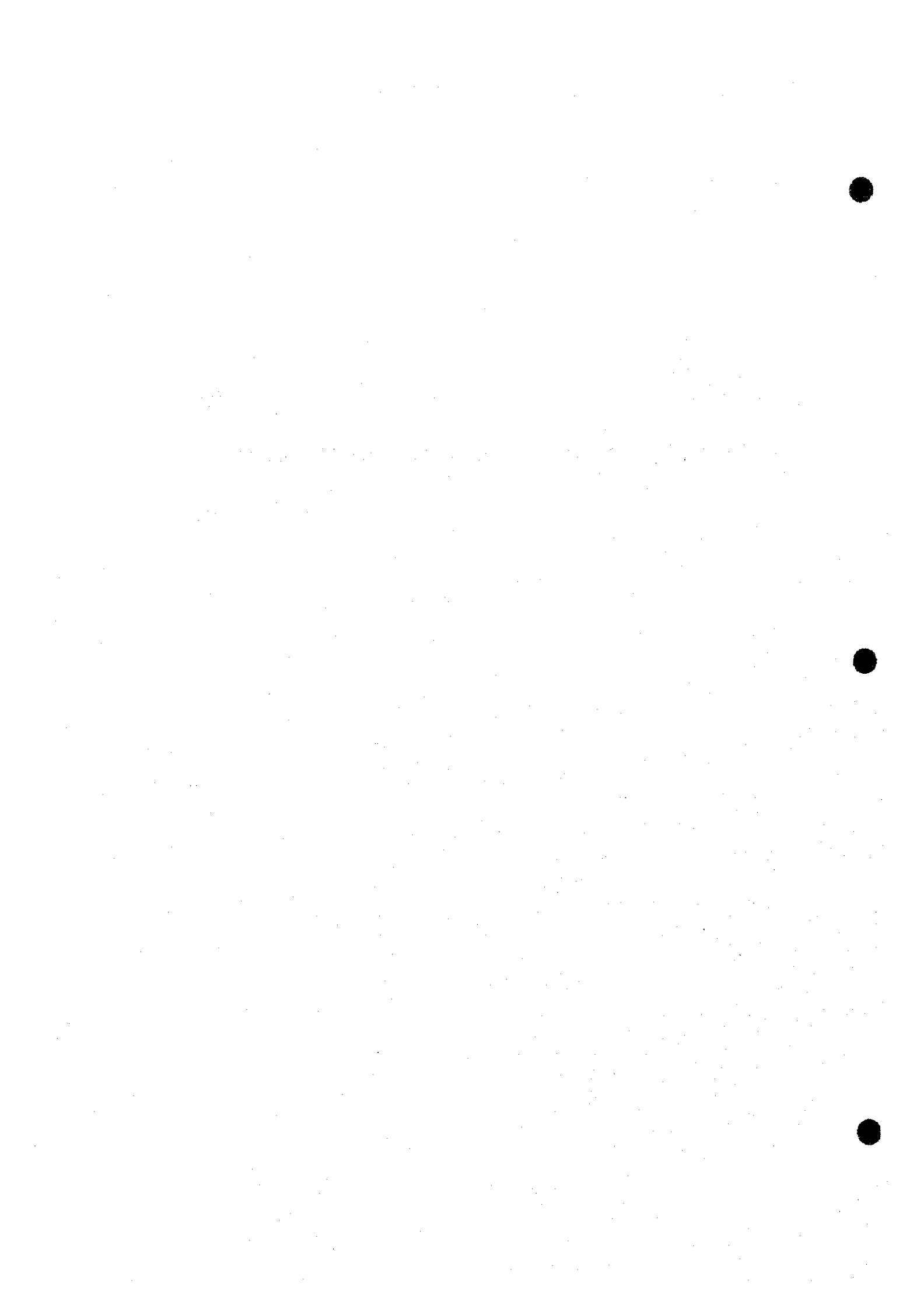


Part - J

INSTITUTIONAL FRAMEWORK FOR WATER RESOURCES

MANAGEMENT



Part – J INSTITUTIONAL FRAMEWORK FOR WATER RESOURCES MANAGEMENT

Table of Contents

	<u>Page</u>
J1 Background and Current Measures to Address Water Resources Issues	J – 1
J1.1 Introduction	J – 1
J1.2 Background	J – 2
J1.3 Measures to Address Water Issues	J – 2
J1.3.1 National Water Summit of 1994	J – 2
J1.3.2 Water Crisis Act of 1995	J – 3
J1.3.3 Presidential Task Force on Water Resources Management	J – 4
J1.3.4 Technical Assistance on Water Resources Management	J – 4
J2 Legal Framework and Water Institutions	J – 6
J2.1 Legal Basis	J – 6
J2.1.1 The Philippine Constitution (1987)	J – 6
J2.1.2 The Water Code of the Philippines	J – 6
J2.1.3 Civil Code of the Philippines (RA 386)	J – 9
J2.1.4 Public Service Law (Commonwealth Act No. 146)	J – 10
J2.1.5 The Local Government Code of 1991 (RA 7160)	J – 10
J2.1.6 Executive Order (EO) 557 (1980) Creating the Defunct Rural Waterworks Development Corporation	J – 11
J2.1.7 Executive Order No. 124-A (1987) Dissolving RWDC and Renaming the Old National Water Resources Council	J – 11
J2.1.8 Republic Act No. 6234 Creating the Metropolitan Waterworks and Sewerage System (MWSS)	J – 12
J2.1.9 The Provincial Water Utilities Act of 1973 (PD 198)	J – 13
J2.1.10 The BOT Law (RA 7718)	J – 17
J2.2 Overall Management: National Water Resources Board	J – 18
J2.3 Key Agencies and Institutions with Concerns in Water Resources	J – 19
J2.3.1 National Economic and Development Authority	J – 19
J2.3.2 Department of Public Works and Highways	J – 24
J2.3.3 Department of Environment and Natural Resources	J – 26
J2.3.4 Department of Health	J – 30
J2.3.5 Department of Agriculture	J – 32
J2.3.6 Department of Energy	J – 35
J2.3.7 Department of the Interior and Local Government	J – 36
J2.3.8 National Irrigation Administration	J – 37
J2.3.9 National Power Corporation	J – 38
J3 Current Institutional Arrangements in Water Resources Management	J – 41
J3.1 General	J – 41
J3.2 Water Resources Allocation	J – 41
J3.3 Water Resources Planning	J – 43
J3.4 Water Resources Assessment	J – 43
J3.5 Water Use Regulation	J – 44
J3.6 Water Quality and Sanitation	J – 45
J3.7 Tariff Regulation of Water	J – 46

J3.8	Watershed Management	J - 46
J4	Major Institutional Impediments in the Water Resources Sector	J - 47
J4.1	Observations	J - 47
J4.1.1	Composition of NWRB Board	J - 47
J4.1.2	Lack of Objectivity in Deciding Issues in the Board	J - 47
J4.1.3	Conduct of Research Studies	J - 47
J4.1.4	Water Use Regulation	J - 48
J4.1.5	Dispute Resolution	J - 48
J4.1.6	Data Collection	J - 48
J4.1.7	Enforcement Issue	J - 49
J4.1.8	Water Resources Planning	J - 49
J4.1.9	Economic Pricing	J - 49
J4.1.10	Policies on Privatized Water Utilities	J - 49
J4.2	Conclusions	J - 50
J5	Options to Resolve Institutional Constraints in Water Resources Management	J - 51
J5.1	Create a "Super" Regulatory Body	J - 51
J5.2	Strengthen NWRB as an Interim Measure	J - 52
J5.3	Establish an Independent Regulatory Body	J - 52
J5.4	Enact and Revise Pertinent Laws	J - 53
J5.5	Rationalize Responsibility in Water Resources Management	J - 53
J5.6	Provide Incentives for Private Sector to Develop Water Resources	J - 54
J6	Institutional Framework for Water Resources Management	J - 55
J6.1	General	J - 55
J6.1.1	Creation of an Apex Body in Water Resources	J - 55
J6.1.2	Strengthening of NWRB by Executive Action	J - 56
J6.2	Analysis of Issues and Recommendations	J - 56
J6.2.1	Strengthening of NWRB to Improve Water Resources Management	J - 57
J6.2.2	Creation of the Water Resources Authority of the Philippines	J - 58
J6.2.3	Establishment of Two Regulatory Bodies	J - 59
J6.2.4	Present Legal and Legislative Interventions	J - 60
J6.2.5	Current Steps to Improve Water Resources Management	J - 61
J6.3	Bill Creating the Water Resources Authority of the Philippines (WRAP)	J - 62
J6.4	Reforms to Strengthen NWRB : Interim Option	J - 66

LIST OF FIGURES

Figure J-1	WRAP ORGANIZATION CHART
Figure J-2	FUNCTIONAL CHART WATER RESOURCES AUTHORITY OF THE PHILIPPINES
Figure J-3	FUNCTIONAL RELATIONSHIPS
Figure J-4	ORGANIZATIONAL STRUCTURE (RECOGNIZED NWRB)
Figure J-5	FUNCTIONAL CHART (REORGANIZED NWRB)

Attachment to Part-J: House Bill No. 9896 (Creating the Water Resources Authority of the Philippines)



Part -- J INSTITUTIONAL FRAMEWORK FOR WATER RESOURCES MANAGEMENT

J1 Background and Current Measures to Address Water Resources Issues

J1.1 Introduction

This Part-J deals with institutional planning for water resources management in the Philippines. The work program for this portion started with the familiarization of the existing process and practices in water resources management in the country. This included the review of previous studies done in the sector, such as the Water Supply Sector Reform Study in 1993, the NWRB Strengthening Study in 1995, the Price Waterhouse Study on Regulatory Framework in January 1996, and the NERA Report to the World Bank in February 1996, by the National Economic Research Associates of London.

The pertinent laws on water resources in general, and water resources management in particular, were examined and evaluated to assess their propriety in these changing times and their relevance to the existing situation in water resources management. Weaknesses in the present laws, observed or established, were also identified to serve as a starting point in the institutional appraisal of the sector. There is a long line of laws, starting with the Philippine Constitution, orders, rules and regulations that have their respective impact on the sector. These are discussed in succeeding Sections of this Part-J.

To have the proper perspective of the overall water resources management system and the interplay among agencies and institutions concerned with or involved in the sector, it became necessary to review the various set-up of these organizations. This involved the examination of the structure, mandate and functions of the organizations as well as their linkages with other institutions. These institutions are also discussed elsewhere in this Part-J.

Interviews with the various agencies involved in water resources development were undertaken to have a fuller understanding of the programs and thrusts of these agencies and the level of regulations applied in water resources management. Coordination visits and meetings with other agencies equally involved in the sector were also conducted. The list of officials and personages in those agencies with whom consultations or contacts were established is appended to this Part - J.

Linkages with other consultants working on water resources projects were also established to acquire a general overview of the current government thrusts to improve water resources management. Coordination efforts were also made with major planning bodies such as the National Economic and Development Authority (NEDA), the Department of Public Works and Highways (DPWH) and the Presidential Task Force on Water Resources Development and Management (PTFWRDM).

Socio-economic data on population and household expenditures were used as reference points to match the present clamor, to impose raw water fees on all water abstractions from water users including residential houses with the ability to pay.

Various documents which describe the chronology of events the government has launched to address the water resources crisis were all examined. The results of the review were used as basis for defining the direction that the government wants to take in water resources management (i.e., the creation of a single apex body for water resources management).

J1.2 Background

The unabated extraction of groundwater resources and pollution of surface water aggravate the crisis in water availability and water quality in the country today. Despite a series of active efforts in water, there seems to be a continuing momentum at degrading the country's dwindling water resources. This situation is expected to deteriorate partly due to the disequilibrium in investment in the sector and the rapid growth in population.

Initially, the major issues would appear to be water supply shortages, disoriented water resource allocation among water users, water pollution and the degradation of the watersheds. But as easily discernible as the issues on the surface, is the very core of the problem – the lack of (better, the need for) an integrated, coherent and sustainable water resources management program.

Several studies undertaken on water resources in the past four years revealed an array of problems confronting the sector. Some of these studies reviewed and examined the entire breadth of the water resources sector. The findings in these studies and conclusions derived therefrom, are not at all encouraging. They range from a perception of "fragmentation" of the overall water resources management system among numerous institutions, bodies or agencies, to the more unsettling allegation of over-dependence on central government to deliver basic services of water to its constituents.

These findings did not send any level of comfort to water resources policy-makers, planners, project implementors, resource regulators and administrators. On the other hand, they prompted people concerned with the sector to institute necessary measures to confront the gnawing problem.

Inter-agency committees were formed to dissect the various recommendations in those studies to improve water resources management. They served as forums for identifying a single "best approach" to improve the system but to date, discussions on a final option have not progressed very considerably.

This Institutional Study will consider the different recommendations contained in the reports of those studies for enhancing better water resources management in the Philippines. It is also intended that recent developments resulting from discussions in the sector, particularly agreements reached and options identified by the inter-agency committees will be dwelt on at some length.

J1.3 Measures to Address Water Issues

J1.3.1 National Water Summit of 1994

Recognition by government of the existence of the water crisis generated a desire to resolve the crisis at the soonest. Government demonstrated its clear commitment to tackle the problem by supporting, in an affirmative way, the National Water Summit of 1994 with the presence of the President at the opening rites. At the end of its deliberations, the Summit pointed to the "... urgent need to properly manage the nation's water in a sustainable manner, and ... the need for an integration and coordination of all water-related efforts towards a more focused approach to water resources management."

From the Summit, the President emphasized the nationwide concern for the water sector by

involving his Cabinet. As a result, Cluster G (a Cabinet working group of department functionaries in charge of specified issues and concerns) was reconstituted into a Water Management Cluster. This Cluster now serves as the advisory committee to the President and the Cabinet on all matters relating to the water resources sector.

This transition in official thinking marked a milestone in water resources management policies and directions. For one, the Cluster set a high-level intervention for policy decisions in activities and initiatives in water resources issues.

The Summit also cleared the way for strengthening the institutional mechanism for closer coordination among water-related agencies. One bold move in this direction was the initiative to upgrade the National Water Resources Board (NWRB) – the key regulatory and coordinative agency – into an effective apparatus in water resources management.

J1.3.2 Water Crisis Act of 1995

To complement the National Water Summit of 1994, Congress enacted in 1995 Republic Act No. 8041 otherwise known as the “National Water Crisis Act of 1995.” The law was meant to address the problems and ill effects spawned by the water crisis then prevailing.

A significant step introduced by the Act was the creation of a Joint Executive-Legislative Water Crisis Commission (JELWCC) chaired by the Executive Secretary no less. The impact of this set-up manifested itself to the public: there is a sense of urgency in the effort to resolve the crisis.

