

Chapter 5

PLANS FOR RECONSTRUCTION

5.1 Government Programme

The Government of the Philippines has structured the earthquake recovery plan with three phases:

- Phase I Rescue and Relief
- Phase II Rehabilitation and Recovery
- Phase III Reconstruction and Development

5.1.1 Rescue and Relief

Phase I was managed by the National Disaster Coordinating Council, a permanent inter-ministerial administration established to coordinate preparedness and emergency response for all natural disasters in the country. This phase lasted for several weeks after the earthquake. The total cost of the Rescue and Relief phase has been estimated at P1.5 billion (US\$56 million).

5.1.2 Rehabilitation and Recovery

Phase II superseded the Rescue and Relief phase and is planned to run for two years. It consists primarily of the repair of infrastructure and social services needed to facilitate recovery of the affected region. The total budget for this phase is P15 billion, (US \$ 555 million). Ten billion pesos have already been approved by Congress (Republic Act 6960, August 7, 1990). Planning and supervision of Rehabilitation and Recovery is the responsibility of the Presidential Task Force for Rehabilitation, a specially convened administrative unit for the lifetime of the phase.

5.1.3 Reconstruction and Development

Phase III consists of all reconstruction projects that will take longer than two years, and that have a developmental dimension to them. The National Economic and Development Authority has the responsibility for planning this phase, with implementation being carried out by the line agencies (e.g., Department of Public Works and Highways and the Department of Health). The total budget envisaged for all the Reconstruction and Development projects so far identified is P27 billion (US \$ 1 billion), which it is envisaged will be funded on a project-by-project basis. The overwhelming proportion (91%) of the funding for Reconstruction and Development projects is earmarked for infrastructure,

with a significant sum (P1.2 billion), apportioned for projects in Industry, Trade and Tourism.

5.2 Strategy of Plan

The main goal of the Reconstruction and Development Program is to restore normalcy and to minimize the effects of similar and other calamities that may occur in the future. Its component objectives are:

- normalize and accelerate economic recovery including the creation of an attractive investment climate;
- provide adequate livelihood and employment opportunities especially for the displaced workers;
- ensure the continuous flow of goods and services especially during relief operations when calamity strikes;
- strengthen institutional infrastructures, arrangements and mechanisms for disaster preparedness and raise public awareness on natural disasters and disaster mitigation;
- reduce the susceptibility of vertical and horizontal infrastructure to damages due to natural disasters; and
- prevent further degradation of environment and rehabilitate damaged ecosystems.

The strategies adopted in the Reconstruction and Development Program in pursuit of its objectives are organized according to their sectoral (line agency) and spatial (regional or physical planning) orientation.

5.2.1 Sectoral Strategies

The sectoral strategies of the Reconstruction and Development Program are those which are likely to fall under the jurisdiction of specific government line agencies (Departments of Public Works, Agriculture, Environment and Natural Resources, Trade and Industry, and Social Services). They include:

- opening or improving alternate routes, ports, and airports to promote economic and physical integration, prevent isolation and ensure that interregional transportation and communications are not disrupted in the event of future calamities;
- providing appropriate reinforcement and other infrastructures designed to prevent slope failures in earthquake-prone areas in order to minimize serious damage to properties in the future;
- closing, abandoning, or minimizing the occupation or use of areas, roads, and other facilities which are found to be unsafe and are beyond possible reconstruction;

- improvement of institutions as well as rules and regulations governing the design, construction, and location of vertical and horizontal infrastructures;
- promotion of environmental protection and rehabilitation;
- strengthening of institutions and capabilities for quick and effective disaster assessment and response and management;
- intensified private sector mobilization for developmental activities and disaster mitigation and related activities; and
- restoration of productive capabilities and development of alternative livelihood skills and opportunities.

5.2.2 Spatial Strategies

The spatial strategies of the Reconstruction and Development Program are based on the national and regional Physical Framework Plans currently being drafted by the government and on the recently adopted national Countryside Agro-Industrial Development Strategy (CAIDS).

The Physical Framework Plans, which are expected to be completed by 1991, have the following general objectives:

- strengthen national cohesion through increased physical integration;
- encourage the growth of urban centers outside the National Capital Region;
- promote the physical environmental integrity of the country; and
- facilitate efficient production and land utilization.

The CAIDS, meanwhile, is a government strategy to facilitate industrial development through the establishment of industrial centers in every administrative region. Each region's industrial center is intended to make full use of comparative resource advantages by developing agro-industries based on the region's major agricultural activities. The CAIDS, in effect, attempts to build complimentary regional industrial specialization.

