

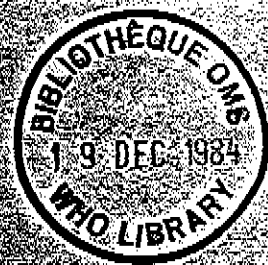


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INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE

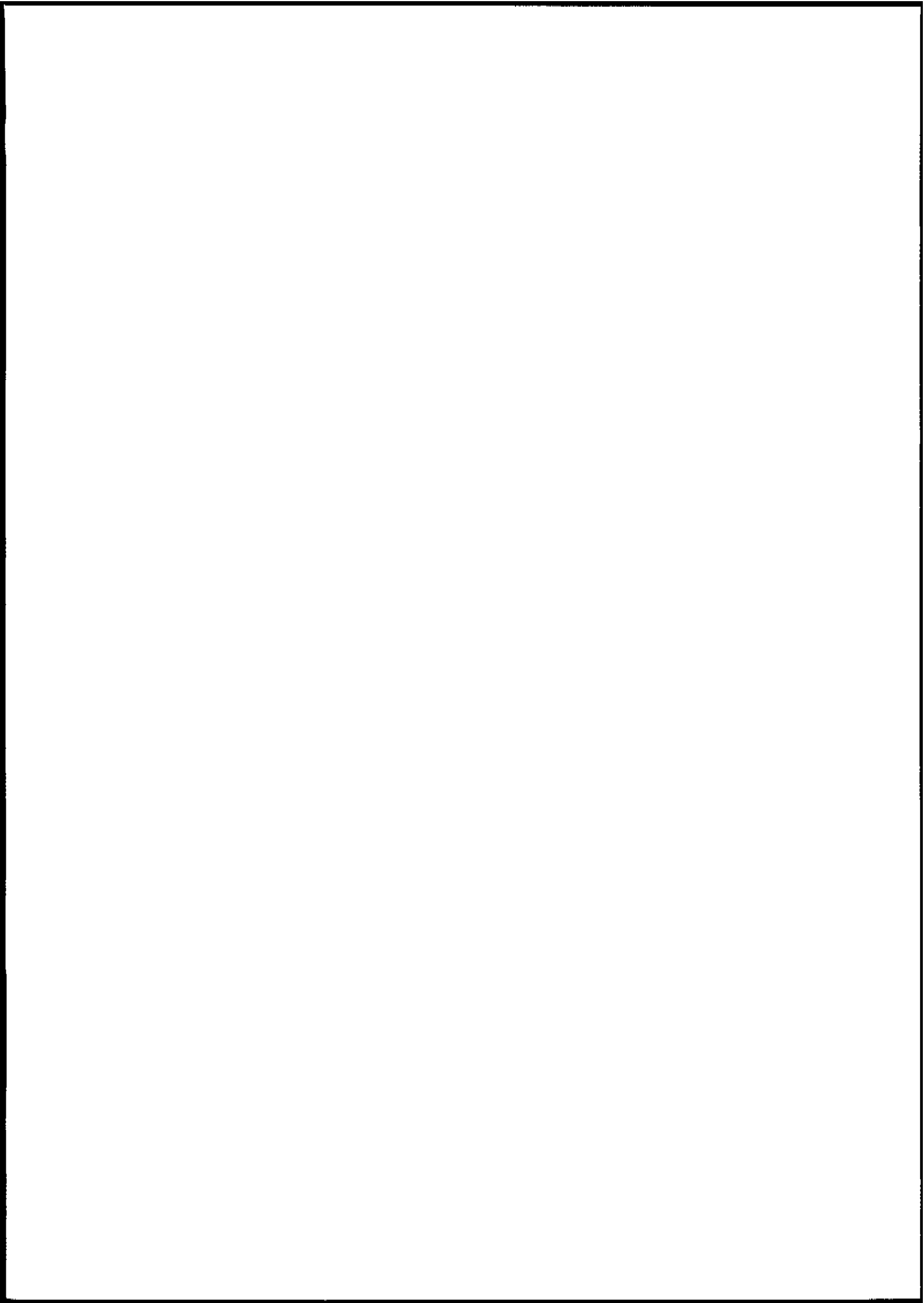
**TECHNICAL COOPERATION BETWEEN DEVELOPING COUNTRIES
NATIONAL DECADE PLANNING EXPERIENCES**

**THE PROCESS OF PLANNING AND IMPLEMENTATION
IN THE PHILIPPINES**

October 1984

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FOREWORD

The preparation of a National Decade Plan is an ideal means of defining a rational and equitable course for the development of a country's water supply and sanitation sector. For its preparation, those responsible will not be limited to the considerations of a regional or a sub-sectoral programme, but will be required to analyze information on a national scale in order to establish overall needs, identify resources and constraints, define priorities, establish feasible targets, and elaborate national strategies for their achievement. Not surprisingly, the commencement of the International Drinking Water Supply and Sanitation Decade saw many countries unprepared to undertake National Planning, as sector knowledge and programmes were fragmented amongst numerous agencies, no coordinating machinery was in existence, and development projects were often determined by the preferences of external support agencies. The promoters of the Decade, recognizing the importance of national planning, accordingly gave high priority to supporting countries in the preparation of their National Plans.

The WHO Booklet, "National Decade Plans: Eight Questions They Answer", published in 1982, outlined the desirable contents of a National Decade Plan on the basis of experience gained in the preparation of such plans in a number of developing countries. Some of this experience was obtained during field work carried out under WHO's Cooperative Programmes with the United Nations Development Programme (UNDP), the Agency for Technical Cooperation of the Federal Republic of Germany (GTZ), the Swedish International Development Authority (SIDA), and the World Bank (IBRD). Whilst it has been possible to generalize on the desirable features of plan content, experience has shown that the planning process has differed from country to country. The lessons to be learned from a particular national planning exercise, whilst probably not applicable in their entirety to the situation elsewhere, can nevertheless contain valuable guidance for others. The World Health Organization, in pursuit of its policy of encouraging technical cooperation between developing countries, has accordingly cooperated with a number of national authors in the preparation of a series of papers, each describing the process adopted for Decade planning in a particular national context. The attached Paper is one in this series, and it is to be hoped that the lessons which it conveys will not only provide an insight as to how the planning process was undertaken in this particular case, but will also assist the nationals of other countries in the important task of preparing their National Decade Plan.