Among the powers and purposes of the JELWCC are:

- 1) To undertake nationwide consultations on the water crisis and a study of the entire water supply and distribution structure;
- 2) To facilitate coordination between Congress and the executive department in formulating and implementing the government’s water crisis management policy and strategy;
- 3) To recommend measures to ensure continuous and effective monitoring of the entire water supply and distribution systems; and
- 4) To conduct studies on policy options and strategies to resolve the water crisis and recommend remedial legislative measures.

By and large, the Act was supposed to provide an immediate, but interim, relief from the effects of the drought in the greater metropolitan Manila area by authorizing the fast implementation, without the constraints of a public bidding, of projects of the Metropolitan Waterworks and Sewerage System (MWSS). MWSS services Manila and its environs. Under the law, the President may enter into negotiated contracts (BOT) and/or related schemes such as:

- 1) build-and-transfer (BT);
- 2) build-lease-and-transfer (BLT);
- 3) build-operate-and-transfer (BOT);
- 4) develop-operate-and-transfer (DOT);
- 5) rehabilitate-operate-and-transfer (ROT); and

- 6) rehabilitate-own-and-operate (ROO);

for the financing, construction, repair, rehabilitation, improvement and operation of water facilities and projects related to increasing water supply, its treatment and distribution.

The other aspect of the law is in authorizing the privatization of MWSS and the Local Water Utilities Administration (LWUA), if necessary and practicable. The law also empowered the President to reorganize MWSS and LWUA or to abolish or create offices, transfer functions, equipment, properties, records and personnel.

J1.3.3 Presidential Task Force on Water Resources Management

Another initiative suggesting the government's interest in mitigating the water crisis is the issuance in October 1996 of Executive Order No. 374 creating the Presidential Task Force on Water Resources Development and Management (PTFWRDM). The task force is envisioned to act as oversight body for ensuring the efficient sourcing and use of water resources.

Its basic responsibility is to develop and evolve policy and program recommendations on:

- 1) Water supply planning and coordination and efficient allocation of water resources to the different users;
- 2) Prioritization of programs and projects to ensure sustainable, adequate, safe and affordable water supply;
- 3) Coordination and monitoring of water policies and programs; and
- 4) Pricing policies on water resources.

The task force is significant for its high-powered composition. It counts among its members the following:

Secretary, DENR	-	Chairman
Chairman, NWRB	-	Vice-Chairman

and as Members, the secretaries of DOE, DOH, DOA, DILG, the presidents of the League of Provinces and League of Municipalities, the administrators of MWSS and LWUA, and three representatives from the private sector, preferably from the environmentalist, water management and consumers groups, to be designated by the PTFWRDM chairman.

In its inherent functions the PTFWRDM may not have impinged on the powers and functions of NWRB, but in its objective aftermath, it had the effect of placing an additional tier in the institutional hierarchy of the water resources sector.

J1.3.4 Technical Assistance on Water Resources Management

Side by side with aggressive policy reform undertakings, there were special studies done to enhance the system for water resources management, in general, and to address the nagging problems in the water sector, in particular. Some of these studies were completed under technical assistance programs as a gesture of mutual cooperation between the Government of the Philippines and donor governments. The collective output of these studies are presented

in the corresponding reports. Their findings have set the future direction for reforms in the sector. These studies are:

(1) The Philippine Water Supply Sector Reform Study (PWSSRS), 1993

This Study was financed under the provisions of the Japanese Grant Agreement in cooperation with the World Bank. The study undertook a major review of the water supply sector. It developed policy implementation options for sectoral reform toward improving the absorptive capacity, sustainability of implementation and operation of the water supply sector, and improvement of its institutional and legal arrangements. Its central recommendation was to strengthen the structural prop (NWRB) whose principal task is to oversee and coordinate the management of the country's water resources.

(2) The Philippines: Action Plan for Reforms Relating to the National Water Resources Board (1995)

This study made an effort to diagnose the current water resources management practices in the country. The action plan it submitted recommended a range of options for strengthening the NWRB. It also detailed a framework of specific implementing actions within a definite timetable to attain its focal recommendation.

(3) Philippines: Study of Regulatory Issues for Water Supply and Sewerage Sector Privatization (January 1996)

This study reviewed the regulatory framework on the water supply and sanitation sector. It analyzed the present constraints on the sector and how these constraints deter private sector participation notwithstanding some expressed interest from foreign investors because of a robust Philippine economy and projections for sustained growth. Thus, it scrutinized the regulatory issues involved to attract the introduction of private capital into the sector. It developed a structural design for an appropriate regulatory regime, taking into account the future privatization of some state-run agencies in the water supply and sewerage sector, but based on the country's political and physical realities.

An important recommendation it made is centered on the need to properly regulate water services and the economic pricing of water.

(4) The Philippine Water Sector: A Policy Advice Note for the World Bank (February 1996)

This paper came close on the heels of the suggested action plan put forth by an earlier study. Substantively, this study established a set of principles to observe in the reform of the institutional arrangements for economic regulation of the water sector. It presented a plan for a single regulatory body or an alternative plan for dual regulatory bodies on water resources management. This study advocated the creation of a regulatory body geared to regulate the economic pricing of water while another body will concentrate on regulating water use and extraction.

As an interim measure, the proponents in this study supported the strengthening of NWRB as a regulatory agency.

J2 Legal Framework and Water Institutions

J2.1 Legal Basis

The legal environment in which the water resources sector in the Philippines revolves is based on the Constitution, a compendium of laws, statutes, decrees, orders, rules and regulations and issuances of competent authority partaking of the nature of a lawful order. This body of laws is of complex diversity, varied in scope and distinct in impact on the sector. It would be prudent to examine the more significant legislations for this study to properly assess the legal framework for water resources management.

J2.1.1 The Philippine Constitution (1987)

The national policy on water, as a natural resource, is enshrined in Section 2, Article XII of the Constitution which, insofar as pertinent, reads:

“All lands of the public domain, waters, minerals, coal, petroleum and other mineral oils, all forces of potential energy, fisheries, forests or timber, wildlife, flora and fauna, and other natural resources are owned by the State. The exploration, development, and utilization of natural resources shall be under the full control and supervision of the State. In cases of water rights for irrigation, water supply, fisheries, or industrial uses other than the development of water power, beneficial use may be the measure and limit of the grant. (Emphasis supplied)

J2.1.2 The Water Code of the Philippines

The Water Code of the Philippines (Presidential Decree No. 1067) is the basic water law of the Philippines. It is anchored on the principle that all waters belong to the State. Proceeding from this premise, these waters are not subject to acquisitive prescription. The State may allow the use or development of water by administrative concession, but the utilization, development, conservation and protection of water resources shall remain within the control of and regulation by government.

In synthesis, the objectives of the Water Code are to:

- 1) Establish the basic principles and structural framework relating to the appropriation, control, conservation and protection of water resources to achieve their optimum development and efficient use, to meet present and future needs;
- 2) Define the scope of the rights and obligations of water users and provide for the protection and regulation of such rights;
- 3) Institute a basic law to govern the ownership, appropriation, utilization, exploitation, development, conservation and protection of water resources and rights to land related thereto; and
- 4) Identify the administrative agencies which will enforce the Code.

“Water” is expansively defined by the Code. Thus, Article 4 thereof declares that “Waters, as used in this Code, refers to water under the ground, water above the ground, water in the atmosphere and the waters of the sea within the territorial jurisdiction of the Philippines.” This definition practically captures the entire segment and categories of water resources in

their natural state or from the perspective of their source. In sum the Water Code dictates that all:

- 1) ground waters
- 2) surface waters
- 3) atmospheric water
- 4) waters in the seas

do belong to the State as a sovereign policy. This fundamental policy was enunciated in the Philippine Constitution, incorporated in the Civil Code (see succeeding section), and now reiterated in the Water Code. Other provisions of the Water Code categorically reinforce this stand as can be seen from the provisions of Articles 5 and 6 of the Water Code.

Art. 5. The following belong to the State:

- a) Rivers and their natural beds;
- b) Continuous or intermittent waters of springs and brooks running in their natural beds and the beds themselves;
- c) Natural lakes and lagoons;
- d) All other categories of surface waters such as water flowing over lands, water from rainfall whether natural or artificial and water from agricultural runoff, seepage and drainage;
- e) Atmospheric water;
- f) Subterranean or ground water; and
- g) Seawater

Art. 6. The following waters found on private lands also belong to the State:

- a) Continuous or intermittent waters rising on such (private) lands;
- b) Lakes and lagoons naturally occurring on such lands;
- c) Rain water falling on such lands;
- d) Subterranean or ground waters; and
- e) Waters in swamps and marshes.

The owner of the land where the water is found may use the same for domestic purposes without securing a permit, provided that such use shall be registered, when required by NWRB. NWRB, however, may regulate such use when there is wastage or in times of emergency.

The provisions of Article 6 of the Water Code are a departure from the stipulations of the Civil Code on water. Before their repeal by the Water Code, certain provisions of the Civil Code, particularly those on ownership of waters (Section 503) recognized private ownership of certain categories of water (i.e., continuous or intermittent waters rising on lands of private ownership; lakes and lagoons, and their beds, formed by Nature on such lands; subterranean waters found on the same; etc.). These laws on the ownership of waters found in private lands are now expressly abrogated by Article 6 of the Water Code. Other instances of repeal of Civil Code provisions by the Water Code are treated, in passing, in succeeding sections.

The appropriation of water which is the acquisition of rights over the use of water or the taking or diverting of waters from a natural source, is governed by the Water Code. Provided such use or taking or diversion is accomplished in a legal manner and for a lawful purpose, the Code allows appropriation of water for any of the following purposes:

- 1) Domestic -- the utilization of water for drinking, washing, bathing, cooking or other household needs, home gardens, and watering of lawns or domestic animals;
- 2) Municipal -- the utilization of water for supplying the water requirements of the community;
- 3) Irrigation -- the utilization of water for producing agricultural crops.
- 4) Power generation -- the utilization of water for producing electrical or mechanical power;
- 5) Fisheries -- the utilization of water for the propagation and culture of fish as a commercial enterprise;
- 6) Livestock raising -- the utilization of water for large herds or flocks of animals raised as a commercial enterprise;
- 7) Industrial -- the utilization of water in factories, industrial plants and mines, including the use of water as an ingredient of a finished product;
- 8) Recreational -- the utilization of water for swimming pools, bath house, boating, water skiing, golf courses and other similar facilities in resorts and other places of recreation. (Art. 10, Water Code)

Under the Water Code, no person shall appropriate water without a water right. A water right is acquired with the issuance of a water permit which is the evidence of the water right granted. The following may apply for a water permit:

- 1) Citizens of the Philippines who are of legal age;
- 2) Associations, duly registered cooperatives or corporations organized under the laws of the Philippines, at least 60% of the capital of which is owned by citizens of the Philippines; and
- 3) Government entities and instrumentalities including government-owned or controlled corporations.

The measure and limit of appropriation of water is its beneficial use. Beneficial use as defined in the Code is the utilization of water in the right amount during the period that water is needed for producing the benefits for which the water is appropriated. Standards of beneficial use are prescribed by NWRB to the appropriators of water for different purposes and conditions.

The Code is supported by a compendium of rules and regulations (called Implementing Rules and Regulations) for effective enforcement of its provisions. Together, they provide the basic framework for water resources management, define the rights and obligations of water users and, by extension, the protection and regulation of those rights. The law also identifies the agencies of government involved in, and charged with, the enforcement of the Code.

Although the Code is generally hailed as a model for other countries in a similar stage of development there are perceived, some established, inadequacies in its implementation, enforcement and monitoring.

To begin with, there are numerous agencies and departments of government dealing with water resources activities. In most instances, each agency or department is responsible for one or a number of specific aspect of water resources activity in a given subsector.

J2.1.3 Civil Code of the Philippines (RA 386)

Article 501, Section 1 (Ownership of Waters) says in part:

Art. 501. The following are of public dominion:

- a) Rivers and their natural beds;
- b) Continuous or intermittent waters of springs and brooks running in their natural beds and the beds themselves;
- c) Waters rising continuously or intermittently on lands of public dominion;
- d) Lakes and lagoons formed by Nature on public lands, and their beds;
- e) Rain waters running through ravines on sand beds, which are also of public dominion;
- f) Subterranean waters on public lands;
- g) Waters found within the zone of operation of public works, even if constructed by a contractor;
- h) Waters rising continuously or intermittently on lands belonging to private persons, to the State, to a province, or to a city or a municipality; and
- i) The waste waters of fountains, sewers and public establishments.

Article 504, Section 2 (The Use of Public Waters) provides as follows:

Art. 504. The use of public waters is acquired:

- a) By administrative concession;
- b) Within the prescript of Water Code

The extent of the rights and obligations of the use shall be that established in accordance with the prescript of Water Code.

It is to be noted that some provisions of the Civil Code on ownership of waters, easements relating to waters, use of public waters and acquisitive prescription on the use of waters, have been repealed by the Water Code insofar as those provisions are inconsistent with the latter law. For instance, paragraph (2) of Article 504 of the Civil Code provides, before the adoption of the Water Code, that use of public waters could be acquired by "prescription for ten years". This provision is now declared repealed as being inconsistent with Article 3 of the Water Code, reproduced here into:

Art. 3. The underlying principles of this Code [Water Code] are:

- a) All waters belong to the State;
- b) All waters that belong to the State can not be the subject of acquisitive prescription;
- c) The State may allow the use or development of waters by administrative concessions;
- d) The utilization, exploitation, development, conservation and protection of water resources shall be subject to the control and regulation of the National Water Resources Board; and
- e) Preference in the use and development of waters shall consider current usage and be responsive to the changing needs of the country. (*Italics supplied*)

The repeal of these provisions is stipulated by Article 100 of the Water Code when it declared that: "The following laws, parts and/or provisions of laws are hereby repealed:

"a. The provisions of the Spanish Law on Waters of August 3, 1866, the Civil Code of the Philippines (RA 386) on ownership of waters, easements relating to waters, use of public waters and acquisitive prescription on the use of waters, which are inconsistent with the provisions of this [Water] Code."

J2.1.4 Public Service Law (Commonwealth Act No. 146)

Commonwealth Act (CA) 146 prescribes a level of equity ownership by Filipino nationals in corporations dealing in the operation of certain public utilities. The law sets such ownership to at least sixty percent (60%) of the capital stock of such corporations. Water distribution and sewerage systems are utilities that are classified covered by the citizenship requirement under the Act. The other utilities covered are: railways and urban mass transit, distribution (not production) of electricity and gas, telephone systems, wireless broadcast stations and any common carrier (either freight or passenger).