The spatial strategies adopted by the individual regions may be summarized as follows:

- Cordillera Administrative Region
 - environmental protection with consideration of CAR's geologic foundation
 - assessment and evaluation of load level capacities of geologic foundations;

- identification of environmentally critical and hazard prone areas and ban on any type of development within these areas;
 - emplacement of erosion control measures;
 - establishment of forest/community parks in every barangay; and
 - strict adherence to environmental standards.
- development and enhancement of suitable access roads
 - downgrading Kennon Road into a secondary road;
 - development and enhancement of other access roads namely the Naguilan Road, Marcos Highway, and Halsema Highway;
 - construction of alternate routes including the Baguio-Bua-Itogon-Dalupirip-San Miguel Road and Baguio-Asin-Tubao Road as alternates to the Kennon Road, and the Baguias-Tinoc-Hungduan-Banaue-Mayoyao-Alfonso-Lista-Isabela Road as an alternate route to Ifugao.
 - BLIST Metropolitan Planning: decongestion of Baguio City and metropolitan planning involving its four contingent outlying municipalities (La Trinidad, Itogon, Sablan, and Tuba).
 - Region I
 - preparation, review, and update of master plans and zoning ordinances, especially in the nodal centers of Dagupan, Urdaneta, Agoo, Lingayen, San Carlos, San Fernando, Vigan, and Batac
 - development of San Fernando, La Union as an industrial core to absorb the economic activities displaced in the earthquake-damaged areas especially Baguio and Dagupan
 - promotion of the Vigan-Laoag area and the Lingayen Gulf coastal area as major tourist destinations in the meantime that Baguio is being restored as a prime tourist area.
 - improvement of major transport routes especially the Manila North Road, and the construction, improvement, and rehabilitation of
 - the Solsona-Cabugao-Conner-Rizal section of the Ilocos Norte-Kalinga road,
 - the Nueva Era-Bangued section of the Ilocos Norte-Abra road,
 - the Umingan-San Jose section of the Pangasinan-Nueva Ecija road,
 - the Rosales-Santa Fe section of the Pangasinan-Nueva Vizcaya road.
 - adherence to resource and environmental rehabilitation and conservation guidelines and plans.

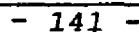
▪ Region II

- initially, the rehabilitation and reconstruction of the primary land access routes (Dalton Pass in Nueva Vizcaya and the Laoag-Allacapan road in Cagayan) and the rehabilitation of other social and physical infrastructures such as school buildings, health facilities, and public buildings
- within a year or two, the provision of basic infrastructures and services in identified urban centers to encourage agro-industrial development, with priority given to Cauayan, Isabela as the site of the Regional Industrial Center
- pre-investment and feasibility studies to identify alternate transport routes and modes for the region. Those already identified and scheduled for implementation within the next five years are:
 - development of Port Irene;
 - improvement/upgrading of the Tuguegarao and Cauayan airports and the reconstruction of the Bagabag airport;
 - improvement/construction of four alternative land access routes: Santa Fe-San Nicolas (Villa Verde Trail)-Rosales section of the Nueva Vizcaya-Pangasinan road; Quirino-Aurora (Cabarroguis-Maddela-Casiguran) road; Nueva Vizcaya-Benguet (Aritao-Kayapa-Baguio) road; Nueva Vizcaya-Nueva Ecija (Dupax del sur-A. Castaneda-Pantabangan) road.

▪ Region III

- construction of flood and erosion control infrastructure particularly in Bongabon, Gapan, Jaen, Talavera, and San Leonardo in Nueva Ecija, Concepcion and Victoria in Tarlac, and Baliwag in Bulacan.
- construction of small and medium scale power and irrigation projects.
- improvement of the reliability of access through the improvement of existing roads and the construction of alternate routes:
 - Carrangala, Nueva Ecija-Dupax del sur, Nueva Vizcaya
 - Cagayan Valley Road
 - Bongabon-Baler road
 - Botolan, Zambales-Capas, Tarlac road
- improvement of telecommunication links.
- promotion of economic activities in stable areas.

ALTERNATE ROUTES UNDER CONSIDERATION BY THE REGIONAL
DEVELOPMENT COUNCILS OF REGIONS I, II, III, AND CAR



5.3 Masterplan Review of Selected Cities (Baguio, Dagupan)

Part of the mission's field activities included consultative sessions with the city planning officials and staffs of Baguio and Dagupan wherein the master plans of each city were reviewed.

The plans which were presented by the Baguio and Dagupan city officials were formulated in 1974 and 1978, respectively. The planning officials of both cities have given high priority to the revision or reformulation of their plans, particularly in order to incorporate earthquake and other hazard mitigation measures. Both city governments are, in fact, in the process of negotiating for appropriate technical assistance.

