

**SUPPORTING REPORT L**  
**ORGANIZATIONAL/INSTITUTIONAL CONSIDERATION**

# **SUPPORTING-L : ORGANIZATIONAL/INSTITUTIONAL CONSIDERATION**

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## **SUPPORTING-L ORGANIZATIONAL/INSTITUTIONAL CONSIDERATION**

### **1. INTRODUCTION**

In 1974, Hurricane FiFi attacked the Republic of Honduras and gave extremely heavy damage to the northern part of the country. It was again heavily damaged nationwide by Hurricane Mitch in 1998. In Honduras, large scale floods occur every 4 to 5 years in some part of the country and suffer from flood and sediment damage. Under these conditions, the National Emergency Committee (COPECO) was created in 1990 for natural disaster prevention at national, regional and municipal levels.

Municipality Emergency Commission of Central District (CODEM) under COPECO was established in 1998 just few months before the Hurricane Mitch. During the Hurricane Mitch, even though there existed these organizations for disaster prevention, a large damage resulted.

After this calamity, various international cooperation agencies and the local government have developed disaster prevention program to strengthen the institution, to equip necessary tools, to rehabilitate the damaged infrastructures, etc. However, full-dress structural measures for flood mitigation or landslide prevention have not yet been implemented.

The natural disaster prevention works in Tegucigalpa were under jurisdiction of Municipality of the Central District. However, after Hurricane Mitch, SOPTRAVI and SERNA are deeply involved in the rehabilitation works and preventive measures of natural disaster in Tegucigalpa. Therefore, the demarcation of jurisdiction for these sectors (flood mitigation, sediment control or landslide prevention in Tegucigalpa) is not clear.

For disaster prevention measures in Tegucigalpa including (1) preventive measures, (2) emergency operation and (3) rehabilitation, many agencies are to be involved; such as SOPTRAVI, SERNA, SANAA, COHDEFOR, COPECO, CODEM, AMDC, SETCO, etc.

Thus, for effective performance of the disaster prevention program, the close cooperation among these related agencies is extremely important.

This Supporting Report L deals with institutional planning for natural disaster prevention in the Municipality of the Central District.

### **2. KEY AGENCIES AND INSTITUTIONS FOR DISASTER PREVENTION**

There are a substantial number of government agencies and institutions which are involved in, are concerned with, or to undertake activities in the disaster prevention sector. The degree of their involvement, the extent of their participation or the nature of their activities varies from one agency to the other.

The followings are major responsible agencies or organizations for natural disaster prevention in the Municipality of the Central District.

#### **2.1 NATIONAL EMERGENCY COMMITTEE (COPECO)**

The National Emergency Committee (COPECO) was created on 12th of December 1990 by Legislative Decree No.9-90-E succeeding the predecessor "COPEN". It is an organization in

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charge of the disaster prevention under the direct control of the President of the Republic. The major objective of the COPECO is to cope with emergency and disaster caused by natural phenomenon at national, regional and district levels.

The *Figure L.2.1* shows an organization of COPECO as of 2001. In the executive section, there are Direction of Training, Direction of Finance and Administration, Direction of Planning and Evaluation, Direction of Operation and Direction of Information under Board of Directors.

Seven (7) Regions of COPECO were created in the whole country for disaster prevention at national level, containing regional Municipality Emergency Committee (CODEM) for each one of the municipalities which conforms the Regions.

COPECO is formed by the following members:

- a) The President of the Republic
- b) A representative of the Sovereign National Congress
- c) The Secretary of State in the Offices of Government and Justice
- d) The Secretary of State in the Offices of National Defense and Public Security
- e) The Secretary of State in the Offices of Public Health
- f) The Secretary of State in the Offices of Treasury and Public Credit
- g) The Secretary of State in the Offices of Planning, Coordination and Budget
- h) The President of the Central Bank of Honduras
- i) A representative of the Catholic Church
- j) A representative of the Private Sector, designated by the Trade and Industries Chambers Federation
- k) A representative designated by the Peasant Associations, and
- l) A representative of the Honduran Red Cross

After hurricane Mitch, this organization has been revised and reorganized. Before the Hurricane Mitch, COPECO was in charge of only emergency operation but at present, responsible for preventive measures, emergency operations and rehabilitation measures against natural disaster such as floods, earthquake, hurricane, droughts, fires, epidemics and other natural/artificial phenomena.

The competence of COPECO is as follows:

- a) Recommend the executive, the declaration of an emergency of disaster or calamity, in those affected regions, previously a report from the National Committee.
- b) Suggest the measures for the rehabilitation and reconstruction of the damaged areas.
- c) Draw the applicable policies for the attention and management of the emergencies in the country.
- d) Coordinate the reception and distribution of the aids with the members of the system.
- e) According to preliminary reports of evaluation of damages, the magnitude of the disaster is assessed.
- f) Elaborate the Operational Plan of assistance for emergency or disaster.
- g) Elaborate the budget of income and outcome, which is approved by the General Budget Management.
- h) Acknowledgement, analysis and approval of the feasibility studies on projects elaborated and presented by the National Executive Committee.

- i) The other competence allocated in Article 7 of the law that may be applicable.

The number of staff of COPECO is about 60. The annual budget of the year 2001 is about 14 million Lempiras. Among them, about 70% (10 millions) is for personal services. *Table L.2.1* shows budget of COPECO for the year 2001.

As for the regal aspects, the regulated functions of COPECO are summarized in *Table L.2.5*.

## **2.2 MUNICIPALITY EMERGENCY COMMITTEE OF CENTRAL DISTRICT (CODEM-DC)**

The Municipality Emergency Committee (CODEM) was constituted in July, 1998 just three months before Hurricane " Mitch" and is a regional level organization for disaster prevention activities. This is a substructure of COPECO as shown in *Figure L.2.1* and plays an important role especially in case of emergency of natural disaster. There are seven (7) regions for CODEM and the CODEM of Municipality of Central District is included in Region 7. The CODEM is not only internal organization of municipality but rather transversal organization and the members of the Directive Board consisting of the representatives of various governmental and non-governmental organizations such as SOPTRAVI, SANAA, ENEE, etc.

Under the Directive Board, there are three sections; EDAN (Evaluation of damages and analysis of necessities), Communications and Logistic for planning and analysis level. As operation and prevention level, ten (10) sectors exist as shown in *Figure L.2.2*.

The Region 7 includes Departments of Francisco Morazan and El Paraiso. The Municipality of Central District has an area of 1,396.5 km<sup>2</sup> in which 201.5 km<sup>2</sup> is urban area and 1,195 km<sup>2</sup> is rural area. In the urban area, there are twenty-nine (29) sectors including barrios and colonias, and in the rural area, there are thirty (30) zones and sectors including barrios, colonias, caserios and aldeas. Total population of the Municipality is 932,288. Under the CODEM of this Municipality, there are thirty-nine (39) CODELs which function at village community level.

At present, CODEM has a disaster prevention plan for the following selected high risk areas:

1. Barrio el Repalto and adjacent colonias
2. Mountain stream of Bambu
3. Mountain stream of El Sapo
4. The Choluteca River at downstream stretch of the Mallol bridge; Canalization and cleaning
5. Mountain stream of Cacao; Improvement
6. Colonia Las Torres

## **2.3 MINISTRY OF PUBLIC WORKS, TRANSPORT AND HOUSING (SOPTRAVI)**

The Ministry of Public Works, Transport and Housing (SOPTRAVI) is the biggest government agency in infrastructure construction. It is composed of General Direction of Roads, General Direction of Public Works and Housing Programs and Projects Unit as shown in *Figure L.2.3*. It is the State's construction arm responsible for the planning, design, construction and maintenance of infrastructure facilities, particularly national highway, flood and sediment control, and other public works in accordance with national development objectives. The Department of Hydraulic Works under General Direction of Public Works is in charge of flood and sediment control works. Under the Sub-Secretariat of Transportation, there are National Geographical Institute, General Direction of Civil Aeronautics and General Direction of Transportation. The Service of National meteorology is provided by General Direction of



Civil Aeronautics. ENEE which is in charge of hydrological observation for dam is also included in SOPTRAVI.

*Figures L.2.4 and L.2.5* show organizational structures of General Direction of Public Works and Department of Hydraulic Works, respectively.

The number of staff of SOPTRAVI is about 3,600. The annual budget of the year 2000 is about 2.1 billion Lempiras as shown in *Table L.2.2*. Among them, national fund is about 72% of total budget and external fund is about 28%. The construction works of flood and sediment control is included in the public works and the budget of Direction of Public Works is 290 thousand US dollar.

The *Table L.2.6* shows the regulated functions of SOPTRAVI in terms of disaster prevention.

## **2.4 MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT (SERNA)**

The Ministry of Natural Resources and Environment (SERNA) was created in 1996 by Decree No. 218 as an organization for production, management, implementation and evaluation regarding use and conservation of water resources, mineral resources and reusable energy. SERNA is also in charge of conservation of environment, ecosystem, plants and animals in the natural reserve and national park. Hence, any type of environmental investigation and pollution control are executed by SERNA. SERNA consists of Undersecretary of Environment and Natural Resources/Energy as shown in *Figure L.2.6*.

The service in the sector of disaster prevention is held by Section of Territorial Regulation (AOT) under Planning and Management Evaluation Unit (UPEG) which evaluates the flood and landslide damage.

Total number of staff of SERNA is 594 and the budget of the year 2000 is 547 million Lempiras.

SERNA has the laws and regulations shown in *Table L.2.7* in terms of environmental preservation and basin management.

## **2.5 NATIONAL SERVICE AUTHORITY FOR WATER SUPPLY AND SEWERAGE (SANAA)**

SANAA was established by the government decree No.91/61 in order to integrate competence in the field of water supply and sewerage into one centralized organization. The decree attributes the necessary faculties for water supply and sewerage services to SANAA, which include study and planning of hydraulic resources, construction and operation and maintenance of facilities related to water supply and sewerage services, formulation and revision of regulations, and setting and revision of tariff.

In 1994 SANAA started an important reform program. The management worked out new policies and visions to reform SANAA. In 1995 the Honduran government, the World Bank, IDB, and SANAA held a seminar to discuss these policies and visions, and they reached to the following consents:

- Decentralize SANAA into seven (7) regional divisions. The regional divisions have certain autonomy in planning, operation and financial aspects.
- Municipalization of SANAA system will be proceeded in gradual and orderly manner, with careful consideration to regional conditions.
- To realize municipalization of SANAA system in Tegucigalpa, fund for severance

allowance should be provided.

Among the above consents, decentralization of SANAA into seven (7) regional divisions was achieved in 1995. To correspond this restructure, four (4) central divisions for planning, technical, development, and financial were established as normative divisions. *Figure L.2.7* shows the present organization of SANAA.

The Metropolitan Division is responsible for the water supply and sewerage services in Tegucigalpa. *Figure L.2.8* shows the organization structure of the Metropolitan Division of SANAA. Currently the Financial and Planning Divisions under the headquarters of SANAA perform financial, commercial, and planning functions related to the Metropolitan Division.

Before the reform program, SANAA employed around 2,100 staffs, and the management at that time tried to reduce 30 % of total personnel. As of April 2000 SANAA employs 1,788 staffs which means 15 % reduction from 2,100 staffs. Among 1,788 staffs, 832 staffs currently belong to the Metropolitan Division.

*Table L.2.3* shows the balance sheet of SANAA and that of the Metropolitan Division of SANAA for the year 1999. Total assets of SANAA and its Metropolitan Division are 1,914 million and 674 million Lempiras, respectively.

## **2.6 MUNICIPALITY OF THE CENTRAL DISTRICT (AMDC)**

The organization chart of the Municipality of the Central District is shown in *Figure L.2.9*. Under Direction of General Management, there are four (4) sections; Urban Development Management, Financial Management, Administration Management and Social Development Management. Among them, the Urban Development Management is in charge of natural disaster prevention. SOPTRAVI is in charge of disaster prevention projects at national level. The disaster prevention in Tegucigalpa City, however, is under jurisdiction of AMDC. After the "Hurricane Mitch", this jurisdiction is under revision because disaster prevention works in the central district is extremely important not only for the Municipality but also for the nation and the counter measures against natural disaster will need enormous budget.

