.

The results of the financial operations of the various municipalities in Sulu are given in Appendix 5-1.

In order to mobilize fund sourcing, the 1987 Constitution and the 1991 Local Government Code granted the Provincial Government to have its initiative to create new revenue sources. The LGU financing options are based on NEDA Board Resolution 4.

(b) Uses of Funds in the Province

Actual expenditures of the provincial government for general government services were 25.9% in 1999 but subsequently increased to 38.5% of total expenditures. Expenditures on economic

development activities has increased from 17.7% in 1999 to 19.3% by 2001. The province enjoys some revenue surplus, which was quite substantial. However, compared to provinces outside of the ARMM, ARMM provinces have less responsibilities as some services have not been devolved such as social services, agriculture, education, etc.

Table 5-1 Actual Results of the Financial Operations of the Province (1999-2001)

Description of Items	1999	2000	2001
INCOME			
LOCAL SOURCES	5,336,852	602,206	383,000
REVENUE FROM TAXATION	4,721,650	413,064	194,000
Real Property Tax	206,570	340,498	127,000
Local Taxes	4,515,080	72,566	47,000
Other Taxes			20,000
NON-TAX REVENUES	615,203	189,142	189,000
Receipt from Eco. Ent.	131,800	73,600	74,000
Fees/Charges	67,887	0	115,000
Loans and Borrowings	-	0	
Other Receipts	415,516	115,542	
AIDS AND ALLOTMENTS	191,447,703	232,455,349	231,804,000
BIR Allotments	186,168,468	230,368,137	218,955,000
National Aids	5,279,235	0	0
National Wealth	-	2,087,212	12,849,000
TOTAL INCOME	196,784,556	233,057,554	232,187,000
EXPENDITURES			
CURRENT EXPENDITURES	111,500,490	307,025,544	149,585,000
General Government	28,906,924	57,035,353	67,997,000
Edu., Cult., & Sports/Mpwr Devt.			0
Health, Nutrition & Pop. Control			7,192,000
Public Welfare & Int. Safety	20,844,408	81,234,951	
Economic Development	19,801,874	30,671,456	62,396,000
Operation of Econ. Ent.	-	0	12,000,000
Other Charges	41,947,284	138,083,784	81,849,000
CAPITAL OUTLAY	-	0	
TOTAL EXPENDITURES	111,500,490	307,025,544	231,434,000
EXCESS (DEFICIT) OF INCOME OVER EXPENDITURES	85,284,066	-73,967,989	753,000

Source: Bureau of Local Government Finance

5.2.2 Availability of Funds

As previously noted, the IRA comprises 99% of the total income of the province, which is tapped to finance most of its expenditures including capital outlays. According to the Provincial Treasurer's Office, the amount of IRA that will be received by the province is known in advance before the end of the preceding year. Thus, for budgeting purposes, the province just uses the actual amount of IRA it received in the preceding year as its estimate of IRA for the budget year. In the case where the IRA received is larger than that of the preceding year, the province prepares a supplemental budget.

For 2000, the 20% Development Fund (20% of IRA) amounted to about P43.8 million. By 2003, the estimated share of the Development Fund from the IRA is now P51.85 million. These are usually spent for development/infrastructure projects contained in the Annual Investment Plan of the province (AIP).

5.3 Annual Investment Plans

The LGU uses its 20% DF for expenditures on economic and social services, including water supply projects.

5.3.1 Budgetary Allocation to the Sector

The Budget Office of the province consolidates the budget proposal submitted by all offices of the Provincial Government. While, the DBM issues a Local Budget Memorandum every October of the preceding budget year to guide the provinces in their budget preparation, the sector allotment usually comes from the 20% DF, depending on the priorities set and approved by the Provincial Development Council (PDC) and the Governor.

The Governor endorses the AIP to the Sanggunian Panlalawigan for approval and appropriation. Unfortunately, the Governor can change the budget allocation in the AIP, based on his own priorities, with the approval of the PDC.

5.4 Cost Sharing Arrangements/ Counterpart Funding

The PEO implements the Provincial government-funded projects under the General Fund. The implementation of these projects is closely monitored with reference to progressive disbursements. For the sector implementation, the following are the local funding sources and corresponding implementing agencies.