THE PROCESS OF PLANNING AND IMPLEMENTATION IN THE PHILIPPINES

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I. INTRODUCTION.

Country Profile.

The Philippines has a total land area of 300,720 square kilometers spread over 7,100 islands. About 95 per cent of the land is contained in eleven of the largest islands, with two, Luzon and Mindanao, accounting for two-thirds of the total area. Nearly 65 per cent of the country is either mountainous or upland with mountain ranges.

The climate throughout the country is generally mild tropical, with average annual temperature varying from a maximum of 32 degrees to a minimum of 22 degrees centigrade. Relative humidity throughout the year is high, varying from a low of 76 to a high of 83 per cent. Rainfall averages some 2,350 mm. annually, the driest period being February to April.

The population of the Philippines in 1980 was estimated at 49 million, with an annual growth rate of 2.8 per cent.

In 1982, the Gross National Product (GNP) at current prices was P336.015M (US\$ 39.53M). Agriculture, fisheries and forest products contributed 26 per cent; industry, which includes mining, manufacturing, construction and public utilities, 36 per cent; and other services accounting for the remaining 38 per cent. Average per capita income was placed at P6,622.00 (US\$ 779.06) per annum.

Health facilities and conditions, and other indications of the quality of life of the people, are generally satisfactory and continue to improve. The crude death rate has declined from 8.3 to 6.9 for every 100,000 population; life expectancy at birth has increased to 61.6 years, compared to 54 about ten years ago; infant mortality rate is now 63.2; and maternal mortality rate is currently pegged at 1.00.

Institutional Arrangement.

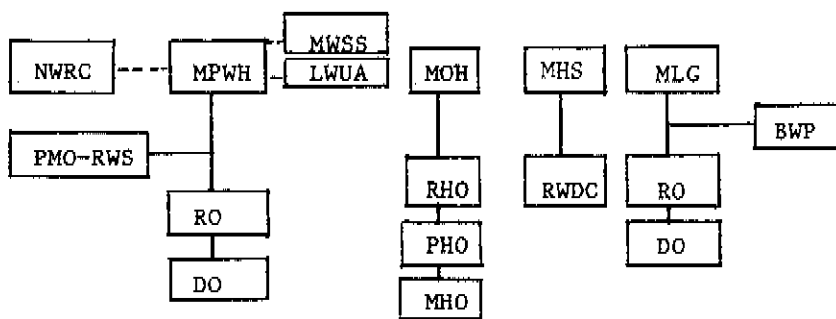
There are numerous agencies in the Philippines presently involved in water supply and sanitation, among which are the following:

1. The National Water Resources Council (NWRC) - Responsible for the formulation of national policies and framework plans for water supply;
2. The Ministry of Public Works and Highways (MPWH) - Responsible for the development of integrated national water supply plans and programmes covering all sectors and agencies concerned, consistent with the policies and plans formulated by the NWRC. The MPWH is also the principal implementing arm of the Rural Waterworks Development Corporation (RWDC) for engineering and construction;
3. The Metropolitan Waterworks and Sewerage System (MWSS) - Concerned with the provision of water supply and sanitation facilities in Metropolitan Manila and other contiguous areas that may be added to its jurisdiction according to its charter;
4. The Local Water Utilities Administration (LWUA) - Involved in the creation of water districts which provide water supply in cities and municipalities with populations of 20,000 or more;
5. The Rural Waterworks Development Corporation (RWDC) - Responsible for the provision of water supply to the rural sector and other areas not covered by the MWSS and the LWUA, with the MPWH as its principal implementing arm for engineering and construction;

6. The Ministry of Local Government (MLG) - Concerned with the implementation of the Barangay Water Programme (BWP), a grass-root programme for the small communities in the country, with financial assistance from the United States Agency for International Development (USAID);
7. The Ministry of Health (MOH) - Responsible for promoting safe water supply and the surveillance of water quality in the whole country. It is also concerned with the construction of sanitary toilets and pilot wastewater treatment facilities in the rural areas. The MOH has a central laboratory and a network of regional and provincial water laboratories with technicians to undertake required bacteriological and chemical examinations of water supply sources.

All other agencies of the Government may also undertake water supply and sanitation projects provided they are in accordance with the policies and guidelines set forth by the Government.

From the above premise, it can be observed that there are four Ministries of the Government concerned with water supply and sanitation. A schematic illustration is shown hereunder:



Legend:

- | | |
|---------|--|
| RO | Regional Offices |
| DO | District Offices |
| PMO-RWS | Project Management Office for Rural Water Supply |
| RHO | Regional Health Offices |
| PHO | Provincial Health Offices |
| MHO | Municipal Health Offices |
| BWP | Barangay Water Programme |
| MHS | Ministry of Human Settlements |

In support of the United Nations International Drinking Water Supply and Sanitation Decade (IDWSSD) Programme, and in consonance with its call for all governments of the world to provide the people with adequate and clean water and proper sanitation, the Philippine Government formed a National Action Committee (NAC). The NAC, with senior officials of the above mentioned Agencies as members, and the Executive Director of the NWRC as Chairman, was created to steer and monitor the progress of water supply and sanitation projects being

undertaken by the Government. To ensure a more thorough and efficient discharge of its functions, the NAC was divided into four sub-committees, namely: Sub-Committee on Water Supply, Sub-Committee on Sanitation, Sub-Committee on Information, and Sub-Committee on Technical Support.