The budget of AMDC for the year 2000 is 725 million Lempiras as shown in *Table L.2.4*.

The laws and regulations related to disaster prevention of AMDC, such as land use, urban planning, land use restriction in the risk area, right of way of river etc., are shown in *Table L.2.8*.

## **2.7 MINISTRY OF TECHNIQUES AND INTERNATIONAL COOPERATION (SETCO)**

The Ministry of Techniques and International Cooperation (SETCO) is a public administrative organization created recently by the Legislative Decree No. 218-96. SETCO is in charge of determination of priority and objectives of program of the investment and public expense. The followings are roles and competences of SETCO:

- 1) To collaborate with the President of the Republic in the determination of the priorities and the goals of the program of investment and public expense;
- 2) To carry out the execution of the priorities and approved goals, presenting the corresponding reports to the President of the Republic;
- 3) To formulate the policies and strategies for the requests for foreign aid, paying attention to the priorities defined by the President of the Republic;
- 4) To conduct negotiations with the corresponding organizations for obtaining the foreign aid

in accordance with the instructions established by the President of the Republic, coordinating actions with the Ministries of State through their Foreign Aid and Mobilization of Resources Units and with the Ministries of State in the Offices of Finances and Foreign Affairs when appropriate;

- 5) To Sign, after receiving authorization from the President of the Republic, the corresponding Grant-Aid agreements;
- 6) To carry out the execution of the programs financed with the resources obtained, in collaboration with the Ministries of State, through their Foreign Aid and Mobilization of Resources Units, presenting the corresponding reports.

### **3. CURRENT MEASURES TO ADDRESS DISASTER PREVENTION ISSUES**

The Republic of Honduras, which experienced the unheard-of disaster due to Hurricane Mitch in 1998, has been implementing the Master Plan of National Reconstruction and Transformation with technical and financial assistance of foreign and international cooperation agencies. The current measures to address disaster prevention issues are as follows:

#### **3.1 MASTER PLAN OF NATIONAL RECONSTRUCTION AND TRANSFORMATION (PMRTN)**

This master plan was prepared and presented in May 1999 by Reunion de Grupo Consultivo in Stockholm. In this plan, the following major strategies for the intensive, equitable, sustainable and participatory development were presented.

- A. Aspectos Fundamentales de la Estrategia
- B. Reactivacion Economica con Empleo Productivo
- C. Combate a la Pobreza y Promocion del Desarrollo Humano Integral
- D. Recursos Naturales y Gestion de Riesgos
- E. La Participacion Democratica en el PMRTN

The above mentioned item D includes "Gestion de Riesgos: Prevencion y Mitigation de Desastres " and as special objectives, the followings are presented:

- \* Establecer un sistema organizado, permanente y eficaz, para prevenir y mitigar desastres
- \* Promover la coordinacion y negociacion entre los diversos actores sociales e instancias institucionales para la reduccion de la vulnerabilidad.
- \* Apoyar las iniciativas de cooperacion que se desarrollan en el ambito centroamericano, asi como la creacion de una Ley Marco que permita establecer sistemas regionales de Prevencion, Mitigacion y Atencion de Desastres.

#### **3.2 MASTER PLAN OF NATIONAL RECONSTRUCTION IN THE SCOPE OF SOPTRAVI**

The scope of SOPTRAVI for this master plan is composed of transportation sector, other infrastructure works sector and housing sector. The other infrastructures works sector includes the hydraulic structures. The objectives are to improve, rehabilitate and/or reconstruct the damaged hydraulic structures such as dike, flood control structures, landslide site, slope failure site, sediment filled river etc.

In order to rehabilitate or improve these structures, an investment of about 241 million US \$ (among them 2.9 million US \$ by national fund and 239 million US \$ by foreign fund) is expected.

### 3.3 CURRENT MEASURES TAKEN TO STRENGTHEN/SUPPORT COPECO BY USAID

#### (1) Strengthen COPECO

The following measures has been done for COPECO with reconstruction funds:

- Support for the Institutional Development Plan process (with OFDA)
- Purchase of office and communications equipment for COPECO's national and regional offices and emergency operations centers (computers, printers, faxes, telephone system and photocopier)
- Provision of professional/technical support for improving administrative and financial control systems
- Technical support for the development of the new legal framework (with FEMA, OFDA/OPS)
- Technical support for the development of National Emergency Response Plan (also with FEMA) which for the first time sets out roles and responsibilities of each of the line Ministries involved in some aspect of disaster response.
- Support for developing training network on risk management.

#### (2) Strengthen risk management at municipal levels

The following measures has been done with reconstruction funds:

- Technical assistance through FUNDEMUN for 40 municipalities, including strengthening CODEMs and producing municipal emergency and contingency plans ( with OFDA)
- Developing land-use and municipal development plans.
- Training through UNITEC to reach up to 258 municipalities for strengthening CODEMs and producing local emergency plans ( with OFDA)

#### (3) Plan for COPECO with CAMI funds by USAID

- Support the development of a national risk management plan (to accompany the national emergency response plan).
- Strengthen emergency operations centers ( with OFDA, through MACOE), including purchase of equipment for central and regional EOCs.
- Improve information systems, including the development of a Geographic Information System (GIS) for emergency management (with the USGS).
- Purchase radio communications equipment for linking central, regional and municipal emergency committees.
- Purchase search and rescue equipment.
- Assist the development of educational and training strategies, including publication of material.
- Develop sector mitigation policies.
- Support the professional development of COPECO staff.

#### (4) Plan for CODEM with CAMI funds

- Specific grassroots activities identified as high priority needs.
- Activities that will reinforce community participation in mitigation and preparedness.
- Creative pilot projects with potential for replication.

### **3.4 PLAN OF OPERATIONS OF DISASTER'S RISK AND MITIGATION MANAGEMENT**

As a part of the Master Plan of National Reconstruction and Transformation, a plan of operations of disaster's risk and mitigation management was prepared through the session of donor countries and Honduras held in Stockholm. The general objective is disaster's risks and mitigation management for the reduction of the ecological and social vulnerability of the region.

The specific purposes are as follows:

- 1) To institute a national system of risks and emergencies management, including new law for risk's management, new regulations for risk's management, revision of construction code, land use law.
- 2) To improve the information system on disasters and risks
- 3) To elaborate and implement an educational strategy and citizens training, promoting a prevention curriculum.
- 4) To coordinate preparation and response actions in emergencies and disasters.
- 5) Institutional enhance of the system's leader COPECO
- 6) Attention to the emergency situations

These programs are expected to be executed under responsibility of COPECO, CODEMS, USAID, PNUD, World Bank, ENEE, SERNA, SANAA, USGS, US South Command, SMN, Engineers Association, Ministry of Government and Justice, Ministry of Education, Red Cross, and others.

Description about law and regulation extracted from Plan of Operations is shown in *Table L.3.1*.

## **4. MAJOR INSTITUTIONAL IMPEDIMENTS IN THE DISASTER PREVENTION SECTOR**

### **4.1 OBSERVATIONS**

Due to recent rapid population increase and uncontrolled land developing activities in the periphery of the urban area, Metropolitan Tegucigalpa has become more vulnerable to natural disaster. Since Hurricane Mitch in 1998, COPECO has been proceeding with the program to strengthen the institution and to reduce vulnerability to natural disaster at national level. At regional level, the institutional framework of CODEM is basically proposed. However, the master plan of disaster prevention/basin management for each region has not been formulated yet.

Especially in terms of preventive measures, any specific strategy including the implementing organization and structural/non-structural measures are not yet planned.

The members of the workshop discussed natural disaster problems and also institutional problems in the metropolitan area. The results of problem analysis and objective analysis are shown in *Tables M.3.1 to M.3.6* in Supporting M.

The followings are the institutional impediments to implement the proposed project and also to proceed with comprehensive disaster prevention program in the Metropolitan area:

#### **1) Lack of Inter-Institutional Organization**

The implementation of the comprehensive disaster prevention plan in the Metropolitan area needs close cooperation among the numerous related agencies and inter-institutional

organization to coordinate their functions and assignment for the preventive measures, emergency operations and operations of reconstruction. CODEM-DC may be an organizer but it has not yet enough capacity.

## **2) Overlapping Agency Functions**

The roles and responsibilities of the various department and agencies in planning, development and maintenance of flood mitigation and landslide prevention works are not clearly defined. This has led to confusion and duplication in the role and functions of various agencies resulting in lack of efficiency and effectiveness of flood mitigation and landslide prevention works.

## **3) Lack of Technical and Trained Staff**

So far, there have not existed the opportunity for the government/agency staffs to plan or implement the comprehensive disaster prevention project/basin management. In order to implement and maintain the integrated disaster prevention project, there is not enough trained staff in CODEM-DC and other governmental agencies. Furthermore, the technical staffs are not always well-established in government agencies.

## **4) Lack of Enforcement of Land Use Regulation**

There is not an urban plan taking disaster prevention concept into consideration in the Metropolitan area. Hence, land use control or regulation of land development activities are not efficiently carried out. There is no police power to regulate the illegal people from living in flood/landslide risk areas.

## **5) Lack of Information Communication System**

There is not sufficient meteo-hydrological data collection system for monitoring and forecasting. A proposed inter-institutional organization will need more complete information communication system among the numerous related agencies to coordinate them and to operate the disaster prevention program efficiently.

## **4.2 CONCLUSIONS**

- 1) There is a need to strengthen the inter-institutional organization for coordinating/regulating the emergency operations that will be carried out by many related agencies for disaster prevention.
- 2) There is a need for government to rationalize and define the institutional responsibility for meteo-hydrological monitoring and flood forecasting.
- 3) The institution tasked for land use regulation must have the authority and the enforcement capacity to implement its policies, rules and regulations. The agency should be in a position to prosecute violations of the law and rules for the proper management of land use.
- 4) The comprehensive basin management should be planned and implemented by regulatory organization from the viewpoint of disaster prevention, environmental preservation and effective use of natural resources.
- 5) It is a need for related agencies to train their staffs for new technology of basin management and risk management using GIS.

## **5. OPTIONS TO RESOLVE INSTITUTIONAL CONSTRAINTS IN DISASTER PREVENTION**

### **5.1 ORGANIZATION FOR DISASTER PREVENTION AT NATIONAL LEVEL**

COPECO has been legally established in 1990 as an inter-institutional body for disaster

prevention at national level. CODEM DC, which functions as a regional level disaster prevention body, was established in 1998 as one of sub-structures of COPECO for Region 7.

In order to prevent or mitigate disaster due to natural and artificial phenomena especially in the urban area, an integrated and comprehensive counter measures are required involving many agencies of governmental and non-governmental organization. Hence, the members of Directive Council of COPECO are composed of the President of the Republic and 20 representatives of deferent agencies shown as follows:

a) The President of the Republic, b) A Representative of the National Congress of the Republic, c) The Secretary of State at the Government and offices, d) The Secretary of the National Defense office, e) The Secretary of State at the Health office, f) The Secretary of State at the Finance office, g) A Representative of the Catholic Church, h) A Representative of the Private Sector designated by the Federation of Trading and Industries Chambers, I) A Representative designated by the Peasant Associations, j) A Representative of the Honduran Red Cross, and also Commission will be made of: 1) The Secretary of State at the Security office 2) The Secretary of State at the Public Works, Transportation and Housing offices, 3) The Secretary of State at Foreign Affaires office, 4) The Technical and International Cooperation Secretary, 5) The General Controller of the Republic, 6) A Representative from the Honduran Council of the Private Enterprise, 7) A Representative of the National Convergence Forum, 8) A Representative from the National Autonomous University of Honduras, 9) A Representative of from the Association of Municipalities of Honduras, 10) A Representative from the Workers Organizations, and 11) Other representatives from private and public institutions.

