RURAL-URBAN LINKAGES AND DEVELOPMENT: A CASE STUDY OF NORTH SULAWESI, INDONESIA

by

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

in

THE FACULTY OF GRADUATE STUDIES

(School of Community and Regional Planning)

We accept this thesis as conforming

to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

December 1997

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Vancouver, Canada

Date January 19, 1998

DE-6 (2/88)

ABSTRACT

There is a lack of research on the relationships between rural areas and the urban hierarchy in Indonesia. Because of this, policies for urban and rural development are undertaken in isolation from one another, without incorporating the implications of rural-urban linkages for rural development. This study contributes to our understanding of rural-urban linkages in Indonesia by examining four villages in the Province of North Sulawesi. Because of the importance of the Indonesian government's transmigration program for rural development in North Sulawesi, specific emphasis is placed on the comparison between the experiences of transmigrant villages and indigenous non-migrant villages in their relationships to the urban hierarchy.

The main case study covers four villages (two transmigrant, two indigenous) in Dumoga Subdistrict of North Sulawesi. The linkages between these villages and the various levels of the urban hierarchy are articulated through the following key sets of variables: economic ties, population movement, services delivery, physical infrastructure, technology and political administration. The variables associated with administration interact strongly with the other sets of variables, as government policies (an aspect of administration) have impacts on all other forms of rural-urban interaction.

In the comparison between indigenous (Mongondownese) villages and those of transmigrants (Javanese and Balinese), it was found that the transmigrants were better off in terms of almost every social and economic indicator. Although the success of the transmigrants may be attributed in large part to the application of their skills at wet rice farming in the new environment of North Sulawesi, they have also been strongly supported in their endeavors by central government programs which provide them with land, tools, irrigation infrastructure and other benefits.

This study also examined in detail the mechanics of policy setting as it pertains to rural villages. It was found that although a system has been put in place by the Indonesian government to promote lower level inputs into the planning process, the continuing strong centralization of the administrative system results in a filtering process as policy suggestions work their way up from lower levels (village, subdistrict, district) to higher levels (provincial, national). Despite efforts at administrative decentralization, policy setting and implementation for rural and urban development remain highly centralized.

The concept of the urban hierarchy which was utilized in this study is that which is defined by the Indonesia administrative system, consisting of the provincial capital (medium size city), the district capital (small town) and the subdistrict capital (rural center). It was found that without its administrative functions, the lowest level on this hierarchy (the rural center) would have very few functional linkages to the rural areas, as most of the other sets of linkages bypass the rural centers. The rural-urban linkages of transmigrant villages differed greatly from those of indigenous villages with transmigrants having stronger connections to higher points on the urban hierarchy. Considering the income differences between migrants and non-migrants, the long-term implication of this final point is that we can expect a gradual reduction in the functions of lower level centers if rural development is successful and incomes increase.

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ACKNOWLEDGEMENTS

I am greatly indebted to my supervisor, Michael Leaf, Ph. D., for his insightful feedback and unending academic and moral support. I am also very grateful to You-tien Hsing, Ph. D., and Professor T. G. McGee, members of my doctoral committee who offered constructive criticism and valuable comments.

I am also obliged to a number of agencies and people in North Sulawesi and Central Sulawesi for letting me conduct the research. They include the Bappeda of North Sulawesi Province, Bappeda of Bolaang Mongondow District, Bappeda of Manado Municipality, Bappeda of Donggala District, Statistics Office of North Sulawesi, Subdistrict Government of Dumoga, Subdistrict Government of Kotamobagu, Subdistrict Government of Parigi, and the village government of Doloduo, Dondomon, Mopugad Selatan, Mopuya Selatan, Tindaki, Purwosari, and Tolai. I also thank the resource persons working with these offices who shared their data and time with me.

My grateful thanks are also due to Meg Rakow assisted me with copyediting and Catherine Griffiths was a valuable helper in the computer lab. I am particularly indebted to my fieldwork colleagues: Teddy Minggu, Oktavianus Kalangit, Meidi Satiman, Indah Sulangi, Susanti, Christien Karambut, Rinna Pangemanan, and Paulus A. Lowing. To them, and to the many people in the survey villages who gave of their time and patience, and to the administrators in all the *desas, kecamatan*, and *kabupaten* in which I worked, I am deeply grateful for their excellent support. *Terima kasih banyak.*

I would like to thank to the Ministry of Education and Culture in Jakarta who sponsored my study.

Finally, special thanks to Andrew and Wulan, for their unending love and patience and good humor.

CHAPTER ONE

INTRODUCTION

Background of the Study

The growth of primate cities in Southeast Asia is a well-documented phenomenon (McGee, 1969, 1994; Ginsburg, Koppel, McGee, 1991; Laquian, 1993; Leaf, 1994, 1996). Although Southeast Asia is one of the least urbanized regions of the world, population figures of its major cities have soared. Indonesia is no exception to the phenomenon. Its capital city, Jakarta, has a population which doubles every 15 years and had reached 8 million in 1990 (CBS, 1992). It is part of the larger extended metropolitan region of Jabotabek, which in 1990 had 16 million inhabitants. Such metropolitan growth is linked with migration from the countryside as well as sustained by natural increase. The process accelerates as employment opportunities in the countryside dwindle. New agricultural techniques are introduced, often at the cost of marginal employment. For instance, in Indonesia the spreading changes in rice harvesting methods may mean that village women using *ani-ani* knives and harvesting stalk by stalk are replaced by hired laborers using sickles (Collier, 1979). Even large-scale, capital intensive agricultural undertakings are experiencing harsh competition because deteriorating terms of trade are challenging their position. Nonagricultural activities are also under pressure, both in the countryside and in the regional centers, as competition from big city-based enterprises has increased, both in secondary and trade activities. In some sectors the take-over of small-scale activities has already been completed.

Migrants are lured to big cities by the wide range of jobs offered. Most migrants to Jakarta find employment in the informal sector (Sethuraman, 1976). The size of the informal

sector in a metropolis like Jakarta has been positively correlated with the number and size of large-scale industries and government departments, the so-called formal sector (Hugo et al., 1987). This correlation partly depends on the migrants' expectations of eventually finding a job in the formal sector. Researchers claim that hopes, rather than actual job opportunities in the formal sector, attract migrants to Jakarta (Sundrum, 1976; Wirosuhardjo, 1983). Most migrants would never qualify for a formal job. Another type of migrant comes to live in big urban centers for the facilities offered in these places, most important of all being schools and other centers for education.

Underlying these demographic trends and economic processes is the concentration of development investment in just a few metropolitan centers. This tendency—whether spontaneous or induced—has been justified by spatial conceptualizations of economic growth theories, such as Perroux's "growth pole" and Hirschmann's "trickle down" notions. Adherents of such concepts have argued that development efforts should be concentrated so as to achieve savings on infrastructure and transport costs for enterprises. The so-called urbanization and conurbation economies are intended to tempt other industries to settle in the growth pole, making use of the forward and backward linkages thus more easily created. Such planning theories have heavily influenced development policy, as implemented by Third World governments and international aid agencies. As an example of such concentrated investment, during the 1970s Jakarta absorbed 60 percent of all foreign investment in Indonesia and 26 percent of all private Indonesian investment, while government expenditures were twice as high in Jakarta when compared to the highest provincial figures (Hill, 1989; Prabatmodjo and Kusbiantoro, 1993). Although expanding quickly, Jakarta contained only 4.4 percent (CBS,1992) of Indonesia's population.

Once a certain level of development has been reached and an innovative center has been established, the theorists argued, growth should spread and intraregional economic inequalities as well as differences between city and countryside should diminish. Import substitution industries were considered the type of economic activity most likely to trigger growth and the succeeding spread, thus earnings from primary exports were channeled into this sector. Import substitution, however, proved inadequate as a solid base for the national economy. It was quite limited in its prospects, due to a lack of investment capacity and marketing opportunities. The capital funding sector suffered from low product prices, while the demand for manufactured products remained low and concentrated in the big urban centers. In Indonesia, after the first and easiest stage of import substitution for consumer goods, there was confusion over how to continue industrialization policy. Several options were proposed, such as starting capital goods industries, upgrading exports of agricultural products, or exporting consumer goods (Hill, 1989).

However, by the 1970s it had become clear that the growth pole approach did not work as planned. Although the concept of concentrating investment still had many supporters, new ideas emerged. Critics of growth pole policy warned that besides its basic weakness of concentrating on economic growth instead of welfare and employment, growth pole policy had other serious drawbacks. It led the population of the metropolis to expand by multimillions of migrants. Even worse, its implied preference (urban bias) contributed to a neglect of living conditions in the countryside, and of social services in general. The goal of spreading development was not fulfilled. As a response to such shortcomings, a new development paradigm was sought. Interest in theories of regional planning increased, and greater importance was given to the role of small towns and medium cities[1] in economic development. Previously, small towns had only been

[1] A small town in the Indonesian context is generally the capital city of the district (*kabupaten*), and a medium city is the capital city of province. The operational definitions of medium city and small town for this study is discussed in Chapter Two.

conceptualized as centers for public administration and locations for social facilities.

Most Indonesians live in rural areas and derive a living from various forms of agriculture. The dispersed settlement pattern is punctuated by distinctive nodes which are sometimes large enough to be called towns. These places are described as service centers, and act as the sites of commercial, medical, educational, administrative and associated activities.

The growth of the largest Indonesian cities has been relatively well-documented (see McGee 1994; Leaf, 1994; Rutz, 1987; Nas, 1986). They are the foci of the nation's political and economic organizations, whilst within them new social relations are being established. Despite the rapid growth of these cities, it can be argued that they affect directly only a small proportion of Indonesia's population. The rate of urbanization at the provincial level is relatively low, ranging from 31percent to the very low levels of 8 to 12 percent (CBS, 1992). Far less is known about the social, economic and geographical relations of the many small towns and rural centers[2] with which the majority of the population have more direct contact. Emphasis should be put on the regional context of these small towns and rural centers, as they constitute the structure on which development plans must be built and implemented. Future development may depend on a viable system of settlements that intervenes between the primate city and the rural village (Hackenberg, 1980).

The distribution of population in Indonesia is uneven. Two-thirds of Indonesians live on the "inner islands" of Java, Madura, Bali and West Nusa Tenggara, which together represent just 8 percent of Indonesia's land area. In 1986, population densities in Inner Indonesia averaged 685 people per square kilometer. Java's population density in 1986 was 774 people per square

[2] Rural center is the capital city of the subdistrict (*kecamatan*). The operational definition of rural center is discussed in Chapter Two.

kilometer. Many of Java's districts represent the highest rural population densities in the world, reaching as high as 2,000 people per square kilometer. In Indonesia's "outer islands", population densities average thirty-three people per square kilometer, although they range from seventy-two people per square kilometer on Sumatra and fifty-one people per square kilometer on Sulawesi, to fifteen people per square kilometer on Kalimantan, and just three people per square kilometer on Irian Jaya (World Bank, 1988).

The fear of overpopulation on the inner islands, especially in Java and Bali, has been an important reason for the Transmigration Program. The two principal objectives of the Transmigration Program are population redistribution, or "reducing the population density in certain regions in order to facilitate ... development and rehabilitation efforts in said regions," and regional development, or "fulfilling the manpower requirements of ... areas in which the population is relatively scarce, so that the available natural resources, especially agricultural land, can be utilized efficiently and effectively' (Government of Indonesia [GOI], 1984). In order to reach the goal of contributing to regional development in the settlement areas, the transmigrants have to be integrated into their new economic and social environments. Evidence from various settlement areas indicates that the process of this integration is not without problems (Heeren, 1967; Hardjono, 1977; Koentjaraningrat, 1982; Swasono and Singarimbun, 1985). However, in some areas there are indications that certain transmigration settlements are relatively more successful in terms of economic and rural development, when compared with their counterpart indigenous rural settlements.

Large-scale transmigration has had a significant impact on town and urban development in the outer islands. Small towns and rural centers in transmigration regions have experienced a boom in activity as a result of transmigration-related construction and the search for off-farm work by local people and by transmigrants. Many of these small towns and rural centers are

growing at rates that promise to double their populations in ten years (CBS, 1985). For small towns and rural centers that have no formal urban status and depend mainly on central budgets, rapid increases in road traffic and accelerated growth may be difficult to manage under current planning arrangements. Cities may also find it difficult to keep pace with the accelerated growth, and the capacity to deliver urban services is particularly low in large coastal cities and small frontier towns in the outer islands. Therefore, the growing demands for services in these areas must be taken into account in future development planning. Select key questions which are significant in determining the suitability of various alternative planning strategies are listed in the problem statement section below.

Problem Statement

There is a lack of research on the relationships between rural areas and the urban hierarchy in Indonesia. Because of this, policies for urban and rural development are undertaken in isolation from one another, without understanding the implications of rural-urban linkages for rural development.

1. How do rural centers and small towns contribute to successful economic development in rural settlement areas? Are there significant differences and structures involved which may relate to different impacts upon rural development? How do rural-urban linkages contribute to rural development?

2. Do rural transmigration settlement areas differ from indigenous rural settlements in terms of their linkages with rural centers and small towns? How can the development of local people be improved by learning from the migrants' experiences of successful economic development?

3. What possible solutions are currently envisioned by the government policy-makers who are responsible for addressing the problems of the region's rural centers, small towns and rural settlements?

Objectives of the Study

The study has three main objectives. First, the study is to explore how rural-urban linkages stimulate rural development, how rural development policies stimulate rural communities, and what the impacts of those policies are on rural populations. The chosen approach is an in-depth analysis which targets the specific cases of villages (local rural settlements) and rural transmigration settlement areas in North Sulawesi, Indonesia. The second objective of the study is to attempt to understand the impacts of linkages on rural development, by analyzing the dynamic of various stages of government intervention and the planning process. A particular emphasis is placed on transmigration because of its impacts in the North Sulawesi policy context. The final objective of the study is to obtain data and actual information on policy implementation within rural-urban linkages, so as to shed more light on the types of intervention that are most useful for rural-urban development goals. Producing new knowledge about rural-urban linkages and development in North Sulawesi, Indonesia, is the major goal of the dissertation.

Literature Review and Development of A Conceptual Framework

Functions and Roles of Small Towns

The idea of strengthening the fabric of small towns and intermediate cities was floated as early as August 1963 at the second Rehovolth Congress held in Israel, where participants outlined and discussed the `Agrindus' concept for "national decentralization by regional

concentration" (Weitz, 1965: p.92). The purpose of Agrindus was to secure cooperation between the largest possible number of neighboring villages for the maintenance of agricultural services; the processing, storage, grading, packing, transport, marketing and financing of farm produce; and the establishment of factories and workshops to meet agricultural and other requirements. The cooperative was to be extended to include cultural and sporting facilities, educational and health institutions, etc. (Weitz, 1965; 94). Thus agriculture was to be combined with industry, without undermining the village, an age-old asset. Instead, villages were to be improved, even reformed, and brought into line with changing conditions. A consensus expressed the view that a region deemed suitable as a basis for the described agricultural planning and rural development was one which contained villages linked to a single urban center (Weitz, 1965: 105).

Johnson (1970) supported the same view when he observed that "a modern type of agriculture not only presupposes the existence of markets where produce can be sold as well as of markets where inputs can be purchased, but it is necessary that both types of markets should be spatially dispersed in such a way that they will be within satisfactory distance and travel time of farmers, for the single reason that farmers' relative mobility is always limited by their very nature of space bound occupation" (Johnson, 1970: 181). Furthermore, he hoped that "ideally, the investment and production decisions of urban entrepreneurs should trigger a chain reaction of differentially smaller investment and production decisions in town hinterlands, which would manifest themselves not merely in random, unplanned, ribbon-pattern developments extending outward from urban centers along already crowded transport routes, but in more purposefully deployed investment clusters properly located at promising growth points in the widening angles of economic landscapes between main lines of travel and transport" (Johnson, 1970: 184).

Johnson advocated the strengthening of the market centers only from the viewpoint of modernization of a developing economy. Equitable growth is another dimension of the problem

that warrants a strategy of development oriented to small towns and market centers. If one goal of equitable growth strategy is to provide basic public and social services to large numbers of people in order to increase their productivity, employment potential and incomes, then much of the city-size research indicates that small towns and intermediate cities offer sufficient economies of scale for investment in a wide range of public utilities, infrastructure, social services, commercial activities and small and medium-sized agro-processing and manufacturing enterprises (Clark, 1968). The spread effect of development has failed to occur in many developing countries because of inadequately articulated and integrated settlement systems through which innovations and the benefits of urban economic growth could be diffused (Berry, 1967). In 1980 the UN Center for Human Settlements recommended the "development of a system of intermediate settlements with sufficient dynamism to counteract the attraction of the great metropolises and concentrating on towns of appropriate size as social, economic and cultural centers for their rural hinterlands" (UNCHS, 1980: 9).

Rondinelli and Ruddle (1978) synthesized the previous strategies of economic growth with equity as Urban Functions in Rural Development (UFRD). Aimed at predominantly rural areas with fairly high population densities and a predominance of small-scale peasant proprietors, UFRD ideas are particularly relevant to poor countries with scarce government funds and manpower resources. The UFRD approach emphasizes a gradual nucleation of dispersed rural populations into hamlets and villages, and encourages urbanization by strengthening strategically located key market towns. In particular, it promotes a concentration of public services in rural growth centers, which not only serve their nucleated village or town populations, but also provide a wide range of services to the surrounding dispersed rural populations (Bromley, 1984: 379).

According to Rondinelli (1984: 37) "small town development policies must be focused on strengthening their capacity to stimulate agricultural production and marketing of agricultural goods, to support small scale agro-processing industries, and to diversify the economic base on market centers. Investment in farm-to-market roads is required to link town-based enterprises with rural supply areas and to make services, facilities and inputs for agricultural production and marketing easily accessible to rural populations scattered widely over the landscape. Attention must be given to providing water, basic housing, health and social services in towns to increase the productivity of the labor force, and also to providing off-farm job opportunities and urban amenities that will encourage people to stay in rural areas".

Recent literature on spatial planning has emphasized the role of small towns in the process of regional and national development. Towns are supposed to act as intermediaries between the countryside and the big cities where economic and bureaucratic decision-making are concentrated. The increased attention given to the function of small towns in development is linked to many phenomena: the excessive growth of metropolises, the failure of development policies centered on big cities, the neglect of rural resources. Small towns have become a very fashionable subject. Planning concepts are not always realistic, however, and empirical evidence on the present functioning of small towns lags behind regional planning theories.

Small towns as propulsive and absorptive growth centers

When faced with the excesses of metropolitan growth, many researchers have adopted growth pole theory to support the option of secondary growth centers, due to the concern that congestion in the metropolis is reducing the economies of agglomeration. The concept of the growth pole is not abolished, it is only moved to other places, so as to avoid further pressure on overcrowded cities such as Jakarta, Bandung, Semarang, Surabaya, Medan, Palembang, and

Ujung Pandang. Lo and Salih (1978) introduced the concept of urban efficiency with regard to agglomeration economies which they claimed failed to work beyond a certain city size even when the city continued to grow. They advocated policies to both redirect metropolitan growth to middle-size cities and to stimulate lower-level towns to grow into the optimum efficiency-size class. By having propulsive growth centers in other parts of the country, it was hoped that regional inequalities might also diminish.

The sorts of activities associated with the propulsive growth center concept are large-scale industries with high labor productivity and high potential to link with other activities. Such industries need a well-developed physical and institutional infrastructure. Their existence might mean the presence of a trained labor force and high quality commercial services, whether in-firm or not. Such industries would attract other companies to the growth pole, subsidiary as well as independent enterprises (Rondinelli and Ruddle, 1978). To facilitate spread to the hinterland, the complex should develop functional relations with agriculture and rural home-based industries (Hansen, 1978). Regional physical and human resources would have to provide the basis of the main industry. Agro-based industries are often thought of as propulsive in small town centers of growth, but mineral resources, hydro-power plants and existing artisanal skills might be points of departure as well (Rondinelli, 1983).

A number of countries in Latin America, Africa and Asia have purposefully attempted to implement growth center strategies in regional development. Their objective is to stimulate production activities, often in the framework of import-substituting industrialization, which would trigger economic growth and restructure the regional economy. The emphasis is mostly on large-scale capital investments and their concentration in urban areas with a view to assumed economies of scale and location. Centers especially suited for such investments are those which function as inter-regional foci of production and trade, generally cities with 100,000 inhabitants

or more. It is assumed that the spread effects of polarized growth in these medium-sized centers will have a stimulating effect on the smaller ones within the region. Economic linkages with the regional center will gradually transform the smaller ones into lower order growth foci and make them "instruments of modernization" for their immediate surroundings (Misra and Sundaram, 1978). The development of medium-sized centers will also counter primate city dominance and bring about an "optimal urban hierarchy". Such a hierarchy is thought to facilitate the diffusion of innovations to the lower order centers, thus enabling these to perform in an adequate way their intended roles in the development and modernization of their rural hinterland (Johnson, 1970; Berry, 1972; Misra and Sundaram, 1978; Rondinelli and Ruddle, 1978; Rondinelli and Evans, 1983).

However, in developing countries the expected spread effects often appear to be of little consequence for the smaller centers, especially due to the strong economic linkages with extraregional and overseas clients and suppliers. In this respect, Mabogunje (1978) has identified the limited results of growth center strategies based on import-substituting industrialization and the prerequisites which condition their possible success in Third World countries. If the regional policies pursued also aim at the development of smaller centers for the benefit of the rural areas, it seems more appropriate to invest directly in such centers. The question is whether to invest in all of these or only in centers of a specific order or in those enjoying a particularly favorable location. In regions where motorized traffic is already rather well-developed, it seems less desirable to promote the emergence of a dense network of service centers. In lesser-developed regions, however, the stimulation of "hintertowns" or a type of "intermediate settlement" is advocated as a supposedly necessary link between the rural areas and the higher order urban centers (Manshard, 1977 in Hinderink and Titus, 1988). In several developing countries attempts have been made to stimulate, in a planned way, the development and distribution of such rural

centers. The centers' role and importance is no longer seen as derived from the spread effects of polarized growth in the medium-sized regional cities. On the contrary, these rural centers are considered "engines of growth" in their own right and for the benefit of their rural hinterland. Their development as market and service centers helps to increase the productive capacity of the rural producers and promotes the commercialization and specialization of agriculture in the framework of national economic growth (Mosher, 1969; ESCAP, 1979). The planning and proper functioning of these rural centers is thought to contribute to an "effective" integration of the rural population in the national economic and political order. Moreover, it is assumed that the development of rural centers increases local employment and, in this way, helps to stem the rural exodus to the metropolitan areas (Johnson, 1970; Southall, 1979).

Elaborating on the growth center concept, some scholars emphasize the aspect of the redirection and reduction of migration streams. They argue that small towns might compete with a larger city as a place of domicile for potential migrants, provided labor opportunities are sufficient (Rondinelli and Ruddle, 1978) and presuming that the search for work is the dominant motive for such a migration. Compared to a metropolis, small towns have some attractive amenities to offer, namely a more informal and personal atmosphere which might help in the search for a job, a lower cost of living, and a healthier living environment. Generally speaking, small towns are less troubled by problems such as cramped living space, crime and over-burdened infrastructure.

If small towns are to become a redirection location for the migration currently flooding the largest metropolises and attract rural migrants as well as urbanites, labor-absorptive activities should be encouraged within the small town production structure. This might entail large-scale labor-intensive enterprises, but more often small-scale industry is proposed (Lo and Salih, 1978). What is labeled "the informal sector" comes to the fore: low-capital enterprises which are based

on local resources and are manageable without high-tech skills. They should, however, offer a enough remuneration in order to justify quitting a rural job but not trying for Jakarta, Surabaya or some other metropolis.

This proposed type of labor absorption fits current realities, as Sethuraman (1976) described in Jakarta, where most migrants tend to find work in small-scale trade, transport services or industry. Such labor-intensive, small-scale activities in small towns will differ in character from those in the metropolis. In places like Jakarta, abundant purchasing power exists, supported by the salaries of factory workers and government officials. Besides small-scale industry, products may be ordered by metropolitan large-scale enterprises in such a way that a large and diverse body of informal trade, services and industries is sustained. However, in small towns, although local pockets of wealth exist, there is no such complex in which to participate. Thus, informal sector activities, next to petty trade and services, should be directed at upgrading regional primary produce or substituting large-scale manufactured goods.

As discrimination against informal activities and competition from large scale industry are nation-wide phenomena, a policy that intends to give breath to informal job opportunities in small towns should be nation-wide as well. On a local level the development of skills and the use of locally produced goods should be stimulated. Finally, it should be noted that such an employment program in small towns will not always result in the growth of their population figures. Today's network of roads is of adequate standard to make commuting to and from the villages possible.

Small towns as service centers and accelerated rural development

The needs of both town and village populations are addressed in the service center concept. Although previously not explicitly concerned with small towns, the notion of spread of

services has a long history. Hospitals and schools and extension offices have been regarded as pawns in the development game since prewar colonial times. Facilities are unevenly spread in developing countries, and are usually concentrated in the larger cities. For reason of social justice, public facilities such as education and healthcare ought to be accessible to all citizens, including those living in the countryside. Small towns are considered to be efficient locations for such services by planners who are inspired by central place theory and who interpret it normatively (ESCAP, 1979, Rondinelli and Ruddle, 1978). A good transportation network is a prerequisite. Because it is possible to plan public facilities, equal access seems an attainable target. Steering the location and growth of private enterprises that function as service facilities (i.e., stores, repairshops, printing shops or public transport companies), is less easy.

The service center concept resembles the previous concept of small towns as accelerators of rural development. It differs in dealing with the whole range of enterprises serving consumers (whether other enterprises or private persons) living in the countryside or in the town. For the services offered, it is supposed there is no rural provision. The concept of small towns and service centers as motors for rural development is focused on assisting productive activities only.

Such a brief discussion of concepts involving small towns does not mention the various combinations of concepts often urged, and by which cross over between service center and rural motor, or absorptive growth pole and rural motor, are met. As several authors (Titus et al. 1986; Rondinelli, 1983; Lo and Salih, 1978) have pointed out, the functions outlined seem to correlate to town size. For instance, propulsive growth pole potential will be more developed in larger towns because of the larger pool of skilled labor and managerial abilities, and the larger opportunities for interindustrial linkages and subsidiary services to develop (Rondinelli, 1983). Lo and Salih (1978) gave another example, pointing out that smaller towns are more apt to act as agropolises, while middle sized towns can become absorptive growth poles. In this respect,

Rondinelli emphasized that secondary centers had large pools of indigenous skills and industry, already oriented towards labor-intensive activities.

Instead of being local points of growth, one might conceive of small towns as geared to speeding up rural development. This small town concept is frequently repeated in regional planning. It gained popularity with Friedmann and Douglass' (1976) `agropolitan district' idea. A country should be split into units of a `single, integrated, self-governing district,' requiring that each district have sufficient autonomy and economic resources to plan for and carry out its own development. Decentralization of decision-making and concomitant land reform were considered crucial steps. While not every spatial theorist and certainly not every planner is so demanding, strong integration between town and region is viewed by many as necessary and enhanced by good transportation and communication links (Stohr and Taylor, 1981).

The urban enterprise associated with the concept of small towns as accelerators for rural development emphasizes rural, and especially agricultural production. First, it entails government extension services and private enterprises distributing inputs like high-yielding seeds, fertilizer, insecticides, and tools. Second, it includes enterprises involved, directly or indirectly, in the marketing or processing of agricultural produce. Next, rural nonagricultural enterprises should also be equipped with tools and raw materials, and the marketing and processing of home industry products undertaken in the regional centers as well. Both large-scale and small-scale urban enterprises might be considered in these respects, with the most important criteria being not size, but their subsidiary and beneficial role.

These supporting activities would not meet standards of efficiency when dispersed over a region. Because of the volume of input necessary to sustain an agro-processing plant, for instance, its best locus might be in a regional center. The same holds true, although to a lesser degree, for trade and service activities.

The Negative and Positive Effects of Linkages

Some argue that small towns and cities are predominantly parasitic—they allow town-based elites and administrative agencies to exploit the rural population and to drain rural areas of their resources, which are invested in metropolitan centers (Lipton, 1977; Funnel, 1988; Potter and Unwin, 1989). The implication is that small towns and cities should not be deliberately developed by the government. If they are encouraged to grow they will likely exploit rather than develop the rural areas in which they are located. Moreover, linking them to the national space economy will not facilitate the "trickling down" of benefits but merely promote rural to urban migration and the penetration of rural areas by exploitative national governments and multinational corporations. Schatzburg (1979), for example, insists that "the structures and organizations of these small towns usually benefit the already wealthy elements of local society who have the means and skill to co-opt most developmental resources and initiatives that originate with the national governments." Thus, he maintains, small towns are "structured to enhance the well-being (social, economic and political) of those who are relatively advantaged" (Schatzberg, 1979, p. 174). Their development, he implies, would be detrimental to the rural poor because small towns and cities "are both centers of extraction that siphon off financial and human resources from the countryside and blockage points that inhibit the downward flow of resources as well' (Schatzberg, 1979, p. 181).

It is also claimed that rural people have limited access to farming innovations and that this lack of access makes small towns and cities ineffective dissemination points for innovation. Moreover, although farm people participate actively in town-based market trade, the urban traders who dominate the markets seek to maximize their profits and are uninterested in diversifying the agricultural economies in which market goods are produced. It is argued that

capital and credit are usually controlled by townspeople who prefer to invest in the towns and to lend to other townspeople who have more collateral, rather than to rural people who are perceived to be high-risk borrowers (Preston, 1978). A study of urban centers in Peru has indicated that the penetration of export industries and resource exploitation activities in the towns created greater dependencies on the national capital, and made life increasingly difficult for subsistence farmers in the rural hinterlands (Roberts, 1976).

Critics warn that strengthening the linkages between small towns and cities and the metropolitan centers has made many rural workers redundant, undermined the network of local trading and petty production activities and weakened the economic structure of small towns, making them ancillary and dependent on the metropolitan economy (Roberts, 1976; Schatzbergs, 1979).

For these reasons, Friedmann proposes a strategy of "agropolitan development" based on the creation of rural districts of about 50,000 inhabitants. The objective would be to create self-reliant rural economies, with minimal linkages to the metropolitan economy (Friedmann, 1980). Stohr and Todtling (1977) have suggested a variation of the strategy based on "selective spatial closure" as a way of protecting small towns and rural populations from backwash effect.

A counter-argument is that small towns and cities per se are not necessarily parasitic; indeed, many perform the beneficial functions essential to rural development, as described earlier. Nor is the interaction with larger, more modern and economically diversified urban centers necessarily exploitative. Much depends on how the economies of small towns and cities are developed, and the ways in which the linkages between them and larger and smaller communities are organized.

Once urbanization begins it is impossible to expect spatial closure. Leeds (1980) argues that no nucleated settlement can be closed, that its very existence even at a low level of

agglomeration is based on specialization, which in turn requires exchange. The author insists that "no town is an island onto itself". The agglomeration of population in towns and cities is based on exchange and interaction: "for any locality, external connections are entailed. Theoretically, never should one expect to find autonomy, closure or boundedness. On theoretical grounds, one should always expect flows of goods, services, personnel, property, knowledge, information or possibly other values going in and out of any locality. The heart of this in and out is exchange—and the heart of human exchange is human strategizing ..."(Leeds, 1980, pp. 25-26).

A good deal of empirical evidence suggests that small towns and cities can perform beneficial functions for rural populations. Not all of the interactions between urban and rural people are to the detriment of the latter, and although linkages with larger communities can bring profound changes to smaller towns and cities, in many cases they create new opportunities for the poor.

In his study of highland towns in Bolivia, Preston found that the negative impact of rural-urban linkages on some of the rural poor was usually minor, but that they also offered new economic and social opportunities to many others. He stated that the most important influence on agricultural innovation in highland Bolivia had been personal contacts among farmers and that those contact points were most often the tool shops in market towns. Farmers are "much more likely to be impressed by seeing large healthy new varieties of potatoes in the market rather than being told about them or even to some extent than actually seeing them growing" (Preston, 1978, p. 69). The degree to which market towns made new products available was crucial in disseminating agricultural innovations to their hinterlands. Moreover, he found little systematic or serious exploitation of rural people by market operators or merchants, nor did individuals or institutions in the towns seem to pose obstacles to capital accumulation by farmers. Preston concluded that "there is little feeling of injustice at the distribution of income" and that most

rural families could get access to some capital. Likewise, the negative effects of administration in the towns were, with the exception of a few individual cases, not a serious problem for farmers and municipal officials had indeed a good deal of popular support (Preston, 1978, p. 176-177).

Other studies of market towns indicate that rural people can compete fairly with townspeople and that linkages between the towns and rural areas are the primary channels through which rural people derive income. Studies of marketplace interaction in the small Guatemalan city of Antigua, for instance, document the ability of rural people "to establish themselves as permanent market participants in competition with urban vendors, to obtain permanent rights in market space, to cope with hostile administrative structures and to form trading partnerships with urban customers." (Swetnam, 1978, p. 137). The very existence of the urban market in Antigua depends on linkages between the city and its rural hinterland, linkages that, in this case, seem to benefit rural residents as much as, if not more than townspeople.

A study of Dagupan City a medium-sized town in the Philippines showed that it has had strong trade relationships with the primate city, Manila, as well as with other towns and cities in its region. The study concluded that those trade and commercial linkages have not been detrimental to Dagupan's economic development, nor to those people living in the town's surrounding area. Sales penetration and contractual ownership penetration by large Manila-based firms changed but did not destroy local trade relationships. Instead, they stimulated local innovations in distribution and opened new employment opportunities. Dannhaeuser argues that trade with Manila was one of the major factors that kept capital within the Dagupan region instead of being transferred elsewhere. The expansion of active marketing by Manila-based firms in Dagupan seems to have mobilized local capital and labor resources that had previously been idle. The expanded economic ties did not impose political dependency on the metropolis. Local

officials have levied high license fees for companies and taxes on salesmen doing business in the city, often to the dismay of the large companies (Dannhaeuser, 1981, p. 165).

Richardson comes closer to the truth in pointing out that "neither the 'diffusion pole' nor the 'parasitic' views of the role of small cities are correct as a general rule. Much depends on how the functions of these cities have evolved with respect to their hinterlands, on the institutional and cultural features of the country in question and on how policies for strengthening the small cities are formulated and implemented" (Richardson, 1982, p.14).

All of this suggests that spread effects and beneficial interaction do not happen automatically as small towns and cities grow and diversify or as they are more strongly linked to other elements of the settlement system. Their economies and linkages must be structured to create benefits for their rural hinterlands and for the national economy. From their studies of growth poles in developing countries Misra and Sundaram conclude that "unless the new growth centers are planned as regional centers capable of serving the region they are located in, they cannot become instruments of modernization" (Misra and Sundaram, 1978, p. 170). Smaller towns must not only serve their rural areas but also be linked to larger centers that can support the wider array of services, facilities, infrastructure and inputs that are needed to promote agricultural development in rural areas.

Roles and Functions of Small Towns: Evidence from Developing Countries

Although the literature on small towns and cities in developing countries has grown so large in recent years that it is impossible to survey all of it here, samples can be cited to indicate the range and types of functions that these settlements perform. Examples of studies which indicate that small towns and cities in Latin America can perform important economic and social functions come from Mexico, Bolivia, Honduras and Guatemala (Beals, 1975; Evans, 1982;

Hardoy and Satterthwaite, 1986). Small cities in Mexico—such as Oaxaca, which has some 100,000 residents—are important market centers for their regions (Beals, 1975). The market in Oaxaca, for example, provides outlets for agricultural goods, livestock, nonagricultural products such as fibers and firewood, and a wide variety of artisanal products—pottery, baskets, mats and household and agricultural implements. An impressive array of people find employment directly or indirectly through market activities—carpenters, stonecutters, healers and curers, butchers, blacksmiths, small-parts sellers and marriage arrangers, mechanics and vendors. The market offers opportunities for farmers to sell their own goods and for a large number of intermediaries to engage in trade. Oaxaca supports traders who buy and resell goods within the market, traders who travel to small rural markets to collect goods for resale in the urban market, and traders who buy goods in the market and resell them door-to-door in town. The market offers opportunities for rural people to shop in stores located on the market's periphery and to visit doctors, dentists, clinics, lawyers and lenders. Wholesalers collect small quantities of local products in the Oaxaca markets and sell them in bulk to retailers in larger cities; they also buy manufactured goods in the city to sell in small lots back in Oaxaca. The city's market and other commercial activities provide employment for field buyers, agents, truckers and small-load haulers (Beals, 1975).

Even very small towns in Mexico—those with 2,000 to 5,000 residents—support minimum basic services that are not available in rural villages: primary schools, medical doctors' offices, health clinics, pharmacies, gasoline stations, secondary schools, cinemas, restaurants, small banks, hotels and, in some places, dentists, lawyers, veterinarians and technical schools (Doherty and Ball, 1971).

Field studies of small towns in Honduras and Bolivia indicate that even in the poorest countries of Latin America, towns with average populations of 10,000 to 12,000 can provide basic health, agricultural supply, educational and commercial services. They are most important

as transportation and distribution centers and as markets for agricultural products grown in surrounding rural areas (Evans, 1982). The degree to which markets in small towns can facilitate and promote interaction between urban and rural residents is seen in anthropological studies of towns such as Antigua in Guatemala, where the bulk of trade is controlled by rural middlemen and where rural vendors travel long distances to participate in the periodic market (Swetnam,1978).

Similar roles are played by small towns and cities in many African countries (Hirst, 1973; Funnel, 1976; Richardson, 1978; Wunsch, 1979; Haggblade et al., 1989; Baker, 1990; Pedersen, 1990). Small towns in Ghana—like Techiman, with less than 20,000 in population—are periodic market centers for their rural areas. Wunsch notes in his study of Techiman that trucks come on market day from as far a way as Kumasi, Tamale, and Accra, as well as from rural areas in Upper Volta, Mali and the Ivory Coast. The town supports retail stores, schools, hospitals and a wide range of skilled and semi-skilled craftsmen, including physicians, nurses, tailors, carpenters, masons, mechanics, ministers and civil servants. Larger towns such as Obuasi with a little more than 30,000 residents, have a wider range of agro-processing, marketing, service, commercial and informal sector activities. Moreover, Obuasi encompasses a population that is socially, religiously and ethnically heterogeneous. In the 1970s, it had more than 90 voluntary associations including religious, ethnic, occupational, trade, recreational, lodge, and secret societies (Wunsch, 1979).

Studies in West Bengal, India, have revealed that rural towns with even as few as 5,000 residents can act as "minimal urban centers" for their rural regions (Corwin, 1977; Wanmali, 1985). These West Bengal towns are reported to:

- serve as economic, political and cultural centers for the population of the villages in the surrounding rural micro region;

- provide the market where products not locally produced and specialized goods and services are available, and where local products may be sold;
- provide the wide range of occupational specialists not usually found in rural villages, but necessary for the continuing existence of a primarily agricultural rural population;
- serve as centers in which administrative and educational specialists representing the wider society and its urban centers meet and interact with the local rural population;
- be characterized by extreme diversity in occupation and heterogeneity in population, regardless of their relative size as urban centers (as rural towns, such settlements exist to serve a nonresident population dispersed in agricultural villages); and
- characteristically draw a large segment of the elite population from far outside the immediate locality, recruiting on the basis of education and experience in specialized administrative, professional and educational positions (Corwin, 1977, p. 39).

In his studies of small central places in India, Johnson found that they are particularly conducive to commercial and industrial activities that cater to local, short-term market demands and that have a small potential number of customers who are within easy reach by foot, bicycle or other forms of transportation (Johnson, 1974). Thus, small towns in India frequently contain a wide array of small retail stores, personal and commercial services, and small cottage processing, fabricating or simple manufacturing operations. Those activities that cater to a small portion of a larger region can also be located successfully in small towns and cities if adequate transportation and additional services are present. The most frequently found economic activities in Indian towns are weight-losing and bulk-reducing processing activities, such as sugar mills, saw mills, livestock slaughtering houses, canneries and oil crushing mills. These localized activities in turn create demand for transportation and supply services, brokerage, storage, credit and insurance services.

Studies of rural industries in South Korea and Taiwan indicate that, in addition to supporting resource-processing activities, small towns and small cities are also good locations for small market-oriented activities such as animal feed shops, ice manufacturing plants, and production of clay building materials, earthenware, hand tools, and small concrete products. Medium-sized towns support a wider variety of services, including: commercial printing; motor vehicle repair; and small machine, galvanizing and metal processing shops. Simple assembly, mixing or finishing activities and separable manufacturing operations can also be efficiently located in small towns and cities, if they have good transportation links with larger urban centers (Ho, 1980).

In Southern Thailand towns from 14,000 to 57,000 in population provide health clinics, small hospitals, postal and district government services, elementary and secondary schools, small libraries, banks, bus services, telephone exchanges, and some types of vocational and higher education. Although few systematic studies have been done of the "influence" areas of small towns and cities in developing countries, estimates made in South Thailand indicate that the larger and more diversified centers—with median populations of about 33,000—have influence areas averaging 10,000 sq. km, and serve hinterland populations averaging 630,000. Such centers are linked to as many as 22 smaller and less diversified towns within their influence areas (Rondinelli, 1984).

Studies of people who migrated from rural villages to small towns and cities in northeastern Thailand found their level of satisfaction high. Most migrants were able to increase their incomes and find better educational and health facilities than in their villages of origin. Although housing conditions in the towns seemed to be of lower quality, the studies revealed that migrants on the whole were "rather pleased with their new life in town", and that among those

who migrated voluntarily to small towns and cities "there is widespread satisfaction with the quality of life found at the destination" (Fuller, 1981, p. 92 and p. 101).

Growth Centers and Rural Development

In most developing countries, and especially in those of Asia and Africa, growth centers are located in rural regions (Appalrayu and Safier, 1976; Mabogunje, 1978; Southhall, 1979; Hinderink and Titus, 1988). The traditional view interprets their role as "parasitic", draining the rural hinterland of resources such as skilled labor and savings. However, from another perspective their location in rural areas could be viewed as a potential advantage, provided that policymakers can design growth center policies that capitalize on their important locational advantages.

One such policy approach so is to promote a more appropriate industrial structure in the growth center. The standard industrial strategy is to develop large scale manufacturing industries which produce import substitutes with the aid of capital-intensive techniques. Experience has shown that this type of strategy is doomed to fail, at least as an instrument of spatial development. It creates an enclave pattern of development and suffers from limited market opportunities, too few jobs, and negligible diffusion of benefits to low income groups. A preferable, and more feasible, approach is to promote relatively labor-intensive agricultural processing industries which produce food (and intermediate materials) either for exports or the home market. The simple equation of agro-based industries with small firms located in rural areas is frequently erroneous, since many agricultural industries such as sugar and fruit canning are made up of relatively large-scale firms that need to locate in or near urban centers for labor supply and marketing reasons. If the economic structures of the pole and its hinterland are interdependent, this should facilitate the development of the intraregional road system (important

for agricultural marketing and commuting) and of hinterland-based supplying firms, both of which increase the probability of substantial "spread" effects.

The location of a vigorous growth center in a rural region has other advantages. The emergence of a stable hierarchy of service centers may be critical to the efficient delivery of basic services, such as health, education, and social welfare, to the rural population. The provision of these services and accessibility to them may be a key factor in whether the rural population stays in rural areas or migrates to the large cities. The growth center will very probably be the apex of this service center hierarchy. Promoting the growth center may bring into the region supply facilities for higher order services that are otherwise obtainable only outside (e.g., in the primate city). More importantly, the strength of the upper levels of the regional urban hierarchy may influence the stability of the settlement pattern in lower level centers, owing to such considerations as reinforcement of the transportation and communication network and firmer administrative control of service functions. The provision of more and better services is critical to raising rural living standards.