CA 146 established the defunct Public Service Commission (PSC). PSC as a regulatory body had under it boards to regulate the operation of certain public utilities, among them water utilities, including public services owned or operated by government entities. These boards issue Certificate of Public Convenience (CPC) for the operation of any utility, except that in the case of public-owned or operated utilities, CPC's are not required for their operation, even if subject to the board's regulation.

The regulatory board for power and water in the then PSC was the Board of Power and Waterworks (BPW). When the BPW was abolished its functions were transferred to the Board of Energy for power services and the National Water Resources Board for water utilities.

J2.1.5 The Local Government Code of 1991 (RA 7160)

The Local Government Code of 1991 effected a decentralization of a broad scope of powers and functions from the central government to local government units (LGUs) consistent with the policy of developing autonomous and self-reliant LGUs. The Code devolved to them some aspects of governance and the delivery of basic services in health food and water.

Under the pertinent IRR of the Code, the LGUs have been ordained to provide services covering, among others, the construction and maintenance of infrastructure facilities funded by . . . the municipality . . . including "artesian wells, spring development, rainwater collectors and water supply systems." (Sec. 25, Rule 5, IRR).

Some provisions in the Code relevant to the subject of this section follows:

Paragraph (d), Section 3, Chapter I:

(d) The vesting of duty, responsibility, and accountability in local government units shall be accompanied with provisions for reasonably adequate resources . . . and an equitable share in the proceeds of the utilization and development of the national wealth within the respective areas."

Section 18, Chapter I:

"Sec. 18 Power to Generate and Apply Resources. - Local government units shall . . . have an equitable share in the proceeds from the utilization and development of the national wealth and resources within their respective territorial jurisdictions. . . ."

J2.1.6 Executive Order (EO) 557 (1980) Creating the Defunct Rural Waterworks Development Corporation

This Order is the authority for the brief existence of the Rural Waterworks Development Corporation (RWDC) created to provide water supply service to rural provincial areas not covered by LWUA or MWSS. Its mandate was to effect the delivery of water supply to small towns and remote barangays (villages) not reached by LWUA, through the instrumentality of the Rural Waterworks and Sanitation Associations (RWSAs).

An RWSA is a non-stock, non-profit cooperative association organized under and/or registered with LWUA and "franchised" to operate a rural water system. These RWSAs are established in remote rural areas where access to WD services is difficult to obtain or not existent at all.

RWSAs are supposed to develop and furnish Levels I and II water supply service in those far-flung barangays and municipalities. Level I service includes point sources (such as rain collectors, wells and springs) generally for rural areas where houses are scattered too thinly or habitation is sparse to justify a distribution system based on technical, economic, organizational and financial considerations. Level II encompasses communal faucet systems designed for rural areas where houses are clustered densely enough to warrant a piped distribution system with, perhaps, a faucet to cater to a number of households.

In 1987, the RWDC was abolished by Executive Order No. 124-A and its functions transferred to and assumed by the LWUA.

J2.1.7 Executive Order No. 124-A (1987) Dissolving RWDC and Renaming the Old National Water Resources Council

EO 124-A had for its purpose two main objectives: (1) the abolition of RWDC and (2) renaming (and effectively reorganizing) the former NWRC. To achieve these twin goals, the Order provided clearly that:

- 1) "The Rural Waterworks Development Corporation is hereby abolished and its

functions and assets transferred to the Local Water Utilities Administration in accordance with Sections 29 to 31 hereof;

- 2) "The National Water Resources Council is hereby renamed and reorganized as the National Water Resources Board and shall continue to be attached to the Department [of Public Works and Highways]. All of its technical functions are hereby transferred to the Bureau of Research and Standards and other offices as deemed by the Secretary."

J2.1.8 Republic Act No. 6234 Creating the Metropolitan Waterworks and Sewerage System (MWSS)

RA 6234 is the charter of MWSS. In creating the agency, the law by express provision and explicit design dissolved the old National Waterworks and Sewerage Authority (NAWASA). MWSS is charged with the responsibility of providing waterworks and sewerage systems in its area of jurisdiction, co-extensive with the Greater Metropolitan Manila area and beyond. Its area of coverage consists of 11 cities (Manila, Pasay, Quezon, Kalookan, Cavite, Makati, Mandaluyong, Muntinlupa, Marikina, Pasig and Las Pinas) and 26 municipalities (Malabon, Navotas, Paranaque, Pateros, San Juan, Taguig, Valenzuela in Metro Manila; Bacoor, Imus, Kawit, Noveleta, Rosario in Cavite province; and Antipolo, Cainta, Montalban, San Mateo, Taytay, Angono, Baras, Binangonan, Cardona, Jala-Jala, Morong, Pililla, Tanay, Teresa in Rizal province). The last nine towns in the above enumeration starting with Angono down to Teresa were included in the MWSS's coverage area by virtue of Batas Pambansa Blg. 799, in 1984. Its service territory covers therefore 37 localities with most of them being urban centers of population.

MWSS's attributes and powers include the following:

- 1) To construct, maintain and operate dams, reservoirs, conduits, aqueducts, tunnels, purification plants, water mains, pipes, fire hydrants, pumping stations, machineries and other waterworks for the purpose of supplying water to the inhabitants of its territory, for domestic and other purposes; and to purify, regulate and control the use, as well as prevent the wastage of water;
- 2) To construct, maintain and operate such sanitary sewerage as may be necessary for the proper sanitation and other uses of the cities and towns comprising the System;
- 3) To fix periodically water rates and sewerage service fees as the System may deem just and equitable in accordance with the standards outlined in Section 12 of this Act;
- 4) To approve, regulate and supervise the establishment, operation and maintenance of waterworks and deep wells within its jurisdiction operated for commercial, industrial and governmental purposes and to fix just and equitable rates or fees that may be charged to customers thereof;
- 5) To assist in the establishment, operation and maintenance of waterworks and sewerage systems within its jurisdiction under cooperative basis;
- 6) To approve and regulate the establishment and construction of waterworks and sewerage systems in privately owned subdivisions within its jurisdiction; and
- 7) In the prosecution and maintenance of its projects and plants, the System shall

adopt measures to prevent environmental pollution and enhance the conservation, development and maximum utilization of national resources, including the improvement and beautification of its reservoirs, filter plants, and other areas to promote tourism and related purposes, and shall provide for the necessary corporate funds therefor.

From its passage in 1971, RA 6234 had undergone a series of amendments in various features. Here are some of the amendments:

- 1) Presidential Decree (PD) No. 425 (March 1974) increasing its capital stock to P1.0 billion;
- 2) PD 1345 (April 1978) authorizing MWSS, on request, to take over and administer the centralized water supply systems in residential subdivisions within its territorial jurisdiction;
- 3) PD 1406 (June 1978) increasing its capital stock to P3.0 billion; increasing total principal indebtedness but imposing ceiling on foreign loans;
- 4) Executive Order (EO) No. 796 amending the composition of the Board of Trustees;
- 5) Batas Pambansa (BP) Blg. 799 (April 1984) ceding to MWSS jurisdiction over the remaining towns of Rizal province;
- 6) EO 1036 (June 1985) reorganizing the institutional structure of MWSS;
- 7) EO 1063 (November 1985) increasing its capital stock to P8.0 billion; and
- 8) EO 197 (June 1987) increasing the membership in the Board of Trustees to nine members.

J2.1.9 The Provincial Water Utilities Act of 1973 (PD 198)

This Act declared a national policy in favor of local operation and control of water systems in provincial areas outside Metropolitan Manila (which is under MWSS area of operation and service coverage), and authorizes the formation of local water districts to operate and administer water supply and wastewater disposal systems in the local communities. The act also serves as the charter of the Local Water Utilities Administration (LWUA), the agency on the national level entrusted with the promotion, development and financing of such water districts and other local water utilities.

Consisting of three Titles, PD 198 is divided into Title I (Preliminary Provisions), Title II (Local Water District Law), and Title III (Local Water Utilities Administration Law).

In Section 5 of Title II, the act spelled out the purposes for which water districts may be formed. Without limiting the extent of the operational scope of such districts, the act encouraged the formation of water districts for purposes of:

- 1) Acquiring, installing, improving, maintaining and operating water supply and distribution systems for domestic, industrial, municipal and agricultural uses for residents and lands within the boundaries of such districts;
- 2) Providing, maintaining and operating wastewater collection, treatment and disposal

facilities; and

- 3) Conducting such other functions and operations incidental to water resource development, utilization and disposal within such districts.

The formation of a water district is commenced by the enactment of a local ordinance (council resolution) by the municipal council to (1) form the water district, (2) transfer any and all waterworks and/or sewerage facilities presently owned or controlled by the municipality or city, to the water district. The water district is deemed formed upon the filing with LWUA of such resolution to organize the district. In one sense, the filing of the municipal or city resolution with LWUA is the operative act which breathes life to the new entity (the WD) and in another sense, the equivalent of registration (with the Securities and Exchange Commission (SEC) for corporations established under the Corporation Code of the Philippines) to attain full-fledged status as water districts for all intents and formal purposes. This is quite evident from Section 7 of Title II which reads in part:

“Sec. 7. Filing of Resolution -- The district shall be deemed duly formed and existing upon the date of such filing. Upon such filing, the local government or governments concerned shall lose ownership, supervision and control or any right whatsoever over the district except as provided herein.”

A water district enjoys a wide spectrum of powers, rights and privileges. Consider that a WD can:

- 1) Purchase, construct or acquire works, water rights, land, rights and privileges useful or necessary to convey, supply, store, collect, treat, dispose of or make use of water for any purpose;
- 2) Sell water to any person with the district;
- 3) Require, construct, operate and furnish facilities and services for collection, treatment and disposal of sewerage, waste and storm water.
- 4) Exercise its right of way to locate, construct and maintain works on any land which is now or hereafter may be owned by the government or by any of its political subdivisions;
- 5) Borrow money and issue bonds, promissory notes and other evidence of indebtedness to support such borrowings. These obligations may be secured by property of the WD. The interest on the bonds and notes is tax-exempt;
- 6) Sell water under its control under a tariff structure determined by its board of directors;
- 7) Make use of its power of eminent domain;
- 8) Fix, levy and collect a sewerage and wastewater service stand-by or availability charge in the event the sewer service is available and no connection is made; and
- 9) Adopt and levy a groundwater production assessment on commercial or industrial users in the event their production is injuring or reducing the district's financial condition.

Among a WD's privileges are:

- 1) Exemption from income taxes, except taxes on interest income from deposits and on investments that are not related to water services operation;
- 2) Exemption from franchise taxes and realty taxes on all lands and other real property devoted to water supply generation and distribution;
- 3) Exemption from all duties or imposts on imported machinery and equipment and materials not manufactured locally;
- 4) Exemption from the payment of all national, local government and municipal taxes and fees, including any franchise, filing, recordation, license or permit fees, charges or costs involved in any court or administrative proceedings in which it may be a party; and
- 5) Exclusive franchise to carry on the function and power of providing water supply services for domestic, industrial or commercial uses within its territory.

A water district is supposed to be a quasi-public corporation performing a function that normally is discharged by a public agency. By legal fiat, a quasi-public corporation is a private corporation that has accepted from the State the grant of a franchise or contract involving the performance of public duties (1 Fletcher 216). It is a private corporation that renders public service or supplies public wants (7 R.C.L. 42; Cooley, Municipal Corporations). The term "quasi-public" loosely translates into "as if public", meaning that inherently the corporation has a private character but appears like a public agency in view of the kind and nature of the service it performs.

This was the collective position taken by the water districts early in their operation. In 1991, however, the Supreme Court ruled in the case of Davao Water District vs. Civil Service Commission (G.R. No. 95237-38) that water districts are government-owned or controlled corporations. The Supreme Court interpreted PD 198 as a special law constituting the charter of water districts. Corporations with original charters are not private corporations which strictly are organized and established under the provisions of the Corporation Code of the Philippines (BP Blg. 68). Hence, water districts cannot be considered as private corporations under the Corporation Code.

PD 198 (in Title III) also established the Local Water Utilities Administration (LWUA). LWUA is primarily a specialized lending institution for the promotion, development and financing of local water utilities. It is the agency on the national level designed to minister to the needs of provincial local water utilities.

LWUA's immediate but continuing program involves the:

- 1) establishment of a uniform standards for the administration and management of water districts;
- 2) development of minimum performance and quality standards for local water utilities and conformance monitoring of those standards;
- 3) furnishing of technical assistance and technical training to local water utilities;

- 4) lending to qualified local water utilities;
- 5) effecting systems integration, district annexation and de-annexation.

LWUA is clothed with sufficient powers to carry out its mandated functions. It has the power to borrow funds from both domestic and foreign sources. To secure such loans LWUA is authorized to issue bonds, debentures or other evidence of indebtedness constituting a lien on all securities, covenants and obligations of local water utilities for loans made to such water utilities by the LWUA.

LWUA exercises powers of regulation in regard to certain standards for local water utilities. In establishing those standards, LWUA is encouraged to vigorously consult and coordinate its actions with government agencies active in the areas of public works, health and sanitation. These standards extend to but not limited to the following:

- 1) Water Quality – Minimum drinking water standards including a uniform testing and reporting system. Water quality standards shall include bacteriological, chemical and physical parameters;
- 2) Design and Construction – Minimum criteria for the design and construction of new or additional facilities for water supply, treatment, transmission and distribution, and for wastewater collection, treatment and disposal;
- 3) Equipment, Materials and Supplies – Standards for the optimum selection and effective utilization of equipment, materials and supplies by local water and sewer utilities;
- 4) Operations and Maintenance – Standardized procedures for operating and maintaining equipment and facilities;
- 5) Personnel – The training of personnel who operate or manage local water utilities. A majority of personnel of a water district must have satisfactorily completed appropriate training courses, programs or seminars or holders of certificates of competence before a water district is issued a certificate of conformance.
- 6) Organization – Organizational and institutional criteria to assure independent operation and funding of local water utilities; and
- 7) Accounting – A uniform accounting system with uniform chart of accounts. Said standards and regulations shall prescribe levels of internal reporting to water utility management.

The certificate of conformance treated in item (5) above is a form of credentials-building and compliance-verification program to determine whether the local water utility has adopted the requisite procedures and practices and therefore deserves to receive a stamp of approval for issuance of said certificate. The certificate of conformance entitles the utility to obtain financial assistance (in the form of a loan) from LWUA.

The power of LWUA to regulate water rates covers only publicly owned water utilities (therefore water districts). Other water utilities such as the ones in private subdivisions or those run by LGUs do not fall within the ambit of the rate review influence of LWUA.

The rate review power of LWUA provides a mechanism to ensure that the rates proposed by

water districts are adequate, just and equitable. They should be sufficient to provide for:

- 1) reimbursement from all new water customers for the cost of installing new services and meters;
- 2) revenue from all water deliveries and services performed by the water district;
- 3) annual operating expense of the water district;
- 4) the maintenance and repair of the works;
- 5) a reasonable surplus for replacement, extension and improvement; and
- 6) payment of the loans of the district and a sinking fund for other debts of the water district.