The COPECO is expected to perform its important roles for disaster prevention at national level in the future.

The actions for disaster prevention are generally composed of three stages; 1) Preventive Measures, 2) Emergency Operations, and 3) Operation of Reconstruction.

The National Emergency Operation Center of COPECO planned a Matrix of Assignment and Functions for Emergency Operations shown in *Table L.5.1*. In this plan, eleven supporting committee for major operations during emergency are proposed involving thirty-eight (38) deferent agencies. In this Table, mark C means a core function (organizer) and mark A means supporting function. The details of operations of each supporting committee are as follows:

(1) Monitoring and Warning

- Analyze the different numeric models in order to determine the nature and magnitude of the event
- Compare the local numeric models with those of international institutions
- Produce technical reports on forecasts and impact level of the event
- Transfer timely information to COEM

(2) Communications

- Coordinate the telecommunications, satellite and radio communications among the institutions and organizations
- Establish temporary communications necessary to cover a disaster or emergency
- Restoration of the permanent communications

(3) Search, Rescue and Evacuation

- Execute rescue and search procedures, according to the nature of the event
- Implement a help chain system in order to optimize the response
- Provide technical assistance to the local response organizations
- Coordinate with the committee, the food, shelter and activities concerning to rescued persons

(4) Security

- Foresee and keep the public order, especially in the disaster affected areas
- Prevent, control and fight against crime permanently, to avoid vandalism and destruction of public and private places whether they have been affected or not.
- Provide the necessary security in the places established as temporary shelters
- Guarantee the protection of people and their belongings, that have been evacuated or relocated as a consequence of great risks, disasters or public calamities.
- Execute the resolutions, dispositions, commands or legal decisions of the authorities.

(5) Transport

- Process and coordinate all the transportation requests
- Evaluate the damages to transportation infrastructure, analyzing the disaster effects at a regional and national level, monitoring the transport capacity and the congestion of the transportation system implementing control according to the needs
- Design and implement alternate services of transport to replace temporarily the damages by a disaster
- Coordinate the restoration of the transport infrastructure
- Coordinate the aerial and sea transportation control activities
- Coordinate the aerial, sea and land transportation support for staff and cargo
- Keep an updated available national transportation inventory (from the state, private or particular)

(6) Temporary shelter and food

- Satisfy the urgent needs of disaster victims based on table attention
- Among the functions of Committee No. 6 are included:
- Shelters, feeding, first aid, records of the persons located in shelters and the distribution of supplies.

(7) Damages Evaluation and Analysis of Necessities

- Coordinate through involved institutional links, the damages evaluation and analysis of necessities.
- Feed the database of COEM with what happened during and after the event
- Follow up the activities that are being carried out in the community
- Evaluate damages and analysis of necessities of the affected site
- Technical report to the coordinator of operations on damages caused and immediate solutions to coordinate the rehabilitation.

(8) Health

Identify and satisfy the health and medical needs of the affected people. This response committee includes the following areas:



## **Supporting-L : Organizational/Institutional Consideration**

- Damages evaluation and health needs analysis
- Epidemics surveillance
- Urgent medical attention
- Donation of medications and health equipments and supplies
- Pre-hospital medical attention
- Food control and surveillance
- Mental health
- Assessment on radiological, chemical and bacteriological threats
- Vector control
- Monitoring and disposition of served waters
- Installation of sanitary facilities
- Garbage and solid waste control
- Sanitary means in control and management of corpses
- Sanitary conditions in shelters
- Transfer and evacuation of hospital patients
- Medical assistance according to normal programs
- Information to the people
- Request of external aid (personnel, medications, equipment and supplies)
- General response to public health: treatment and transport of victims of a disasters; evacuation of patients out of the affected area when necessary

### **(9) Hazardous Materials**

- Provide a coordinated response to an incident with hazardous materials
- Take the necessary measures in order to prevent the incident causing greater damages to the people and environment.

### **(10) Forest Protection**

- Coordinate the activities in fire fighting
- Provide personnel, equipment and supplies for fire fighting

### **(11) Negotiation of International Cooperation**

- Negotiate the requests for external assistance according to the needs previously determined
- Receive all the assistance coming from cooperating governments and international organizations
- Supervise all the resources coming from foreign assistance
- Coordinate with the Humane Aid Unit of COPECO the reception and distribution of the donations to the most affected areas.

## **5.2 ORGANIZATION FOR DISASTER PREVENTION AT REGIONAL LEVEL**

As described in 2.2, there exists the organization "Municipality Emergency Committee of Central District -CODEM DC" for disaster prevention in Region 7 (Francisco Morazan and El Paraiso) including Metropolitan area. CODEM DC has been reorganized and strengthened since Hurricane Mitch and the strengthening of the organization of DODEM is still major issue under on-going Integrated Program Statement on Risk Management conducted by USAID.

This legally authorized CODEM DC is proposed as the most appropriate inter--institutional organization for disaster prevention in Metropolitan area. Through full discussion among the counterpart personnel, the functions and involving agencies for the activities in each stage of disaster prevention were proposed as shown in *Table L.5.2, 5.3 and 5.4*. The major items of preventive measures, emergency operations and operation of reconstruction are as follows:

- A. **Preventive Measures:**(1) general management, (2) Installation and observation of meteo-hydrological equipment, (3) Drill of evacuation, (4)Preservation of foods for emergency, (5)Communication system for emergency, (6) Improvement of river mountain stream and canal, (7) Land slide protection, (8) Monitoring/Regulation of land use, (9) Regulation of house structure and (9) Watershed management.
- B. **Emergency Operations:** Same as the functions in case of COPECO but regional level.
- C. **Operations of Reconstruction:** (1)Reconstruction of infrastructure, (2) Rehabilitation of installations, (3) Stabilization of land slide site, (4) Construction of refugee's house, (5) Prevention of epidemic, (6) Education for refuge children, (7) Security and (8) International cooperation.

The details of each function for preventive measures and operations of reconstruction are as follows:

**Preventive Measures (Before):**

- (1) General Management
  - Elaboration of a Master Plan for antropic and natural disasters prevention
  - Periodic meeting of the disaster prevention committee
  - Training for researchers and study for disaster prevention
  - Preparation of hazard and risk maps including route and evacuation site
  - Maintenance and updating of the hazard and risk maps
  - Inhabitant education
  - Negotiation for international cooperation
- (2) Installation and Observation of Hydro-meteorological Equipment
  - Installation and maintenance of meteorological / hydrological observation equipment, inclinometer and piezo-meter
  - Data recollection, observation and management
  - Landslide movement observation
- (3) Evacuation Drill
  - Evacuation drill for people living in risk areas
- (4) Food Reserve
  - Food and water reserves for the refugees
- (5) Emergency Communication System
  - Installation and maintenance of a communication system
- (6) Artificial Channels, Streams and River Improvement
  - Improvement of the Choluteca River (dominant stream)
  - Improvement of the Chiquito River, Cacao stream, etc.
  - Maintenance (garbage, sand and sediment material removal) of rivers, streams and channels

## **Supporting-L : Organizational/Institutional Consideration**

- (7) Landslide Prevention
  - Landslide control / mitigation; Berrinche, Bambu, Reparto
  - Relocation of people from landslide risk area
- (8) Land Use Regulation and Monitoring
  - Elaboration of a land-use plan
  - Land-use regulation and monitoring
- (9) Housing Regulation
  - Regulation of the structure of houses and buildings in flood risk areas
- (10) Watershed Management
  - Land use control
  - Forest preservation
  - Forest/reforest development
  - Deforestation monitoring
  - Protection against erosion (Slope protection)

### **Operations of Reconstruction (After):**

- (1) Reconstruction of Infrastructure
  - Reconstruction of roads and bridges
  - Reconstruction of river and channel facilities (dike, edge protection)
  - Sewerage reconstruction
  - Removal of sediment material from the rivers, streams or channels
- (2) Stabilization of Facilities
  - Rehabilitation of hydrological observation equipment
  - Rehabilitation of phone, power and water facilities
- (3) Stabilization of the Landslide Site
  - Removal of unstable soils
  - Removal of slope failures
  - Implementation of structural measures for stabilization of landslide and slope failure
- (4) Construction of Houses for Refugees
  - Preparation of land for the people to move in
  - Construction of houses for refugees
  - Installation of basic services
- (5) Epidemics Prevention
  - Vaccinations
  - Disinfections
- (6) Education for the Evacuated Children
  - Education for evacuated children
- (7) Security
  - Keep and maintain the public order, especially in the most affected areas by the disasters
  - Prevent, control and fight against crime in a permanent way, to prevent robbery and destruction of public and private places whether they have been affected or not.
- (8) Negotiation of International Cooperation
  - Negotiation of materials and feeding through international cooperation

- Negotiation of economic resources for the reconstruction

## **6. RECOMMENDATION**

- (1) It is recommended that the existing CODEM-DC will function as a principle inter-institutional body for disaster prevention in the Metropolitan area at regional level.
- (2) The Matrices of Assignment of Functions shown in *Tables 5.2, 5.3 and 5.4* should be revised in detail considering the capacities of related agencies.
- (3) It is recommended that monitoring of the land use should be enforced to regulate the flood and landslide risk areas that will be designated in the risk map prepared by JICA and USGS.
- (4) It is recommended that construction and maintenance works of the proposed disaster prevention/mitigation structures should be legally demarcated to appropriate agencies considering their capacities.
- (5) Regulation of house structure in the flood prone area should be formulated based on the structural code.
- (6) The scale of governmental agencies participating to the emergency operations in the Metropolitan area should be decided under condition of simultaneous disasters in the different regions in the country.
- (7) It is recommended that a strengthening of CODEM-DC should be carried out under the program of institutional strengthening of CODEMs proposed by USAID.

**Table L.2.1 Draft Budget for 2001, COPECO**

(Unit:Lempiras)

Description	Personal Services	Non personal Services	Materials and Supplies	Capitalizable Assets	Transfers	Global Assignment	Total
Central Activities	7,245,756	1,955,000	1,044,000	110,000	0		10,354,756
Superior Direction and Coordination	2,179,380	570,000	118,000	30,000	0		2,897,380
Administrative and Accountable Services	1,913,750	1,195,000	820,000	80,000			4,008,750
Planning, Evaluation and Negotiation	666,276	70,000	36,000				772,276
Computer Service	618,216	80,000	35,000				733,216
Support to Regional Deputy Commissioners	1,868,134	40,000	35,000				1,943,134
Emergency Services	1,828,844	425,000	85,000				2,334,844
Coordination, Operation and Communication	669,044	305,000	30,000				1,004,044
Emergency Supply and Material Control	389,000	30,000	25,000				444,000
Studies for Prevention and Mitigation	766,800	90,000	30,000				886,800
Training Services	855,400	200,000	205,000	50,000		0	1,255,400
Coordination and Education	855,400	200,000	50,000	150,000		0	1,255,400
Total	9,926,000	2,580,000	1,334,000	160,000	0	0	14,000,000

Source; COPECO

**Table L.2.2 Executed Budget by Origin of Funds-2000, SOPTRAVI**

(Unit: Lempiras)

Name of the Program	National Funds	Foreign Funds	Total	%
Office of the Secretary	46,597,399		46,597,399	2.21
Geographical and Geodesic Service	10,944,851		10,944,851	0.52
Aeronautical and Meteorological Services	25,803,902		25,803,902	1.22
Transport Regulation and Control	20,104,220		20,104,220	0.95
Conservation of the National Road Network	29,214,578		29,214,578	1.38
Public Works	295,445,501		295,445,501	14.00
Highway Studies, Design and Construction	218,432,283	594,190,821	812,623,104	38.52
Housing Projects and Programs	109,175,000		109,175,000	5.17
Loss not Assigned to Programs	759,975,133		759,975,133	36.02
Totals	1,515,692,867	594,190,821	2,109,883,688	100
%	71,84	28,16	100	