In many developing countries, the rate of aggregate population growth remains so high that the potential land resources/labor ratio is not only very low, but falling quickly (Geertz, 1963; Lipton, 1977, 1982; Gilbert and Gugler, 1992). Thus it will become increasingly difficult for the rural population to eke out a living from the land, and conditions of rural labor surplus are unavoidable. The implication is that off-farm employment opportunities will have to be created, and it is an open question as to whether this should be attempted in villages or in accessible larger towns. The village approach is difficult to implement effectively and is, at best, only a partial solution. More urbanization is inevitable, whether planned or unplanned. Moreover, urbanization is the most clearly demonstrated instrument for reducing fertility rates. Successful rural development strategies may be little more than population boosters, with the additional

mouths more than nibbling away the gains from rural investment and improvement. If a planned urbanization strategy is chosen, a growth center component is desirable. A regional growth center's key advantage is that it offers an alternative destination to the primate city for rural-urban migrants. Since this alternative is located within the "home" region, the growth center may help to retain population in the region and enhance the possibility of easy return migration to the rural areas if rural and village job prospects improve. If the migrant moves to the primate city, on the other hand, s/he is much more likely to be lost to her/his home region forever.

These arguments suggest that the seeming contradiction between an emphasis on rural development and the existence of growth center strategies is more an illusion than reality. Only in very rare circumstances can the needs of the national population be satisfied via sole reliance on rural development. Furthermore, to use a growth center as an instrument of rural development implies promoting it in a different way than in the past. The historical precedents of heavily capital-intensive expansion, disfunctional enclaves creating intraregional core-periphery relationships, hinterland underdevelopment, and regressive income impacts are too obvious to allow expectations that growth centers will stimulate the development of rural regions as a matter of course. Growth centers must be designed expressly for this purpose and implemented with great care.

Agropolitan District

In contrast to the growth center approach, there have been other suggestions on how rural areas might be developed. One of the more interesting ideas is that of the "agropolitan district" (Friedmann and Douglass, 1976; Friedmann and Weaver, 1979; Friedmann, 1980). Friedmann argues that growth centers imply an urban-industrial strategy. Instead, he suggests, elements of urbanism should be introduced into rural areas via the "cities-in-the-fields" approach, involving

the creation of a spatial unit namely the "agropolitan district" which is larger than the village. The agropolitan district supplies services, provides off-farm jobs, and is self-governing. Normally, it would have an average population density in excess of 200 persons per square kilometer, contain a core town of 10,000-25,000 with a commuting radius of 5-10 kilometers (walking or cycling distance), and have a total population of 50,000-150,000. Most of the labor force would be agricultural, but there would be some small-scale light industry, agro-processing and agro-supplying industries, and a variety of service activities. The functions of the district would be financed by retaining local savings, the substitution of volunteer work for taxes, the transfer of capital from the primate city to rural areas, and changing the internal terms of trade in favor of agriculture.

The major difference between the agropolitan and the growth center approaches is that the former aims to resist urbanization, whereas the latter is ideally embodied within a national urban development strategy. The objections to the agropolitan district revolve around the issue of its feasibility. It would require far-reaching institutional and political reform. Since the key principle is self-governance backed up with sufficient financial resources, implementation would require communal ownership of landed wealth, land reform to rationalize holdings, and a reversal of the flow of savings from rural to urban areas. There is also the striking contradiction between the emphasis on participation and self-government at the local level and the authoritarian regimes that are so endemic in the developing world. It is difficult to foresee rich elites voluntarily giving up political power and wealth to permit the realization of some abstract spatial idea. Moreover, whereas a growth center strategy is very selective spatially, with the chances of success declining as the number of designations increase, the agropolitan district approach seems to call for an even scatter of a larger number of districts. In most cases the required network of a system of dispersed towns in the 10,000-25,000 range does not exist, and it is unclear how they would be

created—whether by selecting certain villages for expansion or by establishing new rural towns. These implementation issues have not been addressed by proponents of the agropolitan approach.

Rural Central Planning

The growing interest in rural central planning results from a renewed interest in rural development as part of a `basic needs' strategy, with emphasis on the goal of greater equality in benefit distribution of the national development efforts. `Basic needs' comprise not only social services such as education and health care, but also income (i.e., productive work) for the rural poor within and outside of agriculture, and better economic services (i.e., credit, agricultural input distribution and marketing). This renewed emphasis on rural development comes from many administrators, economists, sociologists and others realizing that the old axiom in economic theory about automatic `spread effects' in development is no longer tenable in developing countries, in the light of much concrete evidence during the past two decades (UN, 1979). While per capita income in developing countries has grown, the number of poor has also grown and their income has decreased. Polarization and growing income gaps between rural and urban people have resulted.

According to the UN, development strategies in developing countries have centered on rapid industrialization and urban development (United Nations, 1979). There is no dearth of policy statements extolling the merits of rural development, yet in practice it remained a low priority, as the budgets of many countries show. The allocations for agricultural research and extension, for instance, are invariably low. The same holds true for social and other economic services for rural areas, e.g., infrastructural development.

The neglect of rural development has become apparent. Mass migration to `primate' cities has produced desolate slums. For every newly created urban job, several rural unemployed migrants come to the city, necessitating further expenditures on housing, infrastructure, and services. Nonagricultural production has increased, but per capita food production has stagnated despite the `Green Revolution.' Governments have had to spend scarce foreign currency to import foodstuffs (which could have been produced locally) rather than to purchase much needed machinery, spare parts and industrial raw materials (United Nations, 1979).

Rapid population growth in cities is certainly both a consequence and a major contributing factor to the stagnation of rural growth. The benefits of increased productivity have been virtually overtaken by the growing number of mouths to be fed. Nevertheless, to blame population growth alone for the present unsatisfactory state of affairs is too easy and offers only a partial explanation. After all, per capita income has expanded. The problem is much more one of unbalanced (sectoral) growth and a skewed distribution of the growth's benefits.

The literature discussed above indicates that linkages of rural areas to urban areas can be identified via some main variables. One variable is population mobility from rural to urban areas. These people are mostly landless laborers in rural areas and they move to urban areas looking for jobs. Because their skills are mostly related to agricultural activities, it is difficult for them to find jobs in urban areas. The jobs available in urban areas are primarily related to manufacturing and services activities. Therefore, the majority of migrants become involved in informal sector activities in urban areas. The literature also indicates that migrants quite often send money to their families left behind in rural areas. The remittances sent from urban areas are often invested in opening small shops, improving their housing or buying land in rural areas (Hugo, 1981; Firman, 1994). Thus, capital flows from urban to rural areas via remittances (or money which

they bring back when they visit their families in the villages) have significant impacts on economic activities in rural areas and rural development in general.

Other linkages between rural and urban areas are with regard to production. The majority of agricultural commodities produced in rural areas are sent to markets in urban centers where most of the consumers are located. Many rural people visit markets located in rural or urban areas to buy manufacturing goods (which are produced in urban areas) such as clothing, soap, and cigarettes. Thus, it is clearly indicated that rural-urban linkages occur not only via the flow of migrants and agricultural products from rural areas to urban areas, but also through the flow of remittances and manufactured products from urban areas to rural areas.

The Impact of the Green Revolution and the Process of Rural Change

After the first decade of the Green Revolution and its new rice technology based on High Yielding Varieties (HYV), many scholars concluded that the fruits of this agricultural intensification would be enjoyed mainly by large landowners (Sayogyo and Collier, 1973; White, 1976; Sayogyo and Wirandi, 1985). Consequently, it was argued that development would take place largely at the expense of the landless (Antlov, 1986). There were many studies showing effects on the overall agricultural employment situation and especially on aspects such as the harvest (Stoler, 1977; Collier, 1981; Husken, 1984). Until the introduction of the HYVs, the harvest had been open, meaning that everybody who wished to could participate and in return get a share of the harvest. In particular, it was an important source of income for many landless women. This was replaced by a more efficient closed harvest system in which only a limited number of precontracted male workers were allowed to participate.

The harvest is only one of several aspects in which the poor, and especially the landless, were found to experience a deteriorating situation as a consequence of the Green Revolution.

With rapidly increasing yields and the subsequent commercialization of agriculture, the rich could invest much of their surplus in extensions to their large land-holdings. Land become concentrated in fewer and fewer hands, a process which would further widen the gap between rich and poor.

Other arguments mainly focus on the Green Revolution's insufficient contribution to broader aspects of rural development. First, the concentration of efforts on rice production has had a negative impact on the area under secondary crops, especially those grown in irrigated fields, commodities such as maize, soybeans, groundnuts and cassava. Second, it has been argued that the various programs did not improve the position of the very small and landless farmers (Tjondronegoro, 1991). Credit was not provided to them for lack of collateral, and the commercialization of production relations often decrease an agricultural laborer's opportunities to earn a cash income. Third, the policy discriminated against farmers who didn't grow rice, mainly those situated in the upland areas and drier parts of the country. Thus the programs did not only fail to alleviate the positions of certain social groups, but also left out certain areas.

In retrospect, however, the Green Revolution provided most rural groups with new opportunities, with derived benefits varying considerably. Based on my interviews with rural people in Dumoga Subdistrict, it seems fair to conclude that although most groups are better off now than some twenty years ago, the gap between rich and poor has further increased. There is a small group of commercially minded farmers who have benefitted the most, many of whom had large resources at their disposal. Those who have profitted have invested their surplus by buying more land.

Through the expansion of state expenditures, the economic standing of civil servants has also grown rapidly. In the four villages under study, the main advantages of this development have been reaped by subdistrict officials, civil servants who are working in education, health, and

agricultural services located in the subdistrict, and some village officials, who are now among the village wealthy.

Another small group of villagers has been able to take great advantage of the increasing government expenditures in rural areas. These are the entrepreneurs in the construction sector who have been able to secure contracts for various local government-sponsored building projects, such as for construction of roads and bridges. Such entrepreneurs have made huge profits, part of which they have invested in land, but they have also been used to finance other nonagricultural investments. Through their activities, these entrepreneurs have been able to provide a large group of villagers with nonagricultural occupations. Although these entrepreneurs are a very limited group, they have been an important and dynamic force in the diversification of the village economy.

After more than three decades of development, rural areas have experienced numerous changes. The changes have occurred both in agricultural and nonagricultural production, employment structure, income opportunities and social structure. Various rural development policies that have been taken by both central and local governments have played a significant role in influencing the process of change throughout the country. Such policies are directly aimed at the agricultural sector, and strive to improve physical infrastructure, increase rural income by enlarging rural employment opportunities, and also intervene in social service provision to upgrade the living conditions in rural areas.

There are numerous studies which analyze the impact of agricultural production programs on rural employment and income distribution (Collier, 1978, 1981; White, 1976; Jones 1984; Kasryno, 1986; Manning, 1988). The studies indicate that the agricultural development and its related policies have been accompanied by complex changes in the rural employment and income conditions. Furthermore, the findings indicate that there were great differences in impact—

between regions, within region, and between households. It is important to note that the early studies (during 1970s) were often rather negative on employment and income effects of technological innovations. On the other hand, the later studies (done in the 1980s) have shown that in general the Green Revolution has had a positive impact on rural employment and income.

A study done by Kasryno, (1986) analyzing 1980 census data, indicated a shift in youth employment (those in the 10-29 age group) out of agriculture, implying the start of intergeneration mobility of labor on Java away from farming. There were other interesting developments and trends in rural employment and agricultural incomes. Based on microstudies, Kasryno found that in the period 1977-1983 the relative share of income from all farming-related activities remained largely unchanged, while the component of farm labor income declined from 42 percent to 28 percent of total income. This process was accompanied by an increase in income generated by off-farm employment, which rose from 12 percent to 23 percent of the total income. A study done by Manning (1987) confirm this increasing importance of the nonfarm sector for the income of rural households. Kasryno's data show a total rural income increase over six years, rising by approximately 11 percent per annum. This indicates improvements in productivity of both off-farm employment and on-farm employment.

In analyzing various data sources, Manning (1988) found that the rapid growth in rice output has been accompanied by some increased employment in agriculture. He argued that this was especially related to the relative absence of mechanization in Indonesia. Similar findings by Jones (1984) suggested that increased public spending in rural areas has been more important for the employment situation in rural areas than agricultural growth. The spin-offs from activities related to public spending appeared to have greater impacts on the service and construction sectors rather than to manufacturing. In addition, although many of these new, nonagricultural

jobs have been created in the urban areas, generally rural households also benefitted through circular migration.

Aside from the above views, there is a notable change on the labor supply side. Increased education and job opportunities in the nonagricultural sector have changed rural people's perceptions about agriculture and rural areas. A greater flow of information about modern life through television and the mass media stimulates the desired for better jobs, life styles, expectations and living conditions. In the last two decades a large portion of young laborers have shifted from the agricultural sector to nonagricultural sectors (Gunawan, 1993). However, this phenomenon is not an indicator that nonagricultural sectors have generated sufficient employment opportunities, because most migrants from rural areas enter the urban informal sector. They are economically unstable, insecure, and among the lowest income earners in the city. Therefore, they are expected to return to the village at retirement age (Hugo, 1981; Gunawan and Zulham, 1992).

Rapid movements of rural and agricultural labor to urban areas are partly due to strong pull effects of the urban sector. Some studies indicate that high urbanization has been strongly motivated by substantial differences between agricultural and nonagricultural wage rates, and the perception that nonagricultural jobs are more interesting and satisfying for young, more educated rural people (Castello et. al. 1987; Saefullah, 1994). The rural to urban flow is not necessarily due to an unavailability of agricultural jobs in rural areas. The movement of young and educated villagers to urban areas is not simply because of economic reasons; there are social and psychological aspects which induce migration.

Transmigration Program or New Land Settlement

New land settlement can be categorized into three types (Nelson, 1973: p.73). First, there is directed settlement, characterized by a high degree of government control over settlers with respect to: size and location of farms and land clearing; resale of land; crop choices; management practices; credit availability; eligibility for land; cooperative organization; and the settlers' contributions of time to communal activities. The second type is spontaneous settlement, made by individuals or small groups without government assistance, sometimes in the wake of forest exploitation, sometimes in advance of government investments in the area, and sometimes simply by clearing a small part of government-owned forest. The third type, semi-directed settlement, involves specific government investments and programs of assistance to spontaneous colonists in the region that is in the consolidation stage of development.

Based on the above classification, it can also be said that directed settlement is an instrument of three kinds of policies. First, in Nelson's view, directed settlement is an instrument of natural resources development policies, and specifically of land development policy. In this view it is taken in connection with the determination of the internal rate of return of the investments made in directed settlement projects, especially in countries that need loans from agencies such as the World Bank or bilateral donors. Second, directed settlement can also be seen as an instrument of policies that aim to relieve tensions in densely populated existing settlement areas. In some countries, the agency in charge of land reform is also responsible for the execution of settlement projects, (i.e., INCORA in Colombia, IERAC in Ecuador, ONRA in Peru, and the Ministry of Transmigration in Indonesia). Third, settlement objectives may be related to geopolitical concerns. A number of projects have been executed in frontier areas in order to safeguard territorial integrity, for example, the Caqueta development in Colombia and the

movement of large numbers of Javanese and Balinese migrants to West Kalimantan and Irian Jaya (West New Guinea) in Indonesia. Such resettlement also plays a role in nation-building.

Spontaneous settlement is enhanced by directed settlement. Settlers will locate in the vicinity of such projects as well as near other types of natural resource development which imply the construction of penetration roads. Spontaneous migrants will occupy land on either side of such roads, and will also proceed along rivers, expecting the facilities under construction there to give them more opportunities. They leave their villages for reasons such as poverty, land shortage, crops failures and other natural disasters such as droughts and earthquakes. Consequently, spontaneous settlers are normally found around new settlements that receive support from the state and near infrastructure also provided by the state. Thus, government exerts an important influence on the geographical choices taken by the "spontaneous" settlers.

In Malaysia great numbers of settlers have been moved from the northern and western states of peninsular Malaysia into its two eastern states. Under the guidance of regional development authorities created by federal legislation, rubber and oil plantations were established with the necessary processing plants. The factories have their own acreage of plantation trees plus some land for workers' subsistence crops. Technical assistance and marketing are provided by the estate's personnel and prices are set by the central authorities. Settlers receive their land with a dwelling and have to pay back a large part of the cost of their resettlement through annual payments.

The Indonesian situation is rather different in that the official transmigration programs suffer from serious logistical problems, such as inputs which often do not arrive in time for the first season's crop; a main crop that has been selected but is not always adequate to the survival needs of the settlers; and sites which are often ecologically unsuitable and poorly connected to markets (making it difficult for settlers to obtain cash income). In most cases the land used for

resettlement is perceived by local people as their own, so tensions emerge between indigenous or local people and the new arrivals (Colchester, 1986).

In addition to the official transmigration program in Indonesia, there are also a great number of spontaneous settlers, who might be termed pioneers. They operate as individuals or small groups and their general performance appears to be much more successful than that of officially resettled people (Hardjono, 1977). The Indonesian transmigration program is under considerable international pressure to be reviewed or even abandoned, partly because of the program's political, human rights and ecological aspects, and partly due to its high cost per settler. The loans which the government has undertaken to finance transmigration efforts weigh heavily on the national budget, especially since oil revenues have fallen.

A study by Nelson (1973) of 24 projects in Latin America concluded that directed settlement is not an adequate instrument of land development policy. The internal rates of return required for bankable projects relied upon too many unrealistic assumptions regarding the quality of the government services provided and the nature of the settlers. Nor could directed settlement serve as a means to solve problems such as population pressure in existing/established rural settlements, since the amount of resources required would be far greater than the means which governments have available. In the face of these conclusions, sponsors have started to withdraw from policies of directed settlement, while the numbers of spontaneous settlers keep increasing. Instead, governments have started to provide services and infrastructure to spontaneous settlers in centers of certain size and not too far removed from main roads already in existence. This trend is also apparent in the older transmigration areas in Indonesia.

Conceptual Framework

Small towns (district capitals in the Indonesia context) and rural centers (subdistrict capitals) perform a variety of roles in national development. They are tools for achieving a balanced distribution of the urban population. They promote and support rural development, and provide functional linkages between rural and urban areas. In some countries they play major roles in the decentralization of economic and social activities. The definition of small towns varies from country to country, but their size is usually somewhere between that of a regional city and a rural center. The majority are directly the result of agricultural and rural development. Some serve special purposes such as mining and tourism. Small towns in many countries have experienced a decline in their roles as the service centers for their hinterlands. Improvements in all aspects of transportation and communications and the introduction of modern strategies of organization and development in both the private and public sectors have considerably increased the role of the big cities and metropolitan centers, resulting in out migration from rural areas.

In addition to the well-known "pull" factors attracting rural out migrants to the large cities, there are also "push" factors such as inadequate marketing systems, uneconomic prices for agricultural products, manpower redundancy caused by mechanization and the Green Revolution, and (sometimes) inequities in landlord and tenant relationships in the use and development of agricultural land. The negative effects of this out migration to the large cities are evident in the formation of squatter settlements and overcrowded, expensive housing.

Studies of the role and function of rural centers and small towns, and of the linkages of small towns and rural centers in rural development attracted the interest of many scholars and researchers during the two decades prior to the mid 1980s. Since the late 1980s little attention has been given to the study of rural-urban linkages and development. Instead, the study of big cities has dominated recent academic discourse. However, the phenomenon of globalization is

affecting not only big cities or urban areas, but also more remote areas, such as rural areas and rural centers. It is expected that today's wave of globalization and internationalization, with its consequences in the areas of technology and communication, may also influence the linkages between rural and urban areas.

Concerns about the high growth rates of metropolitan cities and the accompanying deterioration of the quality of life have been expressed in many scholarly and popular publications. Since Indonesia is predominantly agricultural and more than 70 percent of the population lives in rural areas, small towns play crucial roles in providing the economic, physical, social and cultural bridges between the regional cities and rural areas.

In the development of rural areas, small towns and rural centers need to be strengthened to act as sites for exchanging agricultural and industrial products and for providing nonagricultural employment opportunities for the surplus or under-employed agricultural laborers. Deliberate planning of small towns and rural centers is necessary within a well-articulated system of service centers to form a framework for successful implementation of rural development strategies. The planning and development of small towns, rural centers and programs for rural development should be integrated, preferably within a framework of regional planning and development in which the responsibilities of the various agencies of the national, provincial and local governments are well-defined. The regional level is probably the ideal level at which the proper integration of physical, economic and social planning can take place.

The key to the role of small towns and rural centers in developing countries lies in the state of rural development. The success of integrated rural development depends on a proper institutional framework which could ensure public participation in planning, decision-making, implementation and evaluation. This implies the inclusion of a bottom-up approach in planning and a policy which promotes self-reliance in rural areas.

The studies reviewed above address the relationships between rural and urban areas through economic, social, and physical factors and through the analysis of the linkages between the rural and urban as two separate entities. In many cases, the studies emphasize the role of the small town in rural development by focusing on its relationship to the rest of the urban hierarchy. However, there is a dearth of studies which deal with the government policies which affect these relationships. There is also a lack of studies which examine how such factors affect rural development.

It is necessary to view the rural-urban relationship from the rural perspective, and then to comprehend its linkages throughout the urban hierarchy. Given the lack of studies of the linkages between transmigration villages and urban areas, it would also be useful to ascertain how such linkages compare to those of nontransmigration villages. What is needed for understanding rural-urban linkages is a complete picture, which allows us to examine variables in such categories as economy, migration, services, infrastructure, technology, and political administration. Finally, data for all such variables in the broader picture of rural-urban linkages must be interpreted through regional development and planning perspectives.

Having surveyed the theoretical literature and empirical studies which discuss the most important linkages between urban and rural areas, and based on my observations in the study areas, it is possible to develop a conceptual framework of rural-urban relations and rural development. The conceptual framework simplifies the very complex real situation of rural-urban relations and can be used as a guideline for field work in order to achieve the goals of the study as proposed earlier.

The conceptual framework in Figure 1.1 depicts two kinds of rural settlements: transmigration villages and non transmigration villages. The urban areas in the diagram are classified according to their administrative functions, with the capital city of a subdistrict as a

rural center, the capital city of a district as a small town, and the capital city of a province as a medium city. Figure 1.1 shows how transmigration villages and non transmigration villages have different patterns linking them to the urban hierarchy. Transmigration villages have strong linkages to medium cities and other big cities and regions (as indicated with thick lines). These linkages are associated with market places, schools, hospitals, and visit to the migrant's place of origin. Linkages between transmigration villages and small towns are relatively weak (as indicated with thin lines). These linkages are mostly related to market places, schools, and health clinics. Linkages between these villages and rural centers are very weak (as shown with a dotted line). These linkages are limited only to people visiting rural centers for administrative matters dealing with subdistrict government. On the other hand, non transmigration villages have strong linkages to rural centers (as indicated with thick line). These linkages are associated with market places, and administrative matters dealing with local institutions. Their linkages to small towns are relatively weak (as indicated with thin lines). These linkages are related to market places, schools and health clinics. Their linkages to medium cities are very weak (as indicated with a dotted arrow line). These linkages are because of those few rich nonmigrant farmers who visit medium cities for education, health, and shopping. Non transmigration villages have no linkages to other big cities and regions. The Figure 1.1 also indicates that non transmigration villages and transmigrant villages have linkages via local people visiting markets located in transmigrant villages or migrants who visit markets located in nonmigrant villages.

This framework shows how the rural-urban linkages can be explored through the following main sets of variables.

1. (**E**) the economic variables are the most common variables used to analyze the condition of communities or households in a certain area. In this study, a number of economic variables will be examined. For example, "production" is related to villages' production of rice, crops, and

livestock. "Marketing" is related to where and to whom rural people send their products; and how and what kind of goods and urban products are marketed to rural areas. "Consumption" relates to rural people's expenditures on both goods produced in rural areas and in urban areas. "Income" requires analysis of the sources of rural people's income. "Capital flows" are related to the money sent or flowing to urban areas or other regions, and the capital inflow received in rural areas from afar, such as remittances.

2. (**M**) the variables of migration include "rural-urban migration", such as when rural people move to towns or cities to find temporary jobs in off-farm employment. Another variable of "social interaction" is related to the frequency with which rural people visit their families or attend social or religious ceremonies in towns.

3. (**SD**) the service delivery variables cover the linkages of rural communities to financial and credit facilities, education, and health services delivered by both public and private sector.

4. (**PI**) the physical infrastructure variables involve the transportation networks which serve as channels between rural and urban areas. An example are transportation facilities available for use by people in rural communities to connect with other areas. Electricity networks available in rural areas, and irrigation networks located in rural areas as the main infrastructure for watering rice fields are other variables.

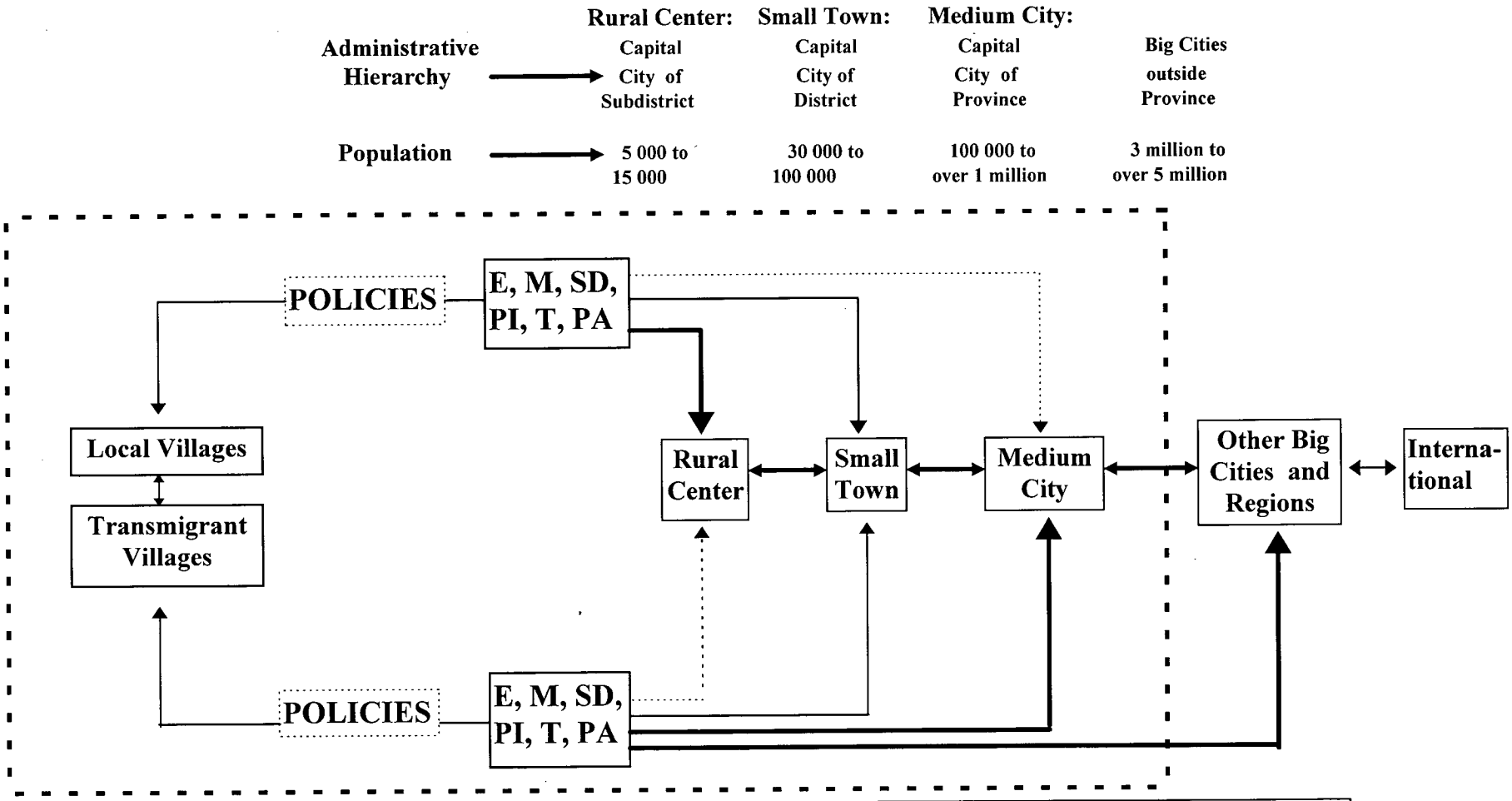
5. (**T**) the technology variables cover the linkages of rural communities to communication and information related to general information, agriculture and health. The rural-urban linkages included in these sets of variables are examined in the context of the case study villages in Chapter Five.

6. (**PA**) the political administration variables in this study include central and provincial governments' budgetary flows to local government and rural development, and the structural relationships of government hierarchy from central to village government. The political variable

is also related to organizational interdependencies, such as village government, village institutions (village council, farmer groups, and non government organizations). The informal political decision chains relate to the role of informal leaders in acting as channels between the rural community and local governments.

However, many of these variables are also directly affected by government policies. Thus, such policies and their means of implementation should also be analyzed. Following an overview of the case study area in Chapter Two, these policies are examined in detail in Chapter Three. Chapter Four and Five present the case study findings with regard to the comparison between migrants and nonmigrants and rural-urban linkages. Chapter Six and Seven give an in-depth analysis of how these rural areas are effected by the administrative system and the planning process. Chapter Eight summarizes the main findings and discusses implications for policy.

Figure 1.1 Rural-Urban Relations and Rural Development Conceptual Framework



Note:
- - - - = Regional Boundary
E = Economic (Production, Marketing, Market, Consumption, Income, Capital Flow); M = Migration; SD = Service Delivery (Education and Health, Finances and Credit); PI = Physical Infrastructure (Transportation, Irrigation System) T = Technology (Information, Communication); PA = Political Administration (Budgetary Flow, Structural Relationships, and Planning Process).

CHAPTER TWO
THE RESEARCH PROCESS AND DESCRIPTION OF STUDY AREAS

Introduction

The purpose of this chapter is to explain in detail the research method applied in this study. This chapter also provides information about the setting and conditions which have affected the population of both local people and transmigrants. The characteristics of the four study villages are also defined.

The study is based on a combination of explanatory research and descriptive research. The former is research related to generating explanations which focus on the analysis of relations among the variables being investigated. The latter describes in detail specific social phenomena in the communities under study, in an attempt to explain the relationships among some social phenomena.

The first section of this chapter describes the method of choosing study areas, household sampling, data collection, and method of analysis. The second section provides information about the setting and conditions which have affected population, both local people and transmigrants, and defined the characteristics of the four study villages. The chapter's third section discusses the national and regional contexts, and is followed by a discussion of Bolaang Mongondow District, Dumoga Subdistrict, and the four study villages. Finally, it is also necessary to elaborate on the setting and conditions of the capital city of Dumoga Subdistrict, the rural center called Imandi; the capital city of Bolaang Mongondow District, the small town called Kotamobagu; and the capital city of North Sulawesi Province, the medium city called Manado.

The Method of Choosing Study Areas

North Sulawesi is one of the many provinces outside the islands of Java and Bali that has become a destination area for transmigrants sponsored by the central government. In 1963 part of Dumoga subdistrict's area was designated by provincial and local governments as a location for the first group of transmigrants from Bali to locate in North Sulawesi. In the early 1970s groups of transmigrants from both Java and Bali followed. With a settlement history of more than 20 years, it is possible to study and analyze the differences between transmigrant villages and nontransmigrant villages' linkages to rural centers and small towns. Another reason for choosing North Sulawesi is that most studies of urban-rural linkages in Indonesia have focused on Java. There has been only very limited attention given to the nature of rural-urban linkages in the regions outside Java.

An important consideration in this study was how to decide on the criteria used for choosing study areas or selection of villages. Selection of particular study sites was conditioned in part by the experiences and background of the researcher and the locations of the places to be studied. At the beginning of the project, an observation of each village was carried out. Officials at the District Bureau of Statistics and the District Development and Planning Bureau were contacted in order to obtain data, reports, maps, and to elicit help in gaining the confidence of local leaders and residents in the selected survey areas. Field observation and analysis of secondary data allowed the researcher to determine the village's characteristics and also to determine which villages were dominated by local people and which by transmigrants.

A number of researchers have stressed that different types of agriculture involve different forms of production with concomitant variations in patterns of social relations (Paige, 1975; Friedman, 1980). The forms of agricultural production in North Sulawesi can be classified into three types: plantation agriculture, dry season crops (*palawija*), and the predominant wet rice

(*sawah*) cultivation. These categories are based not only on the type of crops grown, but also on the social relations of production associated with each form of production. The first of these forms is the most commercialized, while the second type is the least commercialized. In Dumoga subdistrict, there is only a very small proportion of the population active in plantation agriculture. A large proportion of villages, however, depend on the seasonal rice crop. Therefore the sample population will include only those villages in which the predominant types of agriculture are wet rice cultivation and dry season crops.

The following criteria were developed in order to chose four villages in North Sulawesi as the main case study, and three villages in Central Sulawesi as a complementary case study.

1. The village's main products are rice and crops (such as corn, soybean, peanut, cassava, and other vegetables).
2. Each village under study must be of the same approximate distance to its corresponding rural center, small town and medium city as the other study villages are to theirs.
3. Accessibility and road conditions to the villages must be relatively easy and good.
4. Because one of the study's aim is to investigate differences in the linkages and impacts of rural development on transmigrants vs. local people, two transmigration villages and two non-transmigration (local people) villages in North Sulawesi were chosen, and two transmigration villages and one non-transmigration village in Central Sulawesi.

The selection criteria above for the case study areas are detailed in Table 2.1.

Based on the criteria above and a month of observation in the field, four villages were chosen as a main case study in North Sulawesi: two non-transmigration villages (all local people), Doloduo and Dondomon; and two transmigration villages (all migrants), Mopugad Selatan (with all transmigrants originally from Bali) and Mopuya Selatan (transmigrants mostly originating from East Java). For the three villages in Central Sulawesi, Tindaki was chosen as the

non-transmigration village, and Purwosari (mostly transmigrants from East Java), and Tolai (dominated by transmigrants from Bali) as the transmigration villages.

Table 2.1
Characteristics of the Villages

Province and Village	Distance to			Main Production		Status		Road Condition
	RC (km)	ST (km)	MC (km)	Rice	Crops	Transmi -gration	Nontrans-migration	
North Sulawesi:								
Doloduo	16	53	237	X	X		X	good
Dondomon	14	51	235	X	X		X	good
Mopugad Selatan	21	58	242	X	X	X		good
Mopuya Selatan	19	56	240	X	X	X		good
Central Sulawesi:								
Tindaki	23	103	103	X	X		X	good
Purworejo	28	108	108	X	X	X		good
Tolai	32	112	112	X	X	X		good

Note : RC = Rural Center, ST = Small Town, MC = Medium City

Doloduo Village and Dondomon Village are known as two of the oldest villages located in Dumoga Subdistrict. Both villages are dominated by local people called the Mongondownese. As agricultural villages, the main production is rice and some crops. Because of their fertile land, farmers can produce rice two times per year, or sometimes three times in a two-year span.

The people of Mopugad Selatan Village are mostly Balinese and, Mopuya Selatan Village is dominated by Javanese. Both villages are known as transmigration villages, among several located in the Dumoga Subdistrict or Dumoga Valley. These two transmigration villages produce mainly rice, some crops and vegetables. They can harvest rice two times per year or three times in a two-year period.

Ethnicity is another criterion for choosing the villages sampled in the main case study, because of the assumption that ethnicities have a strong impact on people's links to rural centers, small towns, and medium cities. This study selected three ethnic groups, namely, Mongondownese (the indigenous people), Balinese, and Javanese. Both the Balinese and Javanese in this case study moved to the Dumoga Valley between 1974 to 1976.

Most of the rice fields located in these four villages are directly connected to irrigation systems. All villages are connected to an asphalt road in good condition and serviced by mini buses which run to rural centers and small towns. The mini buses are operated as private enterprises. One big bus, organized by the provincial transport department, runs once a day from Doloduo to the medium city (Manado) the capital city of the province. The distances from the four villages to the rural centers, small towns, and medium cities are relatively similar, as Table 2.1 indicates.

Household Sampling

In Indonesia, a village register of households is kept by village officials. The register provides basic demographic information about all residents. This information is used as the basis for village statistical reports and as a record of population to be enumerated in the decennial census. Therefore, the registers are most accurate at the time of the census which is when they undergo extensive updating. In the four sample villages in North Sulawesi and the three villages in Central Sulawesi, the registers were organized in the same way. Household members were listed together, with the first entry being the household head. Almost all information was available on the age, sex, and religion of each of the household members. Other information, such as details of main occupation, schooling, literacy, and ownership of specific types of consumer goods was also sometimes available.

When a register was deemed suitable for use as a sampling frame, the register was updated using information available from the heads of each neighborhood (*dusun*). From the updated register, a sample of 239 households and 60 respondents was drawn including village officials, informal leaders, elders, planners, politicians and entrepreneurs in the four villages, rural center, small town, and medium city of North Sulawesi; and 49 households and 35 respondents including village officials, informal leaders, elders, planners, politicians and entrepreneurs in the three villages, rural center and medium city of Central Sulawesi. Details on the respondents interviewed during the field work are shown in Table 2.2. The sampling method used was systematic sampling with a random start. After the initial sample selection, a further systematic sample of 3 households from the original survey of each village was undertaken. These 3 households were to serve as replacements if, for any reason, it was not possible to contact sampled households.

Table 2.2
Total Respondents Interviewed

Province and Village	Household	Village Official	Informal Leader and Elder	Planner	Politician	Entrepreneur
North Sulawesi:						
Doloduo	76	2	4	-	-	1
Dondomon	52	2	3	-	-	1
Mopugad Selatan	56	2	3	-	-	1
Mopuya Selatan	55	2	3	-	-	1
Rural Center	-	2	6	2	1	2
Small Town	-	-	3	3	2	4
Medium City	-	-	2	3	3	2
Total	239	10	24	8	6	12
Central Sulawesi:						
Tindaki	16	2	3	-	-	1
Purwosari	16	2	3	-	-	1
Tolai	17	2	3	-	-	1
Rural Center	-	-	2	1	-	2
Small Town	-	-	2	2	1	2
Medium City	-	-	2	2	1	-
Total	49	6	15	5	2	7
Total respondents	288	16	39	13	8	19

Data Collection and the Questionnaire

The first period of field work took place in North Sulawesi and Central Sulawesi for five months between October 1995 and February 1996. The second period of field work took place in North Sulawesi for two months during December 1996 and January 1997. The primary data were gathered through the use of questionnaire surveys. The core instrument for these surveys was developed in September 1995 after preliminary field interviews and discussions with researchers working at the Institute of Management and Development Studies, Economics Faculty, Sam Ratulangi University, Manado.

Each household questionnaire consisted of five sections. The first section asked for information from the head of household related to age, education, place of birth, marital status, number of children, number of family living in the same household, and the nature of the relation between each family member and the head of household. The second section was directed towards gaining household information. Information was gathered from the head and spouse on their employment histories, ownership, housing as well as socioeconomic and demographic characteristics. The third section of the questionnaire asked about their main production, cost of production, marketing, consumption patterns and capital flows. The fourth section sought information about the family linkages to other villages, rural centers, small towns, and medium cities, or their commuting patterns (e.g., journey-to-work, education and health facilities, bank, cooperatives, and market). The final section of the questionnaire asked the head or spouse questions about their perceptions regarding rural development (including transmigration programs), terms of trade, job opportunities, their participation in planning processes and development, government policies on rural development, and the environment.

The questionnaire for village officials, informal leaders, elders, planners, and politicians consisted of 16 open-ended questions designed to elicit opinion and identify issues regarding the following: implementation of rural development programs, participation of community in planning processes and development, the role of rural centers and small towns in rural development, the role of local government on rural development, and central government policies to strengthen local governments and community participation in development.

On average, about two hours was needed to interview the household and less than two hours to administer the questionnaire for village officials, informal leaders, elders, planners, and politicians. Interviewers were carefully selected and received training from the Department of Economics and Development Studies, Economics Faculty, Sam Ratulangi University. Eight interviewers (5 females and 3 males) were recruited. The interviewers were primarily from rural backgrounds. One could speak Javanese, another could speak Balinese, and some others Mongondownese. All were students who had prior experience in conducting social science survey research, and all underwent an intensive training concerned with the survey instrument and the purpose of the study.

Household interviews were held either by visiting in the house early in the morning while the respondents ate breakfast or in the evening after dinner, or in the rice field during lunch break. Every evening after the day's work of collecting information from households was completed, all interviewers met with the author to discuss any problems arising from the respondents and to seek solutions together.

In North Sulawesi, questionnaires were administered between October 7, 1995 and November 25, 1995. In Central Sulawesi, questionnaires were administered from December 1 to December 20, 1995. All interviews were conducted in Indonesian language (*Bahasa Indonesia*).

The cooperation from respondents was excellent. For instance, in North Sulawesi there were only 6 refusals from potential respondents, and in Central Sulawesi only 2.

In brief, the field work was divided into the following four stages.

1. The first step was a reconnaissance phase to observe and select the villages to be chosen as case studies. The first phase also included a pilot study in a village not included in the sample, in order to pretest the questionnaire.
2. The second step included initial interviews with households in the four villages, and in-depth interviews with village officials, informal leaders, and elders. At this stage, secondary data were also gathered from the village office.
3. The third step consisted of interviews held in the rural center, the small town, and the medium city with planners, informal leaders and politicians.
4. At the fourth and final step, interviews were held in villages and the rural center and small town to confirm some secondary data and to explore more information with villages officials.

Similar stages were applied for interviewing and gathering secondary data in villages, rural centers, and small towns in Central Sulawesi.

Definition of Major Terms

Household

For the purposes of the study, a household is defined as a group of persons who eat and cook together. The inclusion of the eating and cooking components of the definition was based on previous research and is considered to define an economic unit in Indonesian society. A household consists of all persons who are considered by the household head to be members of the household and/or those persons who in the previous five years had their normal place of residence in the household. This time period is considered suitable for theoretical purposes in

that economic links, both in terms of contributions to production and subtractions due to household consumption, would be expected to be most important during this period.

Household socio-economic status

The household socio-economic status is classified based on land ownership, including land they themselves own or rented land. There are four levels:

1. Households without any land.
2. Households with a small piece of land or less than 0.5 ha.
3. Households with a piece of land between 0.5 ha to 1 ha.
4. Households which have more than 1 ha of land.

Income of household

Household income is the total real income in currencies, or goods and services that could be transferred into currency by a member of the household (Rupiah/day; Rupiah/month; Rupiah/season; Rupiah/year). The household real income includes remittances sent by members of the household working or living outside the village.

Migrant

People who were born in a province other than North Sulawesi and later on moved to Dumoga Subdistrict, North Sulawesi. In this case study, all of the migrants were born on Java and Bali and moved to Dumoga Subdistrict as transmigrants sponsored by the central government.

Nonmigrant

People who were born in Dumoga Subdistrict or elsewhere in North Sulawesi, and who at the time of survey live in Dumoga Subdistrict. In this study, the nonmigrants are identified as local or indigenous people.

Rural center

The rural center is a capital city of the subdistrict (*kecamatan*), and the location of the subdistrict government and some district services or local agencies (*dinas*) involved in such areas as agriculture, education, and health. A rural center also has a bank and market which is open twice a week.

Small town

The small town is a capital city of the district (*kabupaten*), where most of the local agencies (*dinas*) are located. Most public services are available in this town, including education facilities up to and including secondary school, hospital and health center, banks, cinema, restaurants, cafes, and shops. The markets in small towns are open every day.