In the same vein such rates should be equitable. They should be just, fair and reasonable. The rate mix should be such that the cost of the service is apportioned among different levels of users. The ideal result would be that the less privileged pays less than those who are economically leveraged.

J2.1.10 The BOT Law (RA 7718)

This law recognizes the important role of the private sector as the main engine for national growth and development and provides appropriate incentives to mobilize private resources for financing the construction, operation and maintenance of infrastructure and development projects normally financed and undertaken by the Government. These incentives extend to financial incentives, some of which are already available under existing laws; an atmosphere of minimum government regulation and systematic procedures and definite government undertakings in support of the private sector.

Under this law almost all development projects may be prosecuted through the build-operate-and-transfer (BOT) scheme. These projects may cover:

- | | |
|---------------------------|--|
| 1) power plants | 15) mass transport system |
| 2) highways | 16) reclamation project |
| 3) ports | 17) industrial estates or townships |
| 4) airports | 18) government building |
| 5) canals | 19) tourism |
| 6) dams | 20) slaughterhouses |
| 7) hydropower | 21) warehouses |
| 8) water supply | 22) public markets |
| 9) irrigation | 23) solid waste management |
| 10) sewerage | 24) information technology networks |
| 11) drainage | 25) data base infrastructure |
| 12) dredging | 26) education and health facilities |
| 13) telecommunications | 27) other infrastructure and development projects as may be authorized by the appropriate agency |
| 14) railroad and railways | |

This law allows the following contractual arrangements:

- 1) build-operate-and-transfer (BOT)
- 2) build-and-transfer (BT)
- 3) build-own-and-operate (BOO)
- 4) build-lease-and-transfer (BLT)
- 5) build-transfer-and-operate (BTO)
- 6) contract-add-and-operate (CTO)
- 7) develop-operate-and-transfer (DOT)
- 8) rehabilitate-operate-and-transfer (ROT)
- 9) rehabilitate-own-and-operate (ROO)

although there is a provision allowing other contractual arrangements not falling under any of the above, provided these are approved by the President of the Philippines. In any of these contractual undertakings, the Government may not provide direct guarantees, meaning the Government has no obligation to assume responsibility for the loans incurred by the proponent in the event of the latter's default. But some undertakings are authorized such as cost-sharing up to 50 percent of total project cost to be financed from direct budgetary outlay for the project or official development assistance, and the provision of support facilities like access roads.

In the case of public utilities, a franchise to operate is automatically issued to the winning bidder. While a franchise is normally granted through administrative or legislative means, this feature in the law effectively translates that the issuance of the franchise is delegated to the implementing agency. If the contract is terminated by the Government either unilaterally or by mutual agreement of the parties or by the proponent in case the Government defaults, the proponent will be reimbursed for actual expenses on the project and an additional sum as reasonable rate of return.

J2.2 Overall Management: National Water Resources Board

The overall responsibility for coordination of water resources development and management is vested in the NWRB. Created in 1974, its basic mandate is to administer and enforce the Water Code.

The NWRB is clothed with broad regulatory and executory authority and serves as the agent of the State in coordinating, controlling, regulating and supervising the ownership, appropriation, utilization, exploitation, development, conservation and protection of the country's water resources. In particular, the jurisdictional powers, functions and duties of NWRB include: (a) to formulate policies and guidelines on water resources development and management; (b) to effect cross-sectoral and inter-departmental coordination of water resources development activities; (c) to grant or issue water permits and certificates of public convenience/and necessity; (d) to advise NEDA on matters relating to water resources development plans, programs and projects, and (e) to exercise jurisdiction over disputes concerning water allocation and utilization.

The NWRB is manifestly a collegial and quasi-judicial body. Its governing board is composed of the secretaries of six (6) Cabinet departments (DPWH, DENR, NEDA, DOA, DOH, DTI) and the heads of four (4) water agencies (LWUA, MWSS, NIA, NAPOCOR). The Secretary of Public Works and Highways is chairman of the governing board by reason of NWRB's being attached to DPWH for administrative purposes and policy coordination only. Under PD 424, NEDA has the power to increase or decrease the membership in the governing board whereas under PD 292, the President has authority to reorganize the board.

In carrying out its functions, NWRB is manned by an Executive Director and supported by a Deputy Executive Director. Currently, it has a staff complement of 110 personnel organized into five operating divisions.

Board meetings were initially attended by the highest level of representation. This ensured that decisions arrived at embodied the commitment of the agencies. But the frequency of the meetings cast a degree of constraint on the availability of those officials, not to mention the mostly routine matters taken up at such meetings. As practice now shows, attendance is generally relegated to lower level officials. There are doubts as to whether these officials carry the authority to commit the agencies they represent or to decide on issues of policy.

J2.3 Key Agencies and Institutions with Concerns in Water Resources

Apart from NWRB, there is a substantial number of government agencies and other institutions involved in or concerned with or to undertake activities in the water resources sector. The degree of their involvement, or the extent of their participation or the nature of their activity varies from one agency to the other.

The range of national government agencies/units having significant concerns in water resources planning, development, allocation and administration could likely give a picture of structural complexity. But a closer look at their respective mandates clears up part of that suspicion. The following discussion will be limited to an examination of the responsibilities of some key departments and agencies.

J2.3.1 National Economic and Development Authority

The National Economic and Development Authority (NEDA) was created in 1972 as the government central planning body, exercising the functions then vested in the National Economic Council (NEC), the Presidential Economic Staff (PES) and other ad hoc economic bodies. NEDA encompassed and absorbed the functions of NEC, PES and other ad hoc bodies/councils that were abolished. As the primary planning agency, NEDA is to coordinate the development planning and policy formulation, as well as aim to achieve sustainable growth based on equitable distribution of economic benefits.

The NEDA is primarily responsible for formulating continuing, coordinated and fully integrated social and economic policies, plans and programs based on the following principles:

- 1) The State aims to achieve growth coupled with equity;
- 2) Development leading to the attainment of the above mentioned goals is a complex process involving the coordination and integration of policies, plans, programs and projects of all sectors of society;
- 3) In the formulation of basic policies, plans, programs and projects, there shall be maximum participation by and consultation with concerned private sector groups, community organizations and beneficiaries, and local government units to ensure that priority needs are incorporated into such policies, plans, programs and projects;

- 4) National plans shall be the sum of nationally and regionally identified targets and strategies and locally formulated approaches to perceived local needs and priorities established within the framework of national strategies;
- 5) Major socio-economic policies, plans, programs and projects of different government agencies must be properly coordinated by the Authority at both the national and regional levels prior to their adoption, to ensure their consistency with established national priorities and coordination with other policies, plans, programs and projects of the government; and
- 6) The linkage between development planning, programming and budgeting shall be of the highest priority in planning and budgeting activity.

After due consultation with the private sector, community organizations and beneficiaries, local government units, and appropriate government agencies, the NEDA shall coordinate the formulation of socio-economic development plans, policies and projects, including the formulation of annual and medium-term public investment program, programming of official development assistance in the form of grants and concessional loans from foreign governments and multilateral agencies and organizations, and the monitoring and evaluation of plan implementation.

The NEDA consists of the NEDA Board and the NEDA Secretariat.

(1) The NEDA Board

The powers and functions of the NEDA reside in the NEDA Board. It is the country's highest social and economic development planning and policy coordinating body. The NEDA Board is composed of the following:

- | | | |
|---------------|---|--|
| Chairman | : | The President of the Philippines |
| Vice-Chairman | : | Director-General of the NEDA Secretariat |
| Members | : | Executive Secretary
Secretary of Finance
Secretary of Trade and Industry
Secretary of Agriculture
Secretary of Environment and Natural Resources
Secretary of Public Works and Highways
Secretary of Budget and Management
Secretary of Labor and Employment
Secretary of Interior and Local Government
Secretary of Health
Secretary of Foreign Affairs
Secretary of Agrarian Reforms
Secretary of Science and Technology
Secretary of Transportation and Communications
Governor, Bangko Sentral ng Pilipinas
Chairman, Coordinating Council for the
Philippine Assistance Program |

In the performance of its functions, the NEDA Board is assisted by five Cabinet-level agency committees. The committees and their composition and functions are summarized below:

1) Development Budget Coordination Committee (DBCC)

The DBCC is composed of the Secretary of Budget and Management, as chairman, the Director-General of the NEDA Secretariat as co-chairman, and the Executive Secretary, Secretary of Finance and the Governor of the Bangko Sentral ng Pilipinas, as members.

The DBCC recommends to the President the following:

- a) Level of annual government expenditures and the ceiling of government spending for economic and social development, national defense and government debt sector,
- b) Proper allocation of expenditures for each development activity between current operating expenditures and capital outlays, and
- c) Amount to be allocated for capital outlays broken down into the various capital or infrastructure projects.

2) Infrastructure Committee (INFRACOM)

The InfraCom is made up of the Director-General of the NEDA Secretariat, as chairman; Secretary of Public Works and Highways, as co-chairman; and the Executive Secretary and Secretaries of Transportation and Communications, Finance, and Budget and Management, as members.

The InfraCom's function is:

- a) to advise the President and the NEDA Board on matters concerning infrastructure development, including highways, airports, seaports and shore protection, railways, power generation, transmission and distribution, tele-communications, irrigation, flood control and drainage, water supply and sanitation, national buildings for government offices, hospitals and related buildings, state colleges and universities, elementary and secondary school buildings, and other public works.
- b) to coordinate the activities of agencies, including government-owned or controlled corporations, concerned with infrastructure development, and
- c) to recommend to the President government policies, programs and projects concerning infrastructure development consistent with national development objectives and priorities.

3) Investment Coordination Committee (ICC)

The ICC consists of the Secretary of Finance, as chairman; the NEDA Director-General, as co-chairman; the Executive Secretary, the Secretaries of Agriculture, Trade and Industry, budget and Management and the Governor of Bangko Sentral ng Pilipinas, as members.

Its functions are:

- a) to evaluate the fiscal, monetary and balance of payments implications of major national projects, and recommend to the President the timetable of their implementation on a regular basis,

- b) to advise the President on matters related to the domestic and foreign borrowings program, and
 - c) to submit a status of the fiscal, monetary and balance of payments implications of major national projects.
- 4) **Social Development Committee (SDC)**
 The SDC is composed of the Secretary of Labor and employment, as chairman; the NEDA Director-General as co-chairman; and the Executive Secretary, and the Secretaries of Education, Culture and Sports, Health, Interior and Local Government, Agrarian Reform, Agriculture, Social Welfare and Development, and Budget and Management, as members.

The SDC does the following:

- a) Advise the President and the NEDA Board on matters concerning social development, including education, manpower, health and nutrition, population and family planning, housing, human settlements, and the delivery of other social services,
 - b) Coordinate the activities of government agencies concerned with social development, and
 - c) Recommend appropriate policies, programs and projects consistent with national development objectives.
- 5) **Committee on Tariff and Related Matters (CTRM)**
 The CTRM consists of the Secretary of Trade and Industry, as chairman; the NEDA Director-General as co-chairman; and the Executive Secretary, the Secretaries of Foreign Affairs, Agriculture, Transportation and Communications, Environment and Natural Resources, Budget and Management, and Finance; the Governor of Bangko Sentral ng Pilipinas, and the chairman of the Tariff Commission, as members.

CTRM performs the following functions:

- a) Advise the President and the NEDA Board on tariff and related matters, and on the effects of various international developments on the country,
- b) Coordinate agency positions and recommend national positions for international economic negotiations, and
- c) Recommend to the President a continuous rationalization program for the country's tariff structure.

The NEDA Secretariat serves as the technical secretariat to all these committees, except for the DBCC, which is served by the DBM.

(2) The NEDA Secretariat

The NEDA Secretariat serves as the research and technical support arm of the NEDA Board. It also provides technical staff support and assistance, including the conduct of studies and

development policy measures and other recommendations on the various aspects of the substantive functions of development planning and policy formulation, and coordination, evaluation and monitoring of plan implementation.

The Secretariat is headed by a Director-General who carries the rank and title of Secretary of Socio-Economic Planning and exercises general supervision and control over the technical and administrative personnel of the Secretariat.

The NEDA Director-General is assisted by three Deputy Directors-General, each of whom is responsible for the three major offices of NEDA, namely the National Development Office (NDO), Regional Development Office (RDO) and Central Support Office (CSO), respectively. There are also three Assistant Directors-General to assist the Deputy Directors-General in their work of supervising and coordinating their respective offices.

Each of the Central Office staff is headed by a Staff Director who in turn is back staffed by an Assistant Director, while each Regional Office is headed by a Regional Director assisted by an Assistant Regional Director

The functions of the three major offices comprising the NEDA Secretariat, along with the staff units (Bureau level) under each of them are described concisely:

- 1) *National Development Office* – provides technical staff support to the NEDA Board in coordinating the formulation of national and sectoral policies, plans and projects, monitors macro-economic and sectoral performances, prepares the necessary economic reports, and conducts economic and development studies on macro-level plans and policies.

The seven staffs comprising the NDO are the (1) National Planning and Policy staff; (2) Agriculture staff; (3) Trade, Industry and Utilities staff; (4) Infrastructure staff; (5) Social Development staff; (6) the Public Investment staff; and (7) the Project Monitoring staff.

- 2) *Regional Development Office* – provides technical staff support as may be required by the implementing agencies in the regions; monitors regional and inter-regional development policies, plans and programs; prepares integrated reports on regional planning; and conducts studies on regional development policies.

The RDO consists of the Regional Development Coordination Staff which based in the Central Office and the 13 Regional Offices including the Cordillera Administrative Region.

- 3) *Central Support Office* – provides the NEDA Secretariat organizational units with technical assistance and support services in development administration, internal management improvement, legal services, development information and administrative services.

The five staff units under CSO are the Management staff, Legal staff, Administrative staff, Management Information System staff and the Development Information staff.

(3) Attached Agencies

There are seven government agencies which are attached to the NEDA. Six of them are attached for purposes of administrative and technical supervision. These are the Tariff

Commission (TC), Philippine National Volunteer Service Coordinating Agency (PNVSCA), Population Commission (POPCOM), National Statistics Office (NSO), the National Statistical Coordination Board (NSCB) and the Statistical Research and Training Center (SRTC).

In addition, the Philippine Institute for Development Studies (PIDS) is attached to the NEDA for policy and program coordination or integration.

J2.3.2 Department of Public Works and Highways

The Department of Public Works and Highways is the biggest government agency in infrastructure construction. It is the State's construction arm responsible for the planning, design, construction and maintenance of infrastructure facilities, particularly national highways, flood control and water resources development systems, and other public works in accordance with national development objectives.