Source; SOPTRAVI

**Table L.2.3 Balance Sheet of Metropolitan Division of SANAA in 1999**

(Unit: Million Lps)

Items	Total	Metropolitan Division	Items	Total	Metropolitan Division
<b>Fixed Assets</b>	1.552	522	<b>Capital</b>	1.790	626
Property and plant equipment	646	371	Contribution	966	625
Construction in process	906	151	Contribution for projects	894	64
<b>Deferred Assets</b>	57	0	(Deficit)	(49)	(40)
Deposit for guarantee	13	0	Net Revenue (Lost)	(22)	(24)
Depreciation cost	12	0	<b>Debts</b>	124	48
Distribution investment	32	0	Long term payable bill	56	8
<b>Current Assets</b>	256	133	Current debts	68	40
Blank cash	41	20	-Short term loan	1	1
Accounts to receive	89	68	-Short term payable bill	65	38
Payments and loans in advance for employees	51	32	-Other bills to be paid	2	1
Inventories	75	14	<b>Total Capital and Debts</b>	1.914	674
Accounts to receive at long term	37	19			
Other assets	12	0			
<b>Total assets</b>	1.914	674			

Source; SANAA

**Table L.2.4 Budget of AMDC in 2000**

(Unidad: Lempiras)

<b>Items</b>		<b>%</b>
<b>1. CURRENT EXPENDITURES</b>	<b>252,265,716.0</b>	<b>39</b>
1.1 CONSUMPTION EXPENDITURES	252,265,716.0	
a. Remunerations	96,778,688.0	
b. Purchase of Goods and Services	131,196,800.0	
c. Interests	21,790,228.0	
d. Bank Commissions	2,500,000.0	
1.2 TRANSFERS	26,468,000.0	
<b>2. CAPITAL EXPENDITURES</b>	<b>446,936,858.0</b>	<b>61</b>
2.1 DIRECT INVESTMENT	387,756,000.0	
a. Equipment	2,900,000.0	
b. Construction Works	384,856,000.0	
2.2 FINANCIAL INVESTMENT	59,180,858.0	
a. Recovery of Public Debt	56,180,858.0	
b. Financial Disbursements	3,000,000.0	
<b>TOTAL</b>	<b>725,670,574.0</b>	<b>100</b>

Source: AMDC



**Table L.2.5 Regulated Functions on Disaster Prevention (COPECO)**

<b>Article</b>	<b>Law/Regulation/ Ordinance</b>	<b>Date of Legislation</b>	<b>Regulated Contents</b>
Members of National Directive Council	Law of National Emergencies Decree No. 9-90-E Title III, Article 6	12th December 1990	The President of the Republic and 9 representatives
COPECOs' functions	Decree No. 9-90-E Title III, Article 7	ditto	Organize and direct the actions in emergency, Adopt preventive measures, Coordinate the supporting activities, Request the declaration of national emergency, Organize and train brigades and groups of volunteers, Manage the foreign and international aid, and Evaluate the damages
Members of COPECO	Decree No. 217-93 Article 6	1st October 1993	Modification of Decree No. 9-90-E The President of the Republic and 11 representatives
Organizational structure of COPECO	Regulation of Law for National Emergencies Accord No. 600-91 Article 4	26th July 1991	National Directive Council, National Executive Commission, Regional Commissions, Municipal Commissions, Local Commissions
Representatives of National Directive Council	Modification of Accord No. 600-91 Accord No. 121-99 Article 4	18th May 1999	National Directive Council has the National Commissioner, Regional Commissions, Department Commissions, Municipal Commissions
Members of COPECO	Accord No. 121-99 Article 5	ditto	The President of the Republic and 20 representatives from various agencies.
COPECOs' functions	Accord No. 121-99 Article 7	ditto	Request the declaration of emergency, Adopt the measures for rehabilitation/reconstruction, Draw the applicable policies for attention/management, Coordinate material, human and financial resources, Judge magnitude of damage/evaluate damage, Approval of operational plan, Approve COPECOs' budget, Knowledge/analysis/approval of feasibility study.
Members of Regional Commission	Accord No. 121-99 Article 12	ditto	Political Governors of Departments of region and 18 representatives
Powers of Regional Commission	Accord No. 121-99 Article 15	ditto	Coordinate the activities for prevention/attention, Preparation/updating region diagnoses, Participate/integrate social and economic development tasks, Execute guidelines and policies of COPECO at regional level, Collaborate with financial, material and human resources, Elaborate preparation of evaluate report of damage magnitude due to floods, earthquake, hurricanes, droughts, fires, epidemics and other natural /artificial phenomena.
Members of Department Commission	Accord No. 121-99 Article 19	Ditto	Political Governor and 15 representatives
Municipal Commission	Accord No. 121-99 Article 23	Ditto	Municipal Major and 7 representatives

**Table L.2.6 Regulated Functions on Disaster Prevention (SOPTRAVI)**

Article	Law/Regulation/ Ordinance	Legislation date	Regulated content
Establishment of specifications for the design, construction, supervision and conservation of public works.	Interior Regulation of SECOPT, Title 1, Chapter 1 General Dispositions 5	February 28 <sup>TH</sup> 1978	Establish specifications for the design, construction, supervision and conservation of national public works which are not trusted specifically to other organs of the State.
Fulfillment of Public works.	Idem. Chapter 3, Articles 15, 1	Idem.	Supervise the fulfillment of the projects of construction, reconstruction, improvement and conservation of the public works entrusted to Ramo Ministry on the advance of the same.
Study, planning, design, supervision and construction of roads including bridges	Idem. Chapter V, Section III, Article 22 a)	Idem.	Carry out the study, the planning, the design, the supervision and construction of the road system in the country, including bridges, main roads, access roads, activities that cover; <ol style="list-style-type: none"> <li>1. Prepare pre-feasibility study and technical feasibility and economic for the construction and the improvement of roads.</li> <li>2. Carry out final Engineering study and prepare and prepare technical specifications and plans for the execution of projects for roads and bridges.</li> </ol>
Drainage studies	Idem. Chapter V, Section IV, Article 23 b)	Idem.	Carry out longitude studies, geometric alignments, drainage characteristics, etc. of all the roads of land communication not incorporated to the Program of Maintenance and Reparation
Hydraulic works, as protection from flooding	Idem. Chapter V, Section IV, Article 24 e)	Idem.	Study, plan, construct, supervise and maintain the hydraulic and sea works, such as protection works to regulate flooding in urban and rural areas.
Hydraulic work of dams and relief canals	Idem. Chapter V, Section IV, Article 24 f)	Idem.	Design, construct, supervise and maintain dams and relief canals to regulate avenues or floods.
Feasibility and design study for the control of floods.	Idem. Chapter V, Section IV, Article 24 g)	Idem.	Elaborate the preliminary studies of pre-feasibility and technical and economic feasibility, and design engineering works for the integral development of valleys in the country, regarding flood control, protection of settlements, and of agricultural and cattle raising areas.
Paving, viaduct, bridges and urban drainage	Idem. Chapter V, Section VI, Article 25 j)	Idem.	Plan, study, design, construct and supervise pavement works, viaducts, bridges and drainage of road waters in the zones.
Weather forecast and meteorological information	Idem. Chapter V, Section IX, Article 28 t)	Idem.	Manage and operate the national meteorological service putting strict vigilance regarding the physical phenomena and offer the government and the people the forecasting of the weather and meteorological information.
Elaboration of maps	Idem. Chapter V, Section X, Article 29 a)	Idem.	Elaborate the basic map of the national territory, preparing the physical maps, political, topographical, climatographical, aeronautical, special plans of cities and specific regions, photomaps, photomosaic, etc.
Pick up topographical and photogrammetry documents.	Idem. Chapter V, Section X, Article 29 d)	Idem.	Compile and guard all that documentation regarding photographic surveys or photogrammetrics of the national territory...

**Table L.2.7 Regulated Functions on Disaster Prevention (SERNA)**

Article	Law/Regulation/ Ordinance	Legislation date	Regulated content
Environment	The Gazette 27,311 Decree 104-93	June 8 <sup>th</sup> 1993	* General Law of Environment
Rain forests	Decree 87-87		Law of Rain forests
Good use of water	Decree 137	1927	*** Law of the Good use of National Waters
Territorial Land Distribution	In Project		* Law of Territorial Land Distribution
Resources of the Sea	The Gazette 23,127 Decree 921	July 13 <sup>th</sup> 1980	Law on the Good Use of the Resources of the Sea.
Environment and Development.	The Gazette 26,725 Decree 21-92	April 24 <sup>th</sup> 1992	Protocol to the Constituent Agreement of the Central American Commission of Environment and Development.
Agreement on climatic change	Decree 26-95	July 29 <sup>th</sup> 1995	Frame Agreement of the United Nations on Climatic Changes
Biological Diversity	The Gazette 27,675 Decree 30-95	June 10 <sup>th</sup> 1995	Agreement on Biological Diversity
Creation of Council	The Gazette 27,079 Decree 08-75	July 23rd 1993	National Council of Protected Areas of Honduras
Forest Zone Reserve	The Gazette 20,554 Decree 72-71	December 17 <sup>th</sup> 1971	***Forest Zone Reserve of Streams and Rivers which form part of the water supply in Tegucigalpa
Platano River Reserve	The Gazette F23,181 Decree 977-80	August 15 <sup>th</sup> 1980	Creation of the Reserve of Man and the Biosphere of Platano River.
Biological Reserve	The Gazette 24,817 Decree 211-85	January 8 <sup>th</sup> 1986	Declaration of Biological Reserve of Uyuca
Resources of the Sea	The Gazette 23,127 Decree 921	June 3 <sup>rd</sup> 1980	Law on Good Use of the Resources of the Sea
Natural Ecosystems	The Gazette 23,660 Decree 11-82	March 17 <sup>th</sup> 1982	* Central American Agreement of Forests, regional frame for the management and conservation of the natural ecosystems and the development of forest plantations.
Exploitation of the Resources	The Gazette 23,612 Decree 131-82	January 20 <sup>th</sup> 1982	* Constitution of the Republic art.340; declares of usefulness and public necessity the rational and technical exploitation of the resources.
Protected Forest Zone	The Gazette 24,818 Decree 210-85	January 9 <sup>th</sup> 1986	Protected Forest Zone the area, place in the Municipalities of Omoa and San Pedro Sula.

\*: Articles related directly with the Prevention of Natural Disasters in the Metropolitan Area

Source: SERNA

**Table L.2.8 Regulated Functions on Disaster Prevention (AMDC)**

Article	Law/Regulation/ Ordinance	Legislation date	Regulated Content
Environment	# 1 Article 14		Preservation of historic patrimony. Protection of municipal ecosystem and environment.
Land use	# 1 Article 18		Land use, circulation roads, construction, conservation and rehabilitation of urban areas.
Calamity	# 1 Article 25		Declaration of state of emergency or public calamity.
Restrictions on deal of real state agencies with public characters.	# 1 Article 72		Parks, streets, avenues, bridges, riverbanks, coasts, lakes, lagoons, rivers cannot be disposed of, levied on, impounded, nor auctioned. Free access to beaches, lakes and rivers. Owners who live by rivers, lakes, etc. must allow access to beaches, lakes and rivers, leaving adequate spaces for streets no less than 15 meters.
Land use	# 2 Article 67		Use and profitability of the land.
Conditions on sale of marginal land	# 2 Article 68		For the sale of land in marginal zones, the municipality must consider (a) Use and/or destiny of the land (b) Existence of basic services (c) Existence of the minimum social infrastructure.
Use of cooperative urban land	# 2 Article 69		For the sale of cooperative urban land its use will be subject to what the plan of Zoning and Use of land stipulates, if it exists.
Urban planning	The Gazette 26,832	August 28 <sup>th</sup> 1992	Regulation for urban planning.
Use of urban land	The Gazette 26,833 Article 194	August 29 <sup>th</sup> 1992	Restriction to the Granting of permit: When a project were to be carried out on a piece of land located in a" landslide area" or "risk" defined like that by Metroplan.
Cultural inheritance	The Gazette Decree 220-97	February 21 <sup>st</sup> 1998	Cultural inheritance
Land acquisition	Decree No.38-99	March 24 <sup>th</sup> 1999	Special law of expropriation in the area of el Berrinche.
Right of way of river	Agreement No.554	January 7 <sup>th</sup> 1977	Right of way of river, stream and drainage canal.
Use of land.	Agreement No.251 Agreement No. 1089	April 6 <sup>th</sup> 1978	Use of land for construction of houses.