Correlative to the NAC, there are also other inter-agency committees, such as the Provincial and Municipal Waterworks Development Committees and Task Forces.

The Existing Situation of Rural Water Supply and Sanitation.

As of 1981, only an estimated 54 per cent of the total population of the country was served by public water supply. The service coverage was 82 per cent of the population in Metropolitan Manila and its adjoining areas, 55 per cent in other urban areas, and only 47 per cent in the rural areas. The rest of the population mainly depended on water from open wells, rainwater cisterns, lakes, rivers and streams, many of which were of doubtful quality.

With this very minimal coverage of potable water supply, the incidence of waterborne and other related diseases had been high, particularly gastroenteritis, dysentery, infectious hepatitis, typhoid, cholera and parasitism.

The total public investment for water supply for the period from 1975 to 1981 was placed at P2,268.78 million. Of this amount, P713.21 million was spent for rural water supply development.

There are various types of toilet facilities existing in the country today, depending on geographical locations and the socioeconomic standing and cultural traits of the people. Of the country's estimated seven million households, 10.8 per cent use flush toilets with septic tanks; 1.4 per cent flush toilets connected to sewerage systems; 37.8 per cent, water sealed toilets; 2.9 per cent, sanitary privies; 16.6 per cent, antipolo systems 1/; 6.4 per cent, open pit privies; 1.1 per cent, over-hung toilets; and 2.9 per cent, drop type. Only 52.9 per cent of the total households are equipped with sanitary toilets, 27.3 per cent with unsanitary toilets, and 19.3 per cent with no toilets at all.

Constraints and Problems.

The Philippines was not spared of constraints and problems in planning for the Decade programme, but ways and means to overcome these constraints and problems were instituted.

From the onset, difficulties were encountered in the determination of the most suitable inputs (e.g., quantity, quality) for the preparation of the comprehensive master plan. However, the machinery, as explained under "Technical Procedures", was capable of resolving this problem.

Collection of collated data from the island provinces and municipalities had been a perennial problem due to inadequate postal and communication facilities. As expected, survey results from island provinces and municipalities were received last, although still within the timeframe set for the project. In the preparation of implementation schedules, local or field conditions should be taken into consideration.

Also, selection of the appropriate technical persons for the job and then obtaining their full participation, posed a very difficult problem. The use of an existing machinery with sufficient experience resolved this constraint. The Barangay Brigades of the Ministry of Local Government are regularly trained on various governmental activities, hence the water brigade was tapped for this project.

1/

A system in which the privy superstructure is built on stilts above ground level, wastes being discharged to the collection pit through a drop pipe from the toilet pan.

All activities had to be orchestrated at all levels - national, regional, provincial, municipal and barangay. Coordination had been a perennial problem for major projects of this magnitude and nature. Getting the various agencies, local governments and private sector together was not easy, and several briefings and conferences had to be undertaken.

Financing the entire planning exercise (e.g. questionnaire survey, rapid assessment of groundwater availability, barangay mapping, computerized data processing) involved millions of pesos. It was in the financing aspect that one of the biggest constraints was encountered, as there were no specific funding sources for the purpose. Alternative sources of funds were considered but, in the end, funds from existing nationwide appropriates, together with unallocated amounts from IBRD loans, were used.

Development Process.

The Decade planning exercise started with the preparation of the Rural Water Supply and Sanitation Master Plan, which reflected a comprehensive framework and agenda for a concerted action by all entities involved and the prospective beneficiary communities to meet two fundamental human needs, water and sanitation.

Within the context of the Master Plan, projects were identified and subsequently developed. To implement the projects, the Government sought possible financing assistance from international lending institutions and governments providing grants. The scheme, however, involved the provision of counterpart funds from the Philippine Government.

With funds already available, project implementation and monitoring followed.

A provision had been stipulated in the master plan which called for periodic reviews of the Plan to keep up with the trends of the time and to keep abreast of new methods and development technologies in water supply and sanitation. Correspondingly, appropriate revisions or modifications had to be done.

11. DECADE PLANNING.

Initiating a Decade Plan.

The huge demand for water supply and sanitation facilities was observed by both the national and local government through numerous requests from constituents and actual field surveys conducted for the purpose. With the operationalization of the Primary Health Care approach involving full community participation leading to the identification of their basic problems and needs, the demand for these two services became even more pronounced.

Aware of this situation, and with the basic objectives of meeting these demands at the earliest possible time and in the most cost effective manner, the Government decided to come up with a policy that would set guidelines and directions for coordinated development activities in the prosecution of projects in the water supply and sanitation sectors.

Past efforts in the development of water supply and sanitation in the Philippines were made through numerous Government Agencies which were loosely coordinated, resulting in serious gaps and overlapping of plans and programmes. With this condition, clearer delineation of responsibilities/functions and projects became imperative.

The World Health Organization (WHO) fostered the idea to the concerned agencies of the need for an integrated planning approach after the WHO/IBRD Water Supply and Sanitation Sector Study in 1981.

In order to rationalize planning and operations, and optimize limited resources, the Philippine Government thought of coming up with a Rural Water Supply and Sanitation Master Plan. The Plan was to be prepared within the context of the country's Five-Year Development

Plan. The World Bank, the prime source of project funds for the country's water supply and sanitation programme, endorsed the formulation of the said Master Plan.

It was also at this time that the United Nations had issued a call for all countries of the world to participate in the IDWSSD Programme.

Making the Plan Operational.

Generally, entities concerned with rural water supply and sanitation based their planning and programming activities on the Master Plan. Project implementation plans were then formulated and implemented. The implementation plans were disseminated to the field offices for their guidance. Provincial coordinating committees were set up as part of the implementation arrangements.

After two years of implementation, it could be gleaned from the magnitude of accomplishments that actual physical targets and funding requirements more or less jibed with those reflected in the Master Plan.