Medium city

The medium city is the capital city of the province, known as a *Kotamadya. Kotamadya* form the lowest level of fully autonomous urban government. Governments of *kotamadya* are able to regulate their own activities and maintain their own sources of revenue. Thus, the *kotamadya* governments are able, like those at the district level, to maintain a broad range of internal planning and service functions within their government apparatus. Almost all public

services are available in the city, such as education facilities up to and including universities, hospitals and health centers, recreational facilities, and traditional and modern daily markets.

Data Processing and Analysis

All questionnaires were coded at the respective field sites by trained coders. Open-ended or unstructured questions were coded on the basis of what the respondent emphasized in his or her answer. After the coding, data were keypunched in Manado and transferred onto magnetic tape for analysis using the SPSSX package. The data analysis required two levels of analysis: descriptive statistic analysis and qualitative analysis.

Descriptive statistic analysis is used for analyzing variables indicated through absolute numbers or percentages. This kind of frequency table is useful for classifying data into cross tabulation. Cross tabulation is a simple method applied to investigate and analyze the relationship between two or more variables. Thus, cross tabulation can be used for hypothesis testing.

Qualitative analysis is especially useful for variables related to sociocultural phenomena which are impossible to quantify, such as decisions within the family to move, or the level of participation of community in rural development (e.g., mutual assistance, sociocultural association [*mapalus*]). As mentioned earlier, some difficulties may be encountered in the process of sampling, and need to be taken into account in interpretation of findings.

The main variables for hypothesis testing were analyzed by fitting those variables into cross tabulation. The 239 households in four villages in North Sulawesi constitute the main case study. The results of the interviews (both with questionnaire and without questionnaire) with 49 households in three villages in Central Sulawesi are used to support the findings gathered at the four villages in North Sulawesi. For purposes of analysis villages are classified into two groups, transmigration villages and non transmigration villages.

Description of Study Areas

The Country

Indonesia is a vast archipelago state that consists of over 13,000 islands, with some three thousand inhabited and more than ten thousand uninhabited islands. It is the largest country in Southeast Asia, with a land area of over two million square kilometers, situated along the equator over an expanse of more than five thousand kilometers. It has a varied physical environment. In the early part of the seventeenth century the Dutch obtained footholds on Java and Maluku, and operated until the close of the eighteenth century in the form of a private trading company. The Dutch colonial period lasted until 1949, except for two brief periods, in the early 1800s when the British were in control, and in the 1940s during the Japanese occupation (Ricklefs, 1981).

The islands of Java and Bali, generally referred to as the central or inner islands, are well-endowed with physical factors which are favorable for agriculture. They have mostly well-drained and fertile volcanic soils, enjoy rather favorable precipitation levels and intensive cultivation can be carried out in many areas. Rice and other food crops dominate the agriculture production pattern.

The outer islands generally have a less favorable combination of physical factors. Drainage problems occur on a large scale in some parts of South and East Sumatera, South and Central Kalimantan, Southeast and Central Sulawesi, and in the southern part of Irian Jaya. Agriculture development in these swampy zones is very limited. Soil fertility in a number of areas in the outer islands has been seriously effected by leaching processes, with considerable areas of Kalimantan and Sumatera suffering from such problems of soil impoverishment. Most of the country's perennial tree crop estates and plantations which produce for the world market are located on the outer islands.

The differences between Java and the other islands, however, go beyond current patterns of inequity. In terms of historical, ecological, and population developments, Java and the outer islands are seen as two quite distinct situations (Geertz, 1963; Ricklefs, 1981). The political and economic concentration of power on Java, particularly in Jakarta, is to large extent based on the extraction of resources from the outer islands. The labor structure and population processes evident at the micro level in Java are affected by both the social and political structure of Java and the relationships between Java and the outer islands. One important aspect is also related to the culture. In Java and Bali, rice is the main staple of the diet. In the outer islands, other traditional staples (such as corn, cassava, sweet potato, and sago) are the basis of the traditional diet.

The diversity of Indonesia's development has its consequences for transportation, communications, and location of modern industries. Inter island shipping remains the dominant form of transportation and many parts are relatively isolated. In these areas, air transport is of key importance. On Java and parts of Sumatera, the road and railway systems are rather well developed and communication is comparatively good. Modern industrial development is largely concentrated on Java and some parts of Sumatera. Most of the big chemical industries (largely state-run) and other basic industries are found at coastal locations on both islands. Most privately owned and labor intensive small and medium-sized manufacturing industrial activities, which produce mainly consumer goods for the domestic market are found at locations near their customers (i.e., Java).

As the fourth most populous country in the world, Indonesia reached a population of 200 million inhabitants in February 1997[1]. The population growth rate is slightly lower than 2 percent

[1] It was predicted by the Central Bureau of Statistics and State Ministry of Population and Family Planning that Indonesia would reach 200 million in population on February 4th 1997. Published by Kompas February 5th, 1997.

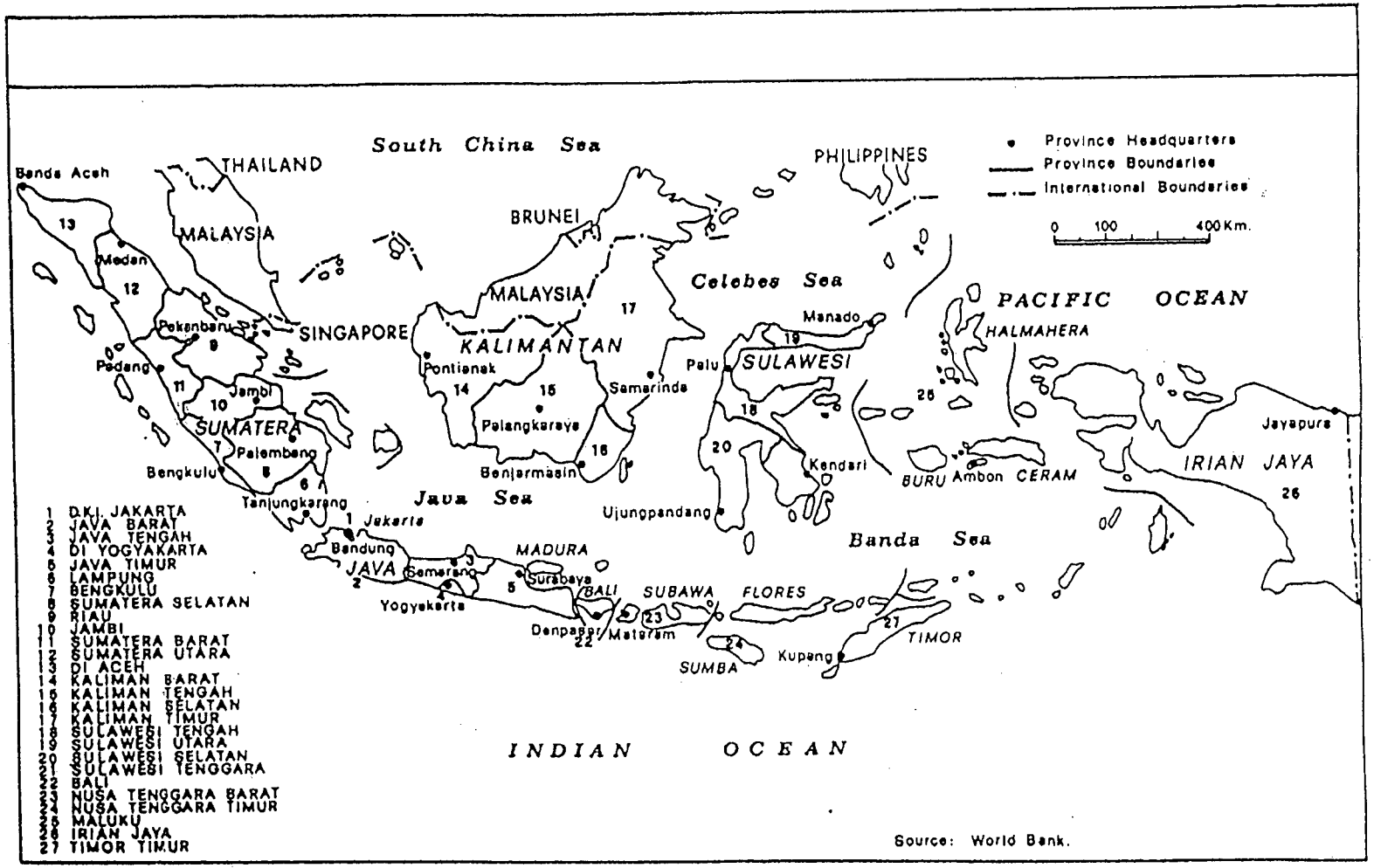
per annum. The relatively low population growth rate is largely attributable to a massive family planning program. The nation-wide efforts in this field were launched in 1970. The population growth rate implies a demographic structure that is characterized by a relatively young population. The distribution of population is extremely unbalanced. The islands of Java, Madura, and Bali, which account for only 7 percent of the total area, have close to two-thirds of the national population. This results in the population density of Java, at almost 2000 persons per square kilometer, being one of the highest in the world. The 1990 census (the most recent census from which results are available) indicated that around 31 percent of the population lived in urban areas. Out of the five largest cities, four are situated on Java Island. Rural-urban migration is a substantial contributor to the urban population growth. In the period 1980-1990, on average the populations in urban and rural areas had grown by 5.4 percent and 0.76 percent per year respectively.

The limits of expansion of cultivable land on Java have been reached, yet agricultural land remains available in the outer islands of Indonesia. A major policy of the Indonesian government and the colonial Dutch administration prior to independence was the sponsorship of population movement from Java to these islands. Such movement, both through the government-sponsored transmigration scheme and through spontaneous movement, has occurred, but the costs involved in these long distance moves and the unsuitability of much of the land for wet rice agriculture have limited the numbers of migrants (Hardjono, 1977; World Bank, 1988).

The economic structure and conditions have changed considerably in the past two decades. From the1970s to 1980s, the agricultural sector (including farm food crops and farm non food crops, estate crops, livestock, fishery, and forestry) primed the engine of economic development as the main contributor to the total gross domestic product. In the 1990s agriculture was replaced by manufacturing as the leading sector. It is estimated that the trade sector will

become the next main engine of economic growth in Indonesia. The slow down in world trade in the mid 1980s, the relatively poor export price performance of a number of non-oil commodities, and the fall of oil prices in 1986, all led to a deterioration of external economic conditions in the mid 1980s. The growth rate of gross domestic product slowed down from an average annual rate of about 8 percent during the 1970s to 7 percent during the period of 1985 to 1995.

Figure 2.1 Map of Indonesia



North Sulawesi Province

North Sulawesi occupies the eastern section of the long northern peninsula of Sulawesi (refer to Figure 2.2). The main section of land is about 600 kilometers long and not more than about 80 kilometers wide. It consists of four districts (Sangihe Talaud, Minahasa, Bolaang Mongondow, and Gorontalo), and three municipalities (Manado, Bitung, and Gorontalo). Each district has its own unique background and culture. Minahasan and Sangerese people are mostly Christians, Bolaang Mongondowese and Gorontalese are mostly Moslems.

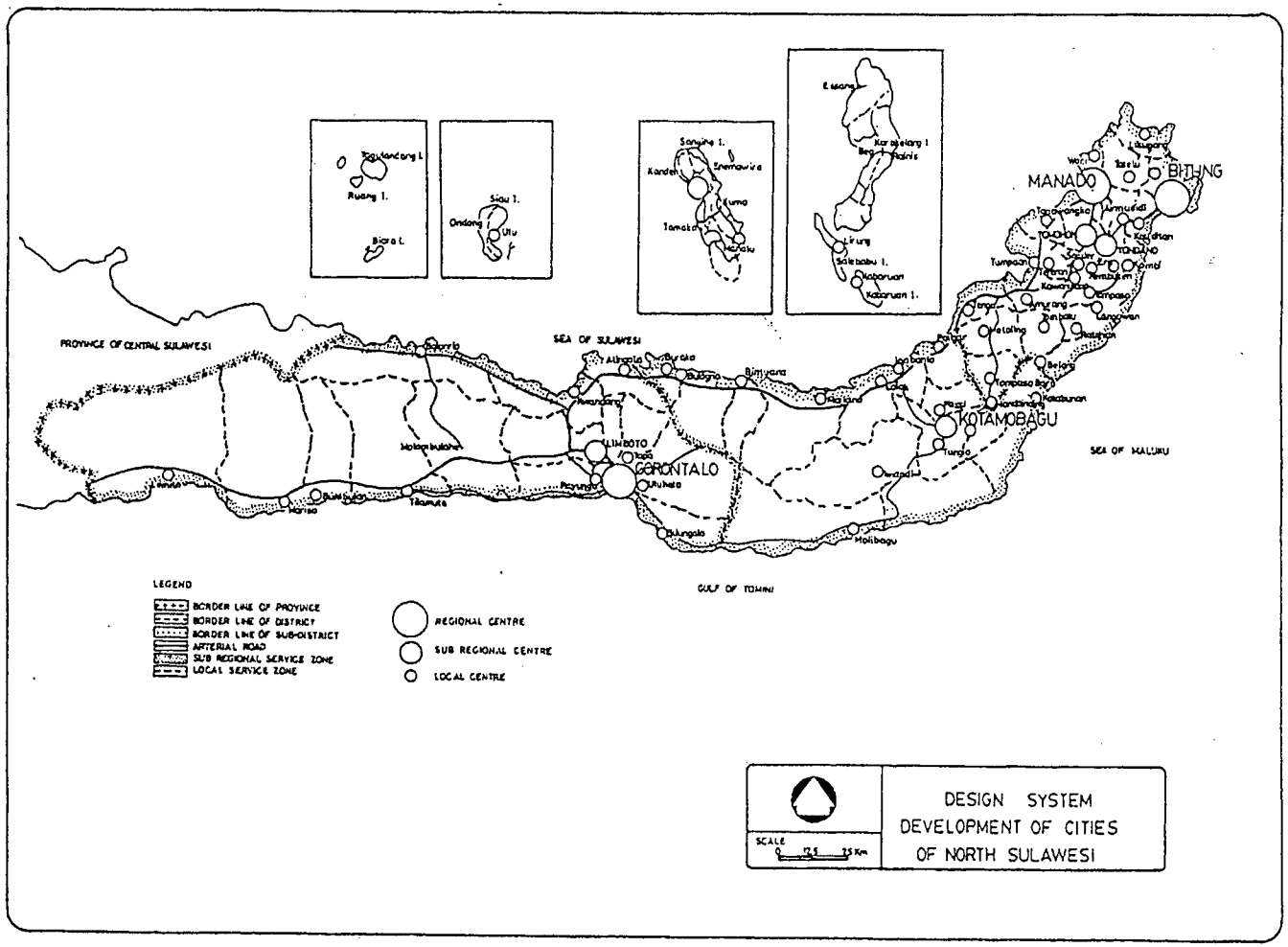
Table 2.3
North Sulawesi: Population By Sex, 1920-1990

Year	Male	Female	Total
1920	295,039	292,400	587,439
1930	374,000	374,000	748,000
1961	664,726	667,772	1,332,534
1971	861,293	856,378	1,717,671
1980	1,069,763	1,045,621	2,115,384
1990	1,255,330	1,221,859	2,477,189

Source: Bappeda, 1994.

The population of North Sulawesi has grown from more than half a million in 1920 to over 2 million in 1980 and 2.477 million in 1990. The growth rate of population during the period 1971-1980 and 1980-1990 was 2.21 percent and 1.60 percent per annum respectively. North Sulawesi's population has grown more slowly than that of the country as a whole. The changes in the rate of population growth are not only influenced by natural increase but they are also affected by migration. In the period 1980-1990, the average population growth in urban and rural areas was 4.76 percent and 0.84 percent respectively. Even though the coastal regions of the peninsula's northern part have long been densely populated, the interior of this region is still a pioneer frontier. In the last two decades population growth in some interior rural areas, however,

Figure 2.2 Map of North Sulawesi



has increased because of the transmigrants from Java and Bali as well as spontaneous local migrants.

The economy in North Sulawesi depends mainly on the agricultural sector. The proportional contribution of the agricultural sector to the total gross regional product (GRP) was about 26.92 percent in 1994. Among those five sub-sectors (farm food crops and farm non-food crops, estate crops, livestock, fishery, and forestry) classified under the agricultural sector, the sub-sectors of farm food crops/farm non-food crops and estate crops shared a relatively big contribution to the total regional gross domestic product, with the proportions of 10.6 percent and 9.1 percent respectively in 1994. Looking at the absolute numbers, however, the data indicated that growth rates of the fishery and forestry sub-sectors in 1993-1994 were about 16.3 percent and 13.3 percent respectively. These figures were relatively high compared to the agricultural sector's overall growth rate (only 7 percent).

The second largest contribution to the total gross regional product (GRP) was provided by the services sector with around 38.02 percent in 1994. Between the two sub-sectors, government services and private services, which are classified under the services sector, the shares of government services and private services in the total regional gross domestic product were about 14.9 percent and 3.2 percent respectively in 1994. At the same time, the contribution of the manufacturing industrial sector to the total GRP was 35.07 percent. Most of the manufacturing activities in North Sulawesi are classified into small-scale industries, producing mainly food and beverages, cigarettes, textiles, furniture and handicrafts, and agro-processed products.

Some basic industries, such as coconut oil plants and most of the fish canneries are located in the municipality of Bitung, where the main port is located. Other big industries and many small-scale industries are scattered along the corridor between Manado, capital city of the province, and Bitung. It is understandable that most of the industries in North Sulawesi are

concentrated in these areas because they can be supported by the relatively complete infrastructure required by industries, such as a main harbor, airport, highway, transportation networks, and communication. Since 1995 this area, the corridor of Manado-Bitung, has been designated by the central government for promotion as one of the growth centers in Indonesia's northeastern region.

Table 2.4
North Sulawesi: The Structure of Employment
by Industry, 1990 and 1994 (percentage)

Industry	1990			1994		
	M	F	M+F	M	F	M+F
Agriculture	63.67	38.95	56.49	64.20	41.77	57.74
Manufacturing	12.59	14.53	13.17	10.90	10.98	10.95
Service	23.74	46.44	30.34	24.90	47.25	31.31
Total	100.00	100.00	100.00	100.00	100.00	100.00

Note: M = Male, F = Female
Source: Bappeda, 1994; Statistics Office, 1995

A comparison of employment in the various sectors is shown in Table 2.4. The data clearly indicate that more than 50 percent of employment was found in the agricultural sector. The proportion of employment absorbed in manufacturing activities was relatively small and decreased slightly from 13.17 percent in 1990 to 10.95 percent in 1994. At the same time the proportion of employment in the agriculture and service sectors slightly increased. Males took most of the agricultural employment (64.20 percent), and females dominated employment in the service sector (47.25 percent). The higher proportion of females in the service sector may be due to the fact that many of them are employed in the trade, hotel and restaurant, banking, and government sectors.

Bolaang Mongondow District

The Bolaang Mongondow District (*kabupaten*) is one of four districts in the province of North Sulawesi. The district, an area of 8358 square kilometers (30.4 percent of the total area of North Sulawesi), is located between Minahasa District and Gorontalo District (Figure 2.3). The district has good access to major road and transportation networks. The Trans-Sulawesi highway crosses the northern coast of the district and another highway crosses the district's southern coast. Between these two highways, another highway crosses through the hills and valleys of the middle of the district to the national park on the district's western side, bordering Gorontalo District.

With an average population density of 47.04 persons per square kilometer in 1994, Bolaang Mongondow District is the least densely populated district in the province of North Sulawesi. In 1994 the population numbered around 393,211 persons, consisting of 200,870 males and 192,341 females. In other words, the district had a sex ratio of 104.43, the highest among the districts and municipalities in North Sulawesi. There were about 85,428 households, with an average of 4.60 persons per household. The district is administratively divided into 15 subdistricts (*kecamatan*) and 243 villages (*desa*).

Table 2.5
Bolaang Mongondow District: Population and Density

Year	Population	Persons/km2
1961	150,127	17.96
1970	208,609	24.95
1980	299,696	35.85
1990	372,725	44.59
1994	393,211	47.04

Source: Bappeda, 1992; Bappeda, 1994.

The structure of employment classified by sector is shown in Table 2.6. The data indicate that the majority of employed males and females in Bolaang Mongondow were working in

agriculture. The service sector absorbed the second largest proportion of employment. The proportion of females involved in the service sector was more than two times that of their counterpart males. The proportion of people engaged in manufacturing activities was relatively small. As at the provincial level, males dominated in agricultural activities and females were concentrated in the service sector.

Table 2.6
Bolaang Mongondow: The Structure of
Employment by Industry, 1994 (percentage)

Industry	M	F	M+F
Agriculture	73.75	42.70	67.29
Manufacturing	8.42	8.08	8.34
Services	17.83	49.22	24.37
Total	100.00	100.00	100.00

Note: M= Male, F= Female
Source: Statistics Office, 1995

In the distribution of Bolaang Mongondow's gross regional product (GRP) among the agricultural (A), manufacturing (M), and services (S) sectors between 1990 and 1993, the largest share was contributed by agriculture. Agriculture's contribution slightly increased from 49 percent in 1990 to 50.95 percent in 1993. The district has almost 170,000 hectares of agricultural land, with around 42,791 ha farmed in wet rice with irrigation networks and about 7,000 ha without irrigation systems (rain-fed fields or *sawah tadah hujan*). With almost 50,000 ha of rice fields in 1992, the district has the largest area of rice fields of any district in North Sulawesi. Most of the wet rice fields are situated in Dumoga Subdistrict, where the four case study villages are located. Dumoga Subdistrict is called the "rice barn" of North Sulawesi.

Figure 2.3 Map of Bolaang Mongondow District

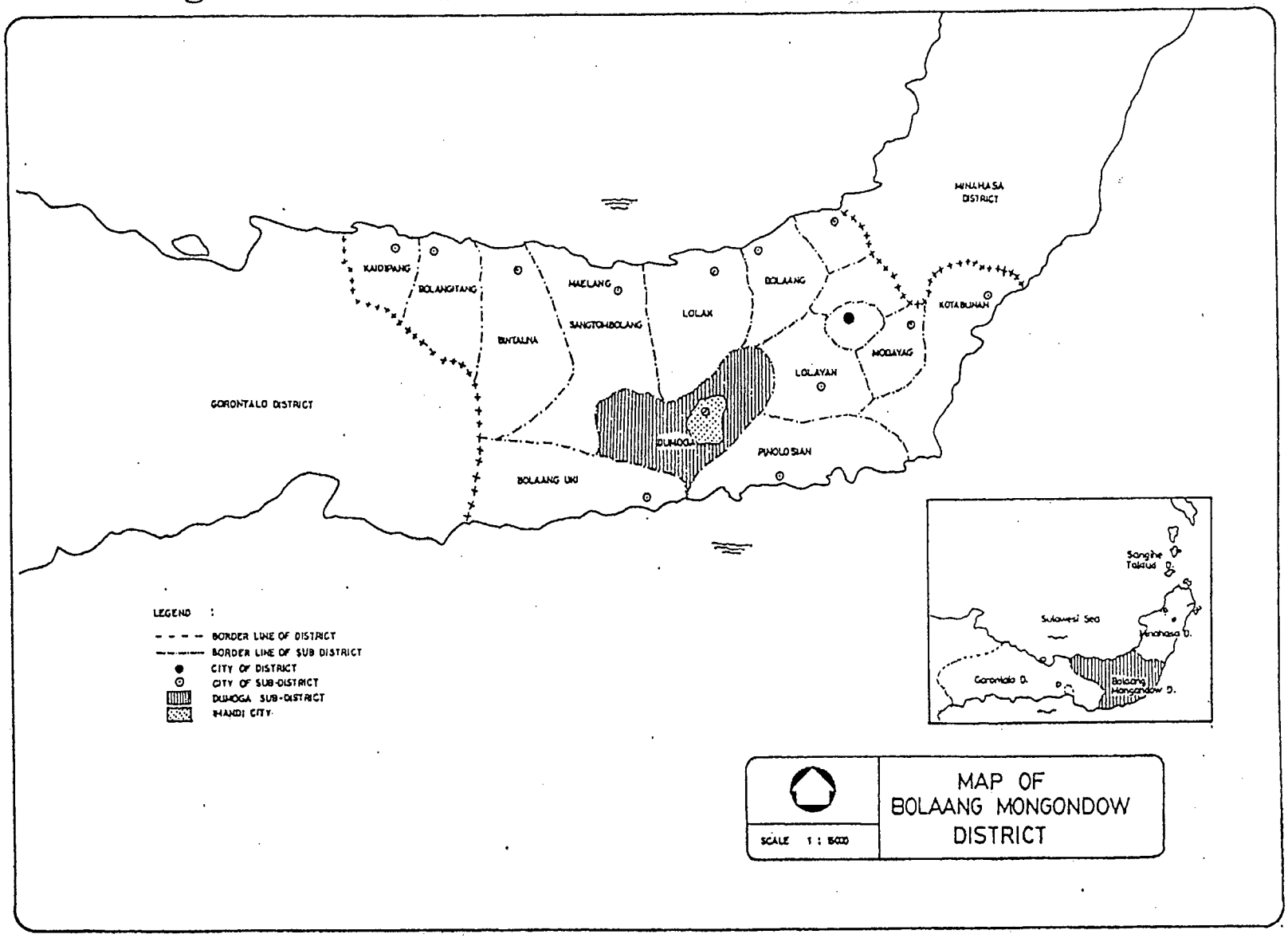


Table 2.7
Bolaang Mongondow: Sectoral Distribution of Gross Regional Product, 1990-1993

Year	Sectoral Distribution (%)			
	A	M	S	Total
1990	49.39	12.20	38.41	100
1991	50.92	12.22	36.86	100
1992	51.47	12.32	36.21	100
1993	50.95	12.61	36.44	100

Note: A = Agriculture, M = Mining and quarrying, manufacturing, utilities, and construction. S = Services.
Source: Bappeda, 1994

The biggest part of agricultural land in Bolaang Mongondow consists of plantations of coconut, clove, nutmeg, cocoa, and vanilla. Some of these commodities are exported both to other provinces in Indonesia and to other countries. These plantation areas are distributed in small plot areas of small-holder production, and organized by local people. However, because the price of these crops is relatively unstable, being subject to fluctuations on the world markets, and the terms of trade are relatively poor, farmers have not given serious attention to or organized the plantations efficiently.

Table 2.8
Bolaang Mongondow: Planted Area by Rice and Crops, 1994

Plantation	Area (ha)	(%)
Rice:	49,791	29.44
Wet rice fields	42,791	25.30
Rain-fed fields	7,000	4.14
Coconut	46,715	27.62
Clove	7,526	4.45
Coffee	3,422	2.02
Nutmeg	96	0.06
Cocoa	989	0.58
Vanilla	232	0.13
Pepper	74	0.05
Others (corn, cassava, sweet potato, nuts, vegetables, fruits, etc.)	60,245	35.62
Total	169,090	100.00

Source: Bappeda, 1994

Table 2.8 indicates that around 35.62 percent of agricultural land in Bolaang Mongondow District is planted in corn, cassava, sweet potato, nuts, vegetables and fruits, all crops which were traditionally staples of the Mongondownese diet. However, when the wet rice fields were developed and supported by dams and irrigation networks built in the early 1980s, rice became the main production crop in the region. At the same time, the main staples of the diet of most population in Bolaang Mongondow gradually changed from corn, cassava, and sweet potato to rice. Some people in the region still rely on both corn and rice as their main staples.

The manufacturing sector's contribution to the total gross regional product from 1990 to 1993 was less than 13 percent. All manufacturing activities included in this sector were small-scale industries: food industries, ceramics industries, brick industries, furniture industries, utilities for agricultural production, and handicrafts. Most of these "industries" were family-run or home industries.

There are many small industries and craft production related to agriculture and simple agro-processing, dispersed throughout the countryside. Palm sugar processing is the most common, especially in Passi Subdistrict. Another kind of agro-industry, rattan manufacturing, is concentrated in Kotamobagu Subdistrict, and bamboo-craft in Lolayan Subdistrict.

This primary and secondary production is partly reflected in the trade flows at traditional markets in the subdistrict centers or rural centers. In most rural centers there is a market which in some places is open five days and others only two or three days per week. In addition, there are markets in some of the larger villages. Commodity flows and trader movements at the market link subdistricts to one another and moreover link the countryside to the outside world.

The share of the service sector in total gross regional product has decreased, mainly in the government subsector, from 38.4 percent to 36.4 percent. The drop is probably because local government has limited recruiting new public servants and has reduced expenditures for public

services. Some subsectors such as trade, transportation, and government contribute a relatively large share to this sector. The banking subsector and other services contribute relatively little to the services sector total.

The Villages

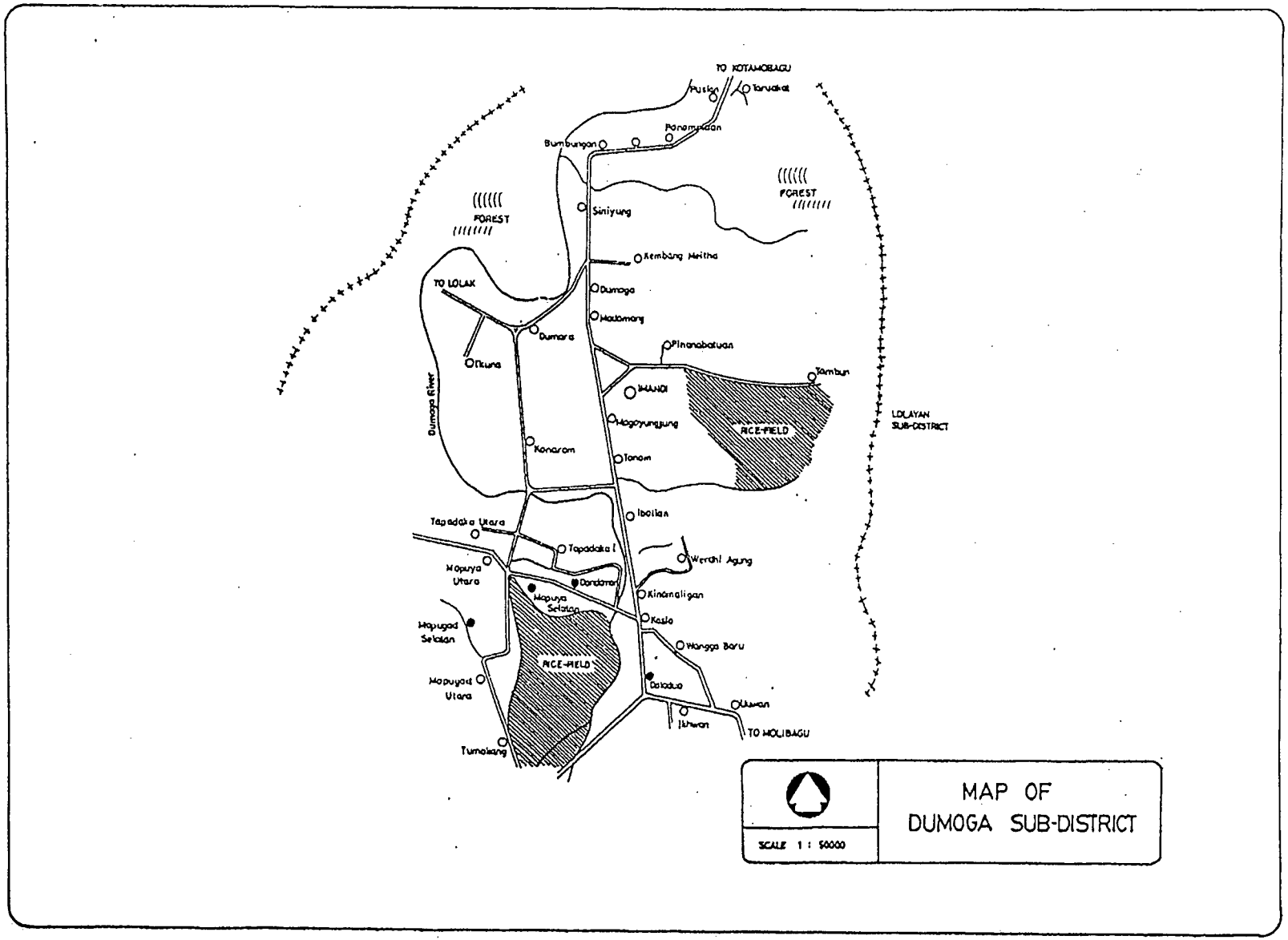
The four villages selected for study are located in Dumoga Subdistrict of Bolaang Mongondow District. Figure 2.4 displays the location of the four villages. Two villages, Doloduo and Dondomon (both non-transmigration villages) are located 16 kilometers and 14 kilometers respectively on the west of the subdistrict capital or rural center. The other two villages, Mopugad Selatan and Mopuya Selatan (both transmigration villages), lie to the northwest, 25 kilometers and 20 kilometers respectively, from the subdistrict capital.

Of the four villages, Doloduo and Mopuya Selatan have the easiest access to Kotamobagu, the district capital. Both villages have direct public transit services to Imandi (a subdistrict capital), Kotamobagu (a district capital), and Manado (the provincial capital). By minibus (*Kijang*) from these two village to Imandi, Kotamobagu, and Manado, it costs Rp 500, Rp 1500, and Rp 6500[2] respectively. The five-kilometer trip between Mopugad Selatan and Mopuya Selatan can be undertaken by *oplet*, a small minibus, at a cost of Rp300. From Dondomon to Imandi or Doloduo by public minibus is costs Rp500.

The various demographic characteristics of the four villages are shown in Table 2.9. Of the four villages, Doloduo has the largest population and the largest village area. Settled by local people in the late 1800s, Doloduo is also the oldest village of the four villages, and one of the oldest villages in Dumoga Subdistrict. Before it was settled, Doloduo was a place for hunting and

[2] At the time of the study in 1995 the rate of exchange between the United States dollar and Indonesia rupiah was approximately $1 = Rp2270. To place this amount within a local context, the wage for an agricultural laborer was Rp5000 per day.

Figure 2.4 Map of Dumoga Subdistrict



farming by traditional methods, such as slash and burn, by local people. It was chosen for farming because of the fertile land and its close access to one of the biggest rivers in the area, the Ongkag Dumoga River. The river provided water for irrigating farm land by a traditional network system.

In the early 1900s, local people started to settle permanently in the area, with a nucleus of around 20 households in the small hamlet. In 1910, some families migrated to Doloduo from Dumoga Village which is approximately 25 kilometers from Doloduo. With the new migrants, the number of families in the village then counted around 80 families. According to one of the elders living in Doloduo, at that time Doloduo was directly under the traditional kingdom of Bolaang Mongondow. In the 1930s the Dutch came and took over the village, and people of ages twenty years and over and those married less than twenty years had to pay taxes to the Dutch colonial government. Since the 1950s, Doloduo's population has grown relatively quickly because more people migrated to the area from other subdistricts and also from Minahasa. The most common motivation for this was that people could buy the land very cheaply (1 ha of land sold for only Rp50).

In the early 1950s some local people moved to Dondomon, which is located only 5 km to the east of Doloduo. Because of the flow of migrants from other villages surrounding Dumoga Subdistrict, the village population grew quite high. The biggest movement of migrants to the village came in the mid 1970s, and was comprised of both Mongondownese (70 families) and Minahasans (180 families).

Even though these two villages had been growing since the early 1950s, road access to the areas remained very poor. In 1972 the main road was built of asphalt. Before the road was developed, traveling from Doloduo to Kotamobagu (around 60 km) took more than one day by

foot or two days by *gerobak*, a cow-drawn cart. Thus people had to spend days to transport their crops to the market in Kotamobagu and to buy their daily needs to take home.

Mopuya Selatan and Mopugad Selatan are two transmigration villages which were established in 1972 and 1975 respectively. The majority of migrants who settled in Mopuya Selatan originally came from East Java Province and those in Mopugad Selatan came from Bali Province. Originally, Mopuya Selatan and Mopuya Utara were part of a single village called Mopuya Village. Because of the village's rapid growth (a consequence of both natural increase and in-migration, with limited availability of land surrounding the village), village officials, elders, and informal leaders decided at a village meeting in 1985 that the village of Mopuya would be divided into two independent villages called Mopuya Utara and Mopuya Selatan. This agreement was also approved by the Dumoga Subdistrict and local government officials. The same conditions and outcome were experienced by Mopugad Village, which divided into two independent villages, Mopugad Selatan and Mopugad Utara, in 1987.

Table 2.9
Demographic Characteristics of Sampled Villages

Characteristics	Village			
	Doloduo	Dondomon	Mopugad Selatan	Mopuya Selatan
Population 1993	4,571	1,892	1,695	2,262
Number of Households	967	351	336	415
The Average of Population per Household	4.7	5.3	5.0	5.4
Area of Village (Ha)	1,540	719	344	594

Source: Village Offices

All four study villages receive irrigation. Doloduo gets water from the Kasinggolan Dam which was completed in 1981, and Dondomon, Mopugad Selatan, and Mopuya Selatan from Torout Dam which was completed in 1986. Before the introduction of irrigation, it was only possible to cultivate one crop of rice per year, but now it is possible to grow two or three crops of rice a year. Agriculture in all of the villages is highly integrated into input and output markets. The use of pesticides, fertilizers, and modern strains of rice is almost universal. These inputs are mostly bought by farmers from the owners of the rice mill, rather than obtained through the government *Inmas* program to which, according to local statistics, all farmers in the four villages belong. The *Bimas* (mass guidance) program, the organization which preceded *Inmas*, was largely accepted in the area during the late 1970s. The reason most farmers buy their inputs from the owners of the rice mill is that they can get credit and pay later in the harvest season at prices a little bit higher than the common price.

Because of the geographical location of the villages and the year-round access to irrigation, the majority of land not used for buildings is capable of being used for growing wet rice. Table 2.10 shows a number of aspects of agricultural development. The first two measures were obtained from local statistics while the remaining measures were estimates obtained in interviews with village officials. These data indicate that the villages of Mopugad Selatan and Mopuya Selatan are the most developed agriculturally. They possess more modern agricultural equipment, prepare more of their land with tractors, and also use outside laborers. However, the variation between villages is not great. This is in large part due to the large-scale changes in agriculture, such as the introduction of mechanization and the spread of *Bimas* and the subsequent *Inmas* programs, which took place in the early 1980s.

Table 2.10
Indicators of Agricultural Development by Village, 1995

Indicator of Agricultural Development	Village			
	Doloduo	Dondomon	Mopugad Selatan	Mopuya Selatan
1. a. Number of Tractors	-	-	4	7
b. Number of Rice Mills	4	2	4	5
c. Number of Corn Mills	7	3	-	-
2. Percentage of Farmers involved in Inmas (1)	100	100	100	100
3. Preparation of Land (%)				
a. Tractor	-	-	20	30
b. Cow	40	30	40	30
c. Human Labor	60	70	40	40
4. Percentage of Agricultural Labor from outside of Village (2)	20	15	10	15
5. Number of Farmer Groups	4	4	6	5

Note: (1) Inmas is an agricultural program of mass intensification.
(2) Refers only to the planting seasons.
Source: Village offices and field surveys

The most common method of harvesting is termed *bawon*. Two forms of this method occur. In the first form, harvest is open to all members of the village, with each harvester receiving approximately one-tenth of the amount they harvest. The second form of *bawon* involves only invited family members who receive a larger share of the harvest than non related villagers. Another form of harvesting that was reported in all four villages was harvesting for wages.

According to statistics obtained from the village offices (see Table 2.11), all villages have a high percentage of inhabitants engaged in agriculture. The data indicate that Doloduo and Dondomon have relatively high proportions of employers and government workers. In Dondomon, there is an especially high proportion who are working as carpenters, with most of their customers coming from outside the village and many of their products found in small towns. Mopugad Selatan and Mopuya Selatan have a relatively high proportion both of farmers

who own land and farm laborers. In Mopuya Selatan a relatively large number of persons specialize in building trades. There are also traders of items such as house utensils, food and vegetables who travel by bike or motorbike to the other villages surrounding Dumoga Subdistrict. Mopuya Selatan also has many people engaged in transportation, such as minibus drivers, conductors on public transit, and motor cab drivers.

Table 2.11
Primary Occupation of Persons Aged 15 and Over by Village, 1995

Occupation	Village (percentage)			
	Doloduo	Dondomon	Mopugad Selatan	Mopuya Selatan
Farmer (Own Land)	43	42	59	40
Farm Laborer	10	15	20	31
Employer	28	20	2	4
Trader	4	3	4	8
Carpenter	3	10	6	3
Transport Worker	2	-	-	4
Government Worker	8	9	5	6
Construction Laborer	1	1	2	2
Others	1	-	2	2
Total	100	100	100	100
Number	871	351	368	627

Source: Village Offices

The main public facilities available in the four villages are indicated in Table 2.12. In general the data indicate that only Mopuya Selatan has relatively complete public facilities. By contrast, Dondomon's public facilities are quite limited. All villages have a primary school. Only two villages have a junior high school, thus the children from Dondomon and Mopuya Selatan have to walk or travel to other villages which have junior high schools. The public senior high school is only available in Imandi which is a rural center. The public markets located in the three villages are not open simultaneously. There is a schedule which rotates the opening of each market on a different day for a whole week.

Table 2.12
Major Public Facilities of Sampled Villages

Facilities	Village			
	Doloduo	Dondomon	Mopugad Selatan	Mopuya Selatan
Market	1	-	1	1
Bank	-	-	-	2
Cooperative	-	-	1	1
School:				
Primary School	6	3	1	2
Junior High School	1	-	1	-
Senior High School	-	-	-	-
Health Services:				
Community Health Center	-	-	-	1
Small Health Clinic Center	1	-	1	-
Post Office	-	-	-	1

Source: Village Offices

The Rural Center

The rural center is the Dumoga Subdistrict capital, which is called Imandi. It is situated in the middle of the Dumoga Valley, and the distance between Imandi and Kotamobagu, the Bolaang Mongondow District capital, is around 40 kilometers. The rural center consists of three villages (Imandi, Modomang, and Dumoga) and has a total population of 8,393 inhabitants in 1994. The average population density is about 1.6 persons per ha. The population growth rate in the period 1984-1994 was around 2.9 percent per year (Statistics Office of Bolaang Mongondow, 1995). The relatively high population growth rate was caused by both in-migration and natural increase.

As a rural center located in the middle of wet rice fields, the main activity of population is in the agricultural sector which accounts for 80.8 percent of the total employment. Most people working in agriculture produce rice and food crops such as fruits, vegetables, and beans. Some of them also have ponds for fish and livestock. Breeding chickens and ducks are other small scale

activities. The population involved in industrial activities amounts to only 1.2 percent. All industries located in this area are classified as small industry, producing mostly food, handicrafts, and furniture. The population engaged in trade accounts for 5.4 percent of the total employment. Most of these activities such as those of shop keepers, retailers, traders, and middlemen, are concentrated in the center of Imandi where the public market is located. Around 8 percent of the population work as public servants, police, and army. A small proportion of people, slightly more than 1 percent, were involved in transportation and others activities.

Because nonagricultural village jobs are limited, during the slack season, many farmers look for work outside the village. Most of them move to small towns and/or medium city to find work as construction workers, laborers in public markets, and laborers in small-scale industries such as concrete, brick, or rattan industries. Some farmers go to work as gold prospectors in the western reaches of the region, next to the National Park of Dumoga Bone. Such prospecting has been banned by local government because most of the activity is carried on inside the national park.