It is mandated to continuously develop its technology for the purpose of ensuring the safety of all infrastructure facilities and securing for all public works and highways the highest efficiency and the most appropriate quality in construction. Its responsibility extends to six major areas of infrastructure development, construction and in some cases, their maintenance. These infrastructure services are Highways, Ports, Flood Control, Water Supply, School Buildings and Urban Community Infrastructure. Other public works for which DPWH are responsible extend to the design and construction of buildings of selected state colleges and universities and other public works when requested and funded by end-user government agencies. A summary of DPWH's responsibilities is given below:

- 1) Highways: Integrated planning of the Philippine Highway system; funding, design, construction and maintenance of national roads, (provincial, city, municipal, and barangay roads in collaboration with LGUs)
- 2) Ports: Planning, funding, design and construction of foreign-assisted fishing ports and municipal (feeder) multi-purpose ports, (Other ports are concerned with DOTC and LGUs)
- 3) Flood Control: Planning, funding, construction, and maintenance of major flood control, and drainage systems and seawalls. (Local drainage concerned is with LGUs)
- 4) Water Supply: Funding, design and construction of Level-1 facility (point source) with foreign financing. (Locally funded Level-1 is concerned with LGUs.)
- 5) School Buildings: Design and construction and maintenance of buildings of national government agencies. (Funded mainly by concerned agencies)
- 6) Urban Community Infrastructure: Planning, funding, construction, and maintenance of basic national infrastructure in depressed areas of urban centers with foreign assistance. (Locally funded community infrastructure is concerned with LGUs)
- 7) Other Public Works: Design and construction of buildings of selected state colleges and universities, and other nationally-funded public works. (Funded by end-user agencies)

Functionally, DPWH is to do the following tasks:

- 1) Provide technical services for the planning, design, construction, maintenance and /or operations of infrastructure facilities;
- 2) Develop and implement effective codes, standards and reasonable guidelines to ensure the safety of all public and private structures in the country and assure efficiency and proper quality in the construction of public works;
- 3) Ascertain that all public works plans and project implementation designs are consistent with current standards and guidelines;
- 4) Identify, plan, secure funding for, program, design, construct or undertake prequalification, bidding and award of contracts of public works projects with the exception only of specialized projects undertaken by government corporate entities with established technical capability and as directed by the President of the Philippines or as provided by law;
- 5) Provide the works supervision function for all public works construction and ensure that actual construction is done in accordance with approved government plans and specifications;
- 6) Assist other agencies, including the local government, in determining the most suitable entity to undertake the actual construction of public works projects;
- 7) Maintain or cause to be maintained all highways, flood control, and other public works throughout the country except for those that are the responsibility of other agencies as directed by the President of the Philippines or as provided by law;
- 8) Provide an integrated planning, flood control, and water resource development system and other public works;
- 9) Classify roads and highways into national, regional, provincial, city, municipal, and other barangay roads and highways, based on objective criteria it shall adopt; provide or authorize the conversion of roads and highways from one category to another; and
- 10) Delegate to any agency it determines to have the adequate technical capability, any of the foregoing powers and functions.

The Department is headed by a Secretary, assisted by four undersecretaries and an equal number of assistant secretaries. It has five Staff Bureaus consisting of:

- 1) Bureau of Design
- 2) Bureau of Construction
- 3) Bureau of Maintenance
- 4) Bureau of Equipment
- 5) Bureau of Research and Standards

It maintains numerous offices nationwide such as regional offices proper, district engineering and project management offices as well as equipment service offices. A breakdown of its key organizational units is presented below:

Key Unit	No. of Units
Service	6
Staff Bureau	5
Regional Office	15
District Engineering Office	116
Sub-District Engineering Office	16
Project Management Office	29
Regional Equipment Service	15
Area Equipment Service	16

There are four national government agencies which are attached to the Department, namely: (1) Metropolitan Waterworks and Sewerage System (MWSS), (2) Local Water Utilities Administration (LWUA), (3) National Water Resources Board (NWRB), and (4) Toll Regulatory Board (TRB). These agencies are attached for purposes of policy and program coordination only.

The Department of Public Works and Highways (DPWH) is responsible for developing integrated national plans and programs for water supply and flood control consistent with national government development thrusts and policies.

J2.3.3 Department of Environment and Natural Resources

The Department of Environment and Natural Resources (DENR) is the primary government agency responsible for the sustainable development of the country's natural resources and ecosystems. It was created by virtue of Executive Order No. 192 on June 10, 1987.

Its mandate is the conservation, management, development and proper use of the country's environment and natural resources as well as the licensing and regulation of all natural resources as may be provided by law, in order to ensure equitable sharing of the benefits derived from them for the welfare of the present and future generations of Filipinos. DENR's functions are to:

- 1) Formulate and implement the department's policies, plans and programs for sustainable development;
- 2) Support natural resources-based industries to promote countryside development;
- 3) Provide raw materials to meet increasing demands and at the same time keeping adequate reserves for environmental stability;
- 4) Encourage and enhance participation of local communities/government units and non-governmental organizations (NGOs) in environment and natural resources;
- 5) Regulate the exploration, disposition and utilization of the country's environment and natural resources;
- 6) Conduct inventory, survey and assessment of the country's environment and natural resources;
- 7) Provide a holistic approach to the control of environmental pollution through the implementation of reasonable and acceptable standards for environmental quality;

- 8) Establish an Integrated Protected Areas (IPAs); and
- 9) Create alternative energy sources of fuelwood.

In accomplishing its tasks, DENR shall be guided by major objectives which shall serve as the basis in formulating policies and programs. These are to:

- 1) Assure the availability and sustainability of the country's natural resources through judicious use and their systematic restoration or replacement, whichever possible;
- 2) Increase the productivity of natural resources in order to meet the demands for forest, mineral and land resources of a growing population in a manner consistent with environmental protection and enhancement;
- 3) Enhance the contribution of natural resources towards the achievement of national economic, political and social development and ecological integrity;
- 4) Promote equitable access to natural resources by different sectors of the population;
- 5) Maintain a desirable level of environmental quality; and
- 6) Conserve specific terrestrial and marine areas representative of Philippine natural and cultural heritage for present and future generations.

The present technical concerns of DENR are focused on coastal environment development, community organizing, urban and roadside forestry and urban pollution. At this point, an examination of its current thrusts, programs and projects will seem in order. These concerns are spread over eight major areas, namely:

- 1) **Sustainable Development of Forest Resources**
This policy is geared towards the development of forest resources and the prevention of depletion and harmful after-effects of over-exploitation as well as the provision for the needs of the present generation without sacrificing the demands of future generations through proper resource use and allocation. The accompanying programs under this are:
 - a) The National Forestration Program
 - b) The National Integrated Protected Areas System
 - c) Forest Resources Inventory
 - d) Soil and Watershed Rehabilitation and Management
 - e) Range and Timber Management
 - f) Urban Forestry/Clean and Green Program
 - g) Industrial Forest Plantations
 - h) People-Oriented Forestry Programs
- 2) **Optimal Utilization of Land and Minerals**
This policy strives to make the most favorable use of non-renewable resources such as land and mineral resources by accelerating the survey and titling as well as the evaluation and classification of lands to determine their best uses as well as to generate more geological data for mineral resources. The existing programs under this are:
 - a) Land Classification and Evaluation

- b) Cadastral Survey
 - c) Final Lot Survey
 - d) Research and Development on Mineral Resources Utilization
 - e) Stone Industry Resources Survey
 - f) Survey and Inventory of Foreshore and Reservations
 - g) Delineation of Ancestral Domains
- 3) **Social Equity and Efficiency in Resource Use**
 This policy incorporates the social, economic and political dimensions of resource use into the Department's comprehensive scheme of resource and environmental management. It aims at rectifying the imbalance in resource allocation and permitting people participation in decision-making. Under this, the following programs are being pursued:
- a) Integrated Social Forestry
 - b) Community-based Forest Management Program
 - c) Community Forestry Program/Center for People Empowerment in the Uplands
 - d) Handog Titulo Program
 - e) Ancestral Domains Management Program
 - f) Promotion and Rationalization of Small-scale Mining
 - g) Agrarian Reform in Public Lands
- 4) **Environment Management**
 This policy seeks to protect and preserve the remaining resources as well as prevent further degradation which are caused by a variety of industrial pollution and misuse of natural resources. In this concept, the programs are:
- a) Philippine Strategy for Sustainable Development
 - b) Strengthening of the Environmental Impact Assessment (EIA) System
 - c) River Revival Program
 - d) Anti-Smoke Belching Campaign
 - e) Monitoring of Air and Water Quality
 - f) Metropolitan Environment Improvement Programme
 - g) Solid Waste Management
- 5) **Ecosystems Research and Development**
 This policy involves the implementation of integrated research programs for ecosystems and natural resources; and the generation of technologies relevant to sustainable use of resources by means of research projects. This policy has these programs:
- a) Technology Generation/Verification
 - b) Packaging of Technology and Information
 - c) Technology Dissemination
 - d) Establishment of Pilot Research Plantations
 - e) Networking
 - f) Ecological Profiling
 - g) Dipterocarp Plantation Establishment
 - h) Information Systems Development and Maintenance
- 6) **Coastal Resources Management**
 This is directed at establishing a community-based management program for

coastal areas with emphasis on improving the welfare of coastal dwellers and enhancing their livelihood. The programs are:

- a) Resource Inventory and Ecological Assessment
 - b) Community-based Coastal Management
 - c) Development of Alternative Livelihood in the Coastal Environment Program
 - d) Establishment of Marine Protected Seascapes Areas
 - e) Coastal Pollution Assessment and Monitoring
- 7) Protected Areas and Wildlife Management
This policy thrust aims to conserve biological diversity. It is focused on preserving the pristine nature of the country's wildlife and natural landscape of protected areas. Programs are:
- a) Implementation of the National Integrated Protected Area System Law
 - b) Conservation of Priority Protected Areas
 - c) National Integrated Protected Areas Project
 - d) Philippine Biodiversity Country Study
 - e) Wildlife Regulation and Trade
 - f) Conservation and Protection of Caves and its Resources
 - g) Prospecting of Biological and Genetic Resources
- 8) Other Major Programs, such as:
- a) Laguna Lake Management
 - b) Mapping
 - c) Coast and Geodetic Surveys
 - d) Remote Sensing and Resource Data Analysis
 - e) Gender and Development

The Department is headed by a Secretary. He has under him, for assistance, three undersecretaries and three assistant secretaries. It has five staff bureaus and maintains 15 regional executive offices and three national government agencies are attached to it. The five bureaus are:

- 1) Lands Management Bureau (LMB) absorbed the functions and powers of the defunct Bureau of Lands and now advises the Secretary (DENR) on matters pertaining to rational land classification, management and disposition.
- 2) Forest Management Bureau (FMB) integrated the powers of the defunct Bureau of Forest Development and the Wood Industry Development Authority and now advises the Secretary on matters relating to forest development and conservation.
- 3) Environmental Management Bureau (EMB) integrated the functions of the National Pollution Control Commission (NPCC), the National Environmental Protection Council (NEPC) and the Environmental Center of the Philippines (ECOP) – all these bodies are not existing anymore – and now advises the Secretary on matters pertinent to environmental management and conservation, and pollution control.
- 4) Ecosystems Research and Development Bureau (ERDB) assumed the functions of the Forest Research Institute (FORI) and the research functions of the National

Mangrove Committee (NMC). It is now responsible for technical researches of the department and the formulation of integrated research programs on ecosystems and natural resources.

- 5) Protected Areas and Wildlife Bureau (PAWB) absorbed the functions of the Parks and Wildlife Division and the Marine Parks Program of the defunct BFD, the Calauit Preserve and Wildlife Sanctuary, Presidential Committee on the Conservation of the Tamaraw, Ninoy Aquino Parks and Wildlife Nature Center, and Shares in Kabuhayan Program. PAWB is now responsible for the establishment and management of an Integrated Area System as well as the formulation of policies for the preservation of biological diversity.

The three attached agencies are briefly described in the following paragraphs:

- 1) National Mapping and Resource Information Authority (NAMRIA) conducts, integrates and regulates the functions of geodetic and geophysical surveys, land classification, mapping, charting and oceanography, aerial photography, remote sensing, management of resource information needed by the public and private sector and research development.
- 2) National Resources Development Corporation (NRDC) promotes natural resources development and conservation through involvement in pioneering mobile production and marketing venture or projects using innovative technologies, systems and strategies except that ventures and activities which will compete with the private sector should be avoided save in cases where the revenues of NRDC are allocated for financing specific development projects.
- 3) Laguna Lake Development Authority (LLDA) undertakes a comprehensive survey of the physical and natural resources and potential of the Laguna de Bay region, particularly the socio-economic conditions, the development of resources and the regional problems; drafts a comprehensive and detailed plan with the objective of promoting the region's rapid socio-economic development; and approves or disapproves all proposals and development activities within the lake region.

LLDA is authorized to conserve and develop the resources of the Laguna de Bay Region and promote the socio-economic well-being of people in coordination with the local government and other public agencies.

The Department of Environment and Natural Resources (DENR) is tasked with the duty of formulating policies and guidelines for the enforcement of environmental protection and pollution control regulations. It is primarily responsible for the preservation of watershed areas and helps in the rational and efficient management of water resources.

J2.3.4 Department of Health

The Department of Health (DOH) is the agency primarily responsible for the formulation, planning, implementation and coordination of the policies and programs in the field of health. It was reorganized structurally and functionally under the provisions of Executive Order No. 119.

Its general objective is to promote, protect, preserve or restore the health of the people through the provision and delivery of health services and through the regulation and

encouragement of providers of health goods and services.

DOH discharges the following functions and has the following powers:

- 1) Define the national health policy and formulate and implement a national health plan and initiate proposals on national health issues which have health implications;
- 2) Provide for health programs, services, facilities and other requirements as may be needed;
- 3) Assist, coordinate or collaborate with local communities, agencies and interested groups including international organizations in activities related to health;
- 4) Administer all laws, rules and regulations in the field of health, including quarantine laws and food and drug safety laws;
- 5) Collect, analyze and disseminate health statistical and other relevant information on the country's health situation, and require the reporting of such information from appropriate sources;
- 6) Propagate health information and educate the population on important health, medical and environmental matters which have health implications;
- 7) Undertake health and medical research and conduct training in support of its priorities, programs and activities;
- 8) Regulate the operation of and issue licenses and permits to government and private hospitals, clinics and dispensaries, laboratories, blood banks, drug stores and such other establishments which by nature of their functions are required to be regulated by the Department; and
- 9) Issue rules and regulations concerning the implementation of established health policies.