# 1: Law of Municipalities- Decree Number 134-90

# 2: Regulation of the Law of Municipalities- Executive Agreement Number 018-93.

Table L.3.1 Plan of Operations on Institution by the Stockholm Principle

GENERAL OBJECTIVE	SPECIFIC PURPOSE	RESULTS	GOALS/INDICATORS	ACTIVITIES	DUE DATE	RESPONSIBLE	OBSERVATIONS
Risk management and Disaster Mitigation for the reduction of ecologic and social vulnerability of the Region	5. Institutional strengthening of the leading institution of the system COPECO	5.1 Reform of the Administration and Finance Systems	5.1.1 New Accounting System	5.1.1.1 A diagnosis was conducted by the Consultant.	Feb. 01-01 to Jun. 31-01	COPECO/USAID	
				5.1.1.2 The new accounting system of COPECO is being designed.	Feb. 01-01 to Jun. 31-01	COPECO/USAID	
			5.1.2 New administration manuals	5.1.2.1 They were carried out at the same time to the Hardware and Software updating.			
		5.2 Construction of the new building for COPECO. Two buildings, one in Tegucigalpa and another in San Pedro Sula	5.2.1 New building	5.2.1.1 Design of the construction plans. 5.2.1.2 Approval of the construction designs. 5.2.1.3 Hiring of a construction company and its supervisor.	Mar-01-01 Sep-30-01	COPECO/COMA -NDO SUR/USAID	
		5.3 Opening of regional offices	5.3.1 # of functional regional offices	5.3.1.1 Appointment of regional vice commissioners, permanent secretaries and assistants. 5.3.1.2 Equipment of regional offices. 5.3.1.3 Regional offices staff training.			

Source: COPECO Extract of the Stockholm Principle: Reduce the ecological and social vulnerability of the region.

**Table L.5.1 Matrix of Assignment and Functions (During)-COPECO  
National Emergency Operarion Center**

C:Core

A: Assistance

	1	2	3	4	5	6	7	8	9	10	11
	EMERGENCY OPERATIONS										
SUPPORTING COMMITTEE	MONITORING AND ALERT	COMMUNICATIONS	SEARCHES, RESCUE AND EVACUATION	SECURITY	TRANSPORTATION	TEMPORARY REFUGES AND FOODS	EVALUATION OF DAMAGES AND NECESSITY ANALYSIS	HEALTH	DANGEROUS MATERIALS	FOREST PROTECTION	INTERNATIONAL COOPERATION MANAGEMENT
1 COPECO	C	C				A	C			A	A
2 Armed Force		A	C	A	A	A	A	A	A	A	
3 Firemen		A	A				A	A	A	A	
4 Honduran Red Cross		A	A			A	A	A			A
5 Honduran Green Cross		A	A			A	A	A			
6 Health Ministry		A				A	A	C	A		
7 Honduran Corporation of Forest Development COHDEFOR	A	A			A		A			C	
8 Ministry of Education						A	A			A	
9 ENEE	A	A				A	A				
10 Governments							A			A	
11 National Police		A	A	C		A	A		A	A	
12 Honduras Telephone		A					A				
13 Radio Amateurs		A					A				
14 Municipalities						C	A	A	A	A	
15 SERNA	A				A		A			A	
16 National Autonomous University of Honduras	A					A	A	A			
17 SANAA	A	A				A	A	A			
18 National Commission of Telecommunication		A					A				
19 Scouts Association of Honduras			A			A	A				
20 Supproting Committee for Security				A			A				
21 SOPTRAVI			A		C		A				
Civil Aeronautics					A		A				
National Meterological Service	A						A			A	
22 Ministry of Agriculture and Stockbreeding					A		A		A	A	
23 Honduran Fund for Social Investment					A	A	A				
24 National Agrarian Insitute					A		A				
25 Port National Company					A		A				
26 Honduran Institute of Family						A	A				
27 Non Governmental Organizations						A	A				A
28 Ministry of Foreign Relations						A	A	A			C
29 SETCO						A	A				A
30 National Institute of Professional Formation						A	A				
31 Ministry of Government and Justice							A				
32 Honduran Institute of Social Security							A	A			
33 Mediacal Association							A	A			
34 Nurses' Association							A	A			
35 Minstry of Public							A	A	A	A	
36 Executive Direction of Income							A		A		A
37 General Finance Office of the Republic							A				A
38 System of the United Nations							A				A

Source: COPECO

Table L.5.2 Matrix of Assignment and Functions (Before)-CODEM-DC

C:Core

A:Assistance

		1	2	3	4	5	6	7	8	9	10
		PREVENTIVE MEASURES									
SUPPORTING COMMITTEE		GENERAL MANAGEMENT	INSTALLATION AND OBSERVATION OF METEOROLOGICAL EQUIP.	DRILL OF EVACUATION	PRESERVATION OF FOODS FOR EMERGENCY	COMMUNICATION SYSTEM FOR EMERGENCY	IMPROVEMENT OF RIVER, MOUNTAIN STREAM, CANAL	LANDSLIDE PROTECTION	MONITORING /REGULATION OF LAND USE	REGULATION OF HOUSE STRUCTURE	WATERSHED MANAGEMENT
1	Armed Force (FFAA)			A	A	A	A	A			A
2	Firemen			A		A					A
3	Honduran Red Cross			A	A	A					
4	Green Cross			A	A	A					
5	Boy Scouts			A	A	A					A
6	Health Ministry	A		A	A	A				A	A
7	Social Security Honduran Institute (IHSS)										
8	Medical Association										
9	Nurses' Association										
10	National Autonomous University of Honduras (UNAH)		A	A	A			A	A		
11	SOPTRAVI	A	A	A	A	A	A	A		A	
12	Municipality of Central District (AMDC)	A		A	A	A	C	C	C	C	C
13	Honduran Fund for Social Investment (FHIS)	A					A	A	A	A	A
14	SERNA	A	C	A			A	A	A	A	A
15	COHDEFOR	A				A	A	A	A		A
6	National Agrarian Institute (INA)						A	A	A		A
17	Ministry of Agriculture and Stockbreeding (SAG)				A			A			A
18	Ministry of Education	A		A	A		A				A
19	Non Governmental Organization/Private Organizations of Development	A			A		A				A
20	CODEM-DC	C	A	C	C	A	A	A	A	A	A
21	ENEE	A	A	A		A					A
22	Ministry of Government								A		
23	Natioinal Police			A	A	A					
24	SANAA	A	A	A	A	A	A	A	A	A	A
25	Honduras Telephone (HONDUTEL)			A	A	A					
26	National Commission of Telecommunications (CONATEL)					C					
27	Radio Amatures			A	A	A					
28	National Meteorological Service		A	A							A
29	Public Ministry			A	A		A	A	A		
30	Professional Formation Institute (INFOP)	A		A	A						
31	Ministry of Foreign Relations										
32	SETCO	A									
33	Honduran Institute for Childhood and Family (IHNFA)										
34	Honduran Institute for Agricultural Marketing (IHMA)			A	A						
35	National Supplier of Basic Products (BANASUPRO)			A	A						
36	Ministry of Work										
37	Ministry of Finances	A			A				A		A
38	American Cooperative of Foreign Shipment/Central American Mitigation Initiative				A						
39	COPECO	A	A	A	A	A		A	A	A	A
40	World Food Programme (PMA)				A						
41	Civil Engineers' Association of Honduras									A	
42	Architects' Association									A	

Table L.5.3 Matrix of Assignment and Functions (During)-CODEM-DC

C:Core

A:Assistance

	1	2	3	4	5	6	7	8	9	10	11
	EMERGENCY OPERATIONS										
SUPPORTING COMMITTEE	MONITORING AND ALERT	COMMUNICATIONS	SEARCHES, RESCUE AND EVACUATION	SECURITY	TRANSPORTATION AND MACHINE	TEMPORARY REFUGES AND FOODS	EVALUATION OF DAMAGES AND NECESSITY ANALYSIS	HEALTH	DANGEROUS MATERIALS	FOREST PROTECTION	MANAGEMENT OF INTERNATIONAL
1 Armed Force (FFAA)	A	A	C	A	A	A	A	A	A	A	
2 Firemen		A	A					A	A	A	
3 Honduran Red Cross	A	A	A		A	A	A	A			A
4 Green Cross			A			A	A	A			
5 Boy Scouts			A	A		A					
6 Health Ministry		A			A	A	A	C	A		A
7 Social Security Honduran Institute (IHSS)								A			
8 Medical Association								A			
9 Nurses' Association								A			
10 National Autonomous University of Honduras (UNAH)	A					A	A	A	A		
11 SOPTRAVI					C		A				
12 Municipality of Central District (AMDC)	A			A	A	C	A			A	A
13 Honduran Fund for Social Investment (FHIS)					A	A	A				
14 SERNA	A				A		A		C	A	
15 COHDEFOR	A	A			A		A			C	
16 National Agrarian Institute (INA)					A						
17 Ministry of Agriculture and Stockbreeding (SAG)					A		A		A	A	
18 Ministry of Education						A				A	
19 Non Governmental Organization/Private Organizations of Development						A					A
20 CODEM-DC	C	C			A	A	C			A	A
21 ENEE	A	A				A	A			A	
22 Ministry of Government							A			A	
23 National Police	A	A	A	C					A	A	
24 SANAA	A	A				A	A			A	
25 Honduras Telephone (HONDUTEL)		C		A		A					
26 National Commission of Telecommunications (CONATEL)	A	A									
27 Radio Amateurs	A	A									
28 National Meteorological Service	A	A								A	
29 Public Ministry				A					A	A	
30 Professional Formation Institute (INFOP)						A					
31 Ministry of Foreign Relations											
32 SETCO		A			A						C
33 Honduran Institute for Childhood and Family (IHNFA)						A					A
34 Honduran Institute for Agricultural Marketing (IHMA)						A					
35 National Supplier of Basic Products (BANASUPRO)						A					
36 Ministry of Work						A					
37 Ministry of Finances											A
38 American Cooperative of Foreign Shipment/Central American Mitigation Initiative											A
39 COPECO	A	A	A		A	A	A				A