The rural center has a good road network connecting it to villages around Dumoga Subdistrict and to other rural centers, districts, and the medium city. The main public transportation to villages surrounding the rural center is provided by *oplet*, a small minibus, *bendi*, a horse-drawn cart, and *ojek* or motor-cab. The route from Imandi to Kotamobagu is served by *kijang*, a minibus, and costs about Rp1500 (in 1995 the rate of exchange between the United States dollar to Indonesia rupiah was approximately $1 = Rp2270). The route from Imandi to Manado (the provincial capital) route is served by buses run by department of transportation and private companies. Tickets costs about Rp6000 for a four hour trip.

Because it is a center of the subdistrict region, all subdistrict government offices and services such as police, post office, schools (from primary school to senior high school),

community health center, and some local government institutions such as agriculture, education, and health, are located in Imandi. There are two public markets, one located in Imandi and the other in Dumoga Village. The markets are open two times a week each on a different day. To support local economic activities, there are two banks (one private and the other government-run) open six days per week. There are shops specializing in groceries, building materials, agricultural inputs and equipment, textiles, furniture and household supplies. There are many *warung,* or small shops, located in the environs of the public markets and also restaurants, cafes, barbers and hair-salons.

The main urban facilities available in the rural center are very limited. There is no sewage or drainage system. Because there is no water supply available, almost all households have their own well for drinking water. Most houses have electricity. For those who have television, regional and national television programs have become the main-stay of family entertainment. Some wealthier families enjoy other television programs by means of satellite dishes.

The Small Town

The small town is Bolaang Mongondow District's capital and called Kotamobagu. It consists of 17 *kelurahan* or villages and all together constitutes a subdistrict headed by a *Camat* (head of subdistrict). In 1988 the population in Kotamobagu totalled 40,070 inhabitants and had increased to 50,683 population by 1992. During the period of 1988-1992 the average annual population growth rate was 3.32 percent. It was predicted by local government that in 1997 the population would total around 63,143 and by 2002 it would reach 76,889 inhabitants (Statistics Office of Bolaang Mongondow, 1995).

The distribution of population in Kotamobagu is relatively unbalanced. According to 1991 subdistrict government data, most of the population was concentrated in the city center,

such as in the Kotamobagu and Gogagoman *kelurahan*, where the population densities were around 82 and 79 inhabitants per ha respectively. Population density outside the city center ranged from 46 persons per ha to only 7 persons per ha.

Formal documents published by the subdistrict government do not contain information about employment based on main industry. Based on my interviews with government officials who are working in subdistrict and district offices, as well as interviews with informal leaders, entrepreneurs, and politicians, and confirmed by my direct observations in town (during two weeks in October 1995 and a week in December 1996), it can be assumed that the majority of population work in the agricultural sector. Because all local government offices and services are located in town, there is some employment in the government sector. The trade and industrial sectors absorb a relatively small proportion of employment.

According to my observations, the town starts its activities early in the morning, especially in the two public markets (*pasar*), called *pasar Inpres* and *pasar Sebelas Maret*, located in the center of town. Around 5 a.m. the small trucks with many kinds of vegetables came from outside town and start to unload the vegetables to the main wholesalers in these two public markets. From these main distributors, the vegetables are distributed to traders who conduct their businesses in these two markets, and to the bike or motorbike vendors who market their vegetables by traveling from one village to another.

After six a.m. the town becomes busy with children who are going to schools which start at seven a.m. and last until one p.m. At the same time public servants and employees are going to their offices, and the markets are becoming more crowded with customers. The *warung,* small shops which sell food, coffee, and tea, and are located surrounding the markets, are filled with customers having breakfast before they go to work. The big shops start to open around 8 a.m. and some of these shops are open until 9 p.m. Activities in the center of town start to slow down after

3 p.m. In the evening only a few shops, restaurants, and cafes are open, and after 9 p.m. the city center grows quite after a busy day.

Some private and government banks with nice looking buildings are located in the very busy areas to support the main economic activities in town. There are many kinds of small shops in the center of town specializing in selling textiles, house supplies, accessories, jewelry, furniture, and groceries. Nearby are shops which specialize in distributing motorbikes, bikes, spare parts for cars and motors, electronics, building materials, and agricultural supplies. In the last few years two department stores and car centers have opened. According to one entrepreneur, in the last decade many more new hair salons, video rental shops, cassette and compact disk shops, electronics and satellite disk businesses, and car accessories shops have opened in town. This boom indicates that modernization and globalization are reaching even small towns located in isolated areas such as North Sulawesi.

The main transportation in town is the *oplet*, a small minibus, and the *bendi*, a horse drawn cart, which are used mostly for short distances around the center of town. To connect the town with other rural centers and towns, there are many minibuses. From Kotamobagu to Manado, the provincial capital, there are buses called *Damri*, run by the Department of Transportation and by private companies with fares of around Rp4000. Some private transport companies offer special services to pick up passengers at their homes outside the city region and then deliver them to specific places in Manado, a special service which costs around Rp7000.

Most public facilities such as hospital, schools, post office, and police station are available in town. The town is also complete with water supply, electricity, and communication. Most government offices are relatively new buildings. Although the buildings are big, the services they offer to communities are very slow.

The Medium City

The medium city is the capital city of North Sulawesi Province, called Manado. The city has been settled by local people since the sixteenth century, and was previously called "Wenang". In 1623, the name of Wenang was changed to Manado (a word taken from the Minahasan language, "Mana dou", meaning "too far"). In 1919, based on the approval of the colonial Dutch government, it became a provincial capital.

The municipality of Manado consists of 5 subdistricts and 68 *kelurahan*, neighborhoods which are administratively similar to villages and constitute the lowest level of government in the city. In 1994 the city's total population was 347,235 persons, and during the period of 1990 to 1994 the population growth rate per annum was 2.49 percent. According to an analysis of the Central Bureau of Statistics and Population and Family Planning Bureau, during that period the natural growth rate of population was only 1.27 percent per year. Therefore, the remaining 1.22 percent was provided by the flow of in-migration from other districts in North Sulawesi and from other provinces outside North Sulawesi. The total area of the city is around 15,726 ha and the population density is around 22.39 persons per ha.

Based on the 1990 census data and the 1994 national economic census, the employment structure in Manado is shown in Table 2.13. The data indicate that the service sector absorbs the biggest part of employment in Manado and the proportion of employment in that sector increased from 72.2 percent in 1990 to 77.3 percent in 1994. In the same period the proportion of employment involved in the manufacturing sector slightly decreased, and in the agricultural sector sharply decreased. The increased proportion of employment in services sector is strongly related to an increase in the activities of the tourism industry. During the last few years, several big hotels were built in Manado, and an increasing number of tourists (both international and local) are traveling to North Sulawesi to enjoy the diving, scenery, and culture of North Sulawesi.

Table 2.13
Manado: Sectoral Distribution of Employment, 1990 and 1994

Year	Sectoral Distribution (%)			
	A	M	S	Total
1990	10.19	17.65	72.16	100
1994	6.14	16.54	77.33	100

Note: A = Agriculture, M = Mining and quarrying, manufacturing, utilities, and construction. S = Services.
Source: Bappeda, 1995; Statistics Office, 1994.

The economic growth rate of Manado during the period of 1989-1995 averaged 10 percent per year. The industrial sector and services sector (especially banking subsector) indicated rapid relative increases. However, at the same time some sectors (trade and transportation sectors) showed decreases. The overall composition of the regional economy indicated that the main engine of Manado's economy strongly depended on certain sectors, such as trade (23 percent), transportation (18 percent), government (17 percent), and banking (which increased its proportion to 10 percent of the total gross regional product).

The main public transport in the city is the *oplet*, a small minibus. All *oplet* are run by private companies. The cost for one trip, for either a short or long distance, is only Rp300. Certain routes are served by buses called *Damri*, which are run by the Department of Transportation, and charge a fare similar to the *oplet* (Rp300). Around certain public markets such as *Bersehati* Market and *Pinasungkulan* Market, the two biggest markets of the six located in Manado, there are many *bendi* which haul short distances with the cost around Rp300 per person. In the evening, there are many motor-cycle taxis or *ojek* especially in the center of town, which offer services for short and long distance hauls, with the price depending on the distance. These motor-cycle taxis mostly begin to operate after the *oplet* and bus are no longer running. This kind of transportation is classified under the informal sector because it is not considered by city government as public transport.

CHAPTER THREE

POLICIES FOR RURAL AND URBAN DEVELOPMENT

Introduction

Since the implementation of Indonesia's first five-year development plan in 1969, rural development has been a priority, especially for the agricultural sector. Efforts to increase rural living conditions have been undertaken through such giant programs such as intensification of rice production and transmigration. Large amounts of the money required for this have been borrowed from the World Bank and other lenders. Both programs have been put into action by provincial and local governments, following strict guidelines produced by the central government through the Ministry of Agriculture and the Ministry of Transmigration. Generous portions of the project budgets have been invested in basic infrastructure such as dams, irrigation systems, and road networks. The programs have had a significant impact in creating new job opportunities for both on-farm and off-farm employment, and increasing incomes of rural communities. On the other hand, these programs have widened the gap between the rich and the poor, creating conflict between migrants and local people. Certain species of tree and animal life have been destroyed. As indicated by this field study, the most important problem is the lack of program planning and coordination among departments and across economic sectors.

In Indonesia, rural development policy emphasizes the goal of rice self-sufficiency. There are two approaches to increasing rice production. The first approach, intensification of rice production, is implemented by increasing the use of agricultural inputs such as new seeds, fertilizers, pesticides, and mechanizing production tools such as hand tractors. The second approach is extensification of wet rice production, which is accomplished by enlarging the area

under wet rice cultivation. The means of implementing this approach has been through the transmigration program. Clearing of land is accomplished by destroying the forest and then converting the fertile land into wet fields for rice. In the case study areas of North Sulawesi, transmigrants are resettled in fertile land which can easily be turned into wet rice fields. Therefore, the transmigration program strongly supports the rural development policy of rice self-sufficiency.

Urban development tends to focus mainly on physical and services development rather than on urban management that could improve local government institutions and upgrade human resource capacities as the main resources for implementing local autonomy. Rural and urban development policies have been implemented separately as two different areas of concern rather than put into a unified rural-urban development framework.

This chapter presents a review of those components of rural development policies such as rice production intensification programs (or Green Revolution), transmigration programs, and urban development policy. All of these have had an impact upon the study area. The first section explores the meaning of village and the structure of village government. The second section analyzes how the national project of rice production intensification programs and related policies (such as market intervention policies) have been implemented in rural areas in Indonesia. The third section investigates the outcomes of transmigration programs vis-a-vis regional development and planning. The fourth section addresses the issue of why medium sized cities and small towns need to develop. The final section investigates the policies which have been implemented with regard to rural-urban development.

What Is a Village?

Village Classification

Villages in Indonesia are characterized by a variety of socioeconomic conditions and levels of development. A village's level of development can be measured by criteria such as income, community participation in local development, and levels of health care and education. Based on the primary livelihoods of village people, villages can also be classified by primary economic function (Maskun, 1993): fishing village (*perikanan*), wet rice village (*persawahan*), dry land village (*peladangan*), husbandry village (*peternakan*), plantation village (*perkebunan*), and small industry village (*perindustrian*). Based on location, villages may be classified as a peripheral village, enclave or isolated village, island village, and village with close or easy access to a city. All of these have an effect on village characteristics and development.

In formulating the development strategies and policies related to the needs of rural areas, villages or rural areas are divided into three groups. First, there are villages which have rapid growth, usually those villages located relatively close to and/or with easy access to urban areas. Generally, the main economic activities of such communities are diversified and do not depend solely on the agricultural sector. The community also shows indications of cultural change, a transition from traditional values or *adat*, and a start towards a market economy. Most of the rapid growth villages are classified by the Indonesian government as *swasembada* villages.

Second, there are villages which have high potential to develop. In general, the main activity of these communities is work in the primary sectors especially agricultural and mining sectors. In these villages, diversification of activities are relatively limited and the community is quite homogeneous in culture and custom (*adat*). In general, economic activities are still on a subsistence level but some people are already oriented to the market economy. The villages are located relatively far away from cities and with difficult access to towns. These villages is mostly

classified as *swakarya* villages, which is considered a lower level of development than *swasembada*.

Third, there are villages seen as having problems and limitations such as scarcity of natural and/or human resources and poor access to other centers and settlements. Such conditions are the main causes of villagers' poverty which makes them leave and go to other villages, with hopes of benefiting from the results of development nationally and locally. These are poor villages which require a special approach in order to increase the development in their region. These villages are classified as *swadaya* villages.

Village Government Structure

Indonesia's Basic Law No. 5 of 1979 defines a village as a region settled by a number of people in a community, legally organized directly under a subdistrict head (*Camat*) and with authority implementing its own household. A village differs from a city because it has a relatively low population density and its main activities are concentrated on the agricultural sector. In general, village communities are homogenous in terms of culture, ethnicity, religion, and main occupation. Furthermore, a group of villages which have functional linkages both socially and economically will create a region or rural area. These rural areas mostly consist of relatively similar types of villages, although they may be administered through a rural center.

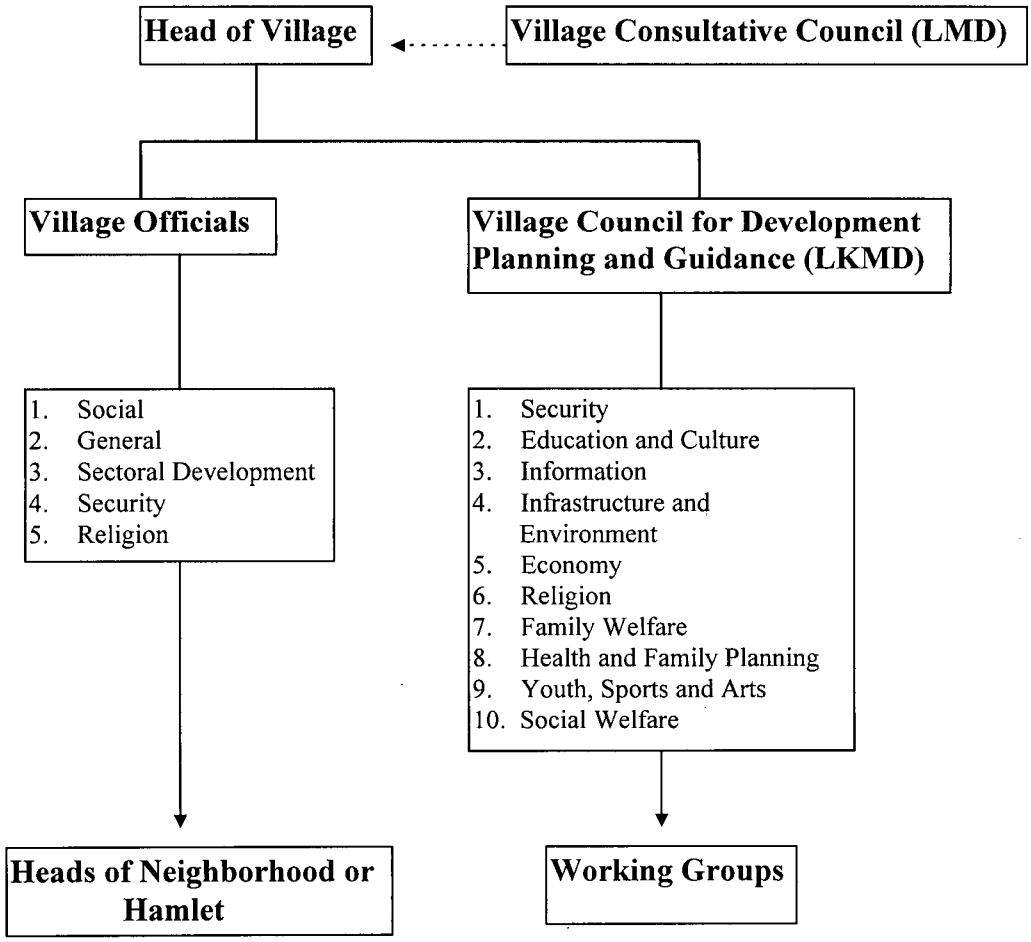
The structure of the village government in the province of North Sulawesi and consequently in the four villages of the research is shown in Figure 3.1. The village head and secretary are ex-officio chairman and secretary of the village council (Village Consultative Council or *Lembaga Musyawarah Desa* [LMD]). Members of the village council are formal and informal leaders in the village, including the village head, leaders of village organizations, and elders. The village has the right to arrange its own affairs, although the yearly budget has to be

approved by the subdistrict officials. Village governance is implemented by the village executive together with the village council, being a legislative body on the village level. The village head is assisted by five village officials and heads of the neighborhood organizations or hamlets. These neighborhood organizations are organized on a territorial basis and consist of a number of families ranging between fifteen and fifty households. The village head is not a government official and does not receive a monthly salary. Any remuneration for village heads and officials has to come from the village's own resources.

The village head is assisted by a second village council not belonging to the village government. The function of this second village council, the Village Council for Development Planning and Guidance or *Lembaga Ketahanan Masyarakat Desa* (LKMD)[1], is to participate in planning, programming, coordinating, and executing programs for village development. In the villages of the field study, membership of these two village councils generally overlapped to a high degree. Meetings between the village government and representatives of the population were attended by members of both councils. The village head has two basic roles: as the head of the village community, and as the one responsible for carrying out instructions from higher levels of the government. The second role has gained in importance since the beginning of the first five-year development plan in 1969. Rural development programs of a number of ministries are carried out with the assistance of the village head and village government. One such example is agricultural development programs. The field extension worker operates at the village level and therefore has to cooperate with the village government.

[1] The LKMD was established by the Ministry of Home Affairs in 1980. At the village level, the LKMD, through its various sections, is responsible for coordination of all activities (as indicated in Figure 3.1.) in the field.

Figure 3.1
Structure of Village Government



In reality, this structure means that there are no village activities which are not controlled and influenced by the LKMD, village head, or neighborhood heads respectively. Through the hierarchical structure of the organization, the government institutions above village level up to the Ministry of Home Affairs are always kept informed about village activities. The village head has to report to the head of subdistrict, who himself has to inform the head of the district and the local regional planning board, who inform the government's sectoral institution and the Ministry of Home Affairs. Apart from the LKMD, the head of the village is assisted by five village officials (*pamong desa*) who are responsible for field activities corresponding to those of the

LKMD. As an advisory board, the Village Consultative Council (LMD), has been set up to approve annual development plans and budgets.

Agricultural Development Policies

Overcoming Rice Deficiency

Rice is the main staple food for the majority of Indonesia's 200 million people. During the first four decades following the proclamation of independence in 1945, Indonesia had to import large quantities of rice mainly from Burma, Thailand, Japan and the United States to maintain adequate food stocks to feed its people. For external security reasons and to maintain internal social stability, in the early 1960s the government began to envisage an agricultural program to achieve self-sufficiency in rice production. The rice deficiency was a drain on scarce foreign exchange, and it was also perceived as a political weakness in Indonesia's international relations. In the government's view, if the domestic supply of rice could not be supplemented by international markets—whether for political, economic or other reasons—the stability and well-being of the country might be seriously threatened. Even if supplies of rice were available on international markets, fluctuations in international prices might have destabilizing effects within Indonesian society.

Studies which were carried out on a limited scale during the early and mid 1960s, led to a concerted effort in the first five-year development plan (1969-1973) to increase rice production on the island of Java, which is the most densely populated part of the country and the most rice-deficient. By the end of the first five-year plan, the government laid plans to spread the rice-intensification program to the other islands during the next plan period, and the third plan placed more emphasis on other crops, such as potatoes, maize and soybeans, shifting the emphasis from rice-sufficiency to overall food self-sufficiency (Mears, 1981; Sajogyo and Wiradi, 1985).

Although the program was very successful during the 1970s in increasing productivity per unit of paddy land, the total consumption of rice increased rapidly because of population growth during this period. At the beginning of the 1980s, Indonesia was the world's biggest importer of rice and despite great achievements of the agricultural intensification program during the previous decade, the goal of self-sufficiency in rice seemed as remote as ever. Some economists (Mears, 1981: 50, 419, 422) were doubtful that self-sufficiency could be achieved permanently, in either rice or other food, because of the high growth rate in food production that would have to be sustained over a number of years. The cost of implementing this program was very high, but thanks to the government's determined efforts and willingness to absorb much of the costs during the critical period of the 1970s and early 1980s, the overall goal was eventually reached. By 1984-1985 Indonesia was self-sufficient in food production.

Rice Production Policy

A combination of macro economic management and sectoral policies are key factors in achieving agricultural development objectives. At the macroeconomic level, adoption of a flexible exchange rate policy, fiscal and monetary policies which help control inflation, and liberalization of foreign trade are essential for increasing the competitiveness of Indonesia's agriculture and spurring domestic economic growth.

Since the 1960s the agricultural sector has been allocated a key position in the plans and funds were made available according to this investment priority status. Rural development continued to emphasize intensive rice production. The largest contribution to growth in the food crops and agricultural sectors has been from rice production. Since 1977 rice production has grown at the rate of over 6 percent per year (Darmawan and Hermanto, 1993). This remarkable rate of growth has been achieved mainly due to government policies to support rice production.

In the 1970s and 1980s the policies included investment in expansion and improvement of irrigation, investment in research capacity to develop rice varieties adapted to Indonesian conditions, rice intensification programs to encourage dissemination of new technologies and inputs, rice price support and stabilization policies, and investment in rural infrastructure.

The main rice production policies which have contributed to the rapid growth in production are found in several rice intensification programs. The first rice intensification program introduced in the mid-1960s was called BIMAS, which is an abbreviation of the Indonesian name, *Bimbingan Masal*, meaning "guidance to the masses".[2] Through the implementation of BIMAS programs, farmers were provided with basic service packages. These programs included extension, short-term credit and heavily subsidized inputs such as High Yielding Variety (HYV) seeds, fertilizers and pesticides. The Agriculture Ministry provided extension services through its officers located in subdistrict levels. The local branches of the Indonesia People's Bank (BRI)[3] handled the credit supply to farmers, while the Home Affairs Ministry was responsible for the implementation of the programs. Due to problems caused by low repayment rates, lack of qualified extension personnel and the untimely provision of many inputs, a new improved BIMAS program was introduced in 1970.

In this program, the village heads' use of coercion to elicit farmers' participation was abandoned. In the new BIMAS, "village unit areas", which were clusters of three or more villages, became the basis of delivery institutions such as the village cooperative, the village unit bank, the agricultural extension field staff and the private kiosks which stock various farm inputs.

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[2] The term "masses" refers to the millions of individual farmers in Indonesia and especially to those on the densely populated island of Java. "Guidance" in this context refers to the government's intention to provide, on a basis of voluntary acceptance by farmers, an integrated package suitable for individual family farms, which would enable the farmer to increase productivity per unit of cultivated land by adopting the new techniques.

[3] A state bank appointed by the central government to support agricultural development.

A Food Logistic Agency or *Badan Urusan Logistik* (BULOG) guaranteed the purchase of rice at a floor price. A raise in the rice yield was generally the result of this revamped BIMAS. However, after a few years, mainly due to the massive pestilence of the brown rice plant hopper and the accumulated debt problems of participating farmers, growth in output slowed down considerably.

The second program, introduced in 1973 and rather similar to BIMAS, was called INMAS (an abbreviation of *Intensifikasi Masal*, or "mass intensification" program). In this program, cash loans were no longer provided. The program was introduced mainly with the intention of providing services to those farmers who could not be given new loans because of their accumulated debts arising from their participation in BIMAS, and to those farmers, such as tenants, who did not qualify for BIMAS (Hardjono, 1983). Because of the unavailability of credit for the participants of INMAS, the incentive to join the program was limited and by the early 1980s the total number of participants in BIMAS and INMAS had decreased from 3.6 million in 1974 to about 1 million.

The third program called INSUS (an abbreviation of *Intensifikasi Khusus*, or "special intensification" program) was introduced in 1979. Its introduction was necessitated by the pest control requirements at the local level. Research had shown that the rice hopper flourished under those conditions usually present in village areas where the crops in the various rice fields ripened successively. The hopper could attack and destroy field after field in swarms, thereby, resisting its enemies. Rice cultivation in the village areas had to be coordinated so that all village areas could be planted at the same time, creating less favorable opportunities for the brown rice plant hopper (*wereng*) to wreak their destruction. Hence, it is clear that INSUS differed from BIMAS and INMAS in that it focused on group farming. All owners of a sizeable piece of well-irrigated land (25-50 hectares) that had been earmarked for intensification were obliged to participate. The

farmer groups received financial support and decided on the timing of activities and on the application of the various input packages which were made available. An extension of the program (called OPSUS or "special operation") was introduced in the early 1980s in an attempt to bring the services to areas not yet covered by the programs.

The fourth program is called SUPRAINSUS ("super special intensification") and was introduced in 1987. The program has been created as a further extension of INSUS and OPSUS and is aimed at specific areas as designated by the Ministry of Agriculture. The backbone of SUPRAINSUS activities consists of the following. First, there is the distribution and application of packages which include High Yielding Variety (HYV) seeds, solid and liquid fertilizers, and chemicals for integrated pest and disease control. Second, there is the organization of irrigation water control and harvest and post-harvest treatment; and third, the extension of soil cultivation, planting (among other aspects, to ensure that densities exceed 200,000 plants per hectares), plant nursing and annual rice variety rotation. The decision on the actual application of special inputs packages is made at the level of the sub-units, called farmer groups, comprised of some 600 to 1000 farmers, or at the level of tertiary irrigation system units of 90 to 150 hectares (Government of Indonesia [GOI], Department of Agriculture, 1987).

Table 3.1
Rice: Program, Area Harvested and Total Production per annum, 1960-1988 (1 unit = '000,000 ha/'000,000 ton)

Year	Program/ Technology	Total Area Harvested	Total Production	Yield (in metric ton/ha)
1960	No Program	7.28	8.76	1.20
1970	BIMAS	8.14	13.14	1.62
1980	INMAS	9.00	20.16	2.24
1984	INSUS	9.76	25.93	2.66
1988	SUPRAINSUS	10.14	28.40	2.86

Source: Modified from Mears, 1984; EIU, 1989.

Statistics regarding the special rice programs, rice areas harvested, rice production and the average yields per hectare are shown in Table 3.1. The data indicate that the total production of rice has greatly increased as a result of expansion of rice field areas. Since the 1970s onward, rice productivity has been substantially increased. Thus, the combination of expanded rice field areas, improvements in the irrigation infrastructure, and the intensification in rice cultivation through the application of High Yielding Varieties (HYV), fertilizers, biocides and more efficient water use, has led to attaining the national goal of self-sufficiency in rice.

In the early 1990s Indonesia's central government (through BULOG) quietly imported rice from Vietnam. The main justification given by the central government was that the rice imports were needed to maintain the nation's rice stocks. However, it can also be argued that despite the programs and technology aimed at increasing rice production, and the rice field areas available, rice production could no longer be increased. In other words, the optimum combination of high technology inputs applied to each hectare of rice field had reached it utmost productive limits. Realizing these limitations, in 1995 the central government (through the Ministry of Agriculture) decided to improve rice production for self-sufficiency through a program called "a million hectares for rice field" in swamp areas in Central and South Kalimantan. Although the project has been running for more than one year, the results for rice production have not yet been published.

Market Intervention Policy

Besides the programs for rice intensification, irrigation development, and development and dissemination of modern varieties of rice, the main intervention policies aimed at increasing rice production are marketing and rice price supports and fertilizer subsidies.

The government is very conscious of the decisive role of rice in the general economy. During the 1950s and 1960s when the national economy was in serious disorder, rice shortages occurred frequently as did shortages of other essential commodities. In such periods the price of rice inevitably influenced the prices of other foodstuffs and necessities of life. Control of rice prices therefore had the effect of stabilizing a large part of the economy.

The main instruments of the rice price control policy have been a ceiling price for consumers, floor price for farmers, and control of the international trade in rice. The central government has delegated the National Logistics Agency (BULOG) the responsibility to control the supply of goods (particularly rice and sugar) and set their prices throughout the year. BULOG has utilized procurement of rice to defend the floor price, and has been successful since the mid-1970s in maintaining the reported floor price. It was not until 1985, following two large harvests in 1984 and 1985 and a large build-up in stocks, that the farm price dropped below the reported floor price. The ceiling price has been maintained mainly by supplying urban markets from domestic procurement, imports and stocks.

The basic concept of the price policy was developed by Saleh Afiff and Leon A. Mears in 1969 (in Amang, 1993). It consisted of five elements: firstly, the floor price should be high enough to stimulate production. Secondly, the ceiling price level should be reasonable for consumers. Thirdly, the price margin should be maintained at a reasonable level to encourage traders. Fourthly, domestic prices should be protected from unstable world prices, but always adjusted to minimize subsidies. Finally, a minimum stock should be maintained in order to implement the policy.

In order to implement the rice policy, BULOG has also built rice storage facilities throughout the country. The relatively narrow band between BULOG's floor and ceiling prices of rice has discouraged the private sector from participation in holding stocks of rice. This has

forced BULOG to maintain large amounts of stocks to keep the market price within the ceiling and floor prices. Budgetary costs of purchasing and maintaining such large stocks have become very high.

In addition, the government has employed the fertilizer subsidy as a key instrument to stimulate crop production, particularly rice. The government subsidy for fertilizers has allowed a steady decrease in real prices of fertilizer from 1970 through 1984 (Darmawan and Hermanto, 1993). In order to set farm-level fertilizer prices, the government has become heavily involved in the production, trade, and distribution of fertilizer. The rapid growth in fertilizer use, induced in part by the subsidy and accelerated by the adoption of modern varieties and massive investments in irrigation, has sharply increased the budgetary burden of the subsidy.

Expansion of rice production was the overriding concern of agricultural policies in the 1970s and the 1980s. However, a series of changes in the Indonesian economy in the mid-1980s have required a substantial broadening of the agricultural policy concern beyond rice production issues.

It seems that in the future, rice will contribute less to the growth of the agricultural sector. This is due to the technical limits to land and yield increases, and also to the changing nature of demand which requires less growth in rice production than was the case in previous years.

Transmigration Program and Regional Development

Aims of the Transmigration Program

The present transmigration program is primarily based on the government sponsored resettlement of transmigrants from Inner Indonesia (Java, Madura, Bali, and Lombok islands) to agricultural settlement areas in the Outer Islands. These sponsored transmigrants are preferably selected from young, male-headed, and landless farmer households. On arrival they are allocated

a two hectare farm lot (depending on the quality of the land), as well as a preconstructed house with a garden. Most of the farm area usually has to be cleared by the transmigrants themselves. In addition, the transmigrants are supplied with food, tools, and fertilizer during the first year in the settlement.

Besides this flow of government sponsored migrants, there is also a consistently increasing flow of spontaneous migrants, who usually join their relatives in the established settlements before starting a living of their own. This secondary group of transmigrants was estimated to be about one-third of the total flow (around 3,774,166 people) of sponsored migrants who had been resettled by 1989 (Government of Indonesia, 1990). The government seeks to encourage an increase in this spontaneous flow because it is so much cheaper and adds to the effectiveness of the transmigration program.

The major aims of the present transmigration policy are: first, to achieve a more favorable distribution of the national population and the labor force; second, to develop new resources and productive areas in the Outer Islands, mainly through agricultural resettlement; third, to increase living standards in both the areas of origin and destination of the transmigrants; and finally, to integrate the national territory and foster national unity by bringing together the various ethnic groups and cultures (Government of Indonesia, 1994).

Although these aims have been persistent over time (e.g., five-year development plans I-VI), their stress and mixture sometimes have changed considerably. This is especially true for the demographic aim which is not mentioned explicitly, i.e. alleviating population growth and pressures in Java. This aim's rationale is based on the argument that Java and Bali have 63 percent of the national population on almost 8 percent of its territory. Thus, the islanders' problems of landlessness, rural poverty and environmental deterioration, which can be solved only by extensive population redistribution measures (Nitisastro, 1970; Arndt and Sundrum,

1977, Arndt, 1983). Whenever authorities become nervous about Java's continuing population growth and the problems of curbing it through family planning, the demographic issue surfaces in such forms as the necessity of distributing the population and supply of labor for national development purposes. The persistence of this argument is clearly reflected in the very high target figures set for the transmigration program of the Five-year Development Plan IV (envisaging the settlement of 465,000 families) and in the Five-year Development Plan V (decreasing[4] to around 175,000 families). Although the target figures are dropping, the program is still the world's biggest resettlement effort in history.

In fact, Java has experienced a net outmigration for more than two decades. More than three million of its inhabitants have been moved out, who might otherwise have burdened Java's local economy and environment. Much of this achievement has been realized at high and ever increasing economic, social and environment costs. Many of these costs might have been avoided if the government had taken a more realistic stand towards some of the program's basic assumptions and expectations. Within the framework of the present transmigration policy, various aims are mutually contradictory. The aim of alleviating demographic pressures on Java together with the political aim of national integration are in fact causing great troubles.

Transmigration in North Sulawesi

North Sulawesi received one of the first four projects established by the Indonesian transmigration authority after independence in 1945. Paguyaman Subdistrict in Gorontalo District was established as a settlement for transmigrants from Java, especially Central and East Java, in 1953. Since it progressed well, transmigrants were sent there throughout the 1950s, resulting in around 640 households or 2,616 inhabitants. In 1968, when this project was finally

[4] This is due to constraints in the central government's budgetary allocation for transmigration programs.

transferred from central government to local government, (which became fully accountable for further developing the settlement areas), the project had over 4,000 migrants (Hardjono, 1977 and Provincial Department of Transmigration, 1994). A further history of the transmigration project on North Sulawesi follows.

In 1962 a small group of transmigrants (88 families and around 163 people), originally from Central and East Java, were settled in Paguyaman Subdistrict. During the 1970s three groups of transmigrants (around 1,600 families or 6,883 settlers) from West Java, East Java, and Bali were resettled in a new project known as Bongo I, Bongo II, and Bongo III villages in Paguyaman Subdistrict. During the 1980s, groups of migrants (consisting of 2,700 families or about 11,472 settlers), mostly from West Java, East Java, Bali and East Nusa Tenggara were sent to new project areas called Marisa I, Marisa II, and Marisa III in Marisa Subdistrict of Gorontalo District. Most of the Bongo and Marisa villages were designed for commercial crops cultivation.

New settlements were also established in two villages, Werdhi Agung in 1963 and Kembang Mertha in 1964, in Dumoga Subdistrict of Bolaang Mongondow District. The transmigrants settled in these areas were some of the victims of the Mt. Agung volcanic eruption in Bali. With relatively limited assistance from the transmigration authority, the resettled Balinese have proved as industrious and resourceful as they have in other transmigration projects such as in Parigi Subdistrict, Donggala District, Central Sulawesi.

The locations for these two transmigrant villages in Dumoga Subdistrict were well chosen, since local terrain made Balinese-style irrigation possible, soil was fertile and no disputes occurred with local people about land matters. The populations of Werdhi Agung and Kembang Mertha rose from 1,459 and 988 migrants respectively, to a total of 3,649 and 2,360 inhabitants respectively in 1993. The population increased a direct consequence of births and the arrival (from Bali) of independent migrants attracted to the new areas. A total area of 1,270 hectares is

under cultivation for rice, corn, soybeans, and groundnuts, all of which can be marketed easily to the rural center in Imandi and the small town in Kotamobagu.

Table 3.2
Sponsored and Spontaneous Transmigrants
From Java and Bali Settled in North Sulawesi

Year	Families	People
Sponsored:		
1950s	640	2,616
1960s	682	2,610
1970s	2,560	11,390
1980s	2,700	11,472
1990s	250	963
Spontaneous:		
1960s-1980s	1,479	4,923
Total	8,311	33,974

Source: Provincial Department of Transmigration, 1994

In 1971 a new project was established at Tumokang in the Dumoga Subdistrict with 60 families (287 settlers), from Central and East Java. In the period of 1972-1975, 500 families (2,475 migrants) from Central and East Java and Bali were settled in Mopuya Village. Another group of around 400 families of fully sponsored migrants (1745 settlers) from West Java and Bali were settled in Mopugad Village. The population of the three villages of Tumokang, Mopuya, and Mapugad, increased from 4507 settlers in 1975 to a total of 9,556 inhabitants in 1993. These new settlement areas were designed on a three-part system in which one-third of the land is used for fully sponsored migrants, one-third for independent migrants, and the resettlement of local people, and the remaining third for future expansion of commercial crops cultivation.

During 1983-1984 there were around 500 families or 2,608 local people, the Bolaang Mongondownese, resettled in Torosik Village and Onggunoi Village, both villages located in Pinolosian Subdistrict of Bolaang Mongondow District. During the 1990s the transmigration program in North Sulawesi focused mainly on local people, with around 1,450 families (or 6,735

settlers) relocated in the new settlements of Pusian and Malango villages in Bolaang Mongondow District and Wonggarasi and Marisa V villages in Gorontalo District. These local migrants were from four ethnic groups from four districts in North Sulawesi: Sangihe Talaud, Minahasa, Bolaang Mongondow, and Gorontalo. The majority of these local migrants have been located in commercial crops cultivation areas which are not supported with irrigation facilities.

Effects of the Transmigration Program on Regional Development

It is already apparent that the transmigration program has significantly influenced demographic aspects, use of natural resources, and living standards in North Sulawesi, and more specifically in the two districts of Bolaang Mongondow and Gorontalo. Transmigrants have increased the supply of food, especially rice, soybeans, and corn.

The transmigration program in North Sulawesi (especially in the case study area which is the center of rice production in the region) has significantly contributed to the increase of rice production in the province as a whole. Data from North Sulawesi in Figures, (published in 1995 by the provincial government of North Sulawesi) show that in the early 1970s North Sulawesi produced around 177,895 tons of rice per year, and 391,186 tons per year by 1994. Bolaang Mongondow and Gorontalo districts contributed around 31.5 percent and 43.0 percent respectively of the total production. The production of soybeans increased from 1,782 tons per annum in the early 1970s to 26,370 tons per annum in 1994. Both Bolaang Mongondow and Gorontalo District shared about 67.0 percent and 31.7 percent respectively of the total soybean production. Corn production increased from 68,942 tons per year in the early 1970s to 135,693 tons per year in 1994. Bolaang Mongondow and Gorontalo district supplied about 14.0 percent and 29.1 percent respectively of total corn production. Since the late 1980s North Sulawesi has been exporting corn to other regions and countries as well.

The most significant impact of transmigration was on the region's infrastructure. Access and main roads were constructed during site development, resulting in around 14 percent of all roads maintained by district governments (especially, Bolaang Mongondow and Gorontalo district) in the 1980s. Many of these transmigration roads are poorly maintained and place a heavy burden on district public works offices when transferred to the province. However, a reliable transportation network is essential for the region's transmigrants for marketing their agricultural commodities and finding off-farm jobs and maintaining household income.

Transmigration sites are also provided with a host of public facilities such as schools, health facilities, agricultural input suppliers, market-places, religious facilities, and extension centers which are put in place in each settlement cluster. These facilities are frequently superior to those in surrounding areas and serve the local non-transmigrant population to the degree that service personnel are available and access is not constrained by distance and travel time.

The transmigration program has had a substantial effect on the budgetary allocations made in the province's favor. Both during 1979-1982 and the 1985/86 financial year, an above average proportion of the development budget (in national terms) was financed out of funds set aside for transmigration. In 1985/86, more than 20 percent of all the money available to the province for development investment came from the transmigration budget. Due to lack of data on the precise pattern of expenditure, it is not possible to quantify the direct income and multiplier effects on economic development in the region. It is, however, quite reasonable to assume that marked growth and employment effects have occurred.

Problems of Transmigration Program

Weighed against these positive impacts are negative ones (Arndt, 1983). In this sense the impact of settlements on the often fragile ecosystems of the Outer Islands is now a matter of

strong national concern. Environmentalists have pointed to the extended impact of the burning and clearing of tropical forests, which results in the destruction of certain tree species, as well as other forms of plant and animal life (Secrett, 1986).

The pursuit of national unity by means of integrating local people with transmigrants from Java and Bali is frequently disturbed by forced attempts to bring them together into the same schemes. The rationale behind this is that the local population should also enjoy the advantages of the transmigration program facilities in order to prevent local feelings of jealousy. For this reason 25 percent of the participants are local transmigrants or *translok.* In reality there are many barriers to this planned integration. The sheer volume of transmigrants may already have caused social unrest among the local population, who fear that they may become a cultural minority in their own homeland.

One such disputed case has been the scheduled settlement on Irian Jaya of some 690,000 transmigrants from Java during the period of 1984-1989, a plan which increased the local population by 54 percent. This quantitative integration problem may be aggravated by large cultural and economic differences which make it impossible to blend the two groups in one settlement project or production system. The two different communities have different types of social organization and modes of production. There is a clear contrast between the communally organized indigenous people as to compared the individually operating and commercially oriented Javanese transmigrants. Conflicts frequently arise from different systems of land tenure and property relations, aggravated by the lack of suitable land for transmigration sites (Soetrisno, 1985; Mubyarto, 1985).

Another important issue concerns the management and planning problems in transmigration schemes which ensue from plans hastily devised in order to fulfill the target figures. This becomes evident from the first stages of the land evaluation and feasibility studies.

The surveys are often carried out in a rather haphazard way and in a very short time (around two months), with insufficient field checks on soil quality (Evers and Gerke, 1992). The costly feasibility studies, usually carried out by foreign consultants, disclose that on average only 20-25 percent of the original surveyed areas are fit for human settlement. However, the authorities frequently try to raise this percentage (against the consultants' advise) in order to place the targeted number of transmigrants. A study done by the Land Resources Development Center (U.K), for example, concluded that although only about 75,000 hectares in Central Kalimantan were suitable and available for transmigration sites, government targets projected the clearance of nearly seventeen times as much forest between 1979-1989 (Secrett, 1986). This planning system—devised to meet over-ambitious targets—is inviting haphazard solutions because it leaves no time nor flexibility for plans to mature.

City Size and Function

According to a Government of Indonesia Report (1994) a city is defined as a region for settlement with a relatively high population density and main economic activities based on a sector other than agriculture. The urban community is a heterogeneous society because it consists of both indigenous people and migrants who have come from other cities, provinces, and regions. The inhabitants also differ in terms of main occupation, culture, ethnicity, and religion. In Indonesia, a city has its own government organization such as local government level I (equivalent to a provincial government in the case of Jakarta), or local government level II (for a provincial capital, municipality, or administrative center). District capitals, subdistrict cities and/ or rural centers do not have their own city governments, but are governed directly from the district government and subdistrict government levels respectively.

Based on population size, cities are classified into five types, as indicated in Table 3.3. These cities have different functions in the provision of services, for example the cities can be classified as having international, national, regional (servicing one province or more) or local (servicing several districts or a part of one district) linkages.

Table 3.3
Type of City and Population Size

Type of city	Population Scale
Megapolitan	more than 5 million
Metropolitan	1 million to 5 million
Big City	500,000 to 1 million
Medium City	100,000 to 500,000
Small City	20,000 to 100,000

Source: Government of Indonesia, 1994.

Cities or urban areas can form a system because of physical, social, and economic linkages with one another. In formulating development plans and policies that focus on such linkages, cities or urban areas are divided into four groups based on their roles and services functions in supporting national economic growth (Government of Indonesia, 1994). First, there are cities or urban areas which function on a national scale as the main gate for the flow of domestic goods and services, and also serve as an international trade center. These areas are also the centers for services, production and distribution, and main transit hubs for transportation reaching other lesser centers in the regions or provinces. Metropolitan and big cities are included in this group because they have a relatively complete main infrastructure. Second, there are cities or urban areas which function as centers of regional activities. These cities cover and service some districts as centers of services, production and distribution, and are transportation hub for access to and from regions or districts. These cities are usually big and medium cities. Third, there are cities or urban areas which function as a center of local activities. These urban areas service regions located in the district and consist of medium and small cities. Finally, there are

cities or urban areas which have special services functions in support of developing strategic sectors, developing new regions, or distributing economic activities. The special services cities also function as buffer-zone areas of agglomeration growth centers which are already existing in those areas.