The head of the department is a Secretary, assisted by four undersecretaries and four assistant secretaries. It maintains a total of 15 regional offices nationwide (12 geographical regions and one each for the National Capital Region, the Cordillera Administrative Region and the Autonomous Region of Muslim Mindanao). It has a number of bureaus and services taking care of specific health concerns. The department exercises supervision over 15 special and specialty hospitals, medical centers and health institutes.

There are two units in DOH which have special participation in the overall water resource administration. Its Bureau of Research Laboratories (BRL) is involved in water quality and sanitation segment of the resource sector. BRL monitors water quality on a nationwide basis. Its laboratory facilities in the different regions analyze the quality of drinking water in their areas of operation.

The Environmental Health Service (EHS) is another unit of DOH whose duty, among others, is to develop and implement sanitation programs and strategies to address environmentally related diseases. Invariably, those programs or portions thereof are devoted to water quality and sanitation.

The list presented below is an outline of its hierarchical administration.

Undersecretaries

- 1) as Chief of Staff
- 2) for Medical Services
- 3) for Management Services
- 4) for Facilities, Standards and Regulation

Assistant Secretaries

- 1) for Special Concerns
- 2) for External Relations
- 3) for Operations
- 4) for Financial Operations and Frontline Services Audit

Hospitals under DOH's Supervision

- 1) Philippine Heart Center
- 2) Lung Center of the Philippines
- 3) National Kidney Institute
- 4) Philippine Children's Medical Center
- 5) Jose R. Reyes Memorial Hospital
- 6) San Lazaro Hospital
- 7) Rizal Medical Center
- 8) East Avenue Medical Center
- 9) National Center for Mental Health
- 10) Philippine Orthopedic Center
- 11) Quirino Memorial Medical Center
- 12) National Children's Hospital
- 13) Jose Fabella Memorial Medical Center
- 14) Tondo Medical Center
- 15) Research Institute for Tropical Medicine

J2.3.5 Department of Agriculture

The Department of Agriculture (DA) was created under Presidential Decree No. 461 which provided for the reorganization of the then Department of Agriculture and Natural Resources into two separate departments, namely: (1) Department of Agriculture, and (2) Department of Environment and Natural Resources.

The DA is the principal agency of government responsible for the promotion of the country's agricultural growth and development. It is concerned with the enhancement of the quality of life, particularly those of small farmers and fishers, and on the sustainability of resource productivity over the longer term.

Its primary objective is to increase real incomes of farmers/fishermen in support of national goals of alleviating poverty, generating productive opportunities, fostering social justice and equity, and promoting sustainable economic growth. It must help ensure food security and support actively the effort to attain self-sufficiency in rice and corn. Its activities must be geared towards increasing export earnings and reducing imports of commodities that can be produced competitively in the country. The DA is thus expected to help in developing farmers/fishermen organizations and in developing labor intensive and employment - generating agro-industrial enterprises.

The DA performs the following functions:

- 1) The creation of policy and environment conducive to increased incomes in agriculture;

The DA shall reform policies which impede agricultural growth. It shall espouse the adoption of policies which give the highest priority to the development of agriculture and the promotion of equity such as support for and participation in the Comprehensive Agrarian Reform Program (CARP);

- 2) The production, verification and dissemination of information relevant to productivity and development;

The department shall undertake a research and extension program centered on forming systems development. This program should aim to (a) strengthen the linkage between research and extension; (b) develop and broaden the adoption of production and processing techniques suitable to Philippine conditions; (c) identify and promote the sustainable use of resource capabilities; and (d) assess commodity market conditions and prospects;

- 3) The production, testing and dissemination of superior plant and animal germplasm.

DA shall lead and support private sector efforts in the development, production and distribution of superior crop varieties and breeds of livestock and fishes suited to Philippine conditions. It shall focus its promotion and dissemination activities to extension, demonstration and provision of parent stock and fish juveniles;

- 4) The facilitation of market process and the promotion of agricultural enterprises.

The department shall help agricultural producers and agri-businessman, especially low-income farmers, in processing and marketing their products, such as by linking them up with processors/buyers; helping conclude marketing agreements, and facilitating access to international markets. It shall assist agricultural entrepreneurs in getting financing facilities by directing them to potential sources and by expanding credit guarantee and insurance facilities;

- 5) Regulation

DA shall continue to strengthen its regulatory activities in order to (a) prevent over-exploitation of resources and ensure their long-term productivity; (b) protect the health and safety of the populace; (c) prevent and/or contain the spread of plant, fish and animal pests and diseases; (d) prevent manipulations in the markets of staple agricultural commodities and inputs; (e) protect domestic agricultural producers from unfair competition of imports made cheap through subsidies by exporting countries; (f) implement international commodity agreements to which the Philippines is a party; and (g) ensure the quality of Philippine agricultural exports and increase their share in the world market;

- 6) Implementation of empowerment programs to provide access to the benefits of development to groups which have been disadvantaged due to the inequitable distribution of resources or market failures;

- 7) Stabilization of supplies and prices of rice and corn.

Administratively, the DA is headed by a Secretary who gets assistance from three undersecretaries and the same number of assistant secretaries. The undersecretaries handle separate areas of concern as follows: (1) Fisheries, Livestocks and Legislative and Executive Liaison; (2) Crops, Regional Operations, Research and Training; (3) Finance, Administrative and Special Services.

The three assistant secretaries take charge of specific sector tasks, namely: (1) Policy and Planning, (2) Livestock, and (3) Regional Operations. It has eleven bureaus under it consisting of: (1) Bureau of Soils and Water Management, (2) Bureau of Fisheries and Aquatic Resources, (3) Bureau of Animal Industry, (4) Bureau of Plant Industry, (5) Bureau of Agricultural Research, (6) Bureau of Agricultural Statistics, and (7) the Agricultural Training Institute. It has regional posts of regional directors in 14 areas of the country including the Cordillera Administrative Region and the Autonomous Region of Muslim Mindanao.

The DA is one department with the most number of agencies (council, authority, commission, administration, institute, board, corporation, center) attached to it. The following are attached to the department:

- 1) National Irrigation Administration
- 2) National Tobacco Administration
- 3) Sugar Regulatory Administration
- 4) Fertilizer and Pesticide Authority
- 5) Fiber Development Authority
- 6) National Food Authority
- 7) Philippine Coconut Authority
- 8) Philippine Fisheries Development Authority
- 9) Sacobia Development Authority
- 10) Quedan Guarantee Fund Board
- 11) Philippine Carabao Research and Development Center
- 12) Southeast Asian Fisheries Development Center
- 13) National Meat Inspection Commission
- 14) Philippine Cotton Corporation
- 15) Philippine Dairy Corporation
- 16) Agricultural Credit Policy Council
- 17) Livestock Development Council
- 18) National Agricultural and Fishery Council
- 19) National Nutrition Council
- 20) Philippine Rice Research Institute
- 21) National Post Harvest Institute for Research and Extension

The Bureau of Soils and Water Management (BSWM) under the DA undertakes the assessment, development and conservation of existing and potential soil and water for agriculture and conducts cloud seeding activities. Another bureau under it, the Bureau of Fisheries and Aquatic Resources (BFAR) formulates plans for the proper management, accelerated development and proper utilization of the country's fisheries and other aquatic resources.

The National Irrigation Administration (NIA), an agency attached to the DA, develops comprehensive water resources projects for irrigation purposes and does related activities such as flood control, drainage and land reclamation.

J2.3.6 Department of Energy

The Department of Energy (DOE) was created in 1992 under Republic Act No. 7638. It is mandated to ensure a continuous, adequate and economic supply of energy with the end in view of ultimately achieving self-reliance in the country's energy requirements through the integrated and intensive exploration, production, management and development of the country's indigenous energy resources and through the judicious conservation, renewal and efficient utilization of energy to keep pace with the country's growth and economic development and taking into consideration the active participation of the private sector in the various areas of energy resource development and to rationalize, integrate and coordinate the various programs of the government towards self-sufficiency and enhanced productivity in power and energy without sacrificing ecological concerns.

Its power and functions are to:

- 1) Formulate policies for the planning and implementation of a comprehensive program for the efficient supply and economical use of energy consistent with the approved national economic plan and with the policies on environmental protection and conservation and maintenance of ecological balance, and provide a mechanism for the integration, rationalization and coordination of the various energy programs of the Government;
- 2) Develop and upgrade the existing Philippine energy program which shall provide for an integrated and comprehensive exploration, development, utilization, distribution and conservation of energy resources, with preferential bias for environment-friendly, indigenous and low-cost sources of energy. The program shall include a policy direction towards the privatization of government agencies related to energy, deregulation of power and energy industry, and reduction of dependency on oil-fired plants;
- 3) Establish and administer programs for the exploration, transportation, marketing, distribution, utilization, conservation, stockpiling, and storage of energy resources of all forms, whether conventional or nonconventional;
- 4) Regulate private sector activities relative to energy projects as provided for under existing laws, however, the Department shall endeavor to provide for an environment conducive to free and active private sector participation and investment in all energy activities;
- 5) Assess the requirements of, determine priorities for, provide direction to, and disseminate information resulting from energy research and development programs for the optimal development of various forms and energy production and utilization technologies;
- 6) Formulate and implement a program for the accelerated development of non-conventional energy systems and the promotion and commercialization of its application;
- 7) Devise ways and means of giving direct benefit to the province, city, or municipality, especially the community and people affected, and preferential benefit to the region that hosts the energy resource and/or the energy generating facility: Provided, however that the other provinces, cities, municipalities, or regions shall not be deprived of their energy requirements;

- 8) Encourage private enterprises engaged in energy projects including corporations, cooperatives, and similar collective organizations, to broaden the base of their ownership and thereby encourage the widest public ownership of energy-oriented corporations;

At the helm of the Department is a Secretary. Assisting him are two undersecretaries for the two sectors of energy Resources and Power, respectively. Down the line are two assistant secretaries, one for operations and the other for policy and programs. DOE has four bureaus, namely:

- 1) Energy Planning Monitoring Bureau
- 2) Energy Industry Administration Bureau
- 3) Energy Research Development Bureau
- 4) Energy Utilization Monitoring Bureau

The Department is charged with promoting the development of indigenous energy resources for projects such as mini-hydros.

J2.3.7 Department of the Interior and Local Government

The Department of the Interior and Local Government (DILG) was created and reorganized pursuant to the provisions of Memorandum Order No. 27 of the Office of the President directing the streamlining of the executive department of government; Republic Act No. 6975 which reorganized the DILG; Administrative Order No. 269 which delegated the power of general supervision of the President over local governments to DILG; and RA No. 7160 otherwise known as the Local Government Code of 1991.

Its mandate is to promote peace and order, ensure public safety and further strengthen local government capability aimed towards the effective delivery of basic services to the citizenry. Towards this end, its objectives are:

- 1) To promote peace and order, ensure public safety, strengthen capability of local government units through active people participation and a professional corps of civil servants within a just social order;
- 2) To achieve peaceful, self-reliant and progressive communities nationwide.

Local governments are called upon to actively participate in accelerating economic development, sustaining political stability and promoting social progress. In this regard, the development of the executive, technical and financial capabilities of local governments is to be pursued in earnest. LGUs are, under the Local Government Code of 1991, given more latitude for resource generation, such as generation of local revenues, local share in national taxes, grants and subsidies, and in credit financing.

The structural composition of the department consists of the department proper, the bureaus and offices under it, the Local Government Academy, the National Police Commission, the Philippine National Police and the Philippine Public Safety College.

The department proper comprises the Office of the Secretary and his immediate staff. The Secretary is assisted by two undersecretaries, one for Local Government and the other for Peace and Order. There are three career assistant secretaries, each responsible for major

functions as (1) plans and programs, (2) administration and human resource development, and (3) finance and controllership. There are staff offices and support services in this unit of the department.

The bureaus are: Bureau of Local Government Supervision (BLGS), Bureau of Local Government Development (BLGD), the Bureau of Fire Protection (BFP) and the Bureau of Jail Management and Penology (BJMP). The BLGS assists the secretary in the exercise of the power of general supervision of the President over the local governments and in the formulation and implementation of national laws, policies and standards concerning local government operations and their personnel. BLGD establishes and prescribes plans, policies, programs and standards and provides technical assistance to strengthen the administrative, fiscal and technical capabilities of local government offices and personnel.

The Philippine National Police (PNP) shall enforce all laws and ordinances relative to the protection of lives and properties, maintain peace and order and take all necessary steps to ensure public safety. It shall investigate and prevent crimes, effect the arrest of criminal offenders, bring offenders to justice and assist in their prosecution.

BFD or Fire Bureau is responsible for the prevention and suppression of all destructive fires on buildings, houses, and other structures, forests, land transportation vehicles and equipment, ships or vessels docked at piers or wharves or anchored in major seaports, petroleum industry installations, plane crashes and other similar incidents, as well as the enforcement of the Fire Code. The Fire Bureau shall have the power to investigate all causes of fires and, if necessary, file the proper complaints with the city or provincial prosecutor who has jurisdiction over the case. The Fire Bureau is composed of provincial offices, district offices and city or municipal stations.

BJMP or Jail Bureau exercises supervision and control over all city and municipal jails. Provincial jails are supervised and controlled by the provincial governments.

The National Police Commission (NAPOLCOM) is a collegial body within the department, composed of a chairman and four commissioners. The secretary of the department shall be ex-officio chairman, while the vice-chairman shall act as the executive officer of the commission. The commission shall administer and control the Philippine National Police in pursuance of Section 6, Article XVI of the Constitution and shall be responsible for the effective discharge of all functions vested in it by law.

The Local Government Academy (LGA) is responsible for human resource development and training of local government officials and personnel of the department proper and the local government bureaus including regional field offices.

The Philippine Public Safety College (PPSC) is the premier educational institution for training, human resource development and continuing education of all personnel of the PNP, Fire and Jail bureaus. Its organizational structure and staffing pattern is non-uniformed in character. PPSC integrated into one roof the responsibilities and functions of the then Philippine National Police Academy, the Fire Service Training Center, the Philippine National Training Center and the National Police College.

J2.3.8 National Irrigation Administration

The National Irrigation Administration (NIA) was established in 1963 as a government agency charged with the development, operation and maintenance of irrigation systems all over the

country. Its predecessor was the Irrigation Division of the defunct Bureau of Public Works whose functions were absorbed by the new NIA.

The NIA aims to develop water resources for irrigation and provide corollary services in line with the agricultural development program of the national government. In particular, NIA is to develop irrigation systems in support of the national food production program, whose level of service should be adequate to enhance the economic and social growth in the rural areas. Consequently, NIA is to ensure their stability through the proper maintenance and operation of these systems.