Funding Source	Implementing Agency/ Unit
Provincial Government	PEO/PPDO
PEDAF (Congressmen)	DPWH – District Engineering Office
Municipal Government	MEO/MPDO

A new cost-sharing scheme was authorized in 2003 in accordance with the policy on national government grants. Cost sharing arrangements for levels I, II and III systems are shown as follows:

Table 5-2 PGB-approved Cost Sharing (% share)

Level and Type of Service	Income Class								
	1st/ 2nd			3rd/ 4th			5th/ 6th		
	NG ¹	LGU ²		NG ²	LGU ³		NG ²	LGU ³	
		Equity ¹	Loan ¹		Equity ¹	Loan ¹		Equity ¹	Loan ¹
Level I/II WS	30	20	50	40	15	45	50	10	40
Level III WS	0	0	0	20	10	70	50	10	40
Sanitation	20	20	60	40	15	45	50	10	40

For any central government grants that are provided for the development of Level I water supply systems and sanitation facilities to limited classes of municipalities, the LGUs and beneficiaries concerned shall share the capital cost required. No subsidy from the central government will be provided for the construction of Level II and III water supply systems.

Any grants from the national government that are provided for the development of Level I water supply systems and sanitation facilities are based on the income classification of the municipality. The LGUs and beneficiaries concerned shall share the capital cost required.

¹ NG – National Government grant for the respective level and type of service and respective income class of the LGU.

Equity – refers to the minimum cash equity contribution to be put up by the LGU.

Loan – refers to the portion of the project cost that the LGU must finance either through loan from MDFO or other Government Financing Institutions (GFIs), e.g., Land Bank, DBP, etc.

² If the LGU can raise the equity portion more than the minimum required amount, then the portion of the project cost it needs to raise through loan would be lower. Loan terms of MDFO: Interest Rate - currently at 14% per annum fixed until maturity of the sub-loan; Repayment Period - payable in 15 years inclusive of a 3-year grace period.

5.5 LGU Financing Options

Other external source of funds of the province is foreign assisted projects either directly coursed through the province as in the case of funds from ADB.

LGUs have the following financing options :IRA, ODA, private sector financing and debt (both public and private sector debts). The LGU can also avail of funds through conduits, e.g., MDFO, GFIs, and through foreign lending agencies and private sector financing institutions.

5.5.1 Municipal Development Fund Office (MDFO)

The MDF is a revolving fund created under Presidential Decree No. 1914 to provide LGUs access to foreign loans, assistance or grants. Operations of the MDF, as well as the evaluation and control of local government transactions of the fund, are guided by the financial policies defined in Joint Circular No. 6-87 of the DOF, COA and DBM. The policies include, among others, the following:

- ◆ On-lending terms for local governments or government corporations to be in accordance with the terms and conditions of the international agreements with foreign financial institutions;
- ◆ Loan repayments to conform with the terms and conditions of the corresponding Loan and Project Agreements;
- ◆ Annual debt service liabilities to all creditors to be at least 120 per cent of total net annual revenues from all sources after operating costs, unless otherwise provided in a mutual agreement among all parties concerned;
- ◆ Repayment to MDF to take precedence over all subsequent borrowings incurred;
- ◆ Payment of additional interest, charges and fees on amounts to be relent to local governments may be required by the Secretary of Finance in consultation or agreement with foreign lending institutions and LGUs/Project Cities to cover foreign exchange risks, commitment charges and front-end fees applied on foreign borrowings by lending institutions; and
- ◆ Internal revenue/specific tax allotments to be withheld by the DOF in case of default or arrears for more than three months.

The MDF-Policy Governing Board (PGB) formulates its policies. It is composed of representatives from the DPWH, DBM, NEDA and the DILG and chaired by the DOF. The funds administered by the MDF come from loan proceeds from multilateral and bilateral sources, contributions from domestic and foreign institutions, various grants and donations, and repayments by borrowing LGUs.