Table L.5.4 Matrix of Assignment and Functions (After)-CODEM-DC

C:Core

A:Assistance

		1	2	3	4	5	6	7	8
		OPERATION OF RECONSTRUCTION							
SUPPORTING COMMITTEE		RECONSTRUCTION OF INFRASTRUCTURE	REHABILITATION OF INSTALLATIONS	STABILIZATION OF LANDSLIDE SITE	CONSTRUCTION OF REFUGEE'S HOUSE	PREVENTION OF EPIDEMIC	EDUCATION FOR REFUGED CHILDREN	SECURITY	INTERNATIONAL COOPERATION
1	Armed Force (FFAA)	A			A	A		A	
2	Firemen					A			
3	Honduran Red Cross				A	A			A
4	Green Cross				A	A			A
5	Boy Scouts								
6	Health Ministry				A	C	A		A
7	Social Security Honduran Institute (IHSS)					A			
8	Medical Association					A			
9	Nurses' Association					A	A		
10	National Autonomous University of Honduras (UNAH)		A			A	A		
11	SOPTRAVI	A	A	A	C				A
12	Municipality of Central District (AMDC)	C	A	C	A	A	A	A	A
13	Honduran Fund for Social Investment (FHIS)	A	A	A	A				A
14	SERNA	A	A	A	A				A
15	COHDEFOR		A	A	A				
16	National Agrarian Institute (INA)				A				
17	Ministry of Agriculture and Stockbreeding (SAG)								
18	Ministry of Education						C		A
19	Non Governmental Organization/Private Organizations of Development	A	A	A	A	A	A		A
20	CODEM-DC	A	C	A	A		A	A	A
21	ENEE		A		A				
22	Ministry of Government							A	
23	National Police				A			C	
24	SANAA	A	A	A	A	A			A
25	Honduras Telephone (HONDUTEL)		A		A			A	
26	National Commission of Telecommunications (CONATEL)		A					A	
27	Radio Amateurs								
28	National Meteorological Service		A						
29	Public Ministry				A			A	
30	Professional Formation Institute (INFOP)				A		A		
31	Ministry of Foreign Relations								A
32	SETCO								C
33	Honduran Institute for Childhood and Family (IHNFA)						A	A	
34	Honduran Institute for Agricultural Marketing (IHMA)								
35	National Supplier of Basic Products (BANASUPRO)								
36	Ministry of Work								
37	Ministry of Finances								A
38	American Cooperative of Foreign Shipment/Central American Mitigation Initiative								A
39	COPECO		A		A		A		A
40	World Food Programme (PMA)				A				A
41	Civil Engineers' Association of Honduras	A			A				
42	Architects' Association	A			A				
43	OIM				A				

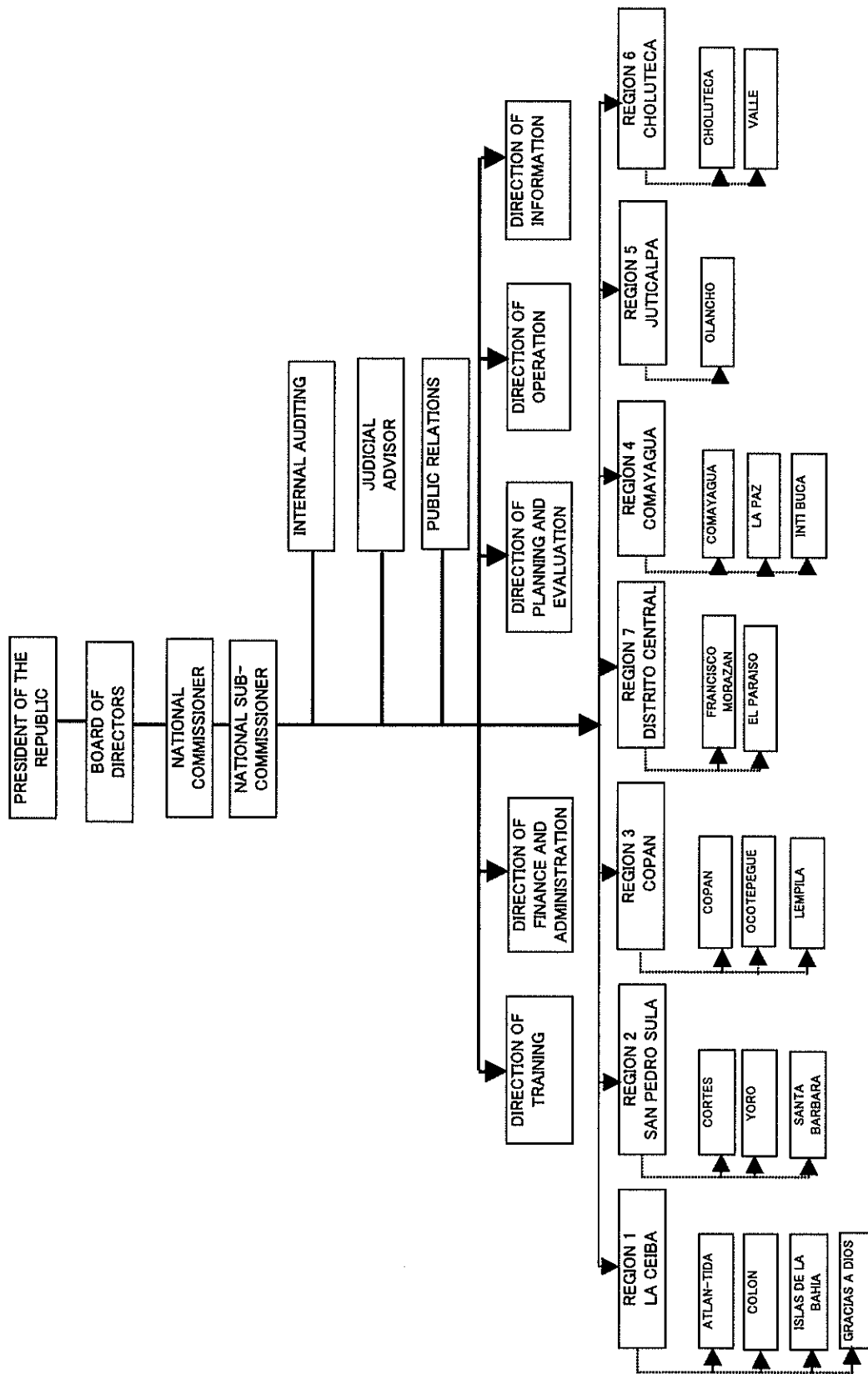


Figure L.2.1

Structural Organization of National Emergency Committee (COPECO)

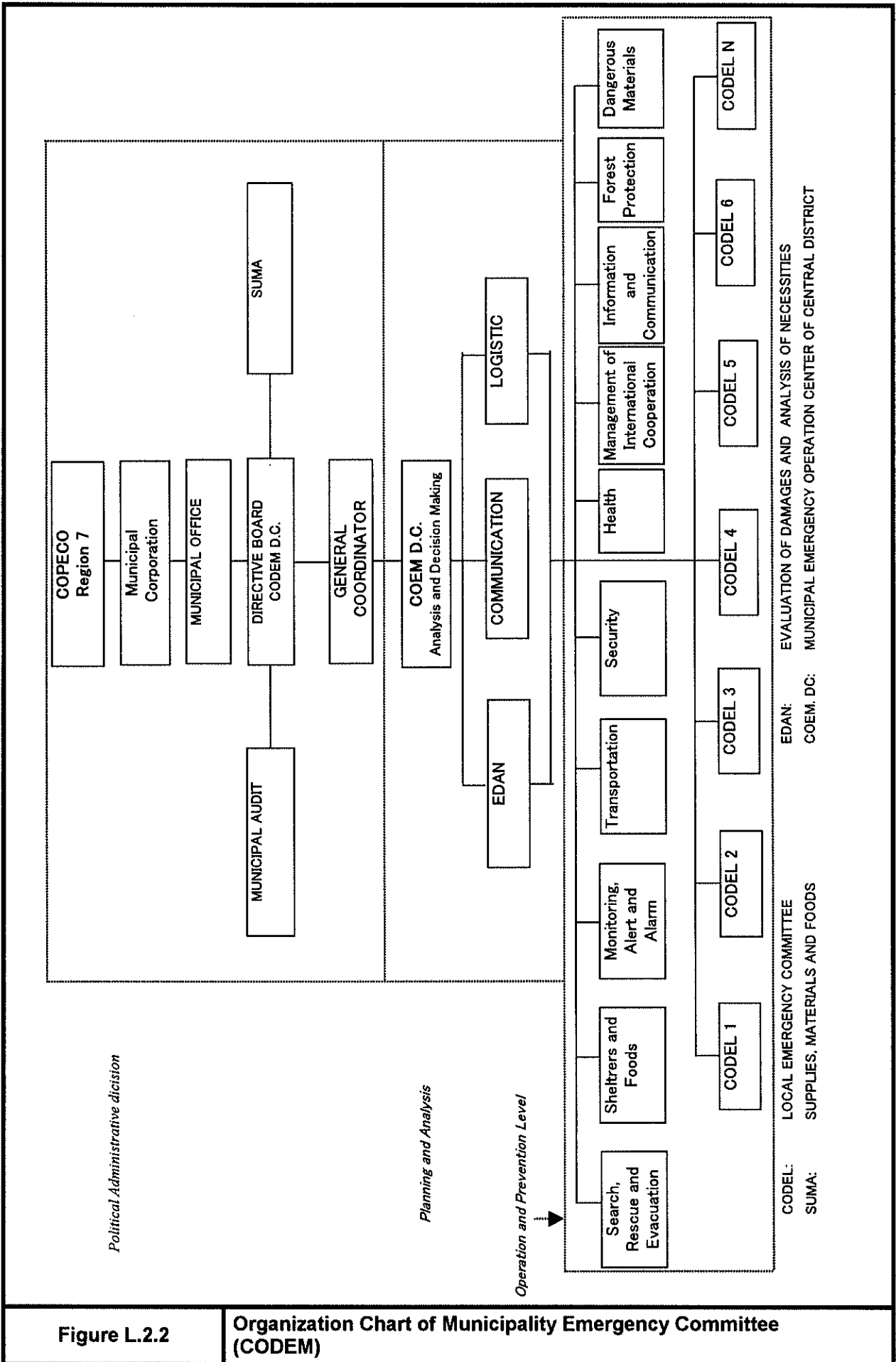


Figure L.2.2

Organization Chart of Municipality Emergency Committee (CODEM)

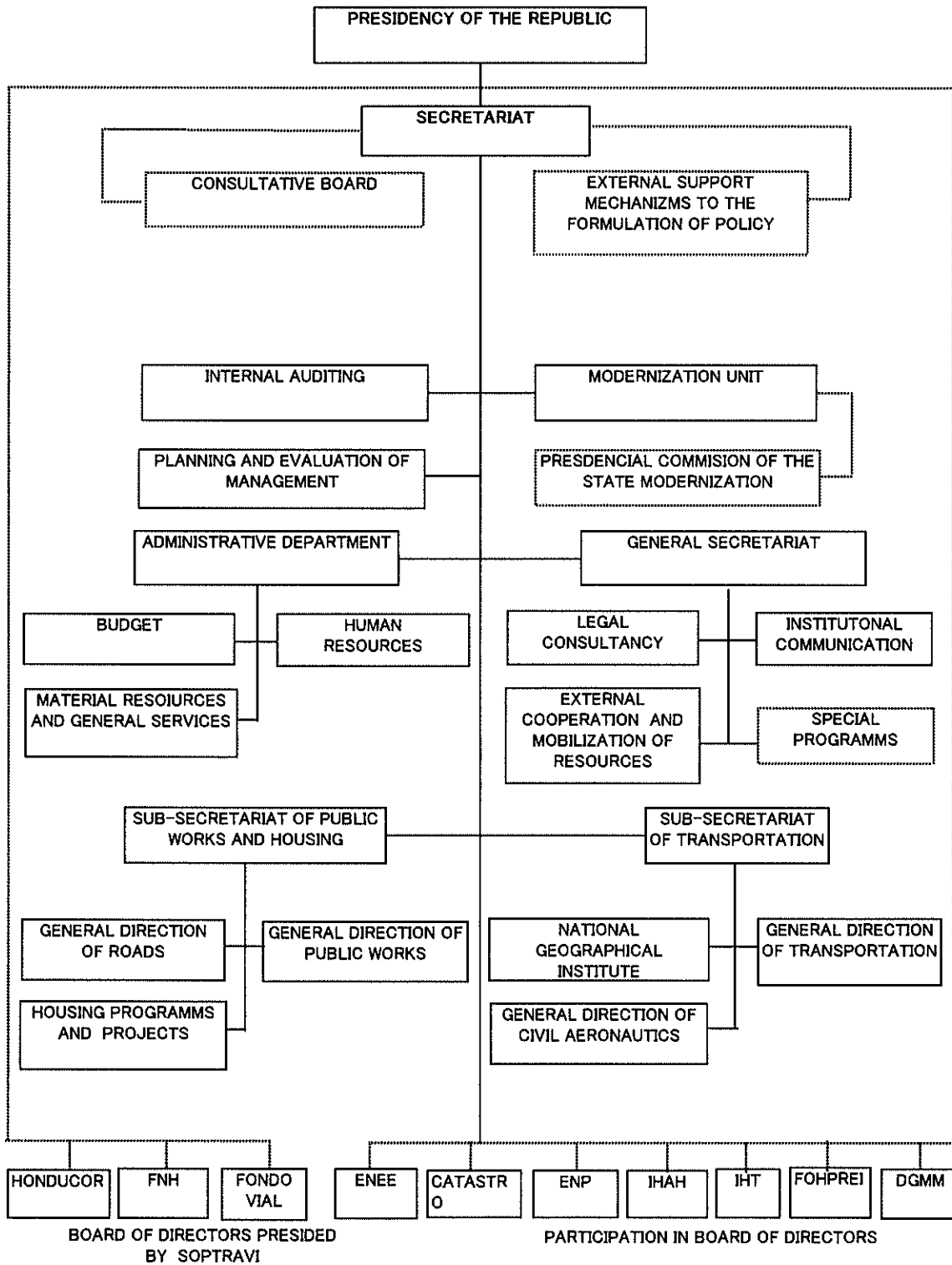


Figure L.2.3

Organization Chart of Ministry of Public Works, Transportation and Housing (SOPTRAVI)