Functionally, NIA's areas of concern are to develop all available water resources in the country, primarily for irrigation purposes; plans, design, construct and/or improve all types of irrigation systems and appurtenant structures; operate, maintain and administer all national irrigation systems; supervise the operation, maintenance, repair and/or administer all commercial and pump irrigation systems constructed, improved or repaired with government funds; and to delegate fully or partially, the management of national irrigation systems to duly organized cooperatives or associations.

The NIA is authorized to charge and collect from all beneficiaries of all irrigation systems under its administration such fees and charges as may be necessary to cover the cost of operation, maintenance and insurance, and to recover the cost of construction within a reasonable period of time in accordance with government policy.

To encourage the continued participation of farmer beneficiaries in the development and operation of irrigation facilities, the government shall bear the interest on all indebtedness for the construction of the irrigation projects. NIA is authorized to impose such charges to the extent only of recovering the operation and maintenance cost of such facilities, the cost of their construction, but making sure that those charges will not diminish or destroy the beneficiaries' incentive to avail of the irrigation services and that those charges are within the beneficiaries' capacity to pay.

Its organizational set-up consists of a seven-man Board of Directors and a Management hierarchy headed by an administrator. He is assisted by a deputy administrator and four assistant administrators who are responsible for four different areas of operation. The four services are: (1) Project Development and Implementation; (2) Systems Operations and Equipment Management; (3) Finance and Management; and (4) Administrative Services.

It has 13 regional irrigation offices (RIO) nationwide, 67 provincial irrigation offices (PIO) and 101 irrigation systems offices (ISO). The Upper Pampanga River Integrated Irrigation System (UPRIIS) and the Magat River Integrated Irrigation System (MRIIS) are of the same level as the regular RIO's. Regional offices 7 and 8 covering the areas of Central and Eastern Visayas have been merged into one regional office which is Region 7, based in Tacloban City.

J2.3.9 National Power Corporation

The National Power Corporation (NPC) was created in 1936 under Commonwealth Act No. 120 as a non-stock corporation. By virtue of Republic Act No. 2641, it was converted into a stock corporation.

In 1974, NPC was placed under the Office of the President. Later in 1975 it was attached to the then Department of Public Works, Transportation and Communications. In October of 1977, Presidential Decree No. 1206 created the Department of Energy to which NPC is

presently an attached agency.

NPC is mandated to set up transmission line grids and construction of associated generation facilities in Luzon, Visayas and Mindanao, and other major islands in the country. It is responsible for supplying reliable electricity at the least possible cost to its customer, mainly entities that distribute to the final consumers and a few industrial firms. In the aftermath of the country's sad experience from the oil crisis in the 1970's, NPC now undertakes the development of non-oil based power sources such as hydro, nuclear, geothermal, coal and other energy sources. These mandates may be summarized as follows:

- 1) Promote the total electrification of the country;
- 2) Undertake the generation of power and the production of electricity through the development of hydro, oil, geothermal, coal, nuclear and other sources, as well as the transmission of electric power on a nationwide basis;
- 3) Set up transmission line grids and construct associated generation facilities.

The powers, functions, attributes and functions of NPC are as follows:

- 1) Investigate and survey for the development of water power in any part of the Philippines;
- 2) To take water from any stream, river creek, lake, spring or waterfall; to intercept and divert the flow of waters, to alter, straighten, obstruct or increase the flow of waters in streams or water channels for purposes specified in the act;
- 3) To construct, operate and maintain power plants, auxiliary plants, dams, reservoirs, pipes, mains, transmission lines, power stations and substations, and other works for the purpose of developing hydraulic power from any river, creek, lake, spring and waterfalls in the Philippines and supplying said power to the inhabitants thereof; acquire, construct, install, maintain, operate and improve gas, oil or steam engines; to establish, develop, operate, maintain and administer power and lighting systems for the transmission and utilization of its power generation; to sell electric power in bulk to (1) industrial enterprises, (2) city, municipal or provincial systems and other government institutions, (3) electric cooperatives, (4) franchise holders and (5) real estate subdivisions;
- 4) To construct works across or otherwise, any stream, watercourse, canal, ditch, flume, street, avenue, highway or railway of private and public ownership, as the location of said works may require. The Corporation is hereby given the right of way to locate, construct and maintain such works over and throughout the lands owned by the Republic of the Philippines or any of its branches or political subdivisions;
- 5) To contract indebtedness and issue bonds subject to the approval of the President upon recommendation of the Secretary of Finance;
- 6) To exercise complete jurisdiction over watersheds surrounding the reservoir of plants and/or projects constructed and proposed to be constructed by the Corporation, subject to the needs of waterworks systems, and the requirements of domestic water supply; and

- 7) In the prosecution and maintenance of its projects and plants, the Corporation shall adopt measures to prevent environmental pollution, and enhance conservation, development and maximum utilization of natural resources, including the improvement and beautification of its reservoirs and other areas to promote tourism and other related purposes.

The NPC is governed by a National Power Board composed of nine members with the Secretary of Energy as chairman. Its executive head is the President and Chief Executive Officer. The President is supported by a senior vice-president who is at the same time the chief operating officer. Across the broad width of its organization is a number of vice-presidents, each responsible for a major area of activity.

Its operational functions, however, are assigned to five regional centers which have been designated as profit centers. Thus, the five centers are: (1) Northern Luzon Profit Center, Metro Manila Profit Center, Southern Luzon Profit Center, Visayas Profit Center and the Mindanao Profit Center. Each regional center attends to both power generation and power transmission in its area, and in some to one or a number of thermal power plants located in the place.

NPC is responsible for the strategic and rational development of the country's power grids in support of the vision to attain industrialization. It aims to secure a stable supply of electricity through adequate reserve provision. It also encourages private sector participation in energy generation. NPC's role in the water sector is that it develops electric power generation facilities including hydro-electric and geothermal power, and constructs dams, reservoirs, diversion facilities and plants.

The foregoing discussion of government institutions in the water resources sector is not complete if no mention is made of other inter-agency bodies – some ad hoc and others permanent – that address or coordinate activities in the resource area. These include (a) the Joint Executive – Legislative Water Crisis Commission, set up by virtue of the National Water Crisis Act of 1995, (b) Cluster G of the Cabinet, established after the 1994 Water Summit which, among others, recommend policies on water issues to the Cabinet, (c) the Infrastructure Committee in NEDA which evolves policies and programs in water resources to the NEDA board and (d) the Water Crisis Management Committee which assesses the water situation on a periodic basis and recommends to NWRB policy and course of action on reservoir management and related matters.

Except for the JELWCC which ceased function officially after accomplishment of its mandated task, the others are still regularly functioning.

All of these institutions may not improperly crowd the institutional landscape for water resources management but certainly there is reason they should be well coordinated.

J3 Current Institutional Arrangements in Water Resources Management

J3.1 General

The major components of water resources management in the Philippines are vested in the mandates of several agencies of government. For instance, NWRB acts as the primary agent of the State in matters pertaining to the control, supervision and regulation of the use, exploitation, development and protection of the water resources of the nation. NWRB's mantle of authority is derived from the Water Code. Through this instrument, NWRB is able to administer and enforce suitable policies and directions in appropriate water resources management scenarios.

There are other agencies as actively involved in water resources management although the nature of their involvement may be of a different dimension. Whatever role these agencies play in the water sector, their respective parts bear some impact on the overall water resources horizon. It bears noting that the preponderance of water institutions provided a starting point for consolidating moves and activities in the sector toward a focused water sector management system.

For the past four years, the national government has steadfastly pursued its dedication to developing a regime of efficient water resources management system. This is evident in the several events of no mean significance – starting with the commissioning of special water studies in 1993 (PWSSRS), the Water Summit (1994), the Water Crisis Act (1995) through to the PTFWRDM (1996). In between, several studies of paramount impact to the sector run a parallel course in a bid to fully rationalize the sector and revitalize it in terms of both the efficiency of its system and sufficiency of its service and resources.

What is important about these measures is that they have to wade through a maze of multiple agencies which compose the key elements in the hierarchy of the water resources sector. To put the sector in proper light, the major players in the field of water resources management are summarized hereunder.

- 1) Water Resources Planning is shared by NEDA, NWRB, JELWCC (now defunct), the Inter-Agency Committees at the national level, by LLDA and provincial government at the regional level, MWSS, LWUA, DPWH, NIA, DILG, DA, and NWRB at the subsector level.
- 2) Water Resources Assessment is a complementary effort of NWRB, MWSS, BRS, PAGASA, LWUA and NPC.
- 3) Water Quality and Sanitation is a collaborative undertaking of DOH, EMB and EHS with support provided by MWSS and LWUA.
- 4) Watershed Management is led by DENR and assisted by NIA, BSWM, NPC and the WDs.

J3.2 Water Resources Allocation

NWRB remains at the forefront of coordinating and regulating water-related activities in the twelve water resources regions of the country. It is also responsible for the formulation and development of policies in water resources management. The wide concerns of the agency also extend to the monitoring, supervision and regulation of the operations of water utilities outside the operational jurisdiction of MWSS and LWUA.

Early in its operation, some functions of the agency were decentralized in the regions as this was deemed essential for the effective monitoring and regulation of water use in those parts of the country. But a re-organization of the agency in the 1980's caused the streamlining of its function in data collection, as a result of which this responsibility is now lodged with the Bureau of Research and Standards (BRS) under the DPWH. The agency's adjudication and regulatory roles are now exercised from its main office in Quezon City. But field functions such as initial evaluation of applications for water permit, field monitoring of water withdrawals by permittees of water rights and certificates of public convenience and/or necessity, evaluation and appraisal of property and equipment in service for water utilities operation, and periodic inspection, testing and calibration of water meters which were discharged through the agency's deputized agent/personnel from the regional or provincial offices of DPWH, NIA or water district in the area, were maintained. The deputies still act for NWRB in those matters specified in the deputization memorandum.

Policy making is exercised by a governing board composed of ten members (Secretaries of DA, DOH, DTI, DENR, DPWH, NEDA Dir.-Gen., heads of LWUA, MWSS, NIA, NPC) who all serve in an ex-officio capacity. The DPWH secretary is chairman of the governing board as the agency is attached to that department for policy and program coordination.

Organization-wise, NWRB operates under the administrative direction of an executive director and a deputy. The task of allocating water resources and regulating such allocation is performed by a staff of 110 specialists, supported by a team of experts with varied technical expertise. Its personnel are distributed in five divisions, namely: policy and program, water rights, water utilities, monitoring and enforcement, and administration and finance.

NWRB also acts as the main coordinator for legislations, framework plans, information system, and training plans related to water resources allocation and regulation. The agency is also a member of technical working groups of inter-agency coordination forums such as:

- 1) Cabinet Cluster G on Water Resources Management
- 2) Water Crisis Committee
- 3) Joint Executive – Legislative Water Crisis Commission
- 4) Task Force on Water Resources Development and Management
- 5) Groundwater Data Bank

The granting of water permits for water rights and of certificates of public convenience/and necessity is a regular activity of NWRB. This function allows NWRB to adjudicate and regulate water resources extraction and use. The investigation and evaluation of water permit applications is an on-site activity that requires strong presence of NWRB. In most instances, however, NWRB's presence in the locality is put in through its designated deputies from other government agencies (DPWH, NIA and WD). Besides, NWRB has to monitor observance by the grantee, of the terms of the water permit or certificate of public convenience issued. This function basically requires NWRB's physical monitoring aura.

The NWRB also grants and issues certificates of public convenience (CPC) and certificates of public convenience and necessity (CPCN) to privately-owned water utilities (i.e., subdivision water systems). It has also regulatory responsibilities for monitoring privately-owned water utilities which have not acquired their CPCs. This function is among those assumed by the NWRB from the defunct PSC.

J3.3 Water Resources Planning

The development of the country's water resources depends, to a large extent, on an orderly and systematic planning. Development planning requires direction. The country's development thrust in water resources should be based on carefully studied framework plans that can provide technical information on ground water and surface water resources. NWRB is tasked with collating, coordinating and updating the framework plans for water resources and for NEDA to integrate the plans for water resources development and management into national strategies and policies. In 1994, NWRB produced an updated National Framework Plan on Water Resources Management that incorporated Regional Framework Studies.

On the other hand, the NEDA Board which is chaired by the President of the Philippines, formulates national policies and strategies including those on the water resources sector. NEDA has been the leading agency in preparing the Medium Term Philippine Development Plan (MTPDP) and the Medium Term Public Investment Plan (MTPIP). Both planning documents incorporate water resources sector plans at the national and regional levels. There are also coordinating committees established to align development of water resources with the national strategies and fiscal direction of the government.

Today, privatization projects on water supply require approval from the NEDA-ICC. It is necessary that the NEDA-ICC Technical Review Committee endorse the project for approval to the NEDA Cabinet level before the proponent can propose the preparation of studies for the privatized water supply project.

The Development Budget Coordination Committee (DBCC) and the Investment Coordination Committee (ICC) review the MTPDP and the MTPIP to ascertain its adherence to established ceilings for government expenditures for the various sectors, the proper allocation of expenditures for each development activity, and to evaluate the fiscal and balance of payments implications of major projects.

NWRB's role in this segment of water resources management is confined to updating policies on water resources and integrating various subsectoral policies, strategies and plans on water resources. In this respect, NWRB is to recommend to NEDA suitable action plans to address emerging issues in the water resources sector as they evolve.

J3.4 Water Resources Assessment

Assessment of water resources is a collaborative effort by several agencies of government. Water resources assessment relies mainly on water data collected and evaluation of ground and surface water resources. Information essential for water resources assessment can be culled from studies undertaken for about 41 river basins in the 12 water resources regions of the country. This section will describe the key agencies responsible for water data collection, its evaluation and assessment.

The Bureau of Research and Standards (BRS), the National Irrigation Administration (NIA) and the National Power Corporation (NPC) are the three agencies that are primarily responsible for the collection of streamflow data.

In 1974, the NWRB assumed the responsibility of accumulating and processing data on river stages and discharges. The agency maintained the national network for streamflow stations which was transferred to its responsibility by the Water Resources Division of the then Department of Public Works. In 1987, the functions of NWRB were realigned and the

maintenance of the national network of streamflow data was transferred to BRS.

The BRS regularly records streamflow data and publishes its studies and output in a material called the Philippine Water Resources Summary Data for 1970-80 (1991). The actual collection and processing of the streamflow data in the field are under the direct control and supervision of the regional offices of DPWH. It must be noted that the regional offices are primarily project-oriented and are the implementing arms of the department. Water data collection is not an inherent mandate of the office.

There are about 274 monitoring stations nationwide which daily register river stages. The information and data collected from these stations are submitted to the DPWH regional offices where they are fed and processed through the BRS developed computerized data processing system.