Why do Medium Cities and Small Towns need to develop?

Population Growth in Medium Cities and Small Towns

The reasons and urgency behind efforts to develop medium cities and small towns can be identified by looking at population growth rates, especially during the decade of 1980-1990, as indicated in Table 3.4. The list of cities that were classified as a strategic cities in Long-Term Development Plan II (1994/95-2018/19), includes many medium cities and small towns which have population growth rates exceeding the national urban population growth rate (5.36 percent per year) (CBS, 1990). The evidence also suggests that many medium cities and small towns outside Java are in conditions that require development, even though around 69 percent of Indonesia's total urban population is concentrated on Java and Madura islands.

Medium cities and small towns located outside Java have been playing important roles in regional development activities. They are centers of accumulation, storage, processing, and marketing of agricultural products from rural areas surrounding cities. There are also centers for producing and distributing the manufactured products which supply both urban and rural communities. They are also services centers for administration, education, health, information, and culture serving not only urban communities but also the rural communities where the majority of Indonesia's population live. In transmigration areas, small towns are crucial centers for marketing of agricultural production, and supply and distribution of manufactured products such as consumer goods and agricultural inputs. Consequently, medium cities and small towns

generate regional economic development by creating new job opportunities and improving local income.

Most cities outside Java fall under the classification of medium cities and small towns, based on populations. However, to honor the national development commitments and in order to equally distribute development beyond Java, and especially in the eastern part of Indonesia, the growth of the medium cities and small towns in regions such as Ujung Pandang, Palu, Kendari, Manado, Ambon, Biak, Timika and Jayapura has become a central issue for development. When these cities function as accelerators and centers of regional development, they have an important role as a center of social, economic, and political activities in the eastern part of Indonesia. In order to accelerate the pace of regional development in the eastern part of Indonesia so that it can catch up with the very rapid development in the western part of Indonesia, the development of medium cities and small towns must not be subject only to the considerations or criteria of population size and economic activities.

In contrast, development of the medium cities on Java needs to be put in a broader context. These cities have relatively larger populations, are located near to one another, and are supported by good roads and transportation networks. The development of medium cities on Java can not focus on one individual city in isolation. Rather, the development must consider several cities and their interconnections. The physical linkages may be so strong that it is almost impossible to distinguish the boundaries between them (NUDS, 1985; Firman 1991).

Table 3.4
Strategic Cities in Long Term Development II (1994/95-2018/19)

Strategic Cities	Total Population		Population Growth (%)	
	End of Repelita V 1993/94	End of Repelita VI 1998/99	1980-1990	Repelita VI (1993/94-1998/99)
A. Metropolitan				
1. Jakarta	15,524,000	20,000,000	5.80	5.20
2. Surabaya	3,967,000	4,967,000	4.80	4.60
3. Bandung	3,791,000	4,657,000	4.60	4.20
4. Medan	2,557,000	3,141,000	4.80	4.20
5. Semarang	1,401,000	1,608,000	2.80	2.80
6. Yogyakarta	1,310,000	1,461,000	7.80	2.20
7. Palembang	1,287,000	1,529,000	3.90	3.50
8. Malang	1,254,000	1,563,000	5.00	4.50
9. Tegal	1,191,000	1,520,000	6.80	5.00
10. Ujung Pandang	1,164,000	1,423,000	4.10	4.10
11. Surakarta	1,091,000	1,302,000	3.90	3.60
B. Big Cities				
1. Cirebon	985,000	1,142,000	2.60	3.00
2. Kediri	770,000	946,000	5.60	4.20
3. Banjarmasin	634,000	764,000	3.90	3.80
4. Pekalongan	628,000	782,000	5.10	4.50
5. Padang	575,000	726,000	5.00	4.80
6. Bandar Lampung	548,000	651,000	4.30	3.50
C. Medium Cities				
1. Denpasar	497,000	714,000	8.50	7.50
2. Pontianak	485,000	593,000	4.10	4.10
3. Kudus	461,000	617,000	7.90	6.00
4. Pekanbaru	429,000	574,000	6.40	6.00
5. Tasikmalaya	425,000	505,000	4.10	3.50
6. Samarinda	418,000	567,000	6.30	6.30
7. Manado	407,000	495,000	3.60	4.00
8. Pasuruan/Probolinggo	399,000	481,000	4.00	3.80
9. Jambi	385,000	516,000	6.90	6.00
10. Madiun	385,000	437,000	2.70	2.60
11. Purwokerto	375,000	478,000	6.00	5.00
12. Balikpapan	357,000	435,000	4.00	4.00
13. Mataram	350,000	415,000	3.60	3.50
14. Serang	326,000	432,000	6.80	5.80
15. Jember	309,000	349,000	2.70	2.50
16. Garut	293,000	340,000	3.20	3.00
17. Pematang Siantar	285,000	330,000	3.40	3.00
18. Kisaran/ Tanjung Balai	265,000	354,000	8.50	6.00
19. Ambon	252,000	327,000	6.20	5.40
20. Cilacap	227,000	259,000	2.90	2.60
21. Bengkulu	218,000	335,000	16.30	9.00
22. Klaten	211,000	245,000	4.90	3.00
23. Karawang	210,000	282,000	7.10	6.00
24. Palu	204,000	286,000	8.70	7.00

Table 3.4 Continued

Strategic Cities	Total Population		Population Growth (%)	
	End of Repelita V 1993/94	End of Repelita VI 1998/99	1980-1990	Repelita VI (1993/94-1998/99)
25. Banda Aceh	179,000	240,000	7.10	6.00
26. Kupang	162,000	202,000	4.90	4.50
27. Jayapura	150,000	190,000	4.80	4.80
28. Batam	147,000	259,000	16.40	12.00
29. Pangkal Pinang	138,000	160,000	3.80	6.00
30. Lhokseumawe	134,000	180,000	9.80	6.00
31. Kendari	130,000	190,000	9.10	8.00
32. Sukabumi	126,000	140,000	0.90	2.00
33. Magelang	125,000	132,000	- 0.02	1.00
34. Situbondo	124,000	149,000	6.40	3.80
35. Palangkaraya	123,000	164,000	6.80	5.80
36. Kotabumi	117,000	153.000	9.00	5.50
37. Purwakarta	108,000	127,000	4.50	3.20
38. Gorontalo	108,000	138,000	4.00	4.00
39. Tembilahan	100,000	128,000	5.10	5.00
C. Small Towns				
1. Sorong	98,000	131,000	9.10	6.00
2. Dumai	93,000	113,000	4.30	3.80
3. Pare-Pare	93,000	108,000	3.00	3.00
4. Singkawang	88,000	107,000	3.00	4.00
5. Tarakan	87,000	105,000	2.30	4.00
6. Singaraja	85,000	103,000	3.30	4.00
7. Ternate	81,000	106,000	10,90	5.50
8. Bukittinggi	80,000	95,000	2.60	3.50
9. Sibolga	77,000	90,000	1.90	3.00
10. Watanpone	77,000	96,000	5.60	4.50
11. Bojonegoro	72,000	84,000	1.10	3.00
12. Baturaja	63,000	80,000	7.40	5.00
13. Palopo	63,000	73,000	3.20	3.00
14. Raba-Bima	61,000	75,000	2.50	4.50
15. Ende	57,000	71,000	6.10	4.50
16. Sumbawa Besar	56,000	70,000	5.50	4.50
17. Lubuk Linggau	55,000	69,000	6.10	4.50
18. Sampit	54,000	76,000	10.00	7.00
19. Dili	52,000	67,000	-	5.00
20. Kotabaru	50,000	59,000	9.80	3.50
21. Rantau Prapat	48,000	58,000	5.20	4.00
22. Biak	44,000	54,000	4.20	4.50
23. Maumere	42,000	51,000	6.20	4.00
24. Manokwari	39,000	47,000	3.20	4.00
25. Ubud	29,000	40,000	11.20	7.00
26. Tual	27,000	30,000	14.90	2.00
27. Buntok	21,000	28,000	7.40	6.00
28. Muaratewe.	20,000	25,000	-	5.00

Note: Repelita is a five-year development plan

Source: Government of Indonesia, 1995. Five-year Development Plan VI, 1994/95-1998/99, Book II.

It has been predicted that the population of the strategic cities listed in Table 3.4 will hit around 63.3 million people by the end of Five-year Development Plan VI (1998/99). This number is around 77 percent of the projected total urban population (around 82.4 million people). By the end of Long Term Development Plan II, the population in strategic cities will reach 114.3 million people or around 79 percent of the projected total urban population of 143.8 million inhabitants (Government of Indonesia, 1995).

The data also indicate that of the eleven cities classified as metropolitan cities, eight are located on Java, two (Medan and Palembang) are located on Sumatera, and one city (Ujung Pandang) is located on Sulawesi. Of the big cities, three (Cirebon, Kediri, and Pekalongan) are located on Java, two (Padang and Bandar Lampung) on Sumatera, and one city (Banjarmasin) is located on Kalimantan. Thus, the location of both metropolitan and big cities is mostly concentrated on Java, while four of the cities are found on Sumatera, and one city each on Kalimantan and Sulawesi.

The patterns of spatial distribution of medium cities show a concentration on three islands; of the 39 cities, there are 15 cities on Java, 10 cities on Sumatera, and 5 cities on Kalimantan. The remaining 9 cities are distributed thus: 4 cities on Sulawesi, and one city each on Bali, West Nusa Tenggara, East Nusa Tenggara, Maluku, and Irian Jaya. The locations for small towns are mainly distributed outside Java. There is only one strategic city located on Java, 9 cities on Sumatera, 4 cities on Kalimantan, 3 cities on Sulawesi, 6 cities on Bali, West Nusa Tengara, East Nusa Tenggara, and East Timor, and 5 cities on Maluku and Irian Jaya. In other words, it can be argued that the location of urban development for metropolitan, big cities, and medium cities is concentrated in the western part of Indonesia, and it is only at the level of small towns that there is a balanced distribution between the western and eastern parts of Indonesia. This is not surprising since the majority of Indonesia's population is concentrated in the western

part of Indonesia, which is more developed in terms of basic infrastructure including road and transportation networks, airports, ports, and communications for supporting economic activities. It is also the location of most big industries and manufacturing activities.

Rural-Urban Areas Development and Policies

The development of urban and rural areas needs a comprehensive approach and integrative implementation which can increase the role and direct initiative for participation with the motivation of mutual assistance of communities. As stated in (GBHN) 1993, development is to be implemented by communities and government. Thus, community is the main actor in development, while government has responsibility for directing, assisting, guiding, and creating conditions to support implementing development. Furthermore, in the development of rural and urban areas priority is given to balancing the growth rate of development between rural and urban areas.

From Five-year Development Plan I (*Repelita I*) 1969/70-1973/74 up to Five-year Development Plan V (*Repelita V*) 1989/90-1993/94, the development and dynamism of urban areas has increased and cities have become important as centers for economic activities and as proponents for regional and national development. Urban areas are seen as centers of modernization and technological innovation, centers of social and cultural activities, centers of education and arts, and as gateways in connecting with other countries. The role of rural areas in national development was also seen as substantial as development is still dominated by the agricultural sector in the guest for national rice self-sufficiency.

In establishing national and regional development, rural and urban areas are complementing each other in an interdependent, interconnected system. The contributions of rural and urban areas to each other's development are varied and essential: providing main foods,

services and basic facilities; providing raw and semi-raw materials, and mastering human resources for industry and other economic activities. Interlinkages of mutual benefit like this are keystones for development of rural and urban areas.

During the early Long-Term Development Plan I (1969-1994) the orientation of development mostly emphasized achievement of sectoral targets. Villages and cities were getting relatively less attention although they required special attention. With the successes of sectoral development, Five-year Development Plan IV (1984-1989) was the start of more serious attention being given to spatial dimensions in planning and implementing development especially in rural and urban areas.

Conditions such as limited job opportunities, shortage of available land, and the limitation of basic infrastructures in rural areas have pushed rural people to migrate to cities, resulting in major impacts for both rural and urban areas. The basic infrastructure provided in urban areas is usually not adequate to meet the rapidly increasing needs of huge numbers of migrants flowing from rural areas. Limited job opportunities in urban areas are a main cause of increasing unemployment and the growing activities of the informal sector. The gaps in lifestyles between urban and rural people, and among community groups in urban areas, are reflected in the differences in wage rates, availability and accessibility to basic infrastructures. These problems all decrease economic productivity and perpetuate poverty in both rural and urban areas.

As a part of regional development, developing rural and urban areas requires special and thorough attention from both central and local governments. The problems arising both in rural and urban areas are connected to each other, which makes attempts to solve such problems in isolation even more difficult. Rural and urban areas are a single unified entity, a region, that requires integrated and comprehensive development management. The rural-urban areas

approach is a readjustment in establishing sectoral development which gives special attention to the linkages between rural and urban areas. The social and economic linkages between rural and urban areas are the foundation for formulating future development policies for both rural and urban areas.

The Challenges and Constraints of Rural-Urban Development

The development of both rural and urban areas faces some serious challenges and constraints. First, the number of poor people is still high in absolute terms (around 27.2 million Indonesians). This is the main problem to be tackled in developing rural and urban areas. Poverty in rural and urban areas is strongly related to low levels of education, skills, and health, disadvantages which limit the ability of people to get a job and earn enough income to support themselves. Another factor is the absence of or limitations on infrastructure and transportation networks connecting poor regions to more advanced areas, therefore, stifling opportunities for growth. Some regions lack the natural resources that could be used for development. Thus, they remain poor.

Second, limitations on the quality of human resources have direct effects; including low productivity and fewer opportunities for people to actively participate in development, especially in rural areas. Thus, the main challenge is to prepare and upgrade the skills of rural and urban communities in adopting new technology so that community members can directly participate in development.

Third, increasing the rate of development requires utilization of additional natural resources, especially land and water. On the other hand, natural resources need to be managed carefully in order to ensure their sustainability. Constraints on urban land results in the urbanization of fertile agricultural land along the city's edge. Over use of water resources,

especially in urban areas, has reached such extreme levels that the supply of water and much of the catchment areas have been degraded. Waste, water and land pollution are major negative by-products of development which threaten the sustainability of development.

In rural areas, the limited education of both communities and the local government personnel who guide development activities have contributed to the destruction of the forest and conservation areas. The destruction of local environments has a direct effect on local communities. Environmental degradation by private sector concerns who seek profits from mining, manufacturing, and fishing is a crucial planning issue in and of itself.

Finally, the various economic imbalances between regions and cities, between villages and cities, and within the community groups in the city, are all significant planning issues which would benefit from a rural-urban approach. It is also clear that the discrepancy in supplies of natural resources and human resources in terms of both quality and quantity, is causing inequality in productivity among regions and thereby promoting uneven urbanization.

Conclusion

The impacts of Indonesia's rural and urban development policies, especially the social and economic effects of rice intensification and transmigration programs have been substantial in North Sulawesi. Rice intensification through the BIMAS program is generally well accepted in village communities that have adequate water for rice fields, even if they are entirely dependent on rainfall. All of the communities included in the present study enjoy a regular irrigation system, and therefore meet this prerequisite for participation in the BIMAS program. Yet the program has been successful not only in transmigration villages such as Mopugad Selatan and Mopuya Selatan, but also in nontransmigration villages such as Doloduo and Dondomon. However, the BIMAS program is only beneficial to the farmers who possess wet rice fields and a majority of

these farmers are identified as transmigrants. Thus, the rice production policies, which were designed by the central government in Jakarta, have fewer benefits for the local people. Local people primarily own dry fields and plant traditional crops such as corn, cassava, sweet potato, and other vegetables.

Transmigration programs have generated a substantial impetus for regional development. Resettlement makes an obvious contribution to reducing the shortage of labor and utilizing natural resources. More than half of the total production of rice in North Sulawesi comes from transmigration areas. The increased government expenditure resulting from the budget allocations for transmigration has become very important for development. A part of the road network, (especially in the two districts of Bolaang Mongondow and Gorontalo) has been financed out of the transmigration budget. Many public and private investments in the region can only be justified economically by the outcome of the changes brought by transmigration. Resettlement programs make a distinct contribution to rising income levels, both for local inhabitants and for migrants. Therefore purchasing power in the region has increased.

The effects upon economic development in the province and district have not yet been properly incorporated into overall regional policy. Thus optimum use cannot be made of the driving force they provide. Despite transmigration's significant influence upon the region, there is a lack of coordination sensitive to the development potential and bottlenecks in the region. Coordination needs to be sensitive as well to special ethnic factors which influence the intake region's social absorptive capacities. For the most part, intersectoral coordination is still centrally managed, although a change of course was made in this respect by Government Regulation No.6 in 1988.

Urban development during the Long Term Development Plan I from 1969/1970 to 1993/94 clearly showed an emphasis on development of urban infrastructure and services in

metropolitan areas and other big cities. Relatively less attention has been given to improving urban management and municipal development, especially in medium cities and small towns. These urban centers are quite often visited by people from rural areas for services such as education and medical help. There are a number of relevant issues in this respect, including: improving local government capability to increase local revenues, controlling physical urban development, managing and supplying urban infrastructure, land management, creating an environment for improving direct participation of private sector and communities in urban development, issuing regulations that support urban development, and increasing the skill of the local government apparatus in urban development.

Increasing the level of education of communities and improving their socio-economic conditions will result in greater demand for quality service from local governments. As they become more knowledgeable, urban communities will be more critical and skeptical regarding the problems of urban development. Therefore, there must be a transition from a style of urban management that was relatively closed to the public, to a new type of implementation which is more transparent to urban communities.

In Indonesia, rural development policy (especially in the case study area of North Sulawesi) is focused on the goal of rice self-sufficiency. This policy is strongly supported by the transmigration program. However, the policy does not address the issue of rural-urban linkages in a way which can reduce the gap between rural and urban areas. Thus, a comparison between migrants and nonmigrants is helpful for understanding the overall picture of rural-urban interaction. In the context of North Sulawesi, especially in the case study area, transmigration is important because of its significant impacts on both migrants and nonmigrants populations. Because migrants and nonmigrants have different characteristics, they also link differently to the urban hierarchy. These differences are described in detail in the following two chapters.

CHAPTER FOUR

CHARACTERISTICS OF NONMIGRANTS AND MIGRANTS IN THE CASE STUDY AREAS

Introduction

Rural development policies have clearly benefitted transmigrants more than their local neighbors. The findings show that the migrants enjoy significantly higher incomes and own more wet rice land and production tools than their local counterparts. The success of migrants is not only derived from their skills and motivation to improve their lives, but is also supported by the central government which provides land and infrastructures such as dams, irrigation networks, and rural roads.

Rural development policies are always designed in urban areas, in Jakarta by the central government or in provincial and district capitals. They are then implemented in rural areas under the supervision of officials from provincial and district governments. Policy aims are usually to improve rural economic conditions. Rural communities can benefit when these policies are applicable to rural community conditions. However, this is often not the case, because these policies usually ignore the cultural differences between communities in rural areas.

One clear example is the introduction of the Green Revolution for improving rice production. The strategy for increasing rice production was first introduced through the BIMAS program. This program assumed that rural communities will easily accept new technologies such as new seeds, fertilizers, pesticides, and new practices, such as the use of hand tractors in wet rice fields. However, the introduction of new technologies cannot be evenly accepted by rural communities because of their different cultural backgrounds.

The local people, especially the Mongodownese in this study, have practiced dry field planting of crops such as corn, sweet potato, cassava, and vegetables for countless generations. They have become quite advanced in managing dry fields with these traditional crops. However, the economic value of these crops is low compared with rice. Since the local people are less familiar with working in wet rice fields, they do not benefit as much from wet rice technology as the migrants.

The transmigrants, both Javanese and Balinese, are highly skilled in managing wet rice fields. They have for many generations grow wet field rice as their dietary staple and have learned to optimize production on the small fields[1] which they have in Java and Bali. The skills and knowledge of managing wet fields, which were transferred from their ancestors, have become the main capital for starting a new life in the fertile land of the Dumoga Valley, where two hectares of land were provided for each family by the government.

Differences in cultural background between the local people and transmigrants have significant implications for the adoption of new agricultural technologies and the improvement of socio-economic conditions. The impacts and consequences of rural development policies on rural communities, are the main concern of this chapter.

There is very little information about the differential characteristics of migrants compared with the local population, i.e., those born in Bolaang Mongondow, and North Sulawesi. The following section will investigate how migrant and nonmigrant populations differ in terms of demographics, occupation, economic situation, and ownership. The second section analyzes the motivations and the comparative advantages of migrants, and notes their main contributions to

[1] Many migrants have wet rice fields which are smaller than a half hectare. Most of them have previously no land and have had worked as laborers in wet rice fields.

the region. The third section analyzes the main effects of rural development on family and community and identifies the main problems. The final section is the chapter's conclusion.

Demographic Differentials

Age and Sex Differentials

The age distribution and sex of household heads in nonmigrant and migrant households are indicated in Table 4.1. In general, the data show that the nonmigrants are relatively younger than their counterpart migrants. The nonmigrants are concentrated in the 20-39 year age group while migrants are more concentrated in the 30-49 year age group and the group aged 60 years and older. The proportion of migrants aged 60 or older is almost four times higher than the proportion of nonmigrants in the same age group. The proportion of nonmigrants in the 20-29 years age group is almost two times higher than the proportion of migrants in the same age group[2].

Regarding the sex of nonmigrants and migrants, the data reveal that male nonmigrants are generally concentrated in the 20-29 and 30-39 age groups. Male migrants are predominantly in the middle and old age groups (namely, 30-39, 40-49, and 60 years and above). Both female nonmigrants and migrants are predominantly found in the young and middle age groups (20-29 and 30-39 years). In the oldest age group (60 years and older) there are high proportions of both male and female migrants, compared to their nonmigrant counterparts. This is probably due to the fact that many of the oldest migrants are still active in production activities, such as acting as bread-winner to support household incomes.

[2] In comparison, data taken from Central Sulawesi reveal that the ages of both nonmigrants and migrants there are equally concentrated in the 20-39 years age group. In Central Sulawesi, the proportion of nonmigrants in the 50 year and older group is relatively higher than the proportion of migrants in the same age group.

Table 4.1
Age and Sex of Household Head of Nonmigrants and Migrants

Age Group	Nonmigrants (%)			Migrants (%)		
	Male	Female	M+F	Male	Female	M+F
20 - 29	27.1	37.9	32.1	15.3	20.5	17.1
30 - 39	31.4	43.1	36.7	22.2	35.9	27.0
40 - 49	17.1	3.4	10.9	26.4	15.4	22.5
50 - 59	15.7	13.8	14.8	12.5	12.8	12.6
60+	8.7	1.8	5.5	23.6	15.4	20.8
Total (%)	100	100	100	100	100	100
Total (N)	70	58	128	72	39	111

Note: M+F = Male and Female
Source : Sample Survey Data

Education Differentials

In general, as the data indicate in Table 4.2, the education levels of migrants are relatively higher than their counterpart nonmigrants, both for males and females. Almost 70 percent of nonmigrants (both males and females), had at most completed primary school. Only 10.2 percent of nonmigrants (both males and females) had finished secondary school. In contrast, most migrants had studied at the junior high school level. Some of them had even completed senior high school and college. About 16.3 percent of the migrants had taken vocational training. The higher educational status of migrants may be explained by their selection prior to arrival in North Sulawesi. This finding supports some prior studies which also indicated that migrants tend to have higher education levels than local nonmigrants (Titus, 1978; Hugo, 1981)

The data show that male migrants generally have a higher level of education than female migrants. For example, at the junior high school level the proportion of males was double that for females. This may be partly due to the fact that males are given priority over females in schooling opportunities, because males will usually become the bread-winner in the household. However, in terms of those educated at the level of senior high school and vocational training, the proportion of females is relatively larger than males. For nonmigrants, it appears that the

proportion of those who had completed primary school and secondary school was higher for females than for males. Thus, it can be said that for the nonmigrant population, both males and females have a relatively equal opportunity to study at least at primary school. Although the levels of education are higher among migrants than among nonmigrants, in general both groups have a low level of education (around 68.7 percent of nonmigrants and 28.8 percent of migrants had primary levels of education and below)[3].

Table 4.2
Education and Sex of Nonmigrants and Migrants

Education	Nonmigrants (%)			Migrants (%)		
	Male	Female	M+F	Male	Female	M+F
Not completed primary school	27.1	20.7	24.2	1.4	-	0.9
Completed primary school	38.6	51.7	44.5	20.8	41.0	27.9
Not completed junior high school	8.6	3.4	6.3	41.7	20.5	34.2
Completed junior high school	15.7	10.3	13.3	11.1	5.1	9.0
Not completed senior high school	1.4	1.7	1.6	1.4	-	0.9
Completed senior high school	8.6	12.1	10.2	8.3	12.8	9.9
College/University	-	-	-	1.4	-	0.9
Others*	-	-	-	13.9	20.6	16.3
Total (%)	100	100	100	100	100	100
Total (N)	70	58	128	72	39	111

Note : * including vocational training
M+F = Male and Female
Source: Sample Survey Data

[3] Data from Central Sulawesi show that the majority of both nonmigrants and migrants are educated at the primary school level, and only 25 percent of nonmigrants have completed secondary school.

Marital Status and Number of Children

Data on marital status reveal that the majority of both nonmigrants and migrants are married, with the proportion married being 96.9 percent of nonmigrants and 91.8 percent of migrants. The proportion of divorced and widowed is relatively higher among migrants than among nonmigrants[4]. Both nonmigrants and migrants tend to have big families. The proportion of nonmigrants and migrants who have 3 or 4 children is 34.4 percent and 32.4 percent respectively. The proportion of both non-migrants and migrants having 5 children or more is around 21.9 percent and 22.5 percent respectively[5].

Occupational Differentials

Main Occupations of Household Labor Force

The main occupation of household head for both nonmigrants and migrants is indicated in Table 4.3. The data show that most (80.2 percent) migrant heads of households are farmers (own land). The proportion of nonmigrants classified as farmer is around 47.7 percent[6]. The proportion of migrants classified as laborer and farm laborer is only 4.5 percent, while the proportion for nonmigrants in these occupations is almost 40 percent. The relatively higher proportion of nonmigrants who work as laborers and farm laborers is related to the fact that they do not own their own wet rice field or dry crop fields.

The data also show that 12.4 percent of nonmigrants and 15.3 percent of migrants are classified as trader, carpenter, public servant and other (such as retired). People classified in these

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[4] The data from Central Sulawesi indicate that the majority of both nonmigrants and migrants there are married.
[5] These patterns resemble the data from Central Sulawesi, where 37.5 percent of nonmigrants and 48.5 percent of migrants have 3 or 4 children, and 25 percent of nonmigrants and 24.2 percent of migrants have 5 or more children.
[6] These findings are similar to the data from Central Sulawesi where the proportion of nonmigrants and migrants classified as farmers was around 68.8 percent and 72.7 percent respectively. Only 6.3 percent of nonmigrants and 9.1 percent of migrants were classified as laborer and farm laborer.

occupations may also be farmers who work part-time in either paddy or crop fields. The proportion of public servants is relatively small for both nonmigrants and migrants, but those public servants may be working at the subdistrict level in low positions, and some of them are working as primary school teachers in the villages. Since their salaries are relatively small, the public servants also need to work extra jobs to get more money to support their families' needs.

Table 4.3
Main Occupation of Household Head and Housewife of Nonmigrants and Migrants (percentage)

Main Occupation	Household Head		Housewife	
	Non-migrants	Migrants	Non-migrants	Migrants
Laborer	10.2	-	41.4	32.4
Farm Laborer	29.7	4.5	2.3	4.5
Farmer (Own Land)	47.7	80.2	-	-
Trader	2.1	3.6	0.8	0.9
Carpenter	2.9	0.9	-	-
Public servant	2.9	3.6	-	-
Other	4.5	7.2	-	-
No job	-	-	55.5	62.2
Total (%)	100	100	100	100
Total (N)	128	111	124	103

Source : Sample Survey Data

Females, and especially housewives living in rural areas, tend to experience "double duty", as preparing meals and doing daily household tasks for the whole family, while also working outside the household, either in their own fields or as a laborer in other people's fields. As Table 4.3 indicates, 41.4 percent of nonmigrant housewives and 32.4 percent of migrant housewives work outside their household, mainly as laborers and farm laborers[7]. This is explained by the fact that they work outside the household in order to earn cash to support the household's basic daily needs.

[7] These trends are similar to Central Sulawesi where the proportions of nonmigrant and migrant housewives whose main occupation is outside the household are around 31.3 percent and 51.5 percent respectively.

It is common in rural areas for youth to work, either helping their parents in wet rice or crop fields or working outside their home to contribute to the family's coffers. The proportion of nonmigrants and migrants who have working youth or teenagers in the family is 30.4 percent and 36.0 percent respectively, the majority of whom are working as laborers and farm laborers with only a small proportion working outside agricultural activities as traders[8].

In many cases the youth are working part-time after school. Those who no longer go to school tend to work full-time, either helping their parents or working outside the family. It is common that these family workers work with their parents during the busy times in preparing for planting and harvesting and after those seasons work as laborers in others people's wet rice or crops fields. They use the salaries they earn from working for other people to buy their clothing, shoes, and cigarettes or to travel to small towns for sightseeing.

It is shown above that in order to sustain their lives, farmers in rural areas optimize all the labor force available in the family as a strategy for meeting the whole family's basic needs. The family labor force strategy not only involves the parents and teenagers, but in many cases the younger children also participate in the whole family process of production, whether at home or in the fields. The village reality is that after school, the girls help their mothers to look after younger brothers or sisters, or help to prepare lunch or dinner for the whole family, or help with other chores such as cleaning the vegetables, washing household utensils, gathering, carrying and cutting fire woods, and carrying water. Common activities for the boys are taking lunch for their parents in the fields, shepherding livestock such as cows, water buffaloes, or horses, or helping in the fields.

[8] The data from Central Sulawesi show that the proportions of working youth in nonmigrant and migrant families are around 18.8 percent and 48.5 percent respectively.

Part-time Occupations and Off-farm Jobs

In order to make a living in rural areas, some farmers have to work outside their main occupation or work in off-farm jobs as Table 4.4 reveals. The data show that for both nonmigrants and migrants the proportion of household heads who have a part-time job is around 48.5 percent and 35.1 percent respectively. The nonmigrant household heads are more likely to have a part-time job than the migrant household heads. Most part-time jobs are related to agricultural activities, usually activities to prepare land for planting paddy, such as land clearing, plowing, smoothing the soil and managing the water supply from the irrigation system. All these activities are ongoing, under rain or the heat of the sun. The agricultural worker or laborer does not have a choice despite poor weather. In many cases a day's work, which earns from Rp 4,000 to Rp 5,000 per day, starts at 6 a.m., with a break from 11 a.m. to 2 p.m., and ends at 5 or 6 p.m.

Table 4.4
Part-time Occupation of Household Head and Housewife for Both Nonmigrants and Migrants (percentage)

Part-time Occupation	Household head		Housewife	
	Nonmigrants	Migrants	Nonmigrants	Migrants
Agricultural Laborer	14.1	9.0	26.6	24.3
Laborer	8.6	3.6	8.6	10.8
Trader	6.3	9.0	-	-
Carpenter	4.7	3.6	-	-
Other	14.8	9.9	-	-
No part-time job	51.5	64.9	64.8	64.9
Total (%)	100	100	100	100

Source : Sample Survey Data

Other activities are related to paddy harvesting. The sequence of activities is cutting paddy, gathering, dropping off paddy, clearing and filling gunny or plastic sacks, and taking all paddy to a spot next to a road accessible to small trucks. Laborers are mostly paid in paddy rather than money, usually 10 percent of the total yield. However, this 10 percent is divided according to the number of people involved in the paddy harvesting activities.

Some nonmigrant and migrant household heads work part time as traders, either in their own house or in the village markets. Some run small businesses in their houses, for example, opening a small shop (*warung*) selling things such as groceries, cookies, candies, cigarettes, soap, and some items for daily needs. Some sell agricultural products, such as vegetables and fruits, at the village markets. Some of those agricultural products are produced by themselves and some purchased from other peasants in the village. Some household heads work part-time as middle men who buy chickens, goats and pigs in the village which they market either at the village market or at markets in other villages.

Both migrants and nonmigrants also find part-time work as carpenters and construction workers, in either their own village or in other villages where they build or repair houses, or work on other construction. Quite often these people are involved in construction of government projects in the villages, such as school buildings, community health centers, and other local government buildings.

In general, these types of part-time jobs outside of agriculture are undertaken when the heads of households are not too busy working at their own fields. There is a slow period, usually after planting and weeding and before harvesting, an interval of less than 2 months, when the farmers must regulate the water flowing to their paddy field to ensure an adequate amount. A few weeks before harvest, there is also work to scare off the birds which would otherwise eat the paddy early in the morning (5 a.m. to 7 a.m.) and in the afternoon (3 p.m. to 6 p.m.)

The data also indicate that 35.2 percent of nonmigrants housewives and 35.1 percent of migrant housewives hold a part time job[9]. In general, they work as agricultural laborers and

[9] In Central Sulawesi, the proportion of nonmigrant housewives working part-time is around 25 percent, which is higher than the proportion of migrant housewives with part-time jobs (only 15.1 percent).

laborers. Female work in the paddy field usually deals with planting, weeding, harvesting and dropping off paddy.

Migrant Workers

It is a fact of life for both nonmigrant and migrant household heads that when they work either in their main occupation or at part-time jobs, they often have to work outside their own village, in other nearby villages, rural centers or small towns. That proportion both for nonmigrants and migrants is 60.9 percent and 60.4 percent respectively. There are various reasons why migrant workers have to spend a few days in their place of work or leave their village for a few days. One reason is related to the job itself, for example, that the job could be done and finished in a few days such as paddy harvesting and dropping off. A second reason is related to the location of work, and how much time is spent traveling and whether public transit is available. If the travel time is long or if transit is limited, workers may have to spend a few days away from their villages.

Some workers commute, leaving their villages early in the morning and returning in the late afternoon. Around 29.7 percent of nonmigrants and 37.8 percent of migrants commute like this, due to the work places being accessible by public transit or bike and relatively close to their own villages.

Improved job opportunities available in the region have created migration patterns for the village workers, namely rural to rural migration rather than rural to urban migration. It is understandable that these migration patterns occur as a consequence of new job opportunities being created in certain villages throughout the region.

Job Creation and Hired Workers

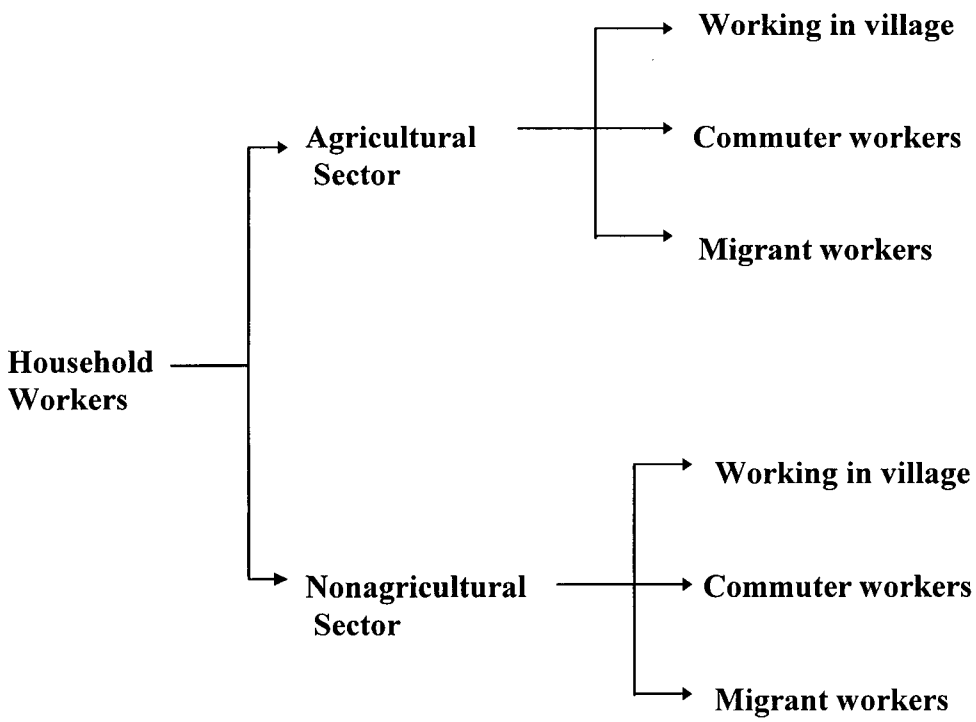
Increasing the agricultural activities in the region results not only in new jobs in the agricultural sector, but also in improving activities in non-agricultural sectors. As a consequence these activities are creating new jobs outside of agricultural activities, as indicated in Figure 4.1. The creation of new jobs outside agriculture such as rural small industries, can offer alternative employment options for rural people, especially during the slow season when farmers do not have much field work. The rural small industries are mostly food processing activities such as producing cassava crackers, making traditional cakes and fried peanuts for snacks, producing tofu and soybean cake, and producing traditional ice cream.

Service activities also create some new jobs in rural areas. As more people in the villages use bicycles as a main mode of transportation there are new jobs for village people who open bicycle repair shops. There are also workshops for repairing agricultural production tools such as plows, small tractors, and wheels. Rural females open hair salons to serve both men and women in the villages.

The majority of respondents, both nonmigrants and migrants, stated that under current conditions plenty of opportunities could still be found (both in the villages and outside the villages) to work as agricultural laborers or laborers for any kind of manual job. Thus, the job opportunities available both in the villages and outside the villages have kept the rural to urban flows of migrant workers relatively small. Although they do not have problems finding jobs in the villages, some nonmigrants and migrants are more concerned that the land that could potentially be planted as paddy and crop fields is limited. They also mention that the potential for their children to find jobs in the cities after finishing secondary school or university will not be easy, especially for those who want to become public servants. Some families complained that they had already spent too much money to smooth the way for their children to work in local

government institutions, including money for bribes to certain key bureaucrats, although in the end their children were not accepted. Thus, they said, it is easier to become farmers because they do not have to spent too much money and certain skills learned from school or university are not needed to be a peasant. A real farmer needs only to learn by working directly in the field.

Figure 4.1
Allocation of Household Workers
in Four North Sulawesi Case Study Villages,
Based on Sector and Type of Workers



The data in Table 4.5 also indicate that some nonmigrants and migrants have to hire laborers to work their properties. It is quite common that they hire from 1 to 4 workers for working either in wet rice fields or crop fields. During the planting seasons and harvesting seasons, they usually hire from 10 to 20 workers. These employers are mostly landlords who dominate land ownership and a significant part of economic life in the villages, by means of

offering credit with relatively high interest to the village peasants, and controlling the village paddy mills.

Table 4.5
Family Labor Utilization and Hired Labor for Nonmigrants and Migrants

Type of Worker	Nonmigrants (%)					Migrants (%)				
	Number of Hired Workers									
	0	1	2	3	4	0	1	2	3	4
Household workers:										
Work in the village	68.8	24.3	6.3	-	1.6	74.8	13.5	7.2	3.6	-
Commuter worker	96.9	2.3	0.8	-	-	93.7	5.4	0.9	-	-
Migrant worker	46.9	8.6	18.0	7.8	17.2	29.7	8.1	13.5	13.5	35.2
Hired workers:										
Agricultural worker	94.5	2.3	2.3	0.8	-	97.3	-	0.9	-	1.8
Nonagricultural Worker	-	25.8	43.0	18.0	10.2	15.3	29.7	27.0	11.7	15.3

Source: Sample Survey Data

Economic Differentials

Income Sources

Although people living in rural areas work predominantly in agricultural activities, it can not be assumed that their main sources of income come from the agricultural sector. In fact, the farmer households in the case study villages depend also on income from nonagricultural sectors activities such as work in the services and trade sectors, rural industries, rural mining, urban jobs (services and small industries), and transfers, as shown in Figure 4.2.

Figure 4.2
Rural Household Income Sources in Case Study Areas of Four Villages in North Sulawesi, Indonesia

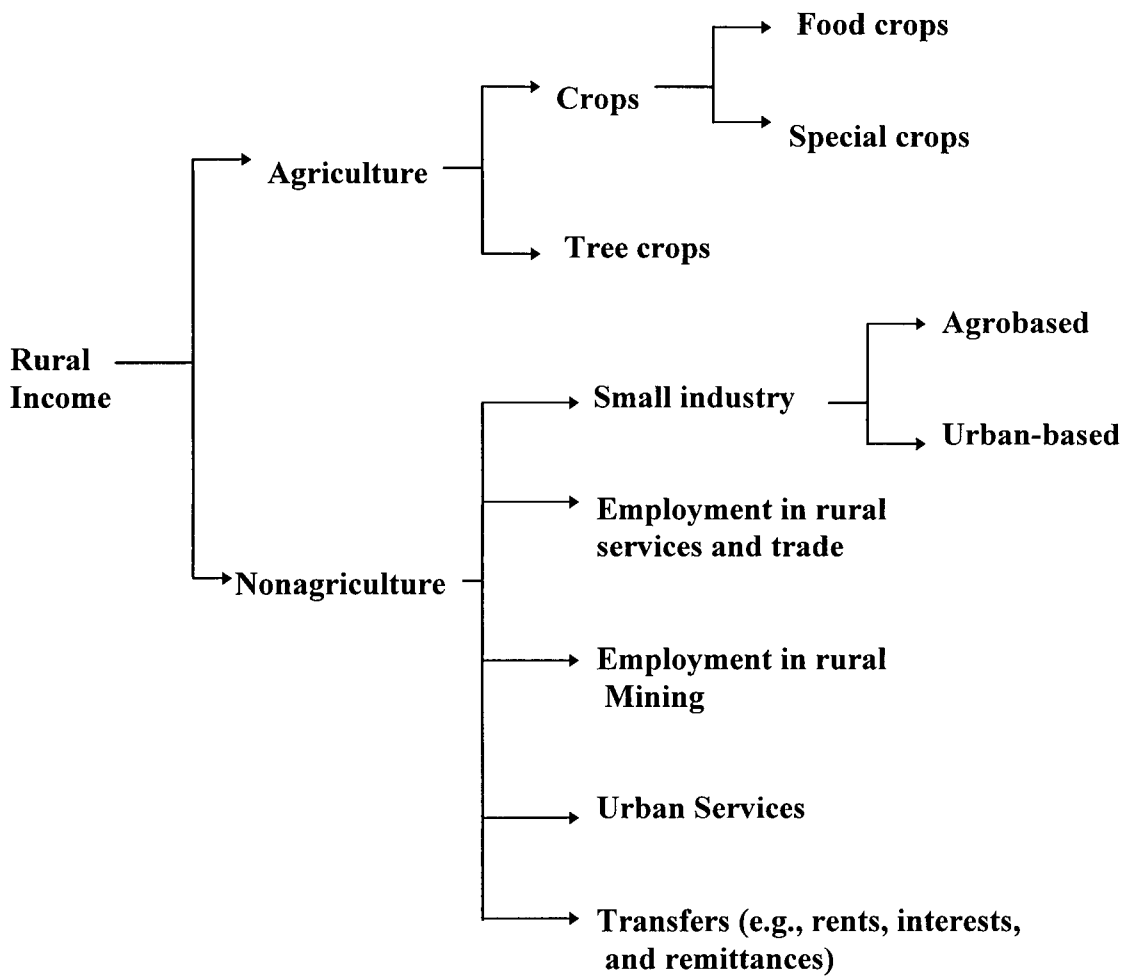


Table 4.6 shows the nonmigrants' and migrants' income sources and average household income based on sectors and places. In general, the average income of migrant households is higher than nonmigrant households. The data indicate that the average income derived from the agriculture sector is relatively high, compared with the average income gained from the nonagricultural sector, for both migrants and nonmigrants. The average income from agriculture for migrants is Rp 356,189 per month, more than two times higher than the average agricultural

income for nonmigrants, which is only Rp 151,740 per month[10]. The relatively high average income of migrants is related to the concentration of migrants in two income groups at the income level of Rp 200,000 or less, and at Rp 201,000 to Rp 499,000. The proportion of migrants in the first category (income level Rp 200,000 or less) is only 40.5 percent while for nonmigrants more than 67 percent fall into that range. For those at the income level of Rp 201,000 to Rp 499,000, the proportion of migrants is larger than the proportion of nonmigrants, 39.6 percent and 17.2 percent respectively. The data also show that almost 12 percent of nonmigrants do not gain any income from agricultural activities; the figure for migrants is less that 2 percent.