Technical Procedures.

In the preparation of the Master Plan, an inter-agency Steering Committee (SC) and a Technical Working Group (TWG) were created, composed of twelve (12) and twentythree (23) representatives of national agencies, respectively. These groups met twice every month, aside from occasional special meetings.

The SC and the TWG were both headed by senior officials of the MPWH. The SC formulated and issued the guidelines and policies which the TWG implemented.

Six local and expatriate (including WHO) technical and financial consultants were also hired for the Master Plan project. Their roles, however, were limited to the review of the Plan and to provide comments or reactions that would help improve the Plan.

Policies, guidelines and controls in the preparation of the Plan emanated from the SC. The TWG translated the policies into operational terms. The TWG prepared the initial draft of the Plan, which was submitted to the SC for their perusal. As modified by the SC, the draft was then reviewed by the Consultants. The TWG consolidated the comments and reactions and then finalized the report, following the same routine.

In the course of the above undertaking, national consultations were conducted, and participation at all levels (National, Regional, Provincial, Municipal, Barangay) was achieved, each level contributing its share to the development of the Plan.

The extent of participation of the Agencies concerned, with respect to some major nationwide undertakings necessary for the preparation of the Master Plan has been as follows:

1. Baseline Data Collection (Inventory of Water Systems and Facilities, etc.) - All related agencies, particularly the MPWH, MLG, RWDC and MOH participated actively in the collection, collation, analysis and interpretation of existing data;
2. Local Government Inputs - The MLG participated in the planning, control and implementation aspect of this activity, while the MPWH helped in the planning, control, coordination and review of the data gathered. The other agencies participated in the review of data;
3. Rapid Assessment on Groundwater Availability - The NWRC and the NHRC implemented this activity, with the MPWH providing the data inputs and participating in the prosecution of the project;
4. Barangay Mapping - The MPWH formulated the guidelines which were used by the MLG in implementing the project.

The Role Played by External Agencies.

External agencies in this context mean international organizations like the United Nations System (UNDP, WHO, UNICEF, WFP), and financial or lending institutions like the World Bank (WB), Overseas Economic Cooperation Fund of Japan (OECF), the Asian Development Bank (ADB), the Australian Development Assistance Bureau (ADAB) and the USAID.

External agencies have been playing vital roles in the development of water supply and sanitation in the country. They have been extending technical assistance in project identification and implementation (i.e. construction methods, project supervision, etc.), research development, and computer applications, amongst others. These agencies also assist institution building, such as the prosecution of training programmes and conducting of consultative meetings.

Another major function being discharged by external agencies is the provision of financial assistance. This comes in the form of grants and loans to finance preliminary and detailed engineering studies, and the actual construction of water supply and sanitation facilities.

Decision-making during the Planning Process.

During the one-and-a-half years of Plan preparation, numerous working meetings were held. Problems and differences were resolved through consensus. A handful of unresolved problems and differences were brought to the attention of the SC, which subsequently acted on them.

The TWG prepared the initial and final draft reports, aside from various technical reports. Upon presentation of the reports, the SC, and subsequently the Consultants, reviewed the reports and concurred with their contents.

III. THE PLAN FRAMEWORK.

Reconciling Objective with Resource Constraints.

The objective of the Water Supply Programme is to provide adequate, safe and potable water to every Filipino household in the shortest possible time, and in an efficient and cost-effective manner. For the sanitation aspect, the objective is to ensure the provision to every household of a sanitary method of excreta disposal, and the provision of adequate and safe drinking water and other sanitary facilities to all communities in the country, through the primary health care approach with intersectoral, and intrasectoral cooperation. This has been envisioned to attain a long-lasting impact on the health and living conditions of the people in the country.

Resources, specifically for this purpose, shall include only manpower, finances, materials and equipment.

Physical targets, investment requirements and strategies, amongst others, have to be established and prosecuted in order to realize the programme objectives. Before establishing the above, the agencies' resources had to be taken into consideration. Historical information on manpower productivity, annual budgets, materials and equipment requirements and the like, were gathered and analyzed before finally setting the targets, investment requirements and strategies.

The Plan in Brief.

High in the Philippine Government's programme thrusts is the development of projects essential in raising the quality of life of the broad masses of the people. One vital means to achieve this objective is the improvement of public health through the provision of adequate potable water supply and sanitation services.

The Master Plan contains essentially specific policies, strategies, targets and action programmes for the provision of water supply and excreta disposal facilities to the rural communities, where the need for these basic services has been identified to be particularly extensive. The Plan also provides the framework for coordinated development activities by all government agencies, as well as prospective beneficiary communities to meet the above mentioned two fundamental human needs.

Some significant water supply and sanitation policies, as reflected in the Master Plan, are as follows:

Water Supply Sector.

1. Project identification and initiation will essentially be the task of the end-user communities and local governments concerned, with technical assistance provided by the Government, principally through the LWUA, the RWDC and the MPWH;
2. Project feasibility studies and designs will be undertaken by the agencies concerned, viz. the MWSS, the LWUA, the MPWH and the RWDC, the last through Provincial Engineers' Offices (PEOs) in consultation with the communities affected;
3. Project financing will be derived from National Government funds for source development of Levels I, II and III projects ^{1/}, corporate equity funds for MWSS, LWUA and RWDC projects which come in the form of grants and loans to the associations; and equity from the associations;
4. Construction will be the responsibility of the concerned agencies and water supply associations, with general technical supervision coming from the MPWH, the PEOs and the LWUA;
5. Loan collection from the associations will be done by the LWUA and the RWDC, through water districts and electric cooperatives, respectively;
6. The Government will underwrite at most, 90 per cent of the capital cost of source development, while the RWSA will contribute at least a 10 per cent equity. The TWSA will also assume all operating and maintenance costs defrayed through water charges on the end-user households. The cost of the distribution system will be recovered from the beneficiaries. The RWSA may obtain a loan from the LWUA or the RWDC for, at most, 90 per cent of the cost of the piped system, with the RWSA providing at least 10 per cent in cash or in kind. Monthly fees will be collected from the end-users to cover operation and maintenance expenses and to amortize the loans for levels II and III systems;

Priorities in selecting water supply projects will be based on the following factors:

- (a) Community Commitment and Capacity - Projects will be undertaken in communities which readily commit to form a RWSA, contribute the required equity, and pay service fees;
- (b) Community Needs - Priority will be given to projects in communities with the greatest detected inadequacy in quantity, accessibility and quality of water, and where waterborne diseases are most prevalent;

^{1/}

Level I systems are based on the provision of point sources (e.g. a shallow well fitted with a handpump); Level II systems comprise a piped supply incorporating public standposts; and Level III systems are piped supplies with private house connections.