The National Irrigation Administration (NIA) and the National Power Corporation (NPC) are also involved in generating streamflow data mainly for the purpose required by their respective projects. Data collection activities by these agencies are normally confined to monitoring stations surrounding their project sites. Information gathered by these agencies are processed but are hardly published. Collectively, these agencies maintain about 168 streamflow stations which monitor river stages and discharges. To be useful, it is necessary that the data gathered by these agencies are included in the information network for streamflow data.

Meanwhile, the National Mapping and Resources Information Authority (NAMRIA) collects topographic, hydrographic and remote sensing data. Among others, the agency is responsible for integrated surveys, oceanography, mapping, charting and land classification. These information are important in water resources development and should complement baseline information required in a water resources master plan.

Another integral part of the water data network is the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) which is tasked to collect streamflow data for flood forecasting and warning system. This agency is also responsible for the establishment and maintenance of the network for meteorological information. PAGASA has launched a hydrology program which can be linked with the streamflow network.

Groundwater information is limited to the groundwater observations performed by the BRS, NIA, Water Districts (WDs) under LWUA, the MWSS, the Rural Water Supply Office of the DPWH, and private well drillers. Information available in the data bank of these agencies is static and mostly confined to the location, well casing and results of pump-testing during the development of these wells. The information gathered by these agencies are not regularly monitored nor documented for dissemination.

J3.5 Water Use Regulation

The extraction and use of water resources is a major regulatory function of the NWRB. Water permits are issued for each specific site and purpose of water resource extraction. These water permits are issued in accordance with the rules and regulations prescribed under the Water Code of the Philippines.

NWRB exercises jurisdiction over water use conflicts between contending water users. A water use controversy is usually presented to a deputized agent of NWRB (field officers of either the DPWH, NIA or WD) who forwards the case to the NWRB for resolution. The

investigative staff of NWRB makes an ocular visit to the site subject of the complaint and gathers the necessary information to help him resolve the controversy.

While NWRB is empowered by law to exercise regulatory functions over the MWSS and the water districts under LWUA, this has not been observed up to now. MWSS continues to be a self-regulating public entity while the water districts still follow the regulatory guidelines of LWUA which is to be expected since the WDs borrow funds from LWUA and in some way, beholden to it. The lender-borrower relationship between LWUA and the WD is very strong. As it is now, the matter of NWRB's supposed regulatory functions over LWUA and the WDs has not been put to a test.

Water utility regulation is a function inherited by NWRB from the Board of Power and Waterworks. Upon the issuance of a CPC to a private water utility, NWRB assumes regulatory power over it – whether it is a private subdivision or an LGU-operated system. But since the Board is short-staffed, it is not capable of conducting on-site inspections outside Metro Manila. As a result NWRB does not actively enforce standards.

J3.6 Water Quality and Sanitation

The quality of surface water is monitored by the Department of Environment and Natural Resources (DENR) through its Environmental Management Bureau (EMB). This is done by its regional offices nationwide. DENR gathers water quality data principally to classify surface water bodies for different types of beneficial use. There are about 74 designated water quality monitoring locations. EMB however does not have technical field personnel to monitor groundwater quality and for this reason it does not regularly perform this activity, except in special cases. A data base for water quality developed by EMB needs updating for it to be most useful in assessing water quality.

The Department of Health (DOH) through its Bureau of Research Laboratories (BRL) monitors quality of drinking water. The regional offices of the DOH are equipped with the appropriate laboratory facilities to analyze the quality of water used for drinking in their respective areas of coverage. The Philippine Drinking Water Standards (PDWS) is the yardstick for determining the potability of water for drinking. Samples of water are tested to see if they meet the standards prescribed by the PDWS so as to be safe for human consumption.

The Environmental Health Services (EHS) is another unit of the DOH and charged with the duty of developing sanitation programs and strategies to address environmentally related diseases. This unit however is constrained by the lack of field offices to promote its programs in other parts of the country.

MWSS monitors water quality in its service area. This is part of its commitment and duty to its consuming public. When there is an incidence of an outbreak of water borne-diseases, MWSS is assisted by the DOH in pinpointing the source of contamination of drinking water.

In the provinces, LWUA monitors the quality of water supplied by the water districts to their consumers. LWUA maintains a rigid compliance standard in this respect which also includes the parameters set by the PDWS. In some instances, the water districts make use of the services and facilities of the BRL, to ensure that the water they produce complies with the standards for drinking water.

J3.7 Tariff Regulation of Water

Article 83 of the Water Code empowers the NWRB to impose and collect reasonable fees or charges for water resources development from water appropriators except when it is for purely domestic purposes. On this basis, NWRB imposes fees on applicants for water permits. The fees imposed are somewhat unreasonably low. This has been pointed out in several studies done in the water resources sector. NWRB also regulates tariffs of privately-owned water utilities, such as the water supply system in a subdivision. The initial tariff of a subdivision system may not reflect the cost of the water facility as this has been incorporated in the sale price of the homelot (house and lot). However, future adjustments of the rate schedule may include a rate of return on investment not exceeding 12% per annum.

MWSS water tariffs are regulated by its Board of Trustees. In this sense, MWSS is a self-regulating water entity. Its Board of Trustees has in its ranks a number of trustees from the private sector. A subdivision within MWSS's jurisdiction must first seek approval of its tariff schedule before NWRB can issue a CPC. This requirement will ensure that the subdivision's rates are at least equal to or higher than those of MWSS in the event that MWSS is requested to take over the subdivision.

LWUA regulates the rates of water districts. The tariffs are formulated by the WDs but are subject to review by LWUA. WD rates are not effective unless presented, before their adoption, to a public-hearing where consumers' views are heard and considered. By its very nature, the public hearing is at best, a referendum on a consultative basis. An increase in water rates can not go beyond 60% of the current rate.

J3.8 Watershed Management

DENR is the principal agency in the effort of protecting the watershed areas. The Forest Management Bureau (FMB) under DENR formulates and recommends policies and programs to effectively nurture, protect, develop, manage and conserve forest lands and watersheds. NIA, NPC, MWSS and the WDs are guided by DENR policies and collaborate with the latter to protect and preserve the watershed areas in their respective areas of responsibility. There are inter-agency agreements by and among them to combine their efforts and resources in maintaining and promoting environmentally sound watershed areas. Community involvement is also encouraged by enlisting people participation in undertakings and development projects on watershed areas, and safeguarding them.

On the other hand, the Bureau of Soils and Water Management (BSWM) under the Department of Agriculture (DA) remains responsible for the assessment, development and preservation of existing and potential soil and water resources for agriculture.

J4 Major Institutional Impediments in the Water Resources Sector

J4.1 Observations

The 1970's ushered the establishment of order in water resources management in the Philippines with the development and enactment of the Water Code of the Philippines, and the creation of the National Water Resources Board (NWRB). These twin developments set up a system and initially rationalized to some degree, the overall mechanism for water sources development, management and regulation. Since then there has been a rapid growth in infrastructure development and in population which threaten the soundness of the current policies in water resources management.

Over the years, pressures on the water resources have steadily increased and weaknesses in management of the resource, both in concept and in implementation have become apparent. This section of this Part-J will describe key observations in the sector which require adjustments to changes that have already occurred due to the fast pace of development and other externalities that exert pressure on the water resources. These changes may need, in the immediate term, amending certain laws, revising policies and updating guidelines to make them responsive to the present water resources situation, and ensure the satisfaction of present and future demands for provision of the resource. In the long run, any action taken now may still alter the deteriorating course that water resources, as a sector, is headed for.

J4.1.1 Composition of the NWRB Board

The NWRB is mandated with the overall management of the water resources of the country. As should befit the board because of its policy-making and adjudication functions, it was constituted as collegiate, and quasi-judicial body composed of six Cabinet Secretaries and four agency heads for water and power. In previous years, its meetings were attended by the highest level of representation. This guaranteed that the decisions made reflected the commitment and position of the offices they represent.

However, in 1987, a constitutional provision was incorporated barring members of the Cabinet from holding any other position aside from their Cabinet positions. The result was to relegate attendance in NWRB Board meetings to secondary, tertiary or even lower level officials. More often than not, these secondary officials have difficulty committing the position of the offices they represent without being overruled by their superiors.

J4.1.2 Lack of Objectivity in Deciding Issues in the Board

Members of the NWRB Board operate on part-time basis. This gives them little time, if at all, to study thoroughly water issues for deliberation and thus decide on them with passive objectivity. Moreover, since some members of the Board are water users themselves, there is a tendency for individual members to take a position on an issue at hand in favor of the interests of the agencies they represent. In a consensus type of decision-making, the concerned member in reality exercises some form of veto power over localized sector issues.

J4.1.3 Conduct of Research Studies

Exploratory studies and research activities produced the 1976 Water Code. DPWH prepared framework plans which provided implementing agencies a better appreciation of the problems outside their own particular sector. The framework plans also served as a mechanism to

develop joint projects among agencies. They could be bases as well for coordinated projects even if undertaken as separate projects by the different agencies.

These plans now require updating but very little effort is directed towards the commissioning of similar studies and researches. The absence of reliable water resources information system diminishes the capacity of concerned parties to make difficult and controversial water allocation decisions. By parallelism, it would be difficult for someone in the private sector to make up his mind on helping the sector in terms of investment where reliable water data are scarce and means of probing them are unavailable.

J4.1.4 Water Use Regulation

The investigation and processing of water permit applications is a locational activity for which NWRB is not properly equipped – in terms of both manpower and resources. On the other hand, the deputization of other government agencies for this purpose has not proven satisfactory. Moreover, the capability of NWRB to monitor compliance with the terms and conditions of the permits it grants, is very limited due to manpower and budgetary constraints for travel-to-site expenses.

Estimates indicate that only about 35% of all water users is in fact subject to a formal permit. There is reason to believe that a substantial number of water abstractions are not reported, at least, to NWRB. Altogether, the permitting system has proven rather ineffective.

J4.1.5 Dispute Resolution

Complaints on water use, water rights conflicts and other controversies related to water resource allocation are initially filed with the deputized agents of NWRB in the locality. The investigation and ensuing hearings on water disputes are to be held in the place to make ocular inspection easy, or site visit convenient. The investigations are regularly handled by hearing officers from NWRB's Manila Office. This would require the travel of such hearing officers to the venue of the investigation. Since NWRB's roster of qualified hearing officers is limited, this practice slows down the process of settling disputes.

J4.1.6 Data Collection

To date, there is no defined program to carry out long-term observations at gauging stations. For streamflow, there are over 1,000 streamflow stations from which BRS, NIA, and NPC conduct their observations. Some stations now appear to have been neglected or abandoned, leaving only some 400 in operational status or properly maintained. For groundwater, one has yet to see a national groundwater network of some sort. Many agencies such as Water Districts, MWSS, and NIA do collect certain data in connection with their production wells, but these are not serially sequenced. There is an existing Groundwater Data Bank linking at least LWUA, NIA and NWRB - this could be developed into a national network. For water quality DENR, through its regional offices, collects water quality data but in order only to primarily classify surface water bodies for different types of beneficial use.

The environmental quality division of EMB (in DENR) does not have its own field staff just like the BRS (in DPWH). EMB, does not undertake the monitoring of groundwater quality. Although it has established a data base for water quality, this has not been updated regularly.

J4.1.7 Enforcement Issue

There has been no effective enforcement of the provisions of the Water Code due to resources constraint. Investigation of cases involving violations of the conditions of the permit issued is often left to the discretion of the deputized agents. In many cases, decisions or directives of NWRB are ignored since it does not have "enforcement powers" to exact compliance with those directives.

The NEDA, DBM and NWRB have not enforced the provision of the Water Code which directs that "no program or project involving the appropriation, utilization, exploitation, development, control, conservation, or protection of water resources may be undertaken without prior approval by NWRB." This situation became very obvious in recent years when NWRB was not given any role in activities related to the privatization of certain water utilities either for distribution or bulk water supply. Neither is NWRB consulted or its approval sought on plans or programs concerning the development or utilization of water resources in some locations.

J4.1.8 Water Resources Planning

There is no integrated plan for water resources development and management. What pass off as such plans are the missions and goals of each sector agency. Little effort has been devoted to require each agency in the resource area to formulate their plans and make them consistent with the overall direction of the whole water resources sector. As it is, it would seem that the various water agencies may plan and do with respect to their water activities with little regard for the entire water resources management thrust.

There is also no system to integrate the plans and programs of the various subsector agencies in water resources. In previous years there were attempts at regional and basin planning for which the corresponding institutions were created. In no time these regional and basin agencies were dissolved and subsector agencies were assigned to continue the programs and projects within the area of basin authorities. At the moment, there is one basin authority left -- the Laguna Lake Development Authority (LLDA).

J4.1.9 Economic Pricing

The regulation of water tariff is separately exercised by NWRB, MWSS, LWUA, NIA and the LGUs. Standards and guidelines applied in water pricing regulation by these agencies are not based on common parameters. On the other hand, raw water pricing is imposed only on the private extractors while government agencies were exempted from abstraction fees until 1996. It was only early this year (1997) that exemptions of government agencies from raw water charges were lifted.

J4.1.10 Policies on Privatized Water Utilities

The present regulatory policies, laws and mechanisms have not considered the potential growth of privatized utilities, wholesale water regulation and retail water regulation. The current basis for regulating water use is not prepared to address the numerous attempts to develop water resources for commercial use. The privatization of water institutions will give rise to a situation where the present policies and guidelines may hardly be applicable.

The law creating the water districts (PD 198 as amended) is ambiguous on the ownership

status of water districts. There is a divergence of opinion on who indeed owns a water district (under LWUA). When a water district is privatized the question of who will receive the proceeds of the privatization process, is likely to emerge.

J4.2 Conclusions

Collectively, the foregoing observations represent institutional impediments in water resources management. Some observations may present problems for which solutions may be evolved in the short run. Others may require remedies that would entail some time, while still others may need a phased timetable.

The following conclusions are drawn from above observations:

- 1) There is a need to strengthen NWRB as an interim measure and make it capable to handle water use regulation and economic pricing regulation;
- 2) There is a need for government to rationalize and define the institutional responsibility for water data collection, water assessment, water resources planning and water use regulation and allocation.
- 3) The institution tasked for water use regulation must have the authority and the enforcement capability to implement its policies, rules and regulations. That agency should be in a position to prosecute violations of the laws and rules for the proper management of water resources.
- 4) There is a need to enact laws and regulations to entice the entry of the private sector (PSP) in water resource development and water distribution.
- 5) The government must address the issue of water rights and the corresponding mechanism to assure unhampered use of those rights even in the face of unwarranted political intervention.
- 6) There is a need to amend PD 198 to clarify the ownership of water districts and define to whom proceeds of privatization shall accrue once a water district is privatized.
- 7) There is a felt need for an apex body to effectively administer the quantitative, qualitative and economic regulation of water resources.