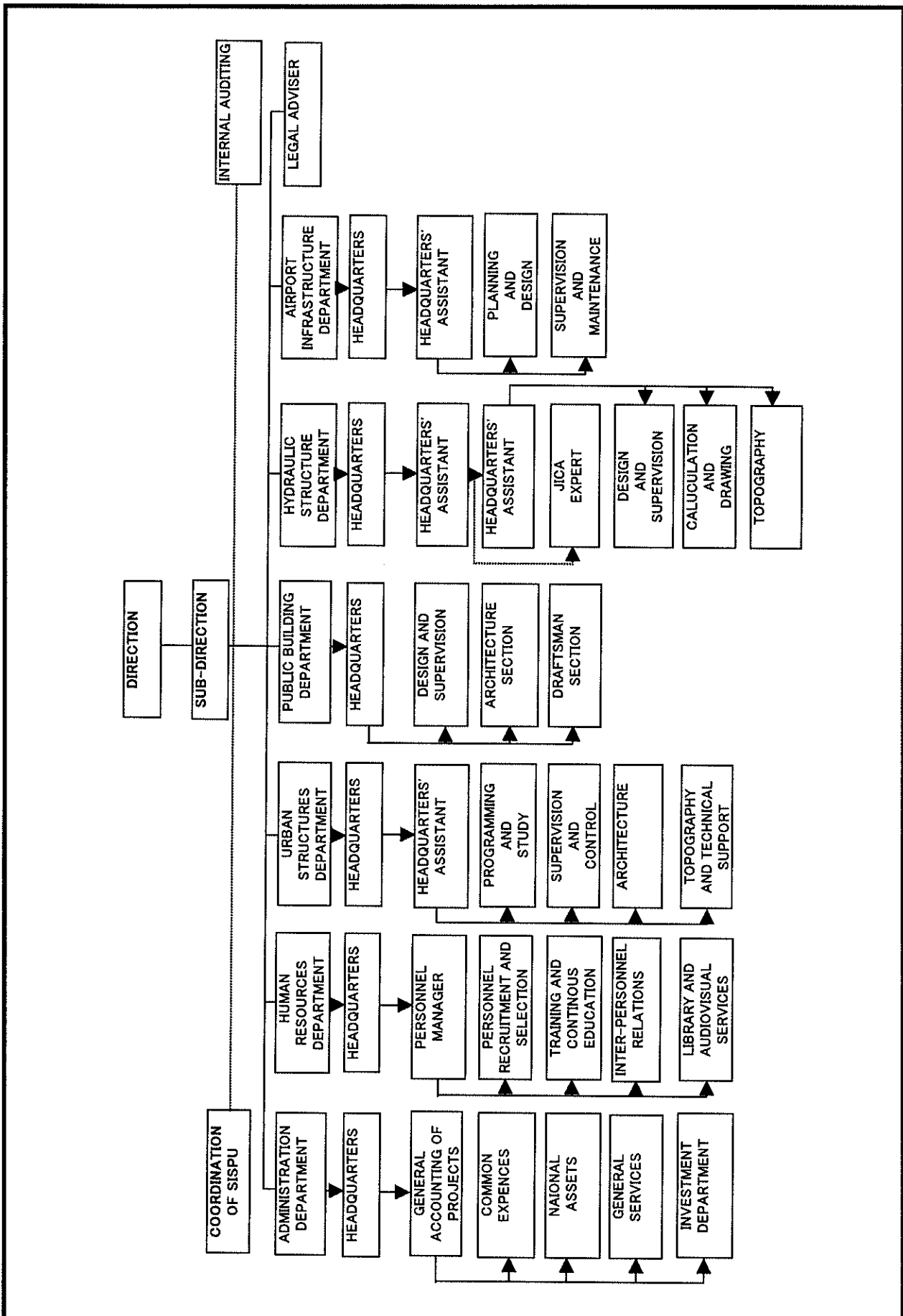


Figure L.2.4

Organization Chart of General Direction of Public Works (SOPTRAVI)

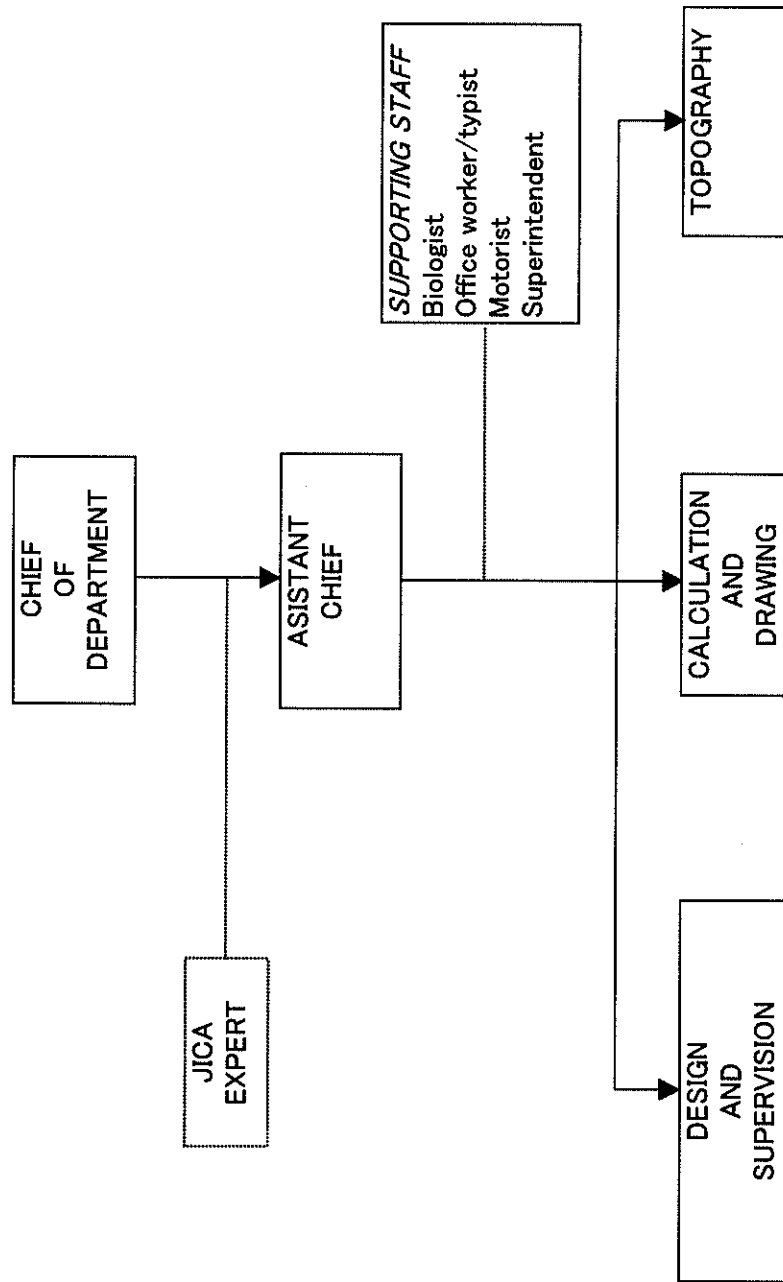


Figure L.2.5

Organization Chart of the Department of Hydraulic Works (SOPTRAVI)

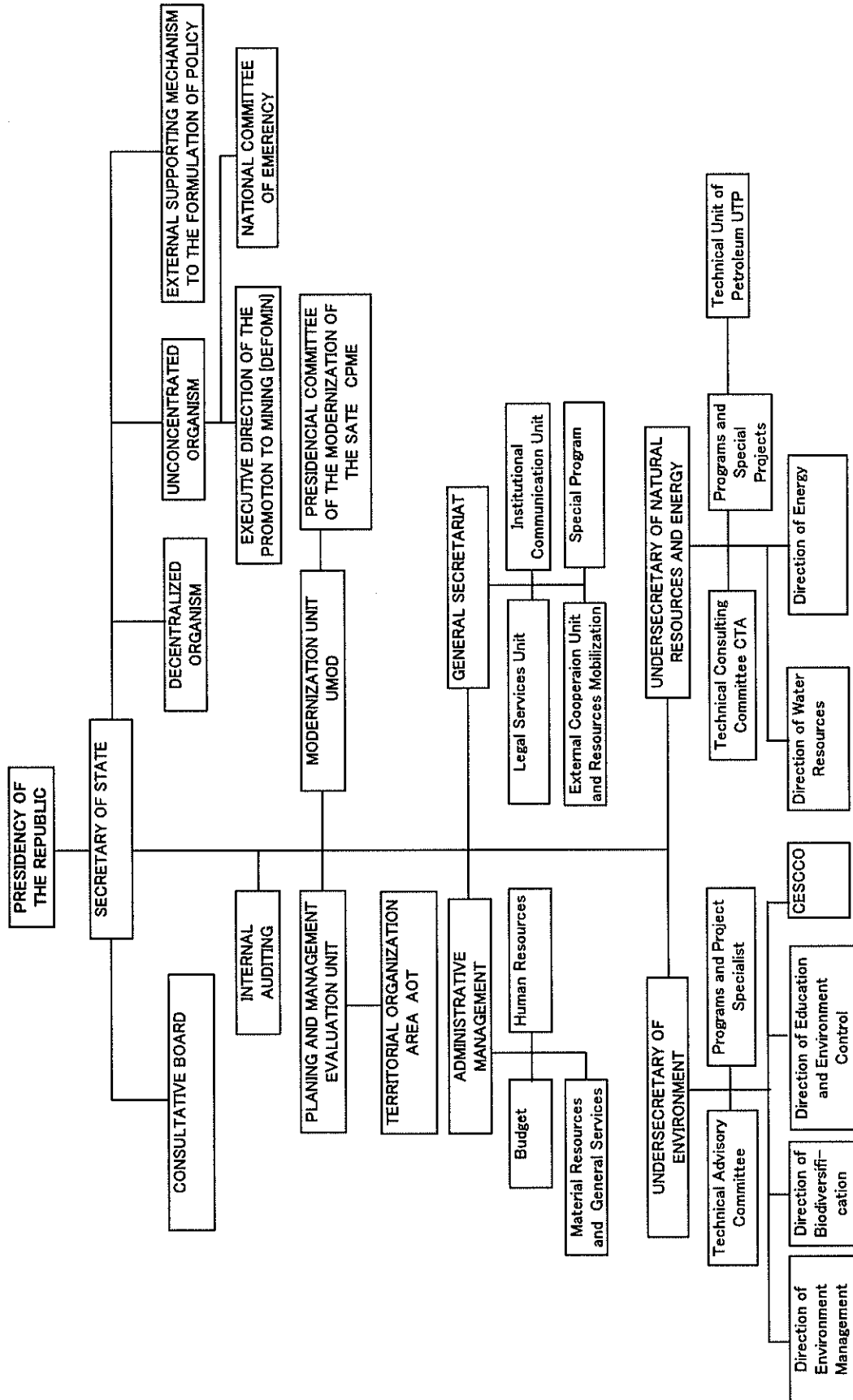


Figure L.2.6

Organization Chart of Ministry of Natural Resources and Environment (SERNA)