- (c) Community Development Level and Potentials - Poor or depressed areas with economic potentials will be given prior attention;
 - (d) Capital Cost - Other things being equal, projects which entail the lowest cost or investment per capita for a given level of service will be preferred.
8. Rehabilitation of existing wells and springs, where feasible, shall be undertaken in order to prolong their usefulness and reduce the need for costly new projects.

Sanitation Services Sector.

1. The MOH will undertake immediate improvements in the provision of sanitary toilets for every household throughout the country through the Primary Health Care approach, with close cooperation and coordination with other related agencies;
2. It is the policy of the Government to encourage and persuade the communities to construct flush toilets with septic tank in urban areas, and water sealed toilets with shallow and wider pit for rural areas where groundwater is high which may endanger the safety of the groundwater sources. In areas where water is not available or difficult to obtain, sanitary pit privies are recommended;
3. Construction of flush toilets with septic tank or vault will be encouraged for households that are financially capable;
4. The MOH will intensify its water quality control programme to cover nationwide monitoring and surveillance of water quality in existing, newly constructed and improved water supply facilities, and to provide safe and adequate drinking water to all Filipinos by 1990, using the primary health care approach and concept;
5. The MOH will improve and upgrade 12 Regional Sanitary Laboratories by 1982, and establish 64 Provincial Sanitary Laboratories by 1984, with the financial assistance of UNICEF;
6. All community drinking water supply facilities will be inspected and water samples will be collected periodically by the Sanitary Inspectors and other authorized personnel for bacteriological, chemical, physical, biological and radiological analyses, as the case may be.

The Master Plan physical targets and investment requirements are indicated in Annex 1.

The Role of the Private Sector, Local Governments and the Rural Communities.

The private sector and nongovernmental organizations have always been a partner in project planning as well as in implementation. Their participation in the programme commences when they are consulted about the conceptualization and identification of projects. Sometimes they initiate projects. As projects develop, they participate in the supply and delivery of construction materials, equipment and vehicles. In most instances where projects are prosecuted by contract, the private sector serves as the contractor. They also participate in research activities aimed at improving the quality of materials and construction technologies. The private sector also provides consultancy services in the implementation of projects (e.g. advisory, supervision, training).

The local governments' role is vital, as they are the entities which identify the most suitable locations for the projects. They are active in institution building, like the formation of Rural Waterworks and Sanitation Associations, and the training of same in proper operation and maintenance procedures.

As beneficiaries of the projects, rural communities contribute an equity for each project implemented. They own, operate and maintain the water systems. During surveys being conducted by the national and local governments, they participate in the identification of their problems, needs, and in data collection. In the questionnaire survey undertaken for the purpose of preparing the master plan, there are over 40,000 barangays that participated in filling up the required forms and in preparing barangays maps. The Ministry of Local Governments orchestrated the overall efforts of the barangay officials and the members of the communities themselves.

Interaction of Water and Health Programmes.

In the past, water supply and sanitation services have always been planned and implemented separately. However, it was observed that water supply complements sanitation and vice versa. Hence, Government planners decided to integrate the two sectors, which resulted in the eventual formulation of the Master Plan.

This integration was strengthened with the declaration of this Decade as the International Drinking Water Supply and Sanitation Decade by the United Nations, which also called for all nations to provide the people with adequate and clean water and proper sanitation, and to fully commit themselves in financing water supply and sanitation projects.

Procedures and guidelines for the effective tie-up of the two sectors were prepared and disseminated. Continuous studies are being undertaken to safeguard the realization of the said integration.

The thrust of providing sufficient water does not end at this point, but should likewise consider the potability or safeness of the water supply. In the construction of water supply facilities, proper sanitary practices should be observed at all times. Given the improper drainage systems of public communal faucets and wells, the resulting effect is unsanitary environment, which is hazardous to health.

In the provision of sanitary facilities (e.g. pit latrines, toilet facilities), it is a common necessity to provide water to obtain appropriate sanitary conditions.

The efforts of various agencies in the sector would be better coordinated and channelled towards the single task of improving public health in the rural areas by providing safe and adequate water supply and excreta disposal systems, and promoting higher standards of hygiene and personal cleanliness.

Intersectoral Programmes within the Decade.

There were no major intersectoral programmes incorporated into the Decade Plan. However, it is worth mentioning that the implementation of the sanitation aspect relied largely on the Primary Health Care approach. Likewise, the Master Plan contained a brief discussion of the projected construction of twelve (12) pilot simple wastewater treatment facilities (stabilization pond) in feasible areas all over the Philippine archipelago.

As a result of the planning exercise, a rapid assessment report on groundwater availability was completed. However, the result was just a rough approximation, hence a more detailed geo-resistivity is now being undertaken in every province of the country.

Various training programmes are being provided at all levels. Training programmes are being extended to engineers and technicians of concerned agencies on an in-house basis, as well as for the beneficiaries of water supply and sanitation facilities.

Continuous research and development activities, including actual field demonstrations, are being pursued, so as to improve further the effectiveness and efficiency of water facilities and applied construction technologies, amongst others.