The following are some notable features of the plans:

- The master plans, as recognized by the city officials, refer to land use and zoning plans. They are typically long term in their orientation and emphasize the importance of a comprehensive, integrated, and participatory approach to planning.
- The pre-earthquake master plans take a very strong sectoral orientation. The plans are preceded typically by sectoral plans which depict the locations of various urban infrastructures and services (roads, water supply, schools, hospitals, churches, etc.). These sectoral plans are descriptive rather than prescriptive.
- There is a strong preference for a formal, and practically unilinear, planning process.
- There are political constraints to some form of metropolitan planning even if it is becoming even more important, because of collective concerns which extend beyond formal administrative boundaries, that coordination among the city and neighboring municipalities be expanded and institutionalized. Baguio City, however, has already taken steps towards metropolitan planning, with the recognition of the BLIST metropolitan area, even before the July 16 earthquake.
- The replanning of Baguio and Dagupan will have to consider significantly different earthquake effects. Baguio, with its mountainous terrain, will have to deal more extensively with slope failures. Dagupan, however, with its alluvial foundation and coastal location, will have to give greater emphasis to mitigating the effects of liquefaction and tsunamis.

Figure 5.3 - 1

BAGUIO CITY MASTER PLAN SKETCH

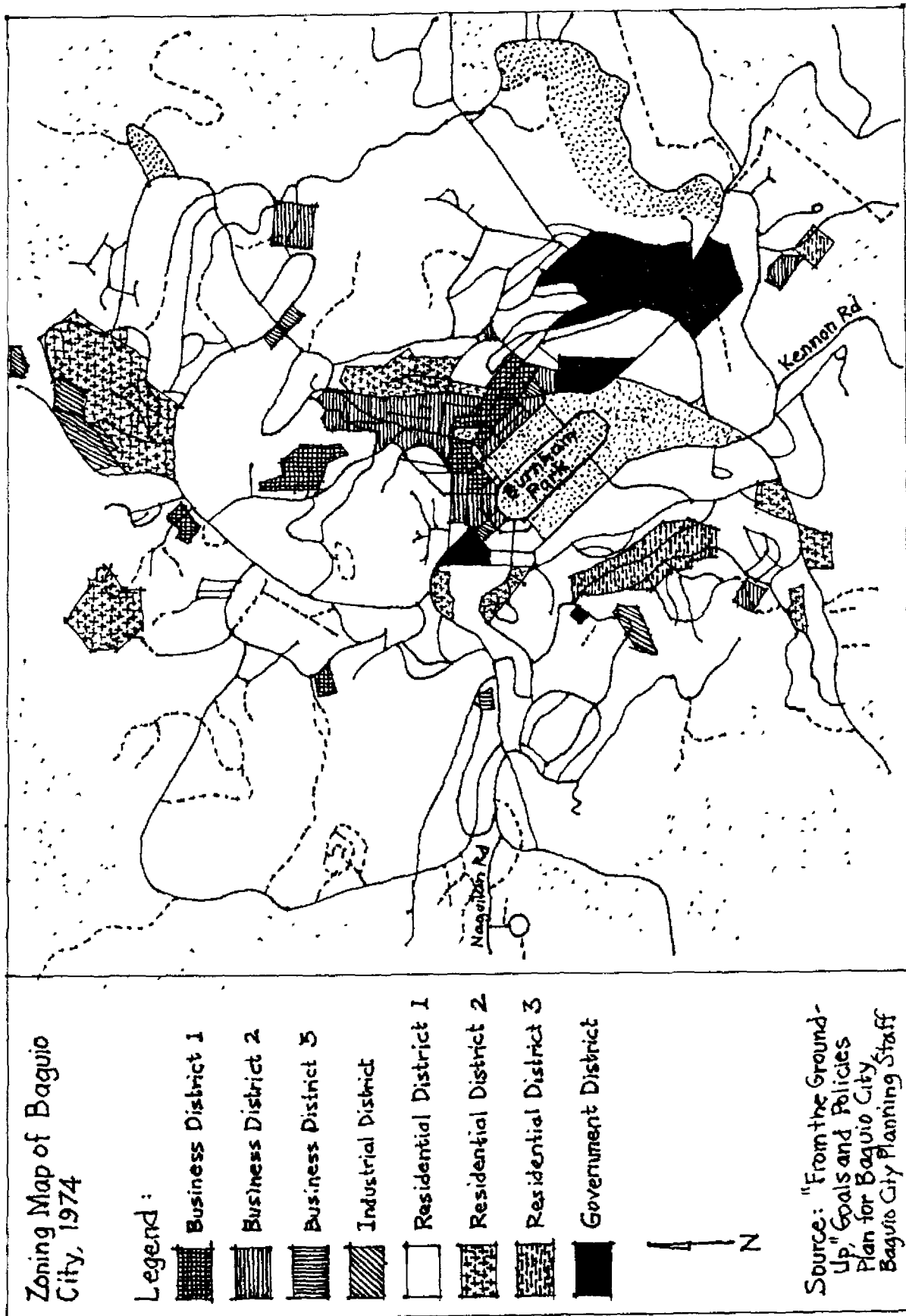
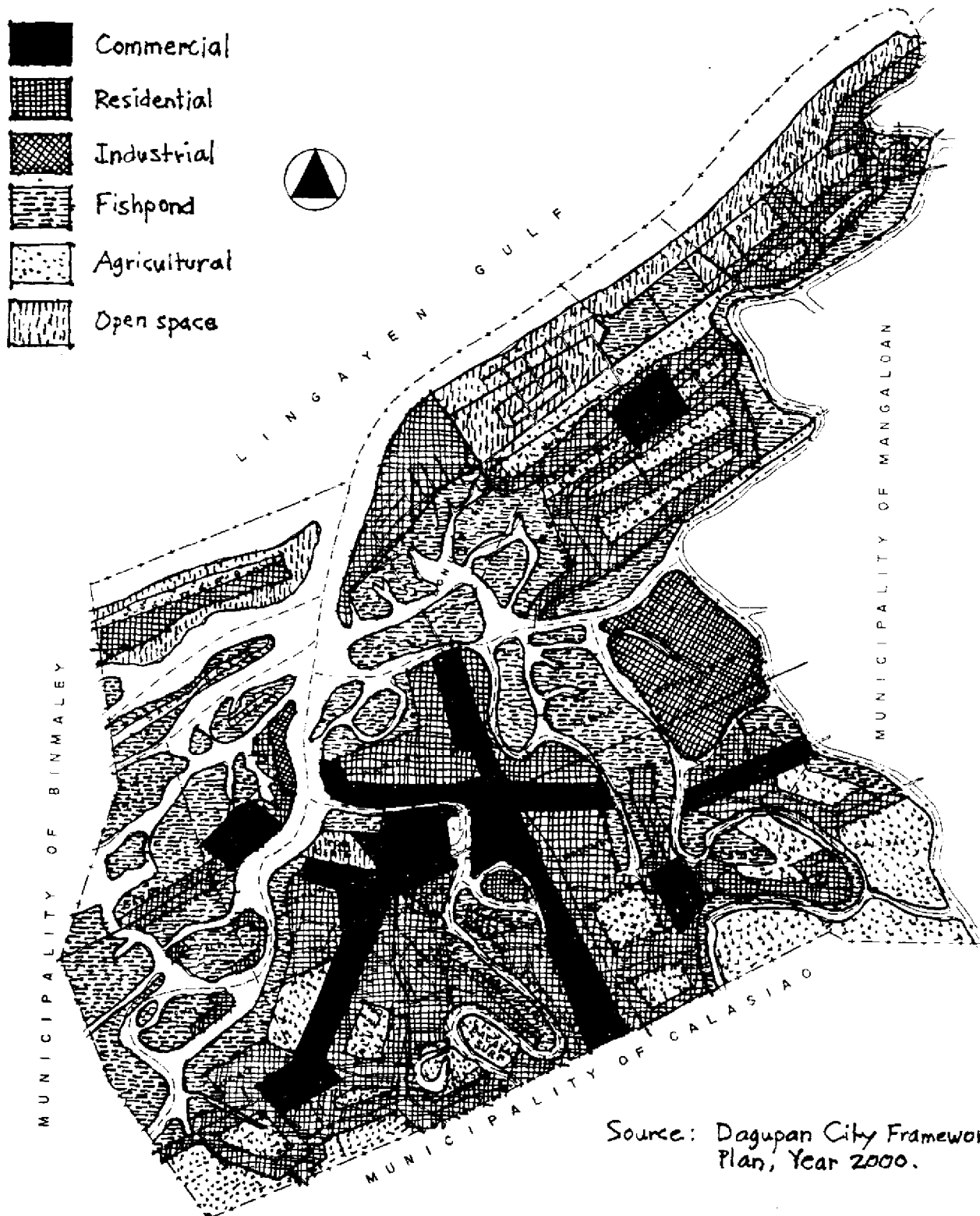


Figure 5.3 - 2

DAGUPAN CITY MASTER PLAN SKETCH



Source: Dagupan City Framework Plan, Year 2000.