5.5.2 Governmental Financing Institutions (GFI)

In the past, the LGUs could not access financing institutions for direct assistance. But with the devolution of the sector to the LGUs, the LGUs could now access direct financing from banks and other financing institutions.

Among the GFIs through which LGUs can access ODA loans are the Land Bank of the Philippines (LBP), Philippine National Bank and the Development Bank of the Philippines (DBP). For the LGU to enter into a loan, the respective legislative council (Sangguniang Panlalawigan, SP for the Province; Sangguniang Panglunsod, SP for the City; and Sangguniang Bayan, SB for the Municipality) will authorize the Chief Executive Officer (Governor or Mayor, as the case may be). The collateral that the LGU may use in order to avail of loans from the bank could be any of the following: deposit hold out, public land and assignment of IRA.

In a deposit hold out loan, the loan is based on the amount in the time deposit account of the LGU in the bank. The LGU is allowed a maximum loan amount of up to 90 per cent of the total amount of its time deposit account in the bank. One of the terms for this kind of loan includes deduction of the amount due from the LGU's IRA deposited in that bank.

Another condition that the bank usually imposes on the loan is the signing of a MOA between the LGU and the bank, where the LGU guarantees that the loan will be honored despite a change in administration in the next election. Interest rate is not fixed.

Loanable amount may be based on the amount of time deposit of the province in the bank.

Other collaterals accepted by the bank are: public land and assignment of IRA. Interest rate is not fixed but fluctuating depending on the current interest rates prevailing during repayment. Penalty charges are imposed whenever the IRA of the province is delayed.

5.5.3 Foreign Lending Agencies

The external assistance to the Sector in the province comes from foreign assisted projects.

5.5.4 Private Sector Financing Institutions

There are several private sector financing modalities that can be promoted to finance WATSAN sector projects particularly in urban areas, where existing service area coverage may warrant viability of WATSAN investments for a profit by the private sector proponent. Further, Level III water supply expansion projects are now increasingly financed through private sector financing mainly thru concession contracts and BOT schemes.

5.6 Financial Status of Water Service Providers in the Province

Sulu has two Water Districts, both of which are operational. The Jolo Water District availed of P37.5 million loan while Siasi Water District availed of P3.8 million loan from LWUA. Both loans have since been fully paid.

5.7 Cost Recovery Practices by the LGU**5.7.1 Capital Cost**

In the past, the capital cost for Level I systems was given as grant to the community. As for Level II systems, the capital cost was shouldered by the RWSA through loan or grants. Water charges collected by each association cover the cost of operation and maintenance and loan amortization. According to the Loan Department of LWUA, new loan disbursements to RWSAs has been stopped.

5.7.2 Operation and Maintenance Cost

The operation and maintenance cost for Level I and II water supply systems is the responsibility of the users upon turnover of the facilities. As such, an organization (or association) to handle the collection of water charges should have been formed beforehand by the implementer.

When DPWH had been undertaking the construction of Level I water supply facilities, the DPWH through DEOs and PEOs assisted in the formation of BWSAs. However, most of these BWSAs are no longer operational, due to the non-collection or low rates of water fees. As a consequence, the users had to go to the LGUs (usually barangay or municipal governments) to address the problem. In some cases, the users likewise requested the PEOs for assistance.

Although the DEO had no budget for operation and maintenance, it extended assistance in the form of materials from their supplies, if these items are available. Because of this situation, the emphasis was placed on the need for monthly contributions from the users for the O&M.

Cost recovery for Level III systems, particularly those covered by Water Districts is managed through a different system. Because of the individual connections, the households covered by the Water Service Providers can be disconnected in case of non-payment.

Average monthly rates range from P2 to P262 per m³ while collection efficiencies range from 25% to 100%.

5.8 Affordability

5.8.1 Capital Cost Contribution

Based on the workshop discussion with the PSPT and the MPDCs of some municipalities of the Province, their experience in implementation of water supply projects was with the CVWSP and contribution from the community was only in kind, i.e., mostly free labor. The LGU however, provided cash equity as its counterpart.

5.8.2 Operation and Maintenance Cost

Since there are no data on average water rate for the RWSAs, no affordability analysis could be made for Sulu.