An aggressive and intensified information dissemination, and integrated health education programmes, are being carried out in order that project implementors and end-users become aware of the programme thrusts and the roles they play.

Water quality surveillance and tubewell disinfection programmes are expected to be accelerated.

A significant number of rural health units (RHU) and barangay health stations (BHS) are also being constructed. Health services are being extended even to remote areas of the country.

Under the Primary Health Care Programme of the MOH, beneficiary communities are trained to be socially prepared. Communities identify their needs and problems, and recommend measures to solve the same.

IV. PLAN IMPLEMENTATION AND FOLLOW-UP.

Programme Status.

In line with the IDWSSD programme, presented hereunder are the physical project accomplishments by level of water service of major agencies involved in the construction of water facilities for the period from 1981 to mid-1983, together with the corresponding sources of funds.

| Agency | Number of Projects Completed by Level of Service | | | | Amount Disbursed (P'000) | Sources of Funds |
|--------------|---|-------------|--------------|-----------------------------|--------------------------------|-------------------------------|
| | Level I | Level II | Level III | Total No. of Projects | | |
| MPWH | 17 484 | 1 802 | 967 | 20 253 | 655 539.70 | GOP, OECF, IBRD, ADB, ADAB |
| RWDC | 20 788 | 40 | - | 20 828 | 58 617.00 | GOP, IBRD |
| MLG/BWP | 355 | 84 | 8 | 447 | 56 416 30 | USAID |
| <u>Total</u> | 38 627 | 1 926 | 975 | 41 528 | 770 573 00 | |

Support activities like training programmes, research and development programme, formation of RWSAs, are all on-going. In addition, consulting services are being availed of.

For the sanitation aspect, a massive information dissemination and health education campaign is being undertaken in rural communities as part of their social preparation. In consonance with this programme, about 29,000 barangays are organized to utilize the primary health care approach. In addition, regional and provincial sanitary engineers and health officers have undergone training in order to be more effective in their activities and to be able to keep abreast of the latest developments.

Programme Impacts.

Water has always been one of the most basic and overriding factors in the development of every human settlement. Man needs water in almost every field of endeavour. He needs water to grow crops and raise animals for food. He needs water to run machines to produce materials for his other basic needs - shelter and clothing. But, most of all, he needs clean, potable water to drink.

The benefits derived from adequate and potable water, and the provision of sanitary facilities, are immeasurable in terms of improved public health and sanitation, the upliftment of the socioeconomic condition of the people, the stimulation of industries and commerce, and greater productivity.

It is a universally accepted premise that the provision of safe, sufficient and potable water and proper sanitation facilities would enhance substantially public health in the community, reduce medical and hospitalization expenses, minimize loss of working man-hours, increase effective nutrition, especially for children who are vulnerable to intestinal parasites, the productivity of the population, and create suitable living environment, hence, a better balance in opportunities between the rural and urban inhabitants and more equitable access to social services would result.

To further strengthen the effects of these services, health education on the use of sanitary facilities, community development, community organization and institution building are resorted to in order to enhance overall community development.

It is however expected that, in view of the worldwide and domestic down-trend in the economic situation now prevailing, the implementation of the programmes derived from the Master Plan will be greatly affected. For example, the inflation rate on water supply materials rose by 50 to 200 per cent; dollar allocation for the procurement of raw materials for pipe manufacturers is prohibited; prices of raw materials are getting higher; and the cost of labour in manufacturing as well as civil works has increased.

The Government water supply and sanitation budgetary allocations for the "non-cash" portion (direct payment basis) is not yet affected. However, local counterpart funds are expected to be reduced.

There are indications that the expected funding requirements for the projects might not be fully realized based on original timeframes, but chances are project implementation might be prolonged.

Nevertheless, an economic recovery is not remote, hence normal prosecution of projects is hoped to be accelerated.

Plan Review and Updating Procedure.

The Government has established a review mechanism for the Master Plan. The Project Implementation and Review Committee (PIRC), an administrative level committee, includes amongst its responsibilities a review of the Master Plan. This body, through its Secretariat, undertakes post-evaluation wherever it is deemed to be critical. It determines whether projections made during the project preparation stage, regarding costs, benefits, and other aspects of implementation, have been realized, and if so, to what extent. In which case, results of the evaluation may indicate divergence between projections and actual performances, thus they are identified and analyzed. Measures would then be instituted.

In addition, international organizations, and to some extent consultants, will be providing inputs to such activities.

Decade Coordination.

The set of human and structural mechanisms designed to link the parts of the organization together to help it achieve its objectives is coordination. Coordination is a perennial problem, especially for inter-agency committees of national and provincial scope. However, due to the systematic arrangements or linkages among agencies and the private sector, coordination within the sector has not posed a significant problem.

Presented in Annexes 2 and 3 are the project management information system model and the organization chart of a specific project, respectively, which clearly delineate the interrelationship among major agencies involved in the implementation of the rural water supply programme.