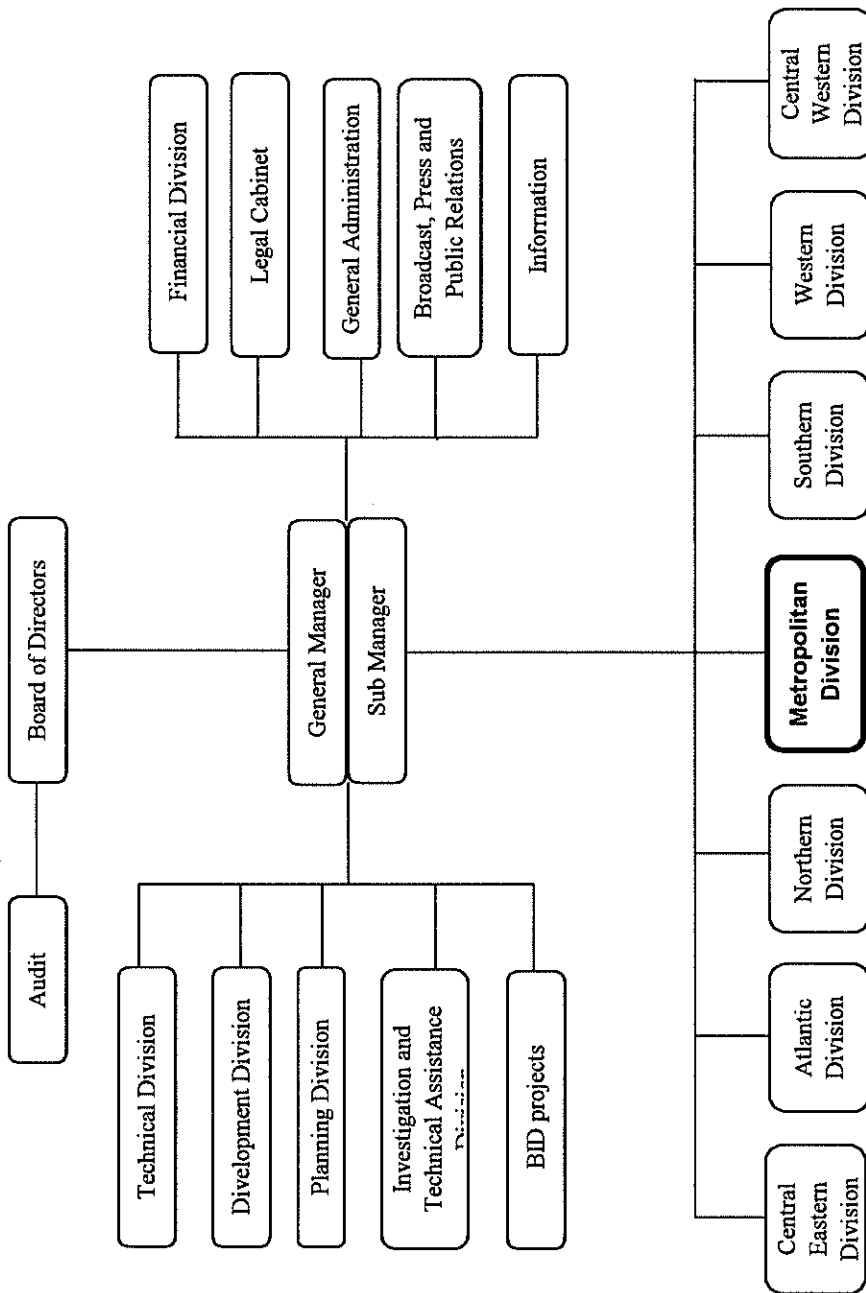


Figure L.2.7

Organization Chart of the National Service Authority for Water Supply and Sewerage (SANAA)



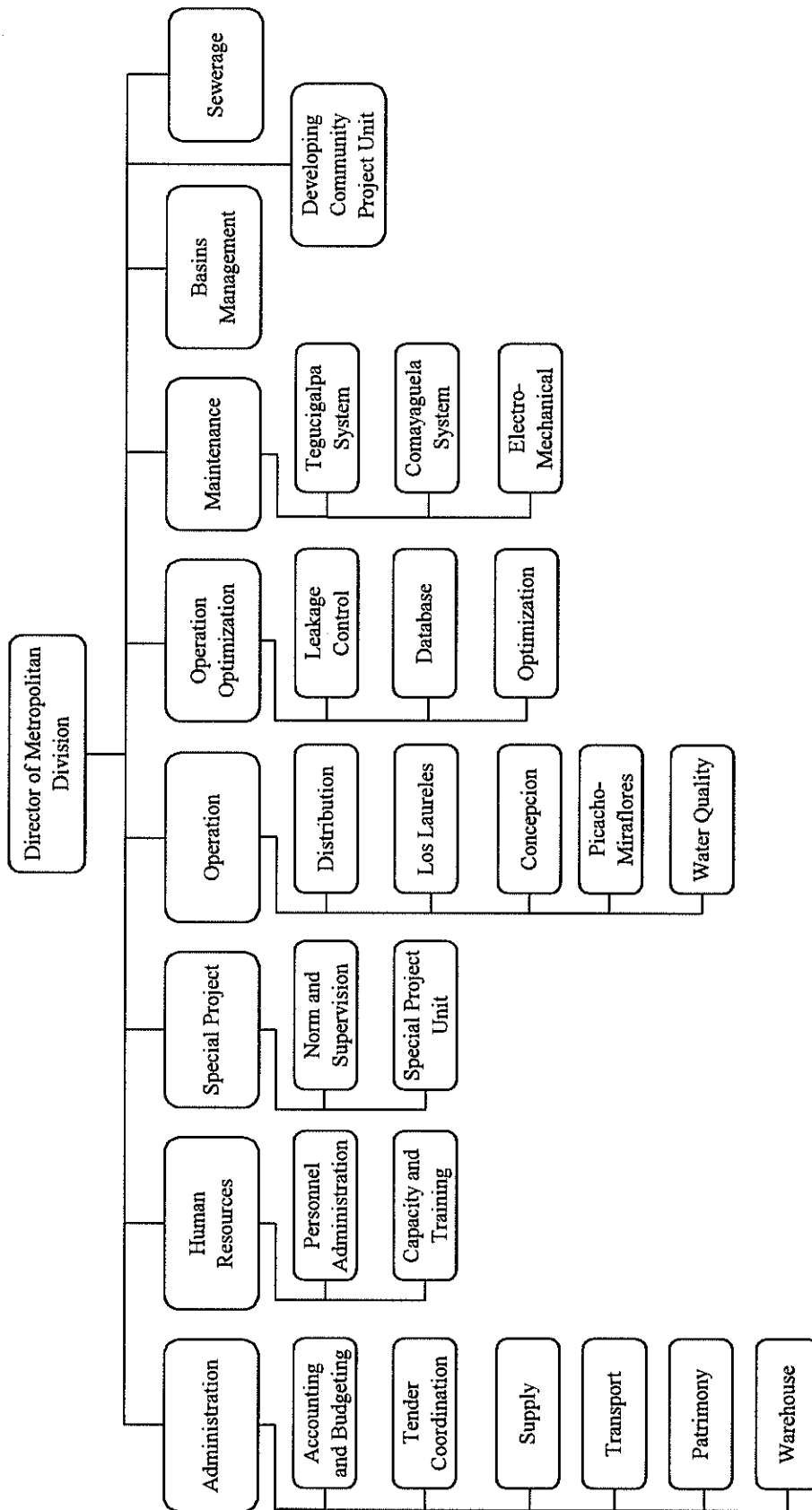


Figure L.2.8

Organization Chart of Metropolitan Division of SANAA

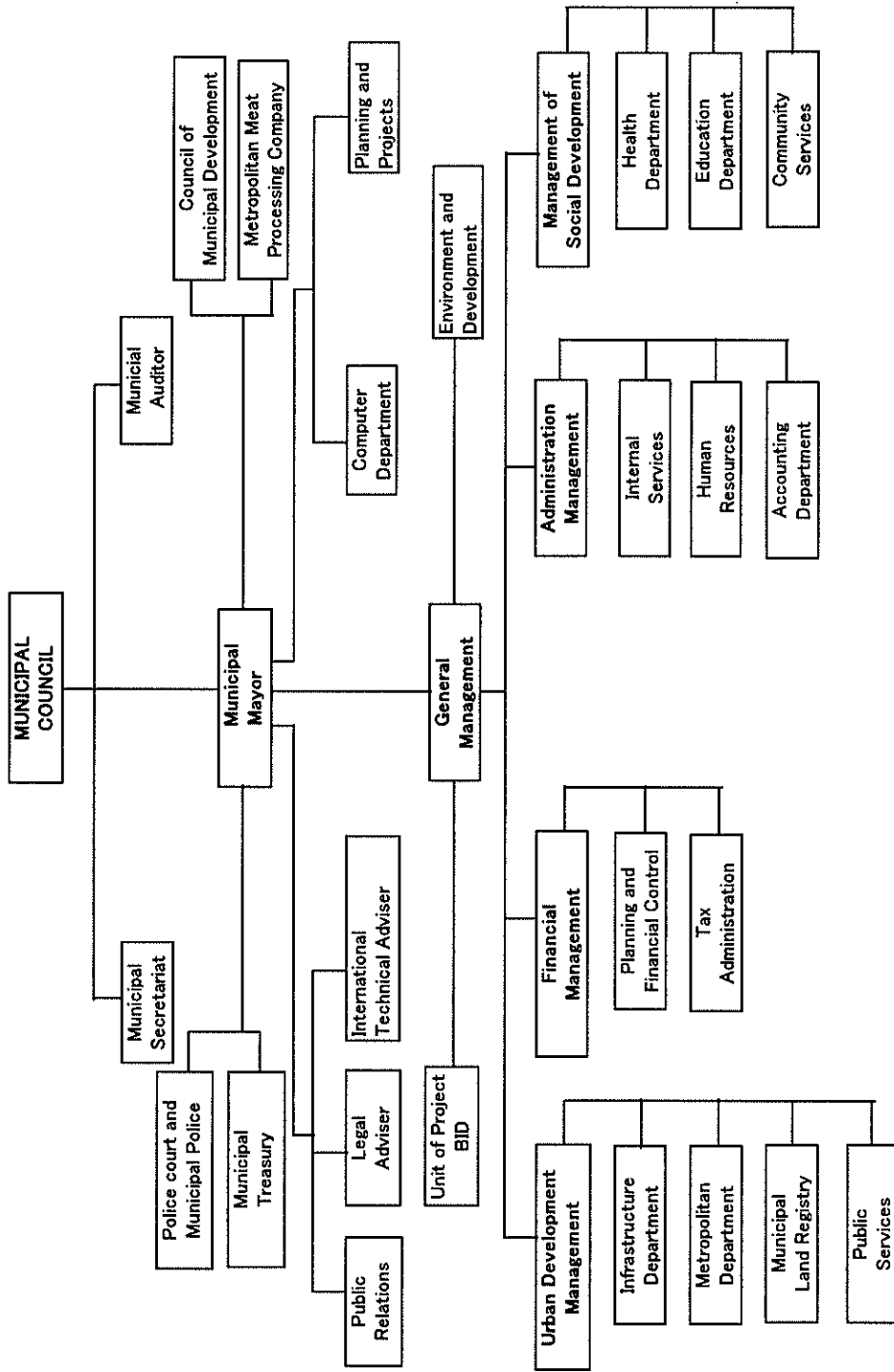


Figure L.2.9

Organization Chart of the Municipality of the Central District (AMDC)

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