In other words, much of the income of migrants in the North and Central Sulawesi study villages comes from agricultural activities, perhaps because the proportions of wet rice field ownership for migrants is also relatively high. The issues of land ownership will be discussed in detail later in this chapter. Another explanation may be that in terms of household labor utilization, migrants optimize their household labor resources better to support the family income. The relatively low average income of nonmigrants earned from the agricultural sector is due to the fact that they tend to engage in agricultural production of crops that have relatively low terms of trade such as cassava, sweet potato, and corn. As discussed in Chapter Three such commodities used to be the main staples of the nonmigrants' diet and may still be for some nonmigrants.

Another interesting issue indicated in Table 4.6 is the average income sources based on non-agricultural sectors, which are higher for nonmigrants than for migrants[11] (per month,

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[10] The income data from Central Sulawesi indicate that the average income from the agricultural sector is high compared with the average income from nonagricultural sectors, for both nonmigrants and migrants. The average agricultural income for migrants is almost three times higher than the average agricultural income of nonmigrants.
[11] These patterns support findings from Central Sulawesi, where the average income based on nonagricultural sector is Rp 189,813 per month for nonmigrants and Rp 111,254 per month for migrants.

around Rp 117,395 for nonmigrants and Rp 87,365 for migrants). This is due to the fact that some nonmigrants are forced to find jobs outside of agriculture because of the shortage of land in the villages. Many of them work in village industries, services, construction, and rural mining. Therefore, around 43 percent of the nonmigrants' income comes from nonagricultural activities.

Table 4.6
Sources of Household Income by Sector and Location (According to Percentage of Households)

Amount of Income from Source (Rupiah/month)	Nonmigrants (%)				Migrants (%)			
	Sector		Location		Sector		Location	
	A	NA	FV	FOV	A	NA	FV	FOV
0	11.7	34.4	10.9	54.7	1.8	55.0	8.2	71.2
≤ 200,000	67.2	47.7	61.7	31.3	40.5	33.3	37.8	9.9
201,000 - 499,000	17.2	13.3	20.3	9.4	39.6	6.3	36.9	13.5
500,000 - 999,000	2.3	4.6	5.5	4.6	14.4	4.5	11.7	4.5
1,000,000 - 1,999,000	1.6	-	1.6	-	2.8	0.9	2.7	0.9
≥ 2,000,000	-	-	-	-	0.9	-	2.7	-
Average (Rupiah)	151,740	117,395	172,443	95,757	356,189	87,365	405,768	95,493

Note: A = Agriculture, NA = Nonagriculture, FV = From Village, FOV = From Outside Village
Source: Sample Survey Data

The comparison of income sources based on location of work in Table 4.6 indicates that the average income for both nonmigrants and migrants is mainly gained from their own villages, rather than from outside the villages. The average income of migrants earned from within the village is around Rp 405,768 per month, while for nonmigrants it is only Rp 172,443 per month. The average income gained from outside the village for both nonmigrants and migrants is relatively similar, Rp 95,757 per month and Rp 95,493 per month respectively[12]. In general, even though the income sources of both nonmigrants and migrants are derived from different sectors

[12] The data from Central Sulawesi indicate a similar pattern where, for both migrants and nonmigrants, the average income gained from their villages is high compared with the average income earned outside their villages. In Central Sulawesi, the average income of migrants gained from within the villages is around Rp 867,166 per month, and for nonmigrants only Rp 499,491 per month. The average income from outside villages for both migrants and nonmigrants is Rp 100,235 per month and Rp 18,125 per month respectively.

and places, most of their income is still gained mainly from the agricultural sector and from within their own villages.

The farmers' incomes from agriculture are based on major commodities such as rice, cash crops, tree crops, and husbandry, as indicated in Table 4.7. Rice earnings contributed the biggest part of income for both nonmigrants and migrants. The migrant's average income gained from rice is around Rp 347,473 per month, which is three times higher than the nonmigrant's average income (only Rp 111,315 per month)[13]. For nonmigrants, cash crop sales contribute the second largest portion of total income, and noncrops and husbandry contribute relatively small amounts to the total income. Husbandry contributes the second largest portion of migrants' average income and cash crops and non-crops provide relatively small portions of the total income.

Table 4.7
Source of Household Income by Major Commodities (According to Percentage of Households)

Amount of Income from Source (Rupiah/month)	Non-migrants (%)				Migrants (%)			
	R	CC	TC	H	R	CC	TC	H
0	53.3	59.4	83.6	96.9	6.3	88.3	87.4	82.0
≤ 200,000	32.0	36.7	15.6	3.1	35.1	10.8	11.7	14.4
201,000 - 499,000	12.4	2.3	0.8	-	42.3	0.9	0.9	2.7
500,000 - 999,000	1.6	1.6	-	-	11.7	-	-	-
1,000,000 - 1,999,000	0.8	-	-	-	4.6	-	-	0.9
≥ 2,000,000	0.8	-	-	-	-	-	-	-
Average (Rupiah)	111,305	38,874	11,770	1,295	347,473	8,166	4,956	26,622

Note : R = Rice, CC = Cash Crop (e.g., beans, vegetables, and fruits),
TC = Tree crop (e.g., coconuts, cloves, and cocoas),
H = Husbandry (e.g., chickens, ducks, goats, and pigs)
Source: Sample Survey Data

[13] Central Sulawesi data indicate that rice was also the top earner of total income for both nonmigrants and migrants. The average income gained from rice for migrants is around Rp 584,047 per month and three times more than the portion which rice earnings contribute to average income of nonmigrants (Rp 169,575 per month). The second biggest contributors to total income are husbandry for nonmigrants and tree crops for migrants.

The farmers' income received from nonagricultural sectors is divided into four major classifications. First are industries based on rural small-scale industry and agroindustry. Second are services including trade, and mining. Third are urban jobs, and fourth, transfers including rents and remittances. Table 4.8 indicates that the services sector contributes the biggest part of total nonagricultural income for both nonmigrants and migrants[14]. Nonmigrants' average income gained from services activities is about Rp 129,059 per month, and for migrants around Rp 92,898 per month. The contributions of rural industry, urban jobs, and transfers for both nonmigrants and migrants has a relatively small influence on their total income.

Table 4.8
Source of Household Income by Nonagricultural Activities (According to Percentage of Households)

Amount of Income from Source (Rupiah/month)	Non-migrants (%)				Migrants (%)			
	I	S	UJ	T	I	S	UJ	T
0	95.3	39.8	98.4	95.3	91.0	61.3	99.1	99.1
≤ 200,000	4.7	39.8	1.6	4.7	8.1	27.9	0.9	0.9
201,000 - 499,000	-	12.5	-	-	-	5.4	-	-
500,000 - 999,000	-	6.3	-	-	-	3.6	-	-
1,000,000 - 1,999,000	-	1.6	-	-	-	1.8	-	-
≥ 2,000,000	-	-	-	-	-	-	-	-
Average (Rupiah)	3,720	129,059	762	1,666	7,772	92,898	838	135

Note : I = Industry (e.g., agroindustry, small-scale industry)
S = Services (e.g., services, trade, and mining)
UJ = Urban Jobs
T = Transfers (e.g., rents, remittances, and interest)
Source: Sample Survey Data

[14] Data from Central Sulawesi show that the services sector contributes the biggest part of total income for both nonmigrants and migrants. The average income gained from the services sector by nonmigrants is about Rp 162,500, and for migrants is about Rp 94,545 per month. Contributions of rural industry, urban jobs, and transfers are relatively small for both nonmigrants and migrants in Central Sulawesi.

Consumption and Expenditure Patterns

The proportion of household expenditures and average costs for daily needs for both nonmigrants and migrants are indicated in Table 4.9. The average costs for daily needs of nonmigrant households are high[15] (Rp 4,729 per day) compared with that of migrants (Rp 4,016 per day). The majority of both nonmigrants and migrants spent between Rp 2,500 and Rp 5,000 per day for daily needs. Only a small proportion of nonmigrants and migrants spent more than Rp 5,000 per day for daily needs.

Table 4.9
The Proportion of Household Expenditures and Average Costs for Daily Needs for Nonmigrants and Migrants

Expenditure on Daily Needs (Rupiah/day)	Nonmigrants (%)	Migrants (%)
0	-	-
≤ 2,500	22.7	38.7
2,501 - 5,000	57.7	46.8
5,001 - 7,500	11.7	5.5
7,501 - 10,000	6.3	6.3
10,001 - 14,999	-	-
≥ 15,000	1.6	2.7
Total (%)	100.0	100.0
Total (N)	128	111
Average (Rupiah)	4,729	4,016

Source : Sample Survey Data

Although the average cost of daily needs for nonmigrants and migrants doesn't differ greatly, it is quite interesting to investigate why they differ. The majority of migrant households report that they do not have to buy many groceries in the public markets because they produce rice, vegetables, fruits and other essentials themselves. However, only a few nonmigrant households produce vegetables, beans, maize and sweet potatoes for their own consumption. The

[15] The situation appears similar for Central Sulawesi, where the average costs used for daily needs by nonmigrants is around Rp 5,656 per day, higher than the average costs spent by migrants, which is only Rp 4,651 per day.

majority of nonmigrant households buy most of the groceries they need at public markets or small shops (*warung*). Therefore migrants spend more on non-essential items.

The desire to maximize the productive output of the available land surrounding the house is more common among migrants rather than nonmigrants, especially for migrants from Bali. The land surrounding their houses is planted with products for the family's consumption, such as many kinds of vegetables and fruits, and also coconuts, cloves, and coffee. Because they can produce food for themselves, the money not spent on groceries can be saved, either by themselves at home or by joining an *arisan,* the rotating savings scheme common in the villages.

The patterns of spending on education, health, clothing, utensils and furniture, etc. for migrant and nonmigrant households are shown in Table 4.10. The data clearly indicate that the average annual expenditures of migrant households for education, health, clothing, and "other" is high[16] compared with the average annual expenditures of nonmigrant households for similar items. "Utensils and furniture" is the only category where the average expenditures of nonmigrants exceed the average expenditures for migrants.

Besides the expenditure classified as "other", the average expenditure for education is the highest for both migrants and nonmigrants. The second biggest expenditure is that for clothing. The expenditure for health was the lowest of all kinds of expenditures for both nonmigrants and migrants.

The average expenditures for "other" is high compared with other categories of expenditures for both nonmigrants and migrants. The "other" category covers taxes, *arisan* or savings, charities, and donations for village development and activities. The relatively high expenditure for "other" indicates that both nonmigrants and migrants directly participate in rural

[16] These findings echo data from Central Sulawesi where the average expenditures of migrants for education, health, clothing, utensils and furniture, and others per year are higher than the average annual expenditures of nonmigrants for similar items.

development as they pay taxes and donate money for rural community development activities. Migrants' expenditures on "other" are higher than those of nonmigrants because of their religious activities, especially for Balinese who hold frequent individual and/or communal ceremonies. Each religious activity or event requires money for buying offerings. According to one informal leader in the village, the cost of things to prepare one simple offering is around Rp 5,000.

Table 4.10
The Proportion of Household Expenditure and Average Annual Costs for Education, Health, Clothing, Utensils and Furniture, and Other, for Non-migrants and Migrants

Amount of Expenditure (Rupiah)	Nonmigrants (%)					Migrants (%)				
	E	H	C	UF	O	E	H	C	UF	O
0	44.5	5.5	1.6	12.5	4.7	38.7	3.6	1.8	9.9	1.8
≤ 100,000	7.8	85.1	47.7	67.2	28.9	7.2	83.8	46.8	77.5	5.4
101,000 - 250,000	18.0	7.8	32.8	10.2	19.5	21.6	9.9	32.4	9.9	27.0
251,000 - 500,000	14.1	1.6	16.3	8.6	27.3	24.3	2.7	15.3	2.7	35.1
501,000 - 1,000,000	10.9	-	1.6	1.6	14.1	1.8	-	3.6	-	18.9
≥ 1,000,000	4.7	-	-	-	5.5	6.3	-	-	-	11.7
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total (N)	128	128	128	128	128	111	111	111	111	111
Average (Rupiah)	241,756	46,873	163,555	90,829	157,971	250,139	49,885	173,829	60,013	282,420

Note: E = Education, H = Health, C = Clothing, UF = Utensils and Furniture,
O = Other (e.g., Taxes, *arisan*, charities, funds for village development and activities, and other)
Source: Sample Survey Data

Raising Cash and Access to Informal Credit Institutions

Many families do not have enough money to cover the household needs discussed above. Therefore, it is not surprising that there are some respondents, around 21.9 percent of nonmigrants and 18 percent of migrants, who reported that they had to sell some of their belongings such as land, houses, and production tools, in order to raise cash that they needed.

Both nonmigrants and migrants shared similar reasons for parting with their belongings. First, they need money to pay for their daily expenses. Some also mentioned that both their paddy and cash crops harvests had failed due to flooding. Second, they need money to support their

children who are studying in the cities, and for paying the costs of hospital or health facilities and medicines. Third, they sold their land because its location was too far from home and/or they did not have enough household labor to work in the paddy fields. Some had to sell their land to the local government because an irrigation network project passed directly through their land. Fourth, they sold the land in order to buy another piece of land located closer to their village. Others sold land to raise money to add to or build a house. Finally, some sold their land or house to raise capital for starting a business.

The reasons given above show that some respondents sell their properties not only for consumption reasons but as a transfer of investment. For example, some respondents have decided to sell their land to finance building or improving their houses, or to establish a small business in the village, such as trading cows and goats, or running a small shop.

Nonmigrants and migrants differed in their choices of buyers for their properties. Nonmigrants sold their properties to the people in the same village and/or to people outside the village, mostly other migrants. Migrants sold to people in the same village, to people outside the village (either migrants or nonmigrants), and to people in towns or cities.

Other sources of cash to fulfill the households' basic needs are the informal institutions of credit within or outside of the village. As Table 4.11 indicates, more than 50 percent of both nonmigrants and migrants borrowed money from their relatives[17]. More than 7.1 percent of nonmigrants have links to money lenders in their own or other villages, while only 2.7 percent of migrants accessed these sources of credit. Those with credit links to the village landlords constituted only 5.4 percent of nonmigrants and 7.2 percent of migrants. Some nonmigrants

[17] The data from North Sulawesi differ from that of Central Sulawesi, where nonmigrants access credit from village landlords and cooperatives while migrants' credit links tend mostly to be with their close relatives.

(19.8 percent) and migrants (19.8 percent) also accessed other credit sources such as cooperatives and village banks (more details on these arrangements are discussed in Chapter Five).

Table 4.11
Nonmigrant and Migrant Access to
Informal Credit Institutions (percentage)

Source of Credit	Non-migrants	Migrants
Close Relatives	57.1	51.4
Village landlord	5.4	7.2
Village money lenders	6.3	2.7
Other villages money lenders	0.8	-
Money lenders at rural center and small town	-	-
Others	12.4	19.8
Never access credit	18.0	18.9
Total (%)	100.0	100.0
Total (N)	128	111

Source : Sample Survey Data

The main reasons for borrowing money from family members are that it is easier to deal with them, and most family borrowers do not have to pay interest because they are borrowing from their parents, siblings, or cousins. Supporting each other like this indicates the strong bonds which link village people. When people need help they support each other, even if the amount of money borrowed is relatively small. Some respondents mentioned that helping each other like this is the one way they can survive, especially during flood or drought seasons when they can not harvest their paddy and other crops. Geertz termed this kind of relationship "shared poverty" (Geertz, 1963).

Investment and Remittances

In general, the proportion of both nonmigrants and migrants who can invest some of their money in buying new land is relatively small[18], as the data in Table 4.12 indicate. The data reveal that a smaller proportion of nonmigrants than migrants have bought new lands. Both nonmigrants and migrants tend to buy wet rice fields rather than crop fields or fallow land. The proportion of nonmigrants and migrants who have bought crops fields were only 3.3 percent and 5.4 percent respectively. The proportion of nonmigrants and migrants who bought vacant land were just 1.6 percent and 3.6 percent respectively.

Table 4.12
Purchasing of Land (Paddy Fields, Crop Fields, and Empty Land) by Nonmigrants and Migrants (According to Percentage of Households)

Size of Land Bought (ha)	Nonmigrants (%)			Migrants (%)		
	PF	CF	EL	PF	CF	EL
0	94.5	96.8	98.4	82.0	94.6	96.4
≤ 0.5	4.7	1.6	-	18.0	5.4	3.6
0.51 - 1	0.8	1.6	-	-	-	-
1.1 - 2	-	-	1.6	-	-	-
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total (N)	128	128	128	111	111	111

Note : PF = paddy field, CF = crops field, EL = empty land
Source: Sample Survey Data

Non-migrants and migrants differ in who they purchase land from. The data show that most nonmigrants bought their land from people in the same village, and only a small proportion bought the land from people outside the village or people living in the rural center or small town.

[18] These findings resemble those based on data from Central Sulawesi, where the proportion of nonmigrants who purchased paddy fields, crop fields, and/or empty fields is small compared with the proportion of migrant purchasers. The proportions of nonmigrants and migrants in Central Sulawesi who bought paddy fields is 6.3 percent and 42.4 percent respectively, while the proportions of nonmigrants and migrants who bought crops fields is 18.8 percent and 36.4 percent respectively. Only migrants (around 15.1 percent) purchased empty land.

Most migrants, however, bought their land from nonmigrants outside their villages, and only a small proportion bought from people in the same village or from people living in the rural center or small town[19].

Some nonmigrants and migrants receive a regular remittance[20] at least once a year from their children, families or relatives who are working, mostly as public servants or workers at private companies, and living outside the region or in the cities. The proportions of nonmigrants and migrants receiving remittances are around 10.8 percent and 6.3 percent respectively. The money they received each year ranges from Rp 50,000 to Rp 500,000. Some respondents mentioned that they received remittances sometimes more than twice per year, while others reported that they did not get money but received presents such as clothing and other things. Most of the money and presents came through the post office or visiting family members or friends in the village, and only a small proportion received the money via village banks.

Ownership Differentials

Land

Land ownership by nonmigrants and migrants is found in Table 4.13. The data reveal that the average land ownership of wet rice fields for migrants is around 2.33 ha per household, a size more than three times greater than the average land ownership of wet rice fields for nonmigrants (who averaged only 0.68 ha per household)[21]. Table 4.13 also indicates that the majority of

[19] Both these patterns are different compared with the land transfer patterns in Central Sulawesi where both nonmigrants and migrants mostly bought land from people living in the same village, and only a small proportion bought land from people outside the village or living in the rural center or small town.

[20] The data from Central Sulawesi show similar patterns. There the proportions of nonmigrants and migrants who received remittances are 19.8 percent and 12.2 percent respectively. The amount of money regularly received ranged from Rp 50,000 to Rp 250,000 annually. Some of them also received clothing and other things. The remittances and gifts were mostly sent through families and friends visiting the village, and some came via the post office.

[21] These findings differ from the Central Sulawesi data, where the average total area of wet rice fields owned by migrants is around 4.68 ha per household, some 10 times greater than the average total area of wet rice fields owned by nonmigrants (only 0.44 ha per household).

nonmigrants (57.0 percent) do not have wet rice fields. Only 10.8 percent of migrants do not have wet rice fields. The proportion of nonmigrants and migrants who have wet rice fields sized 0.50 hectares and less are 41.4 percent and 53.2 percent respectively. Only 1.6 percent of nonmigrants possess wet rice fields of 1 hectare or more, compared with 27.9 percent of migrants. The relatively high average land ownership of wet rice fields for migrants is clearly related to the two hectares of land for each family provided by the central government. The relatively low average land ownership of wet rice fields for nonmigrants is strongly related to their culture and skills. They are more familiar working in crop or dry fields than in wet rice fields. Migrants, however, are accustomed to working in wet rice fields, equipped with skills and knowledge they have brought with them from Java and Bali.

Looking at the average land ownership of crop fields, the data indicate nonmigrants have around 1.06 ha per household. This size is more than three times greater than the average land ownership of crop fields for migrants (that size is only 0.29 ha per household)[22]. The proportion of nonmigrants and migrants who do not have crop fields is 42.2 percent and 79.3 percent. Although the average ownership of crop fields is higher for nonmigrants, most of them own crop land of less than 0.50 hectares. Only 2.4 percent of the nonmigrants have crop field of more than 1 hectare.

[22] These patterns are similar to Central Sulawesi, where the average land ownership of crop fields of nonmigrants and migrants is around 1.01 hectares and 0.80 hectares per household respectively. Most nonmigrants and migrants there occupied land holdings of less than 0.50 hectares.

Table 4.13
Land Ownership of Nonmigrant and Migrant Households

Size of Land Holding (ha)	Nonmigrants (%)			Migrants (%)		
	PF	CF	HL	PF	CF	HL
0	57.0	42.2	7.8	10.8	79.3	8.1
≤ 0.50	41.4	55.5	69.6	53.2	19.8	85.6
0.51 - 1.00	-	-	18.0	8.1	-	3.6
1.00 - 1.99	0.8	1.6	3.1	6.3	0.9	2.7
2.00 +	0.8	0.8	1.6	21.6	-	-
Average (ha)	0.68	1.06	0.41	2.33	0.29	0.71
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total (N)	128	128	128	111	111	111

Note : PF = paddy field, CF = crops field, HL= home lot
Source: Sample Survey Data

The average sizes of the home lots (*pekarangan*) owned by nonmigrants and migrants are 0.41 ha and 0.71 ha per household respectively[23]. The proportions of nonmigrants and migrants who do not have a home lot are only 7.8 percent and 8.1 percent respectively. The proportions of non-migrants and migrants who have a home lot of less than 0.5 ha are 69.6 percent and 85.6 percent respectively. Only 4.7 percent of non-migrants and 2.7 percent of migrants have home lots of more than 1 hectare.

Table 4.14 shows the origins of land owned by nonmigrants and migrants. The data indicate that most (47.8 percent) nonmigrants bought their land from other village people[24]. The proportion of nonmigrants who inherited their land from their ancestors is around 22.6 percent. Most (56.4 percent) migrants got their land from government. The proportion of migrants who bought their land from people in the same village or other villages amounts to around 32.8 percent. The proportion of inherited land for migrants is relatively small, only 4.5 percent. These

[23] The data from Central Sulawesi indicate that the average home lots for nonmigrants and migrants are around 0.66 ha and 1.07 ha per household respectively. Most home lots for both nonmigrants and migrants tend to be less than 0.50 hectares.

[24] In Central Sulawesi, the data are a little different. Most nonmigrants there inherited their land from their parents, while migrants bought from people in the village and/or received land from the government.

people are children of migrants, who moved to Dumoga Subdistrict (as transmigrants from Java and Bali) when their parents had settled in the region.

Table 4.14
Origin of Land Owned by Nonmigrants and Migrants
(percentage)

Origin of Land	Non-migrants	Migrants
Inherited	22.6	4.5
Given by government	-	56.4
Purchased	47.8	32.8
Others	29.6	6.3
Total (%)	100.0	100.0
Total (N)	117	107

Source: Sample Survey Data

Production Tools

One indicator that could be used to show the success of farmers in increasing agricultural production is the availability of production tools in their households. If they do not have enough production tools to farm either the wet rice fields or crops fields (i.e., utensils for clearing, plowing, and harrowing the ground, all important steps of work in the fields before planting of paddy or crops), they must borrow or rent the tools from other farmers, or hire other farmers or laborers to work their fields. As a consequence, they must cover extra costs for renting those tools and laborers.

Table 4.15 reveals that in general the migrants have more production tools than the nonmigrants[25]. The limitation of nonmigrants in owning production tools such as plows, harrows, oxen, and hand tractors is probably related to the relatively low income they earn each month (as already discussed in an earlier section). Saving enough money to buy these tools is not a simple

[25] This finding is similar to the experience in Central Sulawesi.

effort for nonmigrants who give priority to fulfilling their basic daily needs. Thus, it is fair enough to say that, based on the production tools they have, the migrants are more professional in managing and exploiting the wet rice fields in order to optimize rice production.

Table 4.15
Production Tools of Nonmigrant and Migrant Households
(percentage)

Production Tools	Non-Migrants	Migrants
Cows	19.0	44.1
Horses	0.8	1.8
Wheels	6.3	3.6
Plow	25.8	57.7
Harrow	22.7	59.5
Hand mill	3.1	0.9
Hand tractor	-	26.1
Total (N)	128	111

Source : Sample Survey Data

Household Goods

In developing countries such as Indonesia, (and especially in rural areas), when the households own such luxury goods as a cassette players, VCRs, color televisions, satellite dishes, motorbikes or cars, they are classified as successful farmers. In rural areas the families with luxury goods like these are mostly the landlords, village officials, informal leaders, and public servants, all those who have more access to the resources available, such as natural resources, information, and credit from village banks or cooperatives.

Table 4.16 indicates that in general the migrants have relatively more luxury household goods than the nonmigrants. The proportion of migrants who have a bicycle is almost four times higher than the proportion of nonmigrants. In rural areas the bicycle is used as one of the main transportation modes. For farmers the bicycle is very important because it facilitates travel to wet rice fields or crop fields, to the market, or to visit families, relatives, and friends in other villages.

Table 4.16
Household Goods Ownership of Nonmigrants and Migrants
(percentage)

Ownership	Non-migrants	Migrants
Car	1.6	2.7
Motorbike	7.8	17.1
Bicycle	16.4	61.3
Radio, Tape and VCR	18.0	34.2
Color Television	18.0	30.6
Black and white television	7.8	15.3
Sewing machine	4.7	6.3
Others (e.g. satellite dish)	14.1	8.1
Total (N)	128	111

Source: Sample Survey Data

The data also reveal that the proportions of migrants who have a radio, tape player, and/or television are relatively higher than that of the nonmigrants. All these luxury goods are relatively important for accessing information, for example, new techniques to increase agricultural production, information on new seeds and agricultural inputs, marketing information, information related to education, health and family planning. Such information is crucial for people living in rural areas, not only for increasing agricultural production but also for improving rural life. In other words, access to new information transmitted from urban areas is extremely important for developing rural areas.

Production

The main production of agricultural commodities for both nonmigrants and migrants is indicated in Table 4.17. Paddy is the main product in the region and its production is dominated by migrants[26]. The data reveal that the proportion of nonmigrants producing paddy is relatively

[26] The similar patterns in Central Sulawesi demonstrate that the migrants dominate paddy production.

small compared with the proportion of migrants producing the same commodity. The majority of nonmigrants produce less than 1 ton of paddy per harvest (around 3 to 4 months). The proportion of nonmigrants who produce from 1 ton to 3.9 tons of paddy is only 9.4 percent. However, the majority of migrants produce from 1 ton to 3.9 tons of paddy per harvest, and around 3.6 percent can produce more than 10 tons of paddy per harvest.

These statistics are strongly related to the average size of land owned, especially of wet rice fields. Migrants own more wet rice fields than nonmigrants for a variety of reasons. When migrants came to the region, some of them received parcels of wet rice land and the remainder in dry land (which could be easily changed to paddy field). Some of them got wet rice land entirely. Nonmigrants, however, own and farm the dry land that their families have been occupying since their ancestors settled the land. Only a small proportion of nonmigrants have wet rice land that they received from their parents or bought from other people. Finally, there are also many migrants who bought wet rice fields surrounding their village from nonmigrants.

Both nonmigrants and migrants produce some seasonal crops such as corn, soybean, and peanut. Table 4.17 reveals that the proportion of nonmigrants who produce such crops is larger than the proportion of migrants doing so. Among these three crops, production of corn is more attractive to both nonmigrants and migrants than soybeans and peanuts, because most of the dry fields in the region are found on rather steep foot hills. In such growing conditions corn production is more suitable.

Table 4.17
Production of Paddy, Corn, Soybean, and Peanut for Nonmigrants and Migrants (ton)

Production Scale (ton)	Nonmigrants (%)				Migrants (%)			
	Paddy	Corn	Soybean	Peanut	Paddy	Corn	Soybean	Peanut
0	74.2	72.7	78.9	82.0	44.1	92.8	96.4	95.5
≤ 0.49	8.6	8.6	7.0	12.5	2.8	2.7	1.8	3.6
0.5 - 0.99	7.0	7.8	6.3	0.8	11.8	-	1.8	0.9
1 - 1.9	7.8	7.8	4.7	3.9	8.9	1.8	-	-
2 - 3.9	1.6	3.1	3.1	0.8	25.2	2.7	-	-
4 - 5.9	-	-	-	-	2.7	-	-	-
6 - 7.9	0.8	-	-	-	0.9	-	-	-
8 - 9.9	-	-	-	-	-	-	-	-
≥ 10	-	-	-	-	3.6	-	-	-
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Sample Survey Data

Some nonmigrants and migrants also produce yearly crops such as cloves and coffee, although only a relatively small amount. They plant these yearly crops together with other crops in their home lot or in the dry fields. Some nonmigrant and migrant also produce coconut to make copra and coconut oil, and/or to consume themselves. Both nonmigrant and migrant families produce vegetables such as eggplant, spinach, papaya leaf, cassava leaf, and fruits such as banana, papaya, jackfruit, mango, and star fruit. Some vegetables and fruits are sold to village markets and some are eaten by themselves.

The Effects of Rural Development

Changes in Family and Community Relationships

Traditionally, the household head (including Mongondownese, Balinese, and Javanese), usually the husband, takes ultimate responsibility for farmwork. The wife is responsible for household chores such as cooking, washing, cleaning, and child care. However, she also occasionally assists her husband working in the wet rice fields or crop fields. Children in the

village are expected to contribute their labor to farmwork when they grow up and finish their schooling. While of school age, children also assist their parents in light household tasks and farmwork. As a consequence, because children are expected to be a major source of the family labor, most of them are kept on the farm and have limited opportunity for higher education.

However, in the modernized rural community where farm technology and especially mechanization is adopted, the role of children has shifted from being the main source of family labor to helping with light farm or household work. With a relatively lesser role in farming together with a better household income, children have a greater opportunity to pursue higher education. This premise is supported by the fact that the majority of members of both nonmigrant and migrant households who own 1 hectare or more of land and have adopted new technologies and mechanization have obtained high schooling.

Another interesting change in both nonmigrant and migrant households is the democratization of household decision-making, which has moved toward joint decisions made by members of the family. The family's joint decision-making applies to both rice farming and the adoption of new technologies. This implies that farmers who are family heads in the modernized community have liberalized their attitudes and roles in decision-making by increasing their acceptance of the role and opinion of other members in the family, particularly those of the younger generation who are better educated and have strong aspirations.

The field survey revealed that people's participation in the community programs and project is rather more active in the migrant villages, where all households in the village have been organized to contribute, on a voluntary basis, to the cost of improving the irrigation system initiated by village government. Many rural organizations have been established, including farmers' groups, women's organizations which emphasize family welfare, youth groups, and cooperatives. Similar rural organizations have been established in nonmigrant villages but the

level of community participation is lower. Many of the nonmigrants are not interested in community group participation, i.e., joining the village cooperative. However, the main reason the nonmigrants in both villages participated relatively less in rural development is strongly related to the fact that the majority of nonmigrant farmers complained about the leadership of their village head. In other words, they are unsatisfied with the leadership of their village head, but they have to wait until the next village head election, which is held every 8 years.

Changes in Expectations and the Economic Base of the Household

In general, most households in both nonmigrant and migrant villages do not expect much change in their own society. However, farmers in both migrant and nonmigrant communities hold high expectations for an increasing role for technology in their farming. The data also indicate that there are high percentages of both nonmigrant and migrant farmers who have strong expectations for the expansion of public utilities, especially improvements in irrigation networks, village roads, education and health services.

However, for households who own less than one hectare of land, there is a greater prospect of increasing demand for new farming technologies. Their current demand for nonsubsistence goods such as electrical appliances, transportation and community utilities is lower than that of the households who own more than one hectare of land. This means that the relatively poor households' primary demand is an improvement in their farming prospects and income, rather than in their social needs. On the other hand, households which are better off and enjoy a higher income expect more luxury goods and facilities.

The field survey of both nonmigrant and migrant households shows that the adoption of new technology, especially hand tractors, and the support of irrigation networks have resulted in an increase in both farm and nonfarm incomes. Some changes in the lifestyle of farmers who

own more than one hectare of land can be observed. With higher incomes they tend to spend more on nonsubsistence goods and activities such as color televisions, satellite dishes, motorbikes, and shopping in nearby small towns. There are two restaurants in the migrant village, Mopuya Selatan, which offer a variety of fashionable food, music and film through television with a satellite dish. A private medical clinic also provides health service on a daily basis for the community. These kinds of change in lifestyle keep pace with what is taking place in towns.

Motivation of Migrants and the Comparative Advantages

All of the migrants sampled were interviewed about their motivation and decision to transmigrate to Dumoga, North Sulawesi. A majority of the respondents mentioned that they took part in the transmigration program because of deep poverty, no properties or land, hopelessness and the absence of economic alternatives on Java and Bali. They hope for a better life for themselves and their children in transmigration areas or new places.

Some migrants from Java described their life in Java, where they were landless and worked as agricultural laborers, earning very low wages of around Rp 500 or Rp 600 a day. When the transmigrants had just arrived in Dumoga Subdistrict, they continued to work as laborers but they also worked their own land to produce for their own consumption. They still did not have sufficient rice for the whole year. They often had to eat corn as they were used to doing in Java and Bali. However, they felt better off in Dumoga because one day's work brings in enough to have food for two days or more, while on Java the daily wage was just enough to buy food for a day.

There was also one group of migrants who had lived in a satisfactory economic situation in Java and Bali. They owned land there, but not enough to guarantee a sufficient income and

education for their children, so they decided to transmigrate. Another group consisted of farmers of good economic position. They decided to transmigrate for motives of economic expansion. They are owners of bigger land holdings on Java, now cultivated by relatives or their own children, but see more progress in North Sulawesi because of land resources and demand for labor.

One strong motivation for the migrants was to get a better price for their products. When roads to the village settlements were not built by the government, the roads were in extremely bad condition and could be accessed only by carts drawn by horses or cows. Agricultural products had to be taken to the nearest village markets, which were a 4 to 5 hour walk, in order to fetch a decent price. Local nonmigrants did not share these attitudes. They sold most of their products in the village for very low prices. Quite often they earned no profit on their products.

Learning from past experiences in agricultural practices, the transmigration farmers who originated from Java and Bali generally had agricultural work experience prior to resettlement and were highly skilled in wet rice farming practices. Therefore, the skills that they had been practicing since they were children on Java and Bali were the main capital they brought with them for starting a new life and surviving in a new place. Their farming skills were a comparative advantage at destinations such as Dumoga, North Sulawesi.

The local nonmigrants, on the other hand, were considered to be less skilled in agricultural practices. They were accustomed to practicing `shifting cultivation',[27] as had their ancestors. The main agricultural activities depended on dry field seasonal crops such as corn, cassava, sweet potato, peanuts, some kind of vegetables, and yearly crops such as coconut and clove. There are only a relatively small proportion of nonmigrants who have wet rice fields, but

[27] This traditional agricultural practice is often referred to as `slash and burn' and is undertaken by cutting and burning the forest for transplanting short-term crops. The fields are usually abandoned after several crops, resulting in erosion and land deterioration.

these are without irrigation systems and depend on rainfall, and thus produce paddy only once a year. Thus, it is obvious that nonmigrants have less experience and skills for farming wet rice fields.

The Contribution of Migrants to the Region

In general, almost all farmer migrants who settled in the four case study village areas have adequate knowledge of farming systems and technology applied in wet rice fields. The migrants from Java are mastering the management of crop fields on dry and/or steep land. Their knowledge of developing terraces on steep land, rotating crops, and utilizing the grass for breeding livestock is quite advanced. The migrants from Bali really know how to manage water and farming systems including optimizing the use of agricultural production tools. The survey findings predict that the migrants will easily manage by themselves to utilize the resources once they have the production tools and are supported by basic infrastructure such as irrigation systems and village roads.

The knowledge and technologies brought with migrants have been adopted by some local farmers and could, therefore, increase their production. However, certain technologies for producing soybeans have not been well-adopted by local farmers. The local farmers are not yet capable of producing soybean yields like those produced by the migrants, even if they apply similar inputs and technology. On the other hand, some transmigrants adopted the ways of local farmers in letting their animals graze in the empty fields or meadows, since uncultivated land is still available in some areas. Thus, the migrants have given up their previous practice of keeping livestock in stalls.

The migrants have also made a significant contribution in increasing the production of rice, corns and soybeans in the region, as a result of expanding the land base that could be

exploited to produce rice, corns, and soybeans, and adopting new technology and cultivation techniques. The main contribution of the migrants to the region is in production of soybeans which is a relatively new crop for local farmers, and was only introduced to local farmers after the migrants settled in the region. Recently, North Sulawesi has begun exporting soybeans to Java.

Some Special Issues of Changes and Problems

The processes of technical and social change differ from area to area and region to region. In some areas, particularly in remote areas, social change is still technically induced. In this case study, it is quite clear that certain social changes induced by commercially oriented farming have enhanced the adoption rate of new technology. In other words, social change has induced technological change in both nonmigrant and migrant villages. The only limitation for subsistence farmers is their low purchasing power or household income.

On the other hand, a factor which speeds up the adoption of new technology and mechanization, especially for the rich farmers, is the availability of irrigation systems and changes in cultivation practices. For example, in the wet rice fields, fast growing grass and weeds which thrive due to irrigation have made plowing land by means of horses or cows problematic. This is because the land overgrown by increased grass and weeds requires stronger tilling power than that which horses or cows can provide. Using hand tractors or power tillers has solved the problem.

Thus, the village communities in this case study have experienced technological changes in rice farming through both social change and government investment in technologies such as irrigation systems, new varieties of seeds, and rural road and transportation networks. The

changes have been followed by multiple cropping in rice and more farmers being able to find more time for off-farm and nonfarm jobs, both in the villages and outside the villages.

The distribution of the benefits of technology among recipients has been a major concern in many developing countries. It has been argued that the distribution of benefits from technological change is uneven, both within agriculture and between agriculture and the rest of society. As far as this case study is concerned, the findings show that the introduction of new technologies, mechanization and irrigation networks tend to benefit farmers who own more than one hectare of land, in this case mostly migrant farmers. Thus, the uneven distribution of the benefits is quite a critical issue between farmers who have access to technology and those who do not. Given this equity problem, one still cannot definitely conclude that technological improvement will lead to a better distribution of gains. Because of limitations due to the nature of technology, socioeconomic and geographical constraints, and different social as well as political environments, technological change does not always bring a positive distribution of benefits and income.

In the area of the four case study villages in Dumoga Subdistrict, the climate and geographical conditions are not generally favorable to increased cropping intensity. The more critical problems in agriculture are water shortages, periodical drought and widespread plant diseases. The crucial need of farmers is for water, and then the adoption of new technologies and mechanization becomes possible. The government's role in the construction of irrigation dams, water supplies and rural roads is the key to expanding farm output and income in the region, and critical for the viable use of new technology for the rural poor.

To achieve the goal of contributing to regional development in the settlement areas, the migrants have to be integrated into their economic and social environment. There is evidence from some settlement areas that the process of this integration is becoming a problem between

migrants and nonmigrants (Hardjono, 1977, Swasono and Singarimbun, 1985). In the four villages of the case study areas, it can generally be said that there have not been serious problems of integration between migrants and nonmigrants. When the migrants first arrived in the region, they had problems of communication with the local people, but only a few migrants mentioned that the local people were not friendly to the migrants.

However, the data indicate that the average land ownership by nonmigrant households is shrinking, especially for wet rice fields, while for the migrant households, the average ownership of wet rice fields is increasing, causing a greater discrepancy in the average income between nonmigrant and migrant households. If these trends continue they will become such seeds of jealousy among the local people that their deep dissatisfaction could jeopardize future conditions in the region.

Conclusion

The aim of this chapter has been to outline the major demographic, cultural and socioeconomic characteristics of nonmigrants compared with migrants, the effects of rural development, the motivation of migrants, and the contribution of migrants to the region. In general, the migrants are slightly older and they have a slightly higher education than the nonmigrants. The migrants' main occupation is that of farmers (own land) while less than half of the total number of nonmigrants are farmers (own land), and many of them are laborers.

The incomes of both nonmigrant and migrant farmer households are not only earned from the agricultural sector but also from nonagricultural sectors such as services, trade, and rural industries. In general, the average income of migrants households is higher than that of nonmigrants household. The average income gained from agricultural sectors by migrant households is more than two times higher than that of the nonmigrant households. On the other

hand, the average income earned from nonagricultural activities by nonmigrant households is slightly higher than that earned by migrant households.

The average costs for daily needs of nonmigrant households is slightly higher compared with migrant households. However, the average annual expenditures of migrant households on education, health, clothing and others is high compared with the spending of nonmigrant households. The average expenditures for utensils and furniture is higher for nonmigrant households than for migrant households.

The proportion of migrants who invest their money in buying land is higher than the proportion of nonmigrants. The average land ownership, especially for wet rice fields of migrant households is around three times higher than that of nonmigrant households. However, the average ownership of crop fields or dry lands is higher for nonmigrant households than migrant households.

On average, migrants produce more rice than the nonmigrants, due to the fact that the migrants own more wet rice fields and more complete production tools. However, the proportion of nonmigrant households producing seasonal crops such as corn, soybean, and peanut is quite a bit higher than that of the migrant households.

The success of migrant households in developing and managing their resources and land is strongly supported by their motivation to improve their lives by use of their skills that have been developed since they were children working in wet rice fields on Java and Bali. The nonmigrants' skills that serve as comparative advantages are mostly familiarity with work in the dry land or crop fields. The migrants have made significant contributions to increasing rice, corn and soybean production in the region. However, the success of migrants in terms of socioeconomic development is not only a consequence of their high motivation and skills, and traditional culture of wet rice production, but also of support by the central government which

provided cleared land (fertile land in the region), a house, tools, and food support for one year, and which built basic infrastructures such as dams and irrigation systems, rural roads and transportation networks, education and health services, all requiring a huge government investment. According to a World Bank consultant on transmigration programs in Indonesia (Davis, 1987) the costs of settlement averaged around US$ 5,300 per family.

The rural development policies for intensification of rice production by means of introducing new technologies and mechanization, have had significant impacts on income distribution among both farmers with small and large amounts of land, as well as landless laborers. The community's socioeconomic environment has improved, and the family lifestyles and consumption behavior have changed to those of a modern society. The rural development policies also appear to have increased the role of formal participation of farmers in the community.

In short, this chapter has shown that rural development policy emphasizing the goal of rice self-sufficiency is strongly influencing the rural population of both migrants and nonmigrants. This policy is only beneficial to rice farmers who are mostly identified as migrants. Because of this, the gap between migrants and nonmigrants (especially in terms of land ownership and income) is increasing. In other words, this policy is not supporting nonmigrants who are mostly working in dry fields planting traditional crops such as cassavas, soybeans, corn, and peanuts. Therefore, rural development policies must change to an orientation that is beneficial to both migrants and nonmigrants. Attention should be given not only to increasing rice production but also to increasing production of traditional crops (such as cassavas, corn, soybeans, and peanuts) and other plantation crops such as cloves, cacaos, and coconuts.