PHYSICAL TARGETS AND INVESTMENT REQUIREMENTS

RURAL WATER SUPPLY

TARGETS

| Level of Water Service | Stage I (1982-1985) | Stage II (1986-1990) | Stage III (1991-2000) | Total (1982-2000) |
|---|------------------------|-------------------------|--------------------------|----------------------|
| LEVEL I | <u>55 490</u> | <u>50 135</u> | <u>70 885</u> | <u>176 510</u> |
| Construction | <u>42 290</u> | <u>45 635</u> | <u>67 885</u> | <u>158 510</u> |
| Shallow Wells | 29 500 | 34 000 | 45 100 | 106 600 |
| Deep Wells | 14 300 | 10 700 | 18 000 | 43 000 |
| Springs | 1 315 | 470 | 2 700 | 4 485 |
| Others (rainwater collectors, infiltration galleries) | 175 | 465 | 2 085 | 2 725 |
| Rehabilitation | 10 200 | 4 500 | 3 000 | 17 700 |
| LEVEL II | <u>8 000</u> | <u>7 750</u> | <u>11 300</u> | <u>27 050</u> |
| LEVEL III | <u>1 300</u> | <u>2 000</u> | <u>4 000</u> | <u>7 300</u> |

INVESTMENTS (In million pesos)

| | | | | |
|--------------------|-----------------|-----------------|-----------------|------------------|
| LEVEL I | <u>416.64</u> | <u>317.84</u> | <u>624.06</u> | <u>1 376.54</u> |
| Construction | <u>375.84</u> | <u>299.84</u> | <u>630.06</u> | <u>1 305.74</u> |
| Shallow Wells | 61.95 | 71.41 | 94.71 | 228.07 |
| Deep Wells | 245.96 | 184.03 | 309.60 | 739 |
| Springs | 59.18 | 21.15 | 121.50 | 201 |
| Others | 8.75 | 23.25 | 104.25 | 136 |
| Rehabilitation | 40.80 | 18.00 | 12.00 | 70.80 |
| LEVEL II | <u>999.32</u> | <u>968.22</u> | <u>1 411.41</u> | <u>3 378.95</u> |
| Source Development | <u>199.32</u> | <u>193.22</u> | <u>281.41</u> | <u>673.95</u> |
| Distribution | 800.00 | 775.00 | 1 130.00 | 2 705.00 |
| LEVEL III | <u>1 338.29</u> | <u>2 108.89</u> | <u>4 117.82</u> | <u>7 565.00</u> |
| Source Development | <u>38.29</u> | <u>108.89</u> | <u>117.82</u> | <u>265.00</u> |
| Distribution | <u>1 300.00</u> | <u>2 000.00</u> | <u>4 000.00</u> | <u>7 300.00</u> |
| Total | <u>2 754 25</u> | <u>3 394 95</u> | <u>6 171 29</u> | <u>12 320 49</u> |

SANITATION

TARGETS

| | | | | |
|---|----------------|------------------|---|------------------|
| New Construction of Flush Toilets with Septic Tanks | <u>86 900</u> | <u>284 100</u> | - | <u>371 000</u> |
| Rehabilitation/Construction of: | <u>801 900</u> | <u>2 596 400</u> | - | <u>3 398 300</u> |
| (a) Water Sealed Toilets | 781 800 | 2 558 600 | - | <u>3 340 500</u> |
| (b) Pit Privies | 20 100 | 37 800 | - | 57 900 |
| Total | <u>888 800</u> | <u>2 880 500</u> | - | <u>3 769 300</u> |