Having analyzed the characteristics of nonmigrants and migrants and the impacts of rural development policies which could form the basis for future social, economic, and rural

development planning in North Sulawesi, attention will now be turned to an analysis of the major patterns of linkages between rural and urban areas.

CHAPTER FIVE
RURAL-URBAN LINKAGES

Introduction

The linkages between rural and urban areas tend to occur via variables related to economic interaction, migration, service delivery, physical infrastructure, and technology as has been discussed in the conceptual framework in Chapter One (see Figure 1.1). Although these linkages have significant impacts in increasing rural development both economically and socially, the public facilities are mostly enjoyed by the middle and top classes of village farmers. The rural center and small town are primarily service centers and have a relatively small impacts on rural development. This is due to the fact that in contrast to provincial and central governments, local governments can provide only very limited functions for concerns directly related to the region. Thus, rural-urban development tends to be approached from two different and separate sides rather than being bound into one entity of development.

The aim of this chapter is to identify and analyze the main variables that indicate the linkages of rural areas to the hierarchy of urban areas. For example, there are economic variables, which include public markets, consumption, capital flow, marketing and production. The migration variables includes various aspects of social interaction. The service delivery variables cover education, health services, cooperatives, bank and credit institutions. The physical variables involve transportation networks, irrigation systems and electric power. The technology variables cover information and communication. In this study the urban hierarchy is identified as being the rural center or the subdistrict capital, the small town (district capital), and the medium city (provincial capital). The chapter also analyzes the government policies related to rural-urban

linkages and the levels of government which are involved in setting and implementing those policies.

Economic Linkages

The Patterns and Linkages to the Public Markets

A market center is a nucleated settlement with one or more markets each week. In the case study of the four villages in North Sulawesi, only one village does not have its own market. In comparison, in the three villages in Central Sulawesi, only one village had its own market which was open every day. In North Sulawesi, each market is open twice a week according to a schedule that has been set up so that during the whole week there is a market open in one of the different villages in Dumoga Subdistrict. In general, the market is open only half a day, starting around 6 a.m. and lasting until about noon.

A wide variety of commercial activities are usually associated with the larger market places. Most rural markets offer opportunities for small farmers to trade their products such as vegetables, fruits, grains (soybean, red bean, nuts, and corn), and other staples; for stock raisers to sell goats and chicken; for fishermen to sell their catches; and for artisans to sell or trade textiles, baskets, household utensils and an enormous variety of household goods. Services located near the market place can reach large numbers of consumers more efficiently.

All the village markets in the study areas were initiated by village governments together with communities who prepared the location and built the markets. Afterward, the local government improved the building and the market environment with funds from both the local budget and presidential grants for market facilities (*Inpres Pasar*) from the central government. All traders who use the market facilities have to pay fees to the village official each time they come to the market which are based on the size of space used for selling goods. The fees vary

from Rp 250 to Rp 2000 for each trader. A part of the market fees goes to village government as village own revenues and the rest flows to the district government (via the subdistrict government) as local government own revenues.

In general, both nonmigrants and migrants go to the village's markets or to the neighboring village's markets twice a week. Most of them go to the market only to buy groceries such as vegetables, spices, fish, meat, and utensils. Less than 20 percent of the respondents, both nonmigrants and migrants, go to the market to sell vegetables, fruits, beans and, for some people, chicken and eggs[1].

The data indicate that less than 20 percent of nonmigrants and less than 10 percent of migrants go to the markets located at the rural center of the subdistrict at least once a month. The reasons they visit these markets is to sell some of their products and buy meat, fish, vegetables, and fruits which are sometimes less available for purchase in their own village markets. Another reason they visit the rural center is to deal with subdistrict governments for such matters as permits and land certificates or related to education and other matters[2].

The North Sulawesi data show that more than 55 percent of nonmigrants and around 35 percent of migrants visit the markets in the small town (or district capital) at least once a year. The main reasons they visit the market are to buy clothing, textiles, utensils, and building materials. Some of them go to the small town to deal with matters concerning local government,

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[1] The data from the villages studied in Central Sulawesi indicate almost the same patterns, where the majority of the respondents go to the village market or to neighboring village markets to buy vegetables, fish, meat or chicken. Around 25 percent of the nonmigrant and 12 percent of the migrant in Central Sulawesi study go to the market not only to buy but also to sell vegetables, fruits, fish and chicken.

[2] In general, the respondents in the three villages in Central Sulawesi have similar patterns of linkages to the rural center of the subdistrict. In Central Sulawesi, 50 percent of nonmigrants and 12 percent of migrants visit the markets in the rural center of the subdistrict to sell some of their products and buy some groceries. Some of them go to the rural center to deal with education and administrative matters at the subdistrict level.

to visit family and friends, and/or to access the health services or hospital that is available only there[3].

Less than 20 percent of nonmigrants and less than 10 percent of migrants visit the markets in Manado, the capital city of North Sulawesi, at least once a year. The distance, although only 260 km from the villages to the city of Manado, takes 5 hours by bus or public transit and thus discourages travel. Most of the reasons respondents gave for their visit to the city related to the education of their children, to health care, and/or to visit their children and families in town.

There are two reasons why most nonmigrants and migrants visit the rural center, small town, or the city. The first reason is that some respondents come to the towns or cities only to buy goods which are less or unavailable in the markets in rural areas. The second reason is that respondents come to town or to the city to deal with local government matters, education and health services, and/or to visit families and relatives. The data show that the longer the distance to the town or city from the village, the smaller the proportion of both nonmigrants and migrants who visit it. This is not only because of the distance and time involved, but is also related to the costs of transportation, which often makes it too expensive for them to visit the towns or cities. This supports the previous findings that only a small proportion of the respondents can afford to buy the goods they need, send their children to continue their studies at secondary school or university, or use the health facilities at the hospitals located in towns or cities.

[3] In Central Sulawesi, the data reveal that none of the nonmigrants but more than 27 percent of migrants visit markets in town (the town functions as a capital city of both Donggala District and Central Sulawesi Province) at least once a year. The main reasons for the migrants visiting the town are related to health services, education (e.g., their son or daughter entering secondary school or university for the first time), and visiting some friends and relatives.

Consumption Linkages

The traditional markets in the villages play an important role in fulfilling the daily needs of the village communities and as places for selling their products. The proportion of nonmigrants who access village markets and markets in areas surrounding the village to buy groceries is 61.0 percent. This pattern is in contrast to the majority of migrants (around 76.6 percent) who buy their groceries at village markets. This is due to the fact that only one nonmigrant village has a public market. Some nonmigrants and migrants (17.2 percent and 17.1 percent respectively) also buy their groceries from two sources: small shops (*warung*) and village markets. The number of respondents who access only small shops (*warung*) accounts for around 7.8 percent of nonmigrants and 4.5 percent of migrants. In other words, *warung* located in the villages are also crucial for supplying the daily needs of rural communities, probably because there are always some *warung* located in almost every neighborhood. These *warung* sell many items for daily needs in small quantities[4].

The clothes-buying pattern of nonmigrants is different from that of migrants. Nonmigrants buy most clothing not only from village markets, but also from other markets, as indicated in Table 5.1. The data show that 40 percent of the nonmigrants buy their clothing at village markets. Some nonmigrants buy their clothing at markets surrounding the village and at markets in the small town (25.8 percent and 12.5 percent respectively). About 80 percent of migrants buy their clothing at village markets, and only 3.6 percent buy their clothing at markets in small towns[5].

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[4] The popularity of *warung* is also common in Central Sulawesi, where the majority of nonmigrants and migrants get their groceries from village markets and markets located in areas surrounding the village.

[5] The data from Central Sulawesi indicate that most nonmigrants buy their clothing at markets surrounding the village, but some get it from markets in the rural center (56.3 percent and 18.8 percent respectively). On the other hand, respondent migrants in Central Sulawesi buy clothing at the village market and markets surrounding village (48.5 percent and 36.4 percent respectively).

Table 5.1
Nonmigrants and Migrants: Market Location and Households' Needs

Place	Nonmigrants (%)					Migrants (%)				
	DN	CAE	UAF	BM	IOP	DN	CAE	UAF	BM	IOP
Small shops (*warung*)	7.8	-	-	0.8	2.3	4.5	-	-	0.9	9.9
Market in village	33.6	39.8	45.3	24.2	21.9	76.6	80.2	91.0	53.2	20.7
Markets surrounding village	27.4	25.8	26.6	25.8	10.2	-	0.9	-	13.5	-
Market in rural center	-	3.9	1.6	1.6	-	-	-	-	0.9	-
Market in small town	-	12.5	14.9	11.0	1.6	-	3.6	2.7	6.3	1.8
Vendors	3.1	-	-	-	-	-	-	-	-	-
Cooperatives	-	-	-	-	4.7	-	-	-	-	5.4
Others (rice mills in the village)	0.8	0.8	-	18.0	31.3	-	2.7	0.9	17.1	51.4
Small shops and market in village	17.2	-	-	-	-	17.1	-	-	-	-
Small shops and market surrounding village	5.5	-	-	-	-	0.9	-	-	-	-
Market in village and market surrounding village	0.8	-	0.8	0.8	0.1	-	0.9	1.8	0.9	3.6
Market in village and market small town	-	1.6	3.1	2.3	-	-	5.4	3.6	-	-
Market in village and vendors	3.9	-	-	-	-	0.9	-	-	-	-
Market surrounding village and market in small town	-	0.8	3.1	0.8	-	-	-	-	0.9	-
Markets in rural center and small town	-	2.3	1.6	-	0.8	-	-	-	-	-
No shopping anywhere	-	12.5	3.0	14.7	27.1	-	6.3	-	6.3	7.2
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total (N)	128	128	128	128	128	111	111	111	111	111

Note: DN = Daily needs, CAE = Clothing and education supplies such as books, pens, paper, UAF = Utensils and furniture, BM = Building materials, IOP = Input of production, such as new seeds, fertilizer, and pesticide
Source: Sample Survey Data

The pattern of nonmigrants' and migrants' access to markets for buying utensils and furniture is different, as shown in Table 5.1. The nonmigrants buy these goods in village markets

(45.3 percent), markets surrounding village (26.6 percent), and markets in the small town (14.9 percent). About 90 percent of the migrants buy their utensils and furniture at village markets[6].

The patterns of purchasing building materials by migrants and nonmigrants differ slightly as indicated in Table 5.1. The nonmigrants tend to buy building materials at a variety of markets such as markets surrounding village (25.8 percent), village market (24.2 percent), and markets in the small town (10.2 percent). Most migrants (53 percent) buy building materials at the village market, while some buy building materials at markets surrounding the villages and markets in the small towns (13.5 percent and 5.4 percent respectively).

One interesting point illustrated by Table 5.1 is that both nonmigrants and migrants buy agricultural inputs such as new seeds, fertilizer, and pesticide from rice mills located in the village or surrounding the village[7]. The table's data reveal that the proportions of nonmigrants and migrants who buy agricultural inputs from rice mills in the village are around 31.3 percent and 51.4 percent respectively. The proportions of nonmigrants and migrants who get the agricultural inputs at the village market are around 21.1 percent and 20.7 percent respectively. The role of village cooperatives in supporting increased rural production through preparing and supplying agricultural inputs is still far from what it could be. The data indicate that the proportions of nonmigrants' and migrants' access to cooperatives are only 4.7 percent and 5.4 percent respectively. The domination of village rice mills in supplying agricultural inputs to the farmers indicates that the village rice mills play crucial roles in supporting increases in rice and crops production and in stimulating rural development.

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[6] The data are similar to the patterns of nonmigrants' and migrants' purchases of utensils and furniture in Central Sulawesi, where the majority of nonmigrants and migrants buy utensils and furniture at markets located in the village and surrounding the village.

[7] In contrast, the data from Central Sulawesi indicate that nonmigrants mostly buy their agricultural inputs at markets surrounding the village and through middlemen (around 25.0 percent and 25.0 percent respectively). Migrants buy mostly from the village market and markets surrounding village (54.5 percent and 18.2 percent respectively).

The above findings demonstrate that consumption linkages have become an important consideration for understanding rural-urban linkages. The implementation of rural development through investment in rural infrastructure facilities and the introduction of new technologies via agricultural inputs for increasing rice production, has had a direct impact on improving rural incomes from both agricultural and nonagricultural activities. Theoretically, increasing the income of community members will also lead to their increasing expenditures for consumption of goods and services.

It is expected that increased demand by rural farmers for goods and services which are produced in urban areas such as rural centers, small towns, and medium cities will stimulate the urban economy. The data above show that in general only a very small proportion of respondents visit the rural center for shopping or selling their products. Respondents tend to stay home or go directly to small towns or medium cities for shopping. This implies a relatively small demand by rural communities for goods produced by small industries located in rural centers. In fact, there are only few such small-scale industries which are mostly producing foods such as noodles, tofu and soybean cakes, and some shops selling groceries and household utensils, and a few restaurants and cafes operating in the rural center. In other words, improving the rural economic conditions in the region has not yet increased the rural center's economic activities. This is because even though there are many farmers producing rice and crops in villages surrounding the rural center, only a very small proportion of village farmers own or control a large amount of land. Thus, the proportion of farmers who have relatively large purchasing power is very small and the majority of them go shopping directly in small towns or medium cities.

As has been discussed in Chapter Four, the average expenditures of respondents for education, health, clothing, and household utensils and furniture are relatively high. The data indicate that the average total household expenditures for all of these items is almost 20 percent

of total household income per annum. Most of these goods and services are produced in urban areas, and specifically those for education, namely books, pencils, pens, bags, school uniforms and shoes, and also tuition fees especially for those in secondary school, are only available in towns. Thus, all the expenditures identified above require a flow of wealth from rural to urban areas, and especially to small towns and medium cities.

Capital Outflow

A chronology of rural savings and transfer of money outside the region based on the data gathered by one of two village banks located in the rural center of Dumoga subdistrict is listed in Table 5.2. The data show that the growth of saving and capital transfer to outside the region during period 1990-1995 has increased each year. In other words, there is a positive relationship between the growth of saving and the growth of capital transfer.

The growth of total transfers through the village bank is fed by the increasing number of people who transfer some of their money to support their parents, siblings, and children living outside the region. The increase in capital transfer is clearly indicated by the rising average transfer per person, from Rp 228,758 in 1990 to Rp 300,000 in 1995. According to the village bank manager, most of the capital transfer is flowing to Bali, Java, and South Sulawesi, and the biggest number of transfers usually occur after the harvest seasons for both rice and crops. The heavy capital outflow to these three areas (Bali, Java, and South Sulawesi) is understandable because the majority of the senders are migrants who originally came from Bali, East Java and West Java, and South Sulawesi. The money which flowed to South Sulawesi is mostly from the Buginese, who are known as traders who dominate the textile and furniture business at markets in the rural center and some village markets.

Table 5.2
Total Savings, Total Transfer Outside the Region and Average Amount of Transfer by Nonmigrants and Migrants, in Dumoga Subdistrict (Rupiah)

Year	Total Savings	Total Transfer	Number of People Transferring Money	Average Transfer per person
1990	935,000,000	35,000,000	153	228,758
1991	1,135,000,000	38,000,000	163	233,128
1992	1,310,000,000	42,000,000	178	235,955
1993	1,510,000,000	49,000,000	184	266,304
1994	1,745,000,000	54,000,000	197	274,111
1995	1,800,000,000	63,000,000	210	300,000

Source: People's Bank of Indonesia, 1996 (Bank Rakyat Indonesia, Unit Kecamatan Imandi)

However, the relatively high capital outflow from the region is partially offset by capital flowing into the region. The manager of the village bank reported that each year around 40 people in the region receive transfers from outside the region. The capital inflow for each person is between Rp 200,000 and Rp 500,000. Thus, if the average transfer received by each person is around Rp 350,000 per year, the total capital inflow in the region is approximately Rp 14,000,000, a number still much smaller than the total capital outflow, which was around Rp 63,000,000 in 1995.

Table 5.3
Amounts of Capital Transferred by Nonmigrants and Migrants to Support Their Parents, Siblings, Relatives, and Children (Rupiah per year)

Amount of Money	Nonmigrants (%)	Migrants (%)
0	67.2	73.9
≤ 50,000	23.4	11.7
51,000 - 100,000	6.2	5.4
101,000 - 250,000	0.8	6.3
251,000 - 500,000	1.6	2.7
≥ 501,000	0.8	-
Total (%)	100.0	100.0
Total (N)	128	111
Average (rupiah)	24,971	32,252

Source: Sample Survey Data

The average capital transfer by nonmigrants and migrants to their parents, siblings, and children through banks, post offices, and relatives or friends is shown in Table 5.3. The data indicate that the proportions of nonmigrants and migrants who said that they quite often or at least once a year send some money to their parents and siblings outside the region are only 32.8 percent and 26.1 percent respectively. As shown in Table 5.3, around 23.4 percent of nonmigrants and 11.7 percent of migrants said that at least once a year they send around Rp 50, 000 to their parents or siblings outside the region. Only 9.5 percent of nonmigrants and 13.4 percent of migrants send money within the range of Rp 51,000 to more than Rp 500,000 per year.

The capital outflow can also be identified as the funds migrants and nonmigrants bring with them when they visit their place of origin, as Table 5.4 indicates. The data show that only 5.5 percent of nonmigrants and 53.2 percent of migrants visit their parents and siblings living outside the region at least once a year. Around 24.3 percent of the migrants spent around Rp 1,000,000 to Rp 2,999,000, and 3.6 percent spent more than Rp 5,000,000 for one visit to their place of origin. The average expenditure for each migrant is around Rp 1,140,414 per annum. Some of the money is used for transportation costs but most of the money is given to their parents and siblings. Some respondents pointed out that the money might be invested in buying a piece of land or a house for their parents or siblings. Migrants who came from Bali in particular also mentioned that they spent too much money for rituals or religious events[8]. However, they said they could not refuse to do that because those events are an important part of their belief system and an obligation. Furthermore, they said that they could again earn as much as was spent on the visit to their place of origin if they return to work hard in the wet rice fields. If their hard-

[8] These patterns of capital outflow are similar to those of the Balinese migrants in Central Sulawesi, who also stated that they spent too much money for religious events.

earned money was used locally for investments such as buying land, instead of visiting relatives and friends in their place of origin, the proportion of migrant farmers owning more than one hectare of wet rice field would increase.

Table 5.4
Amounts of Capital Transferred and
Transportation Costs of Nonmigrants and Migrants for Visiting
Families and Relatives Outside Village (Rupiah per year)

Amount of Money	NonMigrants (%)	Migrants (%)
0	94.5	46.8
≤ 100,000	5.5	-
101,000 - 250,000	-	2.7
251,000 - 500,000	-	7.2
501,000 - 1,000,000	-	11.7
1,000,000 - 2,999,000	-	24.3
3,000,000 - 4,999,000	-	3.6
≥ 5,000,000	-	3.6
Total (%)	100.0	100.0
Total (N)	128	111
Average (Rupiah)	1,676	1,140,414

Source: Sample Survey Data

Marketing and Production Linkages

The marketing of agricultural products by nonmigrants has been established for quite a long time. For migrants such marketing started immediately after settlement. Thus different types of marketing networks have emerged after more than 80 years for nonmigrants and more than 20 years for migrants. To describe such marketing networks is quite complicated, but an analysis of where nonmigrants and migrants sell their paddy or rice and to whom, will help give an understanding.

Table 5.5
Proportions of Nonmigrants and Migrants
Selling Their Paddy or Rice, by Location of Sale

Location	Nonmigrants (%)	Migrants (%)
In the village	53.1	82.0
In an other village	27.5	7.2
In Rural Center	-	-
In Small Town	1.6	0.9
In Other places	3.6	5.4
Never sell	14.2	4.5
Total (%)	100.0	100.0
Total (N)	128	111

Source: Sample Survey Data

Table 5.5 shows that most nonmigrants and migrants sell their products in their own villages (53.1 percent and 82.0 percent respectively). Some nonmigrants and migrants sell paddy in other villages surrounding their villages, but only a tiny proportion of nonmigrants sell paddy in the small town. Not one of the nonmigrants or migrants sells their paddy in the rural center.

It is understandable that most respondents sell paddy in the village because about 40.6 percent of nonmigrants and 36.0 percent of migrants sell their products to village traders (see Table 5.6). The data also indicate that 26.6 percent of nonmigrants and 52.3 percent of migrants sell their paddy to the village rice mills.

The relatively large proportion of both nonmigrants and especially migrants connected to the village rice mills is an interesting issue for investigation. The village rice mills not only mill the farmers' paddy, but also offer services and do business with village farmers. For example, the village rice mills can offer farmers transport services to bring their paddy from the wet rice fields to the rice mills. The mills also offer the use of concrete pads for drying and facilities for storing paddy. For all of these facilities offered to the farmers, the owner of the rice mill charges 10 percent of the total of rice after milling, which the farmers say is quite reasonable. The mills also

sell agricultural inputs such as fertilizers and pesticides to the farmers and offer a certain amount of credits to the farmers.

Table 5.6
Purchasers of Rice Sold by Farmers

Destination of Sale	Nonmigrants (%)	Migrants (%)
Farmer/traders	2.3	-
Traders in the village	40.6	36.0
Middlemen	8.6	0.9
Traders in rural center	-	0.9
Traders in small town	0.8	-
Sell by farmer in the market	3.1	0.9
Cooperatives	1.6	-
Village mills	26.6	55.9
Never sell rice or crops	16.4	5.4
Total (%)	100.0	100.0
Total N	128	111

Source: Sample Survey Data

Each rice mill in the villages nurtures good connections with the farmers who are their customers. Some rice mills are owned by village landlords, and some are run by entrepreneurs from the town or city. Some owners of the rice mills also run businesses such as grocery shops in the village markets. These entrepreneurs offer groceries to the farmers on credit which the farmers can pay back with interest, in rice at the next harvest. Such are the entrepreneurs' strategies to keep the farmers loyal to the same mill, making it almost impossible to move to other rice mills because of debt. The existence of the rice mills in the villages makes it difficult for the village cooperatives to compete, even though these cooperatives are strongly supported by government funds.

The marketing system for paddy and rice in the case study areas is a typically vertical commodity system in which the commodity passes through a sequence of stages. The main sequential stages in a marketing system are commonly identified as: first, getting and gathering,

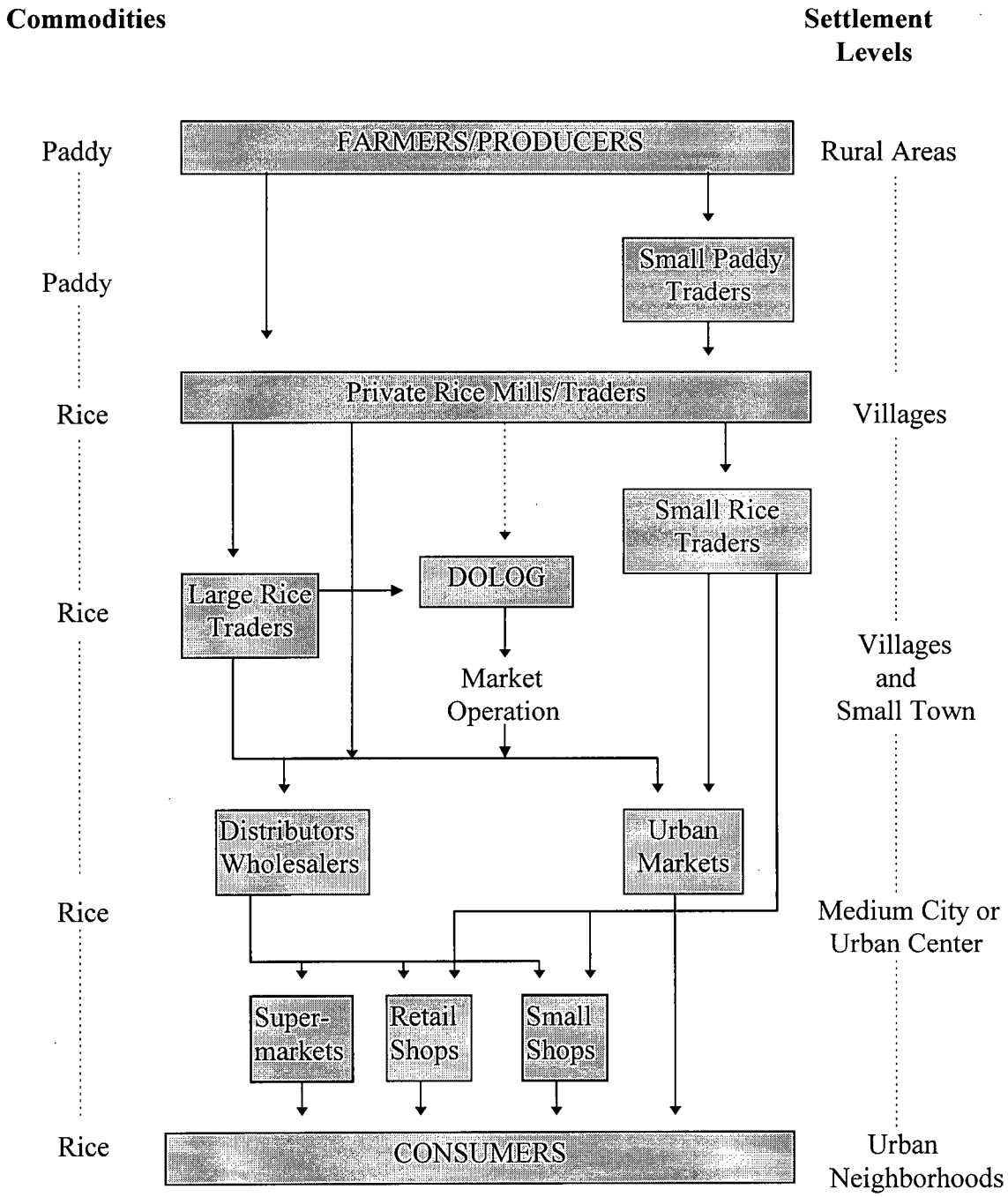
in which the commodity is purchased from farmers or peasants and assembled in village, stores, or mills; second, processing, in which the paddy is milled or transformed prior to onward distribution; third, traders, in which the rice is gathered prior to being distributed to small towns and cities; fourth, wholesale, in which the rice changes hands in bulk at wholesale markets; and fifth, retail, in which the rice is sold to its final consumers.

Figure 5.1 provides an illustration of rice marketing in the case study areas of North Sulawesi. The government of Indonesia sets a floor price for paddy and a ceiling price for rice, and the state procures around 5 percent of total national output, equivalent to approximately 1.5 million tons of rice, at the floor price (Amang 1993). Farmers sell their paddy to small paddy traders or directly to village mills. Small traders who are sometimes acting independently purchase the paddy on a commission basis for intermediaries or for millers.

If market prices are at or near the floor, rice from large traders or sometimes from millers is delivered into the state procurement system. In periods when the market price is above the floor, rice is freely traded in the private system, and flows in diverse ways from millers, to rice traders, to wholesalers or urban markets, to retail, and to consumers. The farm-gate share of the retail price is typically in the range of 80-85 percent.

The state disposes of rice held in public stores in two ways. First, it sells rice on the open market in order to defend the rice ceiling price in the lean season. This is called `market operation'. Second, the state supplies rice rations to the civil service and the military. This is called `budget group' distribution.

Figure 5.1
Paddy and Rice Marketing Channels in North Sulawesi



Note: Provincial Logistics Depots (DOLOG) are directly controlled by the National Logistics Agency or *Badan Urusan Logistik* (BULOG)
Source: Sample Survey Data

A particular problem in this respect attaches to so-called `farm gate' prices. The official `farm gate' price series is often not producer prices at all; these are instead prices for the small proportion of the unprocessed product (e.g., paddy) that is transacted openly in local village markets where prices can be easily collected. These prices may be inaccurate as a measure of the average level or dispersion of prices received by farm households, even though trends in them may roughly follow farm-gate price trends.

Table 5.7
The Changing Price of Rice and Fertilizer at Four Case Study Villages in North Sulawesi, in 1985, 1990, 1995 (Rupiah)

Year	Price of Rice per kilogram	Changes in Price of Rice (%)	Price of Fertilizer per kilogram	Changes in Price of Fertilizer (%)
1985	300	-	3,500	-
1990	500	67	7,000	100
1995	700	40	13,000	86

Source: Sample Survey Data

Another problem is that the changing of the floor price of rice is relatively slow compared with the changing of agricultural input prices such as fertilizer and pesticide (see Table 5.7). In other words, increases in the price of agricultural inputs tend to be faster than changes in the farm-gate price of rice. Increases in the prices of fertilizers and pesticides are mainly a result of the government reducing subsidies for those agricultural inputs. Thus, the terms of trade are relatively low for agricultural products such as rice and other crops versus industrial products and especially agricultural inputs such as fertilizers and pesticides. Consequently, the farmers have to pay for agricultural inputs which are relatively expensive while the price of agricultural products such as rice are kept low through strict government control via DOLOG at the provincial level. Agricultural policies such as these are not aimed at helping the farmers to increase their real incomes, but rather to protect the consumers, mostly non-farmers, who are living in urban areas.

Migration Linkages

Rural-urban linkages also appear through the flow of labor movements from rural to urban areas. The reduction of job opportunities in rural agricultural activities is a direct consequence of the mechanization applied in wet rice fields (such as hand tractors) and decreases in the land available for cultivation force rural laborers to move from their villages to find jobs in nonagricultural activities located outside their own villages.

As discussed in Chapter Four, some respondents (mostly nonmigrant laborers) work outside the village in small industries and trade, by means of daily commuting, and some workers have to leave the family for a few days or a week. Some daily commuters work in the subdistrict government's institutions as civil servants. Their offices are located in the rural centers. However, the data reveal that the proportion of migrant workers is higher for rural to rural migration than rural to urban migration[9], especially the flow of workers from villages to the small town. This finding reveals that the job creation in nonagricultural activities located in surrounding rural areas creates rural to rural daily commuters.

However, the pattern of rural to rural migration will not last long since most nonagricultural activities in rural areas are small-scale activities, meaning that they can only offer limited job opportunities. Moreover, the closure of the land frontier and the ensuing shortage of land that can be used for wet rice field or crops combined with the rapid increase of rural population due to natural increase and spontaneous migrants, will force the rural laborers to urban areas such as small towns and medium cities to find jobs in either the formal or informal sectors.

[9] These patterns of migration are similar to those of Central Sulawesi, where the data also indicate that most migrant workers experience rural to rural rather than rural to urban migration.

Services Delivery Linkages

Education

Each of the four villages in the case study has a primary school, and two of the villages have junior high schools. The village schools benefit local people and migrants who send their children to school. As indicated in Table 5.8, both primary and junior high schools are located less than one kilometer from most of the nonmigrant and migrant settlements. On the other hand, a senior high school is only available at the rural center[10] (subdistrict capital) which is relatively far (around 5 km) from the villages. In general the schools (primary, junior, and senior high schools) start at 7 a.m. Since schools start early in the morning, it is difficult to find public transit, and most of the students at the senior high school level have to spend half an hour walking to get to school. On the way back home, public transit (which is run by private enterprises) quite often avoid picking them up since students pay special fares which are less than the normal fares. So the students must wait for the Department of Transportation's big bus which runs only once a day. It is scheduled to pass the school right after school ends. If they miss the bus, they must walk home.

Secondary schools are available in some rural centers, but are most are located in small towns and cities. Some respondents stated that they send their children to small towns or cities for continuing their studies at senior high schools and university. These opportunities can be pursued only by those who have enough resources to support their children's studies in towns or cities. However, many respondents who do not have enough resources have no alternative but to

[10] The case study of villages in Central Sulawesi indicates that each village has primary schools but junior and senior high schools are only available in the rural center.

have their children finish their academic careers at junior high school. These children then become pay of the family labor force, helping their parents to work in the fields.

Only a few respondents, the landlords in the villages, mentioned that they have children studying at state universities or colleges, which are located only in cities such as Manado and other cities outside the province. If people in the villages can send their children to study at university, it adds to their status in the community. It also adds to their economic position as they expect their children, when finished studying at university, to work in private companies or government institutions as public servants, and later on to get a good position in the bureaucracy, so that they can help their parents when they get old or become dependent.

Most of the primary schools have been built since the early 1980s by district level representatives of the Department of Education and funded by the central government with presidential grants for primary schools or *Inpres sekolah dasar* through the Department of Education. Although there are no tuition fees for children to attend primary schools and junior high schools, in reality parents have to fulfill all requirements determined by the schools, such as uniforms, shoes, and books, and also given donations of a certain amount of money every month to the schools. For many parents these expenditures are relatively expensive for them. Even though the government has propagandized "free schooling" for children under 15 years, in reality attending school requires money, which in many cases parents don't have.

Table 5.8
Distances to Schools for Nonmigrants and Migrants (percentage)

Distance (kilometer)	Primary School		Junior High School		Senior High School	
	NM	M	NM	M	NM	M
0 - 0.9	96.9	90.0	85.1	93.7	-	-
1 - 2.9	1.6	9.1	9.4	6.3	-	-
3 - 4.9	1.5	0.9	3.9	-	3.9	1.8
5+	-	-	1.6	-	96.1	98.2
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total (N)	128	111	128	111	128	111

Note: NM = Nonmigrants, M = Migrants
Source: Sample Survey Data

Health Services

Most of the public health facilities are only available in rural centers, small towns, and cities. Some villages have a health clinic with very limited facilities which is usually staffed only by nurses. Doctors may be available for only a few hours of a day, and the clinics are only open two days a week. Therefore, it is not surprising that only a small proportion of both nonmigrants and migrants have visited the village health clinics. Table 5.9 shows that most respondents, both nonmigrants and migrants, visit community health centers to get health services[11]. Only one community health center is available in a subdistrict and is usually located in the rural center or subdistrict capital. Although the facilities and staff of both village clinics and community health centers are relatively limited, these health services are very important to people in the village areas who need first aid.

[11] The same patterns are found in Central Sulawesi, where most of respondents went to community health centers when they needed health services.

The community health centers are open five days a week and provide services to widely scattered villages in the form of small clinics that offer basic preventive treatment, first aid, maternity care, and family planning information. They are staffed by nurses and a paramedic. Small hospitals with basic treatment and diagnostic facilities and with either a visiting or part-time physician as well as nurses and paramedics require a larger service area, and are only available in relatively large market centers or small towns. A full-service general hospital, staffed by nurses and doctors, and equipped with more extensive diagnostic and treatment equipment, is most often available only in medium cities or regional centers.

All of these public health facilities were built and managed by the provincial and district level representatives of the Department of Health and funded by the central government via the Department of Health with presidential grants or *Inpres kesehatan*. The price of services is decided by both local government and the health department at the district level. Although the price for visiting village clinics and community health centers is relatively expensive, some people still cannot afford it. As Table 5.9 indicates, almost 43 percent of the total nonmigrants never visit the public health centers. Most of them mentioned that when they get sick, they usually use traditional medicine made by themselves or bought medicine in small shops or *warung*, or they went to visit healers or shaman in the village for consultations about their health problems. Some of them said that when visiting the healers or shaman, sometimes they give some money or not, depending on whether they have money in hand.

Table 5.9
Health Facilities: Destinations for Nonmigrants and Migrants (percentage)

Health Facilities	Non-Migrants	Migrants
Village Clinics	1.6	4.5
Community Health Centers	32.8	61.2
Hospital	-	2.7
General Doctors	3.9	18.8
Village Clinics and Community Health Centers	1.6	2.6
Village Clinics and Hospital	8.6	1.7
Village Clinics and General Doctors	3.9	1.7
Community Health Centers and Hospital	3.1	1.7
Community Health Centers and General Doctors	1.6	3.5
Others	42.9	1.8
Total (%)	100.0	100.0
Total (N)	128	111

Source: Sample Survey Data

On the other hand, only a small proportion of migrants had visited hospitals located in the small town and medium city. The proportion of migrants who visited general doctors was more than four times that of nonmigrants. Since the best quality health facilities are only available at the hospital and at private clinics located in the small town or medium city, and those facilities cost quite a bit of money, only the rich farmers can benefit from them.

Cooperative Programs

Since the early 1980s village cooperatives throughout Indonesia have been assigned special priority for further development, with the goal of becoming self-sustaining via education and training of their personnel in order to ensure the supply of management necessary to handle growth. It was expected that the government would continue to upgrade managerial skills through specialized education, so that cooperatives would become self-sustaining economic

units, and that government guarantees for bank loans to cooperatives would continue, although the government's investments in cooperatives-related projects would be reduced as much as possible.

In order to accelerate the development of cooperatives, the government embarked on a policy of stimulating, supporting and facilitating them. A cooperative is an association organized under the sponsorship of the Minister of Cooperatives and Small Businesses. The initial policy of establishing one cooperative in each village did not prove viable, and each cooperative at the present time is supposed to draw its membership from the villages in a subdistrict. It receives official guidance in evolving into all-encompassing institutions that will promote, support, and sustain the key economic activities of the rural community.

Official statements from the government emphasize the status of the cooperative as a communal institution and not a government-owned enterprise. Members of a cooperative are those who have registered as such and those who have ever had any dealing with a cooperative. To promote the growth of cooperatives and to help them to obtain capital, the government linked cooperatives throughout the country with local branches of the government's Food Logistics Board (Bulog), which is responsible for the supply of food and other basic necessities to the people. In facilitating the operations of Bulog in relation to the cooperatives, the Minister of Cooperatives and Small Businesses concurrently serves as the Director of Bulog. The cooperatives are assigned to act as agencies of Bulog in purchasing rice from the population at Bulog-fixed prices, thereby gaining an income in the form of fees received from Bulog for this service. Many cooperatives have other business activities such as savings and credit services, and channeling fertilizers and pesticides from government-owned factories to the farmers who participate in the Bimas and Inmas programs for increasing rice production.

However, the fieldwork data indicate that the majority of nonmigrants and migrants (92.3 percent and 94.6 percent respectively) were not involved as members of any of the cooperatives that have been set up in the region[12]. Nonmigrants and migrants have different reasons why they are not involved as members of cooperatives. Some nonmigrants stated that there is no cooperative available in their village, or that where there once was a cooperative and now it was no longer active. Some argued that they were not interested in being a member of any cooperative because the information on cooperatives was still a blur for them. These arguments differ from those given by migrants. Some migrants said they had been involved as a member in a cooperative but later on that cooperative became inactive because the managers were not professional. Some migrants pointed out that they do not need a cooperative because some rice mill owners in the villages offer credit for fertilizers and pesticides.

Of the tiny proportion of nonmigrants and migrants (mostly identified as village `elites') who participate as members of cooperatives, most mentioned the benefits they could get from the cooperatives, such as easy credit, both in terms of money and inputs such as fertilizers and pesticides. They also mentioned that in order to improve the cooperatives' services to the members, they require professional managers and friendly, trusting relations between the members and leaders of the cooperative.

Many associations called cooperatives are cooperatives in name, but in fact are agencies of government that are intended to promote agricultural activities. Such associations may incorporate some cooperative principles in their organizational structure, but they may be only quasi-cooperatives because of the dominance of the government in management, operations and especially financing. An association of this type may, for example, be successful in achieving one

[12] These figures resemble data from the case study villages in Central Sulawesi, where 87.5 percent of nonmigrants and 87.9 percent of migrants reported that they were not involved in any cooperative activities located in the village.

of the important purposes of a cooperative, which is to provide small and medium-size producers with better access to means of production and productive techniques.

The only cash crop that is grown in connection with cooperatives in North Sulawesi is cloves, which comes under a special monopoly regime linked to cooperative production. In the early 1990s the cooperatives were designated as the sole institution recognized by the government for the purchase and sale of cloves. Cloves are grown by many farmers and are an essential ingredient of the clove cigarette, the production of which is a multibillion-dollar-industry in Indonesia. The only other type of cooperative with which most farmers in this study had any experience were the credit services for money, fertilizers and pesticides which help them at times when they do not have cash in hand to buy agricultural inputs.

Bank and Credit Institutions

Village banks are expected to stimulate farmers to save some of their income in the banks and to help farmers by giving loans with low interest rates for improving agricultural production and rural development activities. The fieldwork data indicate that only 38.8 percent of nonmigrants and 28.8 percent of migrants have relations with village banks. Their interaction with village banks is mostly related to saving money and borrowing money, and some respondents use bank services for sending money[13].

According to most of the respondents who have dealings with the banks, borrowing money is not a simple matter. They have to prepare letters signed by the village head and show land certificates as collateral for the banks. The complicated bureaucracy and the fact that many

[13] These patterns are slightly different from Central Sulawesi, where the proportions of nonmigrants and migrants who have connections to village banks are 56.3 percent and 39.4 percent respectively.

farmers do not have certificates for their land are the main reasons why many village farmers do not access the services offered by the banks. Instead, many farmers prefer to deal with the moneylenders and rice mill owners in the villages. They said that dealing with money lenders is simple because they do not need to give such collateral, yet they know that the moneylenders lend money to them with higher interest rates than the bank.

Thus, it can be argued that most of the village people who use the village banks are members of the middle and upper classes such as landlords, village officials, and farmers who also work as public servants. These people have closer relationships with bank officials and also the village and subdistrict officials where the letters must be shown and stamped in order to get credit from the banks. Some respondents mentioned that in order to smooth the process for getting credit, they also quite often spent money as bribes for village and subdistrict officials as well as the bank officials who work in the credit section. Such "grease" is not available for ordinary poor farmers who are the majority in the region.

Physical Linkages

Transportation Networks

The spatial integration of communities results primarily from physical linkages through natural transportation networks. New roads can reduce travel time, lower shipping costs, widen marketing, commuting and migration opportunities, allow greater access to nonagricultural employment, improve communication and extend the area of service delivery (Leinbach, 1984). Farm-to-market roads have promoted the creation of new markets in rural areas, increased interaction among villages, linked agricultural production areas to crop collection and distribution centers, and made new crops economically viable. Those areas of a region without easy physical access to central places are usually characterized by low social mobility, localized

and subsistence agriculture, and low levels of trade (Sajogyo and Wiradi, 1985; Clauss et al., 1987).

Table 5.10 shows how the nonmigrant and migrant respondents access markets located in the village, rural center, small town, and medium city (provincial capital). In general, the data indicate that both nonmigrants and migrants primarily access the various markets by using public transit (*oplet*) run by private companies. Specifically, the data clearly indicate that most migrants walk to village markets, while only a small proportion of migrants use public transit for the local trip, and around 7.2 percent of them use either a bicycle or motorcycle. However, only 33 percent nonmigrants walk to the village markets, while 27 percent of non-migrants use public transit and 25 percent use *bendi*[14]. Some nonmigrants and migrants reported that they did not go to the village markets (around 7.4 percent and 3.6 percent respectively). They bought the foods that they do not produce themselves from small shops (*warung*) located in their neighborhoods or from vendors.

One interesting point found in Table 5.10 is that less than 40 percent of nonmigrants and more then 70 percent of migrants never go to visit or shop at the rural center markets[15]. This finding indicates that the rural center markets are relatively less important to the farmers for selling their products and buying the goods they need.

Many nonmigrants and migrants reported that they have not visited the markets located in the small town and medium city because those markets are far from the village. Many rural people cited the transportation costs for going to those cities as being too expensive. The bus fares to the small town and medium city are Rp 1500 and Rp 6500 per person respectively. The

[14] These patterns are different from the responses of nonmigrants and migrants in the villages in Central Sulawesi, where data indicate that the majority of respondents access the various markets by means of using transit. The main reason the Central Sulawesi respondents used public transit to go to village markets is because the village markets are located far from their homes.