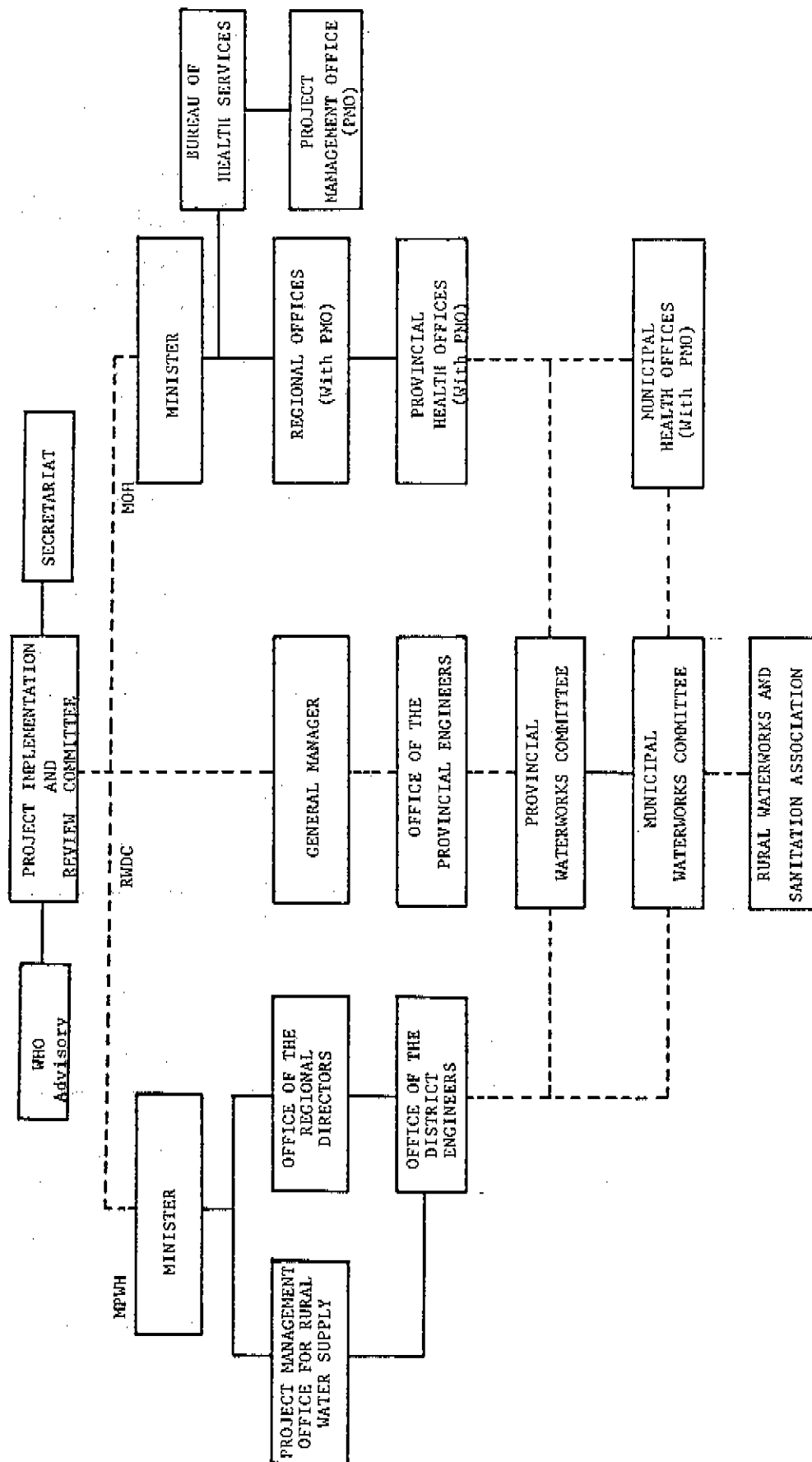
INVESTMENTS

Classification

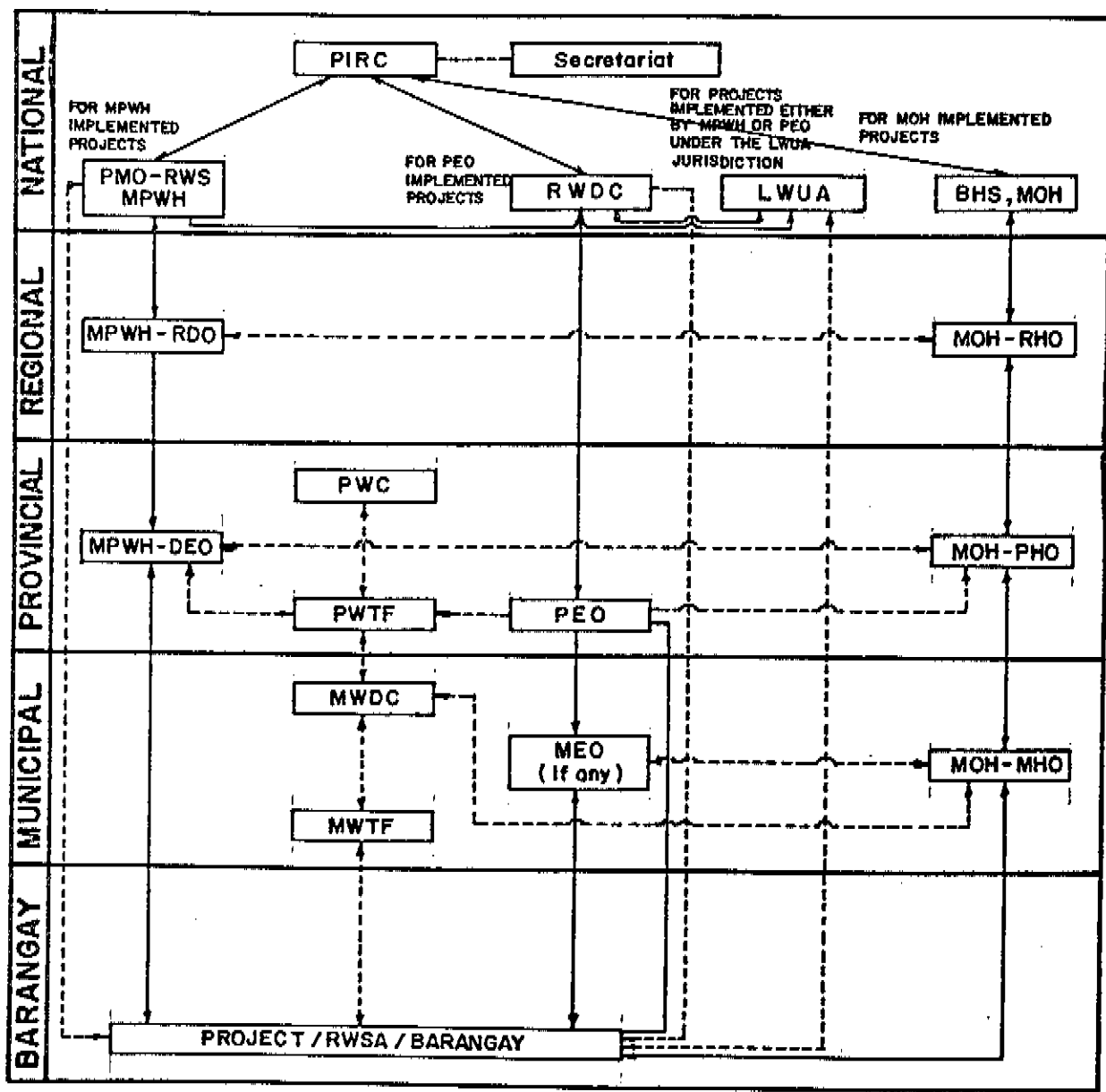
| | | | | |
|--|----------------|----------------|---|------------------|
| New Construction of: Flush Toilets with Septic Tanks | <u>297 530</u> | <u>972 685</u> | - | <u>1 270 215</u> |
| Rehabilitation/ | <u>123 762</u> | <u>401 538</u> | - | <u>525 300</u> |

First Rural Water Supply and Sanitation Project

ORGANIZATIONAL CHART



PROJECT MANAGEMENT INFORMATION SYSTEM MODEL



- Legend:
- | | | | |
|---------|--|------|--|
| PIRC | - Project Implementation and Review Committee | LWUA | - Local Water Utilities Administration |
| PMO-RWS | - Project Management Office for Rural Water Supply | BHS | - Bureau of Health Services |
| RDO | - Regional Director's Office | RHO | - Regional Health Office |
| DEO | - District Engineer's Office | PHO | - Provincial Health Office |
| PWC | - Provincial Waterworks Committee | MHO | - Municipal Health Office |
| PWDTF | - Provincial Waterworks Development Task Force | | |
| MWC | - Municipal Waterworks Committee | | |
| MWDTF | - Municipal Waterworks Development Task Force | | |
| PEO | - Provincial Engineering Office | | |
| MEO | - Municipal Engineering Office | | |