[15] The data from Central Sulawesi also reveal that there are only very small proportions of nonmigrants and migrants visiting markets located in the rural centers.

respondents also pointed out that they do not have any important reasons to go to the small town or medium city. For poor peasants, visiting the town is a luxury that costs too much.

Table 5.10
Modes of Transportation Used by Respondents to Access Village, Rural center, Small Town, and Medium City Markets, (percentage)

Modes of Transport	Village Markets		Rural Center Markets		Small Town Markets		Medium City Markets	
	NM	M	NM	M	NM	M	NM	M
Private transport	0.8	2.7	-	2.7	-	1.8	-	1.8
Public transport (*oplet*)	26.7	0.9	57.9	16.2	82.2	52.3	41.4	18.0
Motorcycle	0.8	3.6	3.1	2.7	0.8	0.9	-	-
Bicycle	4.1	3.6	-	0.9	-	-	-	-
Walk	33.7	85.6	-	0.9	-	-	-	-
Bendi *	25.0	-	2.3	2.7	-	-	2.3	0.9
Never access	7.4	3.6	36.7	73.9	16.4	45.0	55.5	79.3
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total (N)	128	111	128	111	128	111	128	111

Note: NM = Nonmigrant, M = Migrant
* a horse-drawn cart
Source: Sample Survey Data

The majority of public transit such as minibuses, which are commonly used in the region to go to villages, rural centers, small towns, and medium cities, are run by private enterprises. Each minibus requires a permit which is issued by the local transportation agency (*Dinas Perhubungan*) and a license which is issued by the provincial government. Both have to be renewed once a year. There are buses organized by the Department of Transportation agency located at the provincial level, which run once a day from rural centers to Manado and vice versa. The bus fares for both private bus companies and government-run transit are decided by the provincial government based on the distance. Thus the transportation systems between villages and from villages to rural centers, small towns, and cities are strongly affected by provincial government policies rather than by local government policies.

In general, the roads connecting the villages to each other and to the rural center and small town are in relatively good condition during all seasons. Most of the roads inside the villages are gravel and sometimes during wet seasons these roads are muddy. All roads connecting the villages to each other and to the rural centers and small towns were built by both the provincial and local governments with supporting grants from the central government. The roads within the villages were mostly built by local communities, showing the direct participation of local communities together with village government in efforts to develop their own villages. The limited road access to the fields forces the farmers to carry all of the harvest yield by themselves to places accessible by the village roads in order to enable the transport of products to the village by cart.

Improving the road networks in the region creates a trade-off. The urban centers are needed to provide services to rural areas. On the other hand, some entrepreneurs running businesses in the small town and rural center markets report that there are many small businesses operating in the small town and rural center markets which lose their market share as a result of improving road networks and encouraging a more dynamic transportation sector. Similar findings were also reported by De Jong and van Steenbergen, (1987) in their study of small towns on Java. For example, most wholesalers located in medium cities distributed industrial products and groceries directly, via their big trucks, to the small shops or *warung* located in rural areas. This bypass of the marketing distribution system has direct effects on the activities in small towns and rural center markets. However, this bypass benefits rural consumers as they can buy goods in *warung* at prices similar to those in towns.

Irrigation Systems

There are two dams in Dumoga Valley. The dams and main irrigation networks were built by the provincial government and funded by grants from the central government soon after settling the transmigrants from Java and Bali in the region. Although the main irrigation networks have been built, the water distribution can not reach all the potential wet rice field areas because of the shortage of water. Most secondary and tertiary irrigation networks were built by local community and farmer groups. The water distribution is divided into two groups. First, the local water distribution official is responsible for managing the main or primary irrigation networks. Second, heads of farmer groups are responsible for managing water distribution to the secondary irrigation networks. The farmer groups are also responsible for improving the secondary and tertiary irrigation systems whenever those need improvements or maintenance.

The availability of the dams and irrigation systems in the region have two different impacts on the village farmers. Through the various levels (i.e., primary, secondary and tertiary systems) of irrigation networks, the water flow to the wet rice fields can be easily controlled. These integrated irrigation systems make it possible for the farmers to plant paddy two or three times a year. Before irrigation systems were available, they could only plant paddy once a year because they depended on rainfall. This higher technology of water supply also makes it possible for certain fields to be upgraded into the more productive wet rice fields. The plain fields had previously been used for planting seasonal crops such as corn, soybean, and ground nuts. Thus, dams and irrigation systems have significantly increased rice production by permitting more than one harvest per year and by enlarging the area which can be planted in wet rice.

On the other hand, once the land has been connected to the irrigation networks, it stays wet and is only suitable for planting paddy. Most village farmers say that it is difficult to return the wet land to dry land. So, even though the price of rice is relatively low, they have no

alternative but to plant paddy in their fields, because seasonal crops are not suited to the wet fields. The farmers also mentioned that often the prices of corns or soybeans in the markets are quite high but unfortunately they could not produce those crops anymore unless they still owned dry fields that are not connected with irrigation networks.

It is fair to say that the dam and irrigation system that have been built and funded by the governments is an implicit strategy to push the village farmers to produce rice rather than other crops in order to maintain to a certain national level of rice production (often called "rice self-sufficiency" by central government officials). The farmers do not have the power to increase the price of rice since it is strongly controlled by DOLOG. They are also locked into the high technology of agricultural inputs such as fertilizer, pesticide, and seeds, all of which are relatively expensive and increasing in price all the time. They could not grow "modern" paddy without these high technology agricultural inputs. Thus, the village rice farmers can only accept the low price of rice and pay the high prices for agricultural inputs upon which they have become dependent.

Electric Power

The electric power network in Dumoga Subdistrict (including the four case study villages) was built in the 1980s. The availability of electricity in the village has had numerous impacts on village communities. During the evenings, people have more time to work at home, especially in home industries such as crafts and sewing. Children have more time to study. The family can enjoy television programs such as music, films, and news. Many respondents reported that since they began to watch television at home, sometimes they woke up quite late in the morning because the interesting films usually start late at night. Before television and electricity were available in the village, they usually went to bed quite early and woke up early in the

morning. Thus, the available of electricity has led to an increase in nocturnal activities in rural communities and cut down on their time to sleep during the night.

Although the data show that the majority of both nonmigrant and migrant households have electricity, there are more migrant households than nonmigrant households connected to the electricity network[16].

The rural and urban electric power networks are directly organized by the State Electric Power Corporation (*Perusahaan Listrict Negara* [PLN]) which is the state-owned utility. With the support of government funding in addition to its own revenues, the power corporation has steadily increased its generation capacity over the past three decades. In the near future, the total demand for electric power will exceed the maximum that the state utility can produce.

Since the 1980s the State Electric Power Corporation has had a program called "electricity entering the village" or *Listrik Masuk Desa*. The main objective of the program is to provide and to make equal distribution of the electricity facilities to communities living in rural areas, most of which do not yet have access to electric power. Rural electrification is one of the government's targets for regional development in Indonesia, and demand for electricity in rural areas has not only been met by constructing new power plants, but also by extending the transmission networks across large geographical areas where population densities are relatively low.

Theoretically, the extension of electric power lines into villages makes a steady supply of electric power available to everyone in the community. However, financial barriers still prevent some of the poorer villagers from making use of the resource because they are unable to afford the basic capital outlay necessary to connect their houses to the electric power lines. At a

[16] This finding echoes data from Central Sulawesi, where more migrant households had electricity than did nonmigrant households.

minimum, the household has to pay not only for indoor wiring, electric power outlets and light sockets, but also a connection charge, which is assessed by the electric power corporation when a house is connected to the grid. Although the better-off households can afford this one-time charge (which was fixed at 200,000 *rupiah* at the time of the survey), some respondents indicated that this amount is beyond their means. Some poorer respondents reported that they had not yet become customers—despite their desire to have electric lighting—because the costs outweighed the perceived benefits. Such households continue, as in the past, to use kerosene lamps at night.

Electricity tariffs are considered politically sensitive, and they are controlled by the central government. Despite the need to increase revenues for reinvestment, the company has not been allowed to raise the tariff to a level it considers sufficient. The government adjusts the tariff periodically, usually in response to higher domestic fuel prices, but each increase has been strongly opposed by consumers.

The state electric power enterprise monopolizes the supply of electricity to the consumers in both urban and rural areas. Quite often in rural areas, there are power failures (or blackouts) which last several days and come without any warning from the state enterprise. But the consumers do not have any power to complain or to apply for reimbursement when their electrical appliances are thus damaged. On the other hand, if customers pay their electricity bill even only a day late, they will have to pay a fine that has already been decided by the electricity enterprise.

Technological Linkages

Information and Communication

Communication has been a crucial component in the modernization of developing countries for a long time, as made evident by findings of diffusion research. There is also an

earlier and broader tradition that linked modernization and communication under the rubric of "mass media and national development" (Schramm, 1976). A critical assumption on this optimistic viewpoint is that the content of mass media is oriented towards modernization. Regardless of any specific messages, in the context of traditional society, media are a modern "input". However, most studies have not proceeded beyond an evaluation of modern content. At this level, media would seem to create a "climate for modernization" (McNelly, 1966), because they are full of messages relevant to modernization.

Besides the fact that some authors challenge the notion that all media content is modernizing in the context of a rural society (Benito, 1976; Ashby et al., 1977; Soemardjan and Breazeale, 1995), there is agreement that the media provide only a limited amount of information that farmers can directly use. If such information exists, it is bound to be directed almost exclusively to big farmers, i.e., those who have established links with the modern sector and who can adopt or purchase what is suggested.

Because little relevant content is available for agricultural modernization, it can be argued that the media cannot be expected to fulfill needs in that aspect. Where there is such content, it will probably be tied to structural constraints of the audience, implying differential usefulness of media. However, in this study it is expected that the general modernizing function of media can be expected to have an impact on rural audiences and rural development. Media can affect desires, expectations, and the awareness of choices, but they cannot, per se, provide the removal of structural constraints standing in the way of modernization. If the environment is supportive, communication's potential would be enhanced.

In Indonesia, since the majority of the population earn their living by agricultural activities, the central government makes use of newspapers, radio and television to broadcast information and advice to the farmers. Government programs are designed to help farmers make

optimal use of the practical farming information that can benefit them. These programs are directly organized by the Department of Information and disseminated via special national television and radio programs called "rural development programs" and implemented at the village level by the district offices of the Department of Information.

Table 5.11
Nonmigrant and Migrant Access to General, Agriculture, and Health Information (percentage)

Source of Information	General		Agriculture		Health	
	NM	M	NM	M	NM	M
Newspaper	1.6	0.9	0.8	-	-	0.9
Newspaper and Radio	2.3	-	0.8	-	-	-
Newspaper and Television	6.3	2.7	0.8	0.9	0.8	-
Radio	4.7	1.8	3.1	0.9	0.8	-
Radio and Television	8.6	8.1	3.9	3.6	3.9	2.7
Radio and information from friends/other people	2.3	2.7	0.8	0.9	2.3	1.8
Television	43.0	48.6	14.0	14.4	15.7	27.0
Television and information from friends/other people	12.5	18.0	8.6	16.2	14.1	14.4
Information from friends/other people and others	18.8	16.2	52.3	58.5	58.7	48.6
No answer	-	0.9	14.0	4.5	3.9	1.8
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total (N)	128	111	128	111	128	111

Note: NM = Nonmigrant, M = Migrant
Source: Sample Survey Data

Table 5.11 indicates the proportion of respondents' access to information such as general news and information on agricultural innovations (more specifically, information on agricultural inputs such as high-yielding varieties, fertilizers, pesticides, and herbicides), and health. The data reveal that nonmigrants and migrants share almost the same pattern of access to the general information. The biggest proportion of all respondents get information via television[17]. There are

[17] This finding is similar to the data from Central Sulawesi, where most nonmigrants and migrants get general information through television.

relatively small proportions of nonmigrants and migrants who get information through the newspaper and radio. Therefore, it can be said that television is the most effective means of communication in the rural case study areas, made possible by the availability of electric power in rural areas, which is an essential prerequisite for this form of mass communication. This finding supports a study by Soemardjan and Breazeale (1995) in villages in three Indonesian provinces (Aceh, South Sulawesi, and Yogyakarta) where they found that television played an important role as a medium of communication in rural areas.

The television broadcasts are primarily in the Indonesian national language (*Bahasa* Indonesia), although some films and soundtracks are broadcast in English with Indonesian subtitles. These two languages are respectively the second and the third languages most commonly used, after the local language of each ethnic group. The people in rural areas have some incentives for learning the national language. They want to understand the domestic television programs (which requires a good comprehension of Indonesian), and they want to enjoy the foreign programs (which requires a reading knowledge of Indonesian). For these reasons, television's role in the nation-building process is as a mechanism that binds together people who belong to so many different ethnic groups and speak so many different languages.

Although most respondents said that they watch television, it does not necessary mean that most respondents have a television set in their house. Because of the scarcity of television sets in rural areas, many people watch television programs together with their neighbors who might have a television set complete with satellite dish. Sharing the television facilities like this is demonstrates another positive effect of television, as it can make the community more closely knit. The viewers come and go nightly, whenever there is a program that interests them. These frequent informal gatherings inevitably strengthen the group feelings in the neighborhood. When asked what kind of programs they like the most, the biggest proportion of respondents answered

the films and news. Most of the news is controlled by the Indonesian government's national television network, and all private television stations must broadcast the news relayed from Indonesia's national television service.

Some television programs prompt objections, especially in villages where a strong sense of local custom or Islamic mores prevail. Religious leaders see television, in general, as an innovation that has undesirable effects on the religious community. Since television broadcasts are limited to evening hours, the desire to watch television tends to keep people away from their evening devotions at the village mosque. Moreover, village religious leaders and teachers fear losing their traditional social status and the influence that they have traditionally exerted over the community as a result of social modernization brought to the village via television. Although such concerns were often expressed by parents and by the older generation interviewed in this survey, they were far outnumbered by positive attitudes about the benefits of television.

The proportion of respondents who get information through friends and other people is high compared to the proportion of those who read newspapers and listen to the radio. This indicates that these groups of respondents probably can not access those media because they lack the cash to buy a newspaper, radio, or television. Another possible reason is that they are not able to read because they never or only briefly attended school. Most of the respondents who read the newspaper were those with relatively high incomes, the elite in the villages. The majority of them read a local newspaper and some read both local and national newspapers. The news in these newspapers is mostly related to government programs and projects undertaken in the big cities and villages all over Indonesia. The newspapers are also strongly controlled by the government, even though the printed media are owned by private companies located in small towns, medium cities, and big cities.

In the 1970s, the Ministry of Information started a program for village newspapers, called 'newspapers entering the village' or *Koran Masuk Desa*. Through this program, the government provides subsidies to newspaper companies that publish daily or weekly papers especially designed for rural readers. To encourage the habit of newspaper reading among the farmers, the newspapers are preferably published in the local languages of the respective areas of publication. Village administrators and school teachers are typically expected to promote the papers in their home communities by becoming subscribers and making their copies of newspapers available to others.

Another interesting fact shown in Table 5.11 is that nonmigrants and migrants get access to more information on agriculture and health via friends and other people than through television, radio, or newspapers[18]. The rationale behind this is that farmers in rural areas are always interested to hear and to see the successful experiences of other farmers experimenting with new seeds, fertilizers, and pesticides. In this case, they will trust the person who gives or shows new information to them, often the formal or informal leaders in the village. Because most of the farmers have low incomes, they are really concerned with the risk of changing planting systems. The landlords in the village who are also their leaders usually become partners willing to try the new agricultural techniques or products. Because they have relatively large areas of land in the villages, these the landlords and/or leaders tend to take the risk of trying out new agricultural innovations on a part of their land. Discussions on such topics quite often occur in the village or in the wet rice fields through the regular meetings of farmer groups. At the regular meetings of farmer groups, the farmers discuss water distribution, plans for plowing the rice fields, seeding, and planting. Sharing their own experiences, farmers also get new information

[18] These patterns are also indicated by the study from Central Sulawesi, where the proportion of both nonmigrants and migrants who got information through friends and other people was relatively high.

related to agriculture or health at the traditional market, where they meet other farmers from other villages.

Conclusion

The linkages of rural to urban areas do not follow the levels of the urban hierarchy. The findings clearly reveal that only small proportions of respondents visit the rural center (subdistrict capital) and only to buy some foods. Many respondents visit markets located in the small town (district capital) to shop for jewelry, clothing, household utensils, furniture, building materials, and luxury goods. Some respondents went to town to deal with local governments or to seek education and/or health services, while others visited families and relatives in town. Only a small proportion of respondents, mostly the landlords in the villages, have visited the medium city (provincial capital), mostly to take advantage of education and health facilities and, for some respondents, shopping.

Most of the rural products are sold directly in the villages and a very small proportion of rural products are sold in the markets located in the rural center and the small town. At the same time many urban products are flowing to rural areas to meet the potential demands of rural consumers. In other words, the rural and urban linkages are most often of a consumption nature, rather than related to rural production. The findings also show that the capital outflow from the villages is higher than the capital inflow to the region due to migrants remittances. Some part of farmers' incomes are spent for goods produced by the manufacturing sector that is located in urban areas and for their children's education in towns. All of these facts suggest a constant flow of wealth from rural areas to urban areas.

The study shows that the role of rural centers and small towns are more that of service centers, since most education, health, and other public facilities and all local government

institutions are located in both the rural centers and the small towns. The expectation that the rural center, as a capital city of subdistrict, will accelerate rural development has not been realized. This is due to the fact that only a miniscule proportion of rural farmers, mostly the elite in the villages, have strong purchasing power. However, most of them tend to spend their income directly in the small town or in the medium city where there are more alternatives for spending their money. Another factor for the bypass of rural centers is marketing distribution by wholesalers who are located in the medium city and deal directly with small shops or *warung* located in the villages. The consequence of improving the transportation networks has negatively affected the shares of market activities located in the small towns and especially in the rural centers.

The role of local governments is less significant than the roles of provincial and central governments. The study reveals that most of the government policies related to rural development, namely those pertaining to communication and information, marketing, transportation, irrigation systems, electricity, education, health, cooperatives and banks, flow directly from central government agencies via their offices located at the provincial and district levels. Local governments only have an important say in those policies related to village public markets and local education and health services.

In conclusion, the findings show that of all the important variables identified in this study which link between rural and urban areas, the economic variables play the most important roles. This is clearly indicated through production and consumption linkages. Some rural products are sent to markets located in rural centers and small towns. Many manufactured products from urban areas flow directly from medium cities to markets and small shops in rural areas "by-passing" markets located in small towns and rural centers. The study shows that only a very small proportion of respondents visit markets located in rural centers. Many respondents (mostly the

wealthier farmers from the migrant villages) visit markets located in small towns and medium cities. In other words, it can be said that migrants tend to link to small towns and medium cities, and some migrants have connections to other big cities and regions. For nonmigrants, most links are only to rural centers and small towns. Thus, in general many respondents tend to visit a small town or medium city for specific reasons such as education, health, and shopping. At the same time urban products flow directly to markets in rural areas. Both these flows are "by-passing" the markets located in rural centers. The result of this is that the role of the rural center is limited to that of a service center for education, health, agricultural extension and as a center for subdistrict institutions. The rural center does not play the role that it could in facilitating economic activities that could help to accelerate rural development. The next chapter will analyze how such political and administrative aspects affect rural-urban development.

CHAPTER SIX

FINANCIAL LINKAGES BETWEEN CENTRAL, LOCAL, AND VILLAGE GOVERNMENTS

Introduction

The implementation of decentralization in Indonesia has had a narrow emphasis, as it has mostly been concerned with economic aspects. This is clearly demonstrated in the financial relationships between local and central governments. In these financial linkages, central government authorities exercise dominance over local governments, influenced by factors such as the degree of financial autonomy and the locus of control over expenditure decisions. Central governments dominate the transfer of funds to local governments through sectoral development funds, grants, and subsidies. The imbalances in financial relationships are also clearly evident in the fact that local own revenues make only a small contribution to local budgets. As a consequence, local government budgets depend heavily on central government contributions. However, village government funds are relatively less dependent on central government grants.

To understand the implementation of national development policies, it is crucial to consider the background of local governments, both provincial and district or municipality governments, because they are standing in the front line and interact directly with local communities. One important indicator of the nature and extent of the mediating role which local governments can play is the versatility of local governments in accommodating local communities' interests when faced with the central government's policies. In Indonesia, more than 70 percent of development funds for local government (both provincial and district or municipality government) flow from the central government (Booth, 1986; Kuncoro, 1995).

The control of the central government can be seen through the policies applied to all district and municipality governments, such as its clear-cut description of which sectors can be managed by local governments; identification of potential resource revenues which must be delivered to the central government; and the classification of taxes and fees that can be taken over as revenue resources for local governments. As a consequence, local governments have a limited influence compared to the sectoral policies produced by the central government. Such control is a part of the centralized sectoral development strategies. The People's Representative Council at provincial and district or municipality levels has no power to balance the executive authorities. Therefore, an analysis of local dynamics must pay careful attention to the central government's influence on economic and political aspects. Local communities are relatively weak in influencing policies for local development. Rather, such issues related to local development are heavily directed by central government and formulated in the context of national development. Local governments become a channel between local communities and the strong authority that backs central government bureaucrats and policies.

The main purpose of this chapter is to provide a general picture and analyze financial linkages between central, local, and village governments. Specifically, it identifies the domination of central government funded rural programs and projects via "specific *Inpres*" funds. In analyzing the local financial system, it is useful to understand the deficiencies in the structures which link central and local financial systems. This approach may also answer crucial questions about the future economic development in the region. This chapter seeks to answer the following major questions. What are the government structures for administration and implementation of decentralization in Indonesia? What are the links of central, local, and village financial systems? Finally, what are the links of central and provincial funds to local economic growth?

Decentralization in Indonesia

The history of decentralization in Indonesia has followed upon changes in political conditions as they have occurred during the history of the nation. The first draft of legislation on decentralization was introduced in 1893, by a member of the Dutch Parliament. It took ten years to discuss the bill which, when it was finally enacted in 1903, was known as `Decentralizatie Wet'. In general, the early decentralization law was based on political considerations with the aims being administrative efficiency and involvement of the locals in local governments. (Furnival, 1944 in Hoessein, 1996). The implementation of this law could not escape criticism. In practice decentralization was only `administrative decentralization', due to the fact that the implementation of duties in the regions continued to be carried out by authorities acting as extension arms of the central government (Hoessein, 1996). The act was later amended in 1922, making possible the implementation of the initial measures towards decentralization in Indonesia. The aim of the reorganization was to give local autonomy and local participation in implementing governance duties as Europeans (the Dutch in Indonesia) did (Angelino, 1931 in Hoessein, 1996). Hoessein states, however, that improving the constitution, administration, and introduction of council districts did not succeed in releasing political processes from bureaucratic control (Hoessein, 1996). During the World War II years, the Japanese occupying forces basically continued the local government system which had been established by the Dutch, with minor changes such as substituting Japanese words for Dutch.

The principles of decentralization were adopted by the present government of the Republic of Indonesia, as reflected in Basic Law No. 5 of 1974. This basic law formulated the legal framework for local governments and established the idea of `autonomous regions' (*daerah otonomi)* within Indonesia. However, it does not suggest the creation of a federation of districts

and semi-independent provinces. Local governments are obligated to organize and manage their own affairs in accordance with prevailing regulations determined by the central government.

Realizing that the autonomous regions are very important in implementing decentralization, the central government issued Government Regulation No. 45 of 1992, which stressed the implementation of autonomous regions with an emphasis on the district level (*kabupaten* and *kotamadya)*[1]. Based on Home Affairs Ministerial Instruction No. 105 of 1994, the central government has chosen 26 districts all over Indonesia as pilot projects[2] for implementing local autonomy.

Government Structure of Indonesia

In Indonesia, the People's Consultative Assembly (*Majelis Permusyawaratan Rakyat* [MPR]) is the country's highest political body. Every five years the MPR elects both the national president and the vice president. The country's president holds much power since his tasks include the appointment of both government ministers and the governors of the provinces. The People's Representative Council (*Dewan Perwakilan Rakyat* [DPR]) consists of members chosen from the MPR. This council has to be consulted by the president on the enactment of laws as well as for budgetary affairs. The ministers are placed directly under the power of the president. In addition to the various departments for which ministers bear direct responsibility, a number of very powerful non-departmental agencies are also present at the central level. These bodies report directly to the president. The most prominent among these agencies is the National Development Planning Board (*Badan Perencanaan Pembangunan Nasional* [BAPPENAS]).

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[1] *Kabupaten* is a subprovincial administrative district and *kotamadya* is a municipality, having the same administrative status as a *kabupaten*.

[2] The central government has chosen 26 districts to implement local autonomy prior to implementing decentralization in all districts in order to understand the strengths and weaknesses of local autonomy.

At the provincial level of government, Indonesia is divided into 27 provinces (*propinsi)*, each of which is divided into a number of districts (*kabupaten)* and municipalities (*kotamadya)*. For administrative reasons, the 300 districts and the 50 municipalities are subdivided into subdistricts (*kecamatan)*[3]. The lowest level of government is the village (*desa* or *kelurahan)*[4].

The government, at provincial as well as district and municipality levels, is comprised of legislative and executive arms. The legislative arm for the provincial level is the People's Representative Regional Council (*Dewan Perwakilan Rakyat Daerah Tingkat I [DPRD Tingkat I]),* and for the district or municipality level it is the People's Representative District Council (*Dewan Perwakilan Rakyat Tingkat II [DPRD Tingkat II]),* which is mainly comprised of elected representatives from the province and the district or municipality respectively. The executive arm at the provincial level is headed by the governor who is appointed by the president through the Minister of Home Affairs on nominations received from the DPRD *Tingkat I.* At district level, the *Bupati* is the head of the executive arm and is appointed by the governor. The mayor (*Walikota)* in the municipalities (*kotamadya)* is in a similar position. The subdistrict administration is headed by a *Camat* who is appointed by the *Bupati.* The latter office holder is also charged with the appointment of the village head (*Kepala Desa,* or *Lurah* for *kelurahan* in urban areas), who is in charge at this local level.

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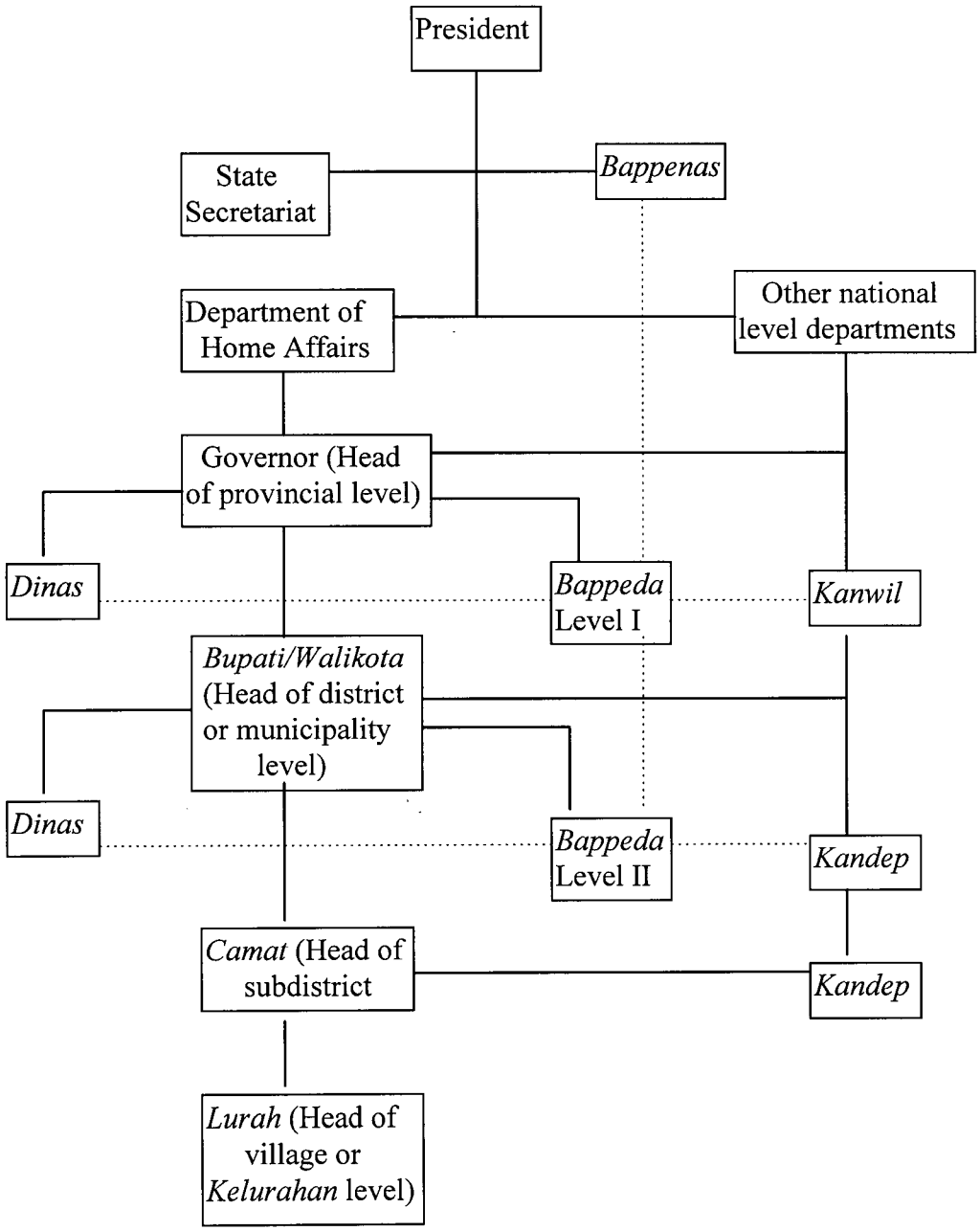
[3] *Kecamatan* is an administrative division (subdistrict) of the *kabupaten* (district) or *kotamadya.*
[4] *Desa* means village or rural community, and often is used interchangeably with *kelurahan.*

Figure 6.1
The Structure of Indonesian Government



Notes:
Kanwil = abbreviation of *kantor wilayah* (provincial level office of a central government ministry)
Kandep = abbreviation of *kantor departemen* (district or municipality level office of central government ministry and some *kandep* at subdistrict levels)
Dinas = local government agency, responsible to the provincial governor or *Bupati* at district levels, and with indirect links to the relevant central government department
Bappenas = National Development Planning Board
Bappeda = Regional Development Planning Board
Source: Modified form MacAndrews, Fisher, and Sibero (1982)

Financial Links Between Center and Region

With regard to the implementation of local autonomy, Indonesia's central government has transferred some responsibilities for governance duties and community services to the local governments at both provincial government and district or municipality levels. Thus, in addition to prepared subsidies and grants, the central government has also handed over some tax resources to local governments, such as motor vehicle taxes, land taxes known as PBB (*Pajak Bumi dan Bangunan)*, and radio taxes. These various taxes are classified as `dry resources' as they are relatively small. By contrast, the central government has retained the tax sources which are relatively large, such as income taxes and value-added taxes (*Pajak Pertambahan Nilai).* Approximately 97 percent of the revenues from all of these taxes are directly transferred to the central government (Shaw, 1987). A consequence of this policy is that the funds that can be gathered for local governments' own revenues (*Pendapatan Asli Daerah* [PAD]) are but a small fraction of the total funds that can be gathered by government from communities (see Table 6.1).

The issues of local autonomy and the financial balance between center and regions are continuously reverberating while the search for the best model applicable in the Indonesian context continues. The experiences of other developing countries have shown that there is no easy way to create a model for financial balance between the center and regions and among the regions, which can guarantee sustained and harmonious economic growth, justice, distribution, and national unity. The issue is critical because Indonesia is a huge archipelago state with an unbalanced population distribution and a huge variety in the levels of economic and social development in and among the different regions. Therefore, even if all tax resources were given to the regions to manage by themselves, such opportunities could only be enjoyed fully by densely populated regions with relatively high economic growth rates. Thus, the financial

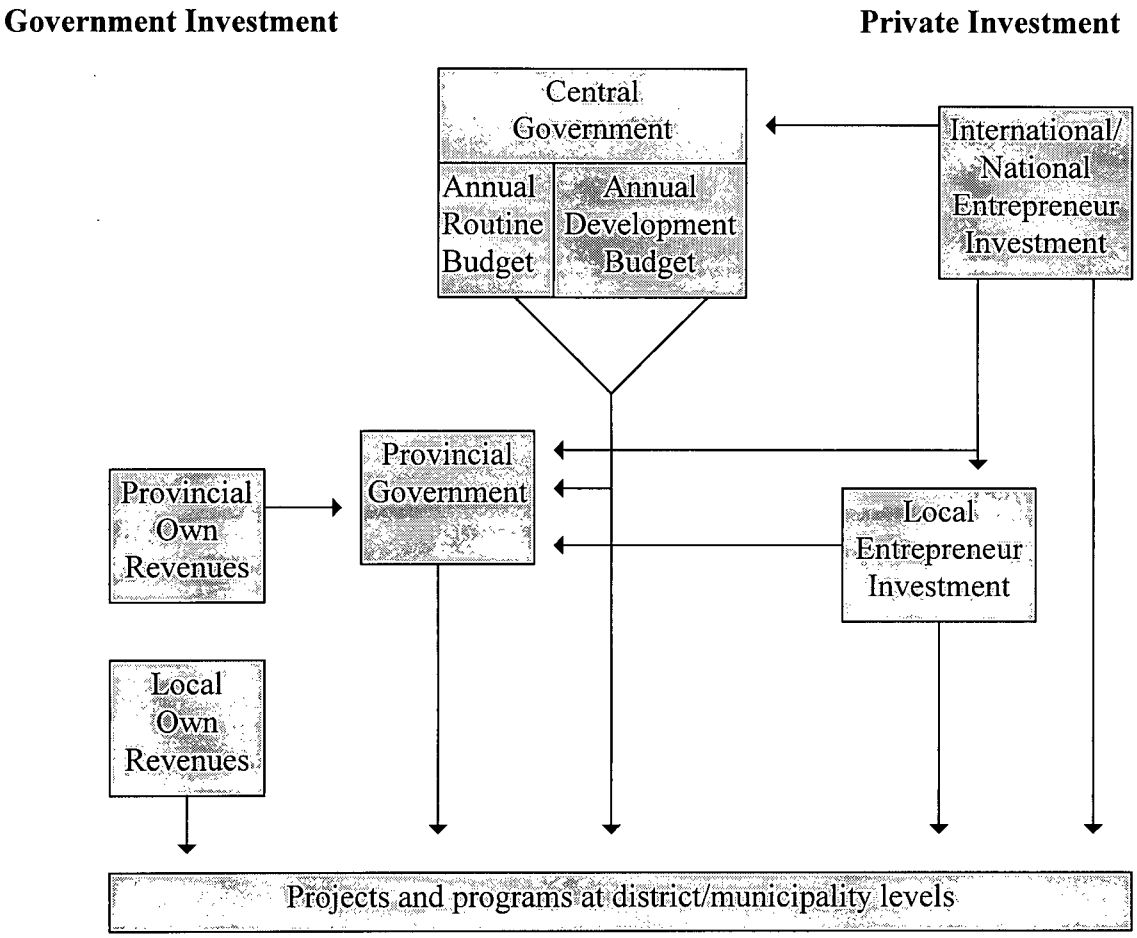
balance between the center and regions, and among the regions, could not be solved merely by the center granting new and potential sources of tax revenues (including big taxes on natural resources development) to the regions. If this concept were adopted, the gap among regions would widen.

The small proportion of the total revenues allotted to district governments is strongly related to the distribution system of revenue resources which are unevenly distributed among district, provincial, and central governments. Not only does the central government benefit from the current and potential wealth of revenues such as income tax, value-added tax, export-import fees, and other taxes, but the provincial governments also get their cut. In addition to the routine revenues which are already decided by central governments, there is a tendency for provincial governments to make every effort to dominate other potential revenue resources. As a consequence, district governments often get only the "leftovers". Most of the district income resources are classified as lean resources (*kurus)*, for instance, taxes for radios, pets, and automobile registration fees. This situation is clearly indicated, for example, in the fisheries industry, where the district government is allowed only to collect the auction fees while the fish catch taxes (which provide relatively large revenues) flow to the provincial government. A local staff person in the provincial planning and development board or *Bappeda Tingkat I* in North Sulawesi, commented that `the model of decentralization has been tried out in some districts (*kabupaten)* for almost three years, (but it) gave an impression of unclear conceptualization. The reasons can be seen in taxes. ... where all the primary tax resources are still centralized. Local government only processes the resources and funds which are relatively dry or very small.'

The other reasons for the small amount of revenue received by district government concerns its authority to manage a limited number of duties related to local autonomy. Before a recently-released regulation, the district government could only tackle five to seven matters

related to autonomy as a maximum while at the same time, provincial governments have been organized to take on 19 autonomy duties[5].

Figure 6.2
Intergovernmental and Private Sector Funds Flow in Indonesia



In some cases, such as the tourism industry, the central government has acceded to allot the sector to district governments. However, at the district and municipality level, tourism industries are still controlled by the provincial government. The unpopular reason usually trumpeted by both central and provincial governments is that the capabilities of the district governments' staffs are not ready to organize all matters related to that sector. Such reasons

[5] Autonomy duties are related to the kind of matters that could be organized by local governments, namely agriculture, plantation, fishery, public works, tourism, transportation, small industry, education, health, etc.

become a weapon for upper-level governments to resist devolving certain authorities to lower governments. Moreover, representatives of the Ministry of Home Affairs note that the quality of local personnel is relatively low because most have only graduated from secondary school, a standard of professional qualifications which is not suitable for increasing the capability to carrying out local autonomy (Kompas, 1 Maret 1993).

These perceptions, however, are different from the local point of view. Local governments complain that so far the central government has limited political will for empowering local governments—including local staff—therefore the central government usually states that there are only a few districts in Indonesia which are ready to organize local autonomy. In fact, the root problems are not far removed from the matter of central, provincial and district governments' disputes over allocation of financial resources.

Sources of Local Government Revenue and Problems

The local government is divided into two autonomous government administrations: provincial government (*daerah tingkat I*) and district government (*daerah tingkat II*), both of which have their own financial sections. These autonomous regions have the same system of financial statements as the central government, namely, routine revenues and expenditures, and development revenues and expenditures.

There are four levels of government which are allowed to raise revenues and implement expenditures: the central government; the province; the district or municipality; and the village or *kelurahan*. At the provincial level, two sources of revenue are the funds transferred to it from the center, and revenues raised within the province. Not all revenues raised within the province are at the disposal of the provincial government. Those collected through central government taxes, such as income tax, value added tax, and import duties, accrue directly to the central government.

Those revenues raised through taxes assigned to the district or municipality stay at that level. The province receives only those revenues such as taxes and `retributions' (usually user charges) which are collected within the provincial borders and assigned to the province (Booth, 1986, 1988; Devas, 1989). In reality the private sector plays an important role in financing infrastructure development in the region. However, since the data were not available in local governments' publications, this study focuses only on central and local government budgets. The intergovernmental and private sector funding flows are shown in Figure 6.2.

Table 6.1 indicates the importance of different sources of local government revenues for both Bolaang Mongondow and North Sulawesi. The main sources of revenue for the district government of Bolaang Mongondow and the provincial government of North Sulawesi come predominantly from central government and regional receipts. The data reveal that the proportion of revenue from central government accounted for less than 50 percent of the total in 1995/96 for North Sulawesi. Bolaang Mongondow's own local revenues show a decreasing pattern whereby in 1995/96 that proportion amounted only 9.29 percent. On the other hand, North Sulawesi's own local revenues show a tendency to increase and hit more than 50 percent of the total in 1995/96. One possible factor pushing up the region's own revenues may have come from increases in the clove tax retribution during a bumper season for cloves.

Another important aspect revealed in Table 6.1 is that between the two levels of local government, the provincial government generates the larger amount of own revenues. The provincial government's own revenues cover primarily provincial taxes and charges or retributions. There are three main taxes, namely motor vehicle ownership taxes, motor vehicle taxes (license), and property taxes. As in most other provinces, the most important taxes collected within and assigned to the province are those derived from the registration and change of motor vehicle ownership. This has accounted for over 80 percent of all revenues raised from

provincial taxes. This situation indicates an imbalance in revenue resources and also seems to be unhealthy. The taxes derived from motor vehicle ownership strongly depend on the fluctuating car market. Evasion of these auto taxes tends to be easy (Kristiadi, 1988). A wide variety of charges are meted out by the provincial government, but the revenues provided are generally less than those earned from provincial taxes. The yield from provincial taxation is relatively small, because the potential tax of the province is quite low. However, it is too difficult to determine whether the potential tax has been fully exploited.

Table 6.1
Bolaang Mongondow and North Sulawesi: The General Composition of Revenues, 1985/86-1995/96

Sources of Revenue	1985/86		1990/91		1995/96	
	(Rp million)	(%)	(Rp million)	(%)	(Rp million)	(%)
Bolaang Mongondow						
Central Government	1,962	63.99	8,028	83.38	11,166	86.78
Provincial Government	-	-	-	-	153	1.19
Regional Receipts	833	27.17	1,293	13.43	1,195	9.29
Borrowing; other receipts; and carry-over from previous year	271	8.84	307	3.19	352	2.74
Total	3,066	100	9,628	100	12,866	100
North Sulawesi						
Central Government	50,003	75.32	78,856	78.61	18,854	42.38
Regional Receipts	8,994	13.55	14,264	14.22	23,597	53.05
Borrowing; other receipts; and carry-over from previous year	7,389	11.13	7,187	7.17	2,033	4.57
Total	66,386	100.0	100,307	100.0	44,484	100.0

Source: Bappeda, 1995; Provincial Government of North Sulawesi, 1996

Table 6.2 shows the revenue sources for both Bolaang Mongondow and North Sulawesi. In 1993/94, 90.03 percent of Bolaang Mongondow's revenues were subsidies and grants derived from central government and higher levels of government, compared with North Sulawesi's 68.1 percent from the same sources. As in most other districts or municipalities, the main source of taxes collected within and assigned to the district or municipality are those derived from local revenues (including local retributions, land tax, entertainment tax, hotel and restaurant tax, advertisement tax, slaughter tax, dog tax, and radio tax) and local retributions (including market fees, bus terminal fees, parking fees, building licenses fees). These counted for 3.20 percent of all revenues from district taxes. These revenues raised within the region (*Pendapatan Asli Daerah)* in turn have amounted to about 0.61 percent of Bolaang Mongondow's gross regional product (GRP) over the same period. For North Sulawesi, local revenues were only about 1.7 percent of its gross regional product.

The proportion of local taxes and local retributions to the total revenues is relatively small both for Bolaang Mongondow (only 0.57 percent and 2.05 percent respectively) and for North Sulawesi (9.43 percent and 4.94 percent respectively). The reason for the very low proportion of local taxes and local retributions raised by district and provincial government is that the taxes allocated to the district or municipal and provincial governments are often insensitive to rising incomes, so that revenue collection tends to lag behind income (Booth, 1986).

The wide variety of district or municipality taxes is frequently regarded as too broad. The collection of some small taxes is laborious and requires collectors to undertake door-to-door operations. For instance, the dog and radio taxes are regarded as inefficient because the revenues are not significant and may be even lower than the collection costs.

Table 6.2
Bolaang Mongondow and North Sulawesi: The Composition of Local Revenues, 1993/94

Sources of Revenue	Bolaang Mongondow		North Sulawesi	
	(Rp million)	(%)	(Rp million)	(%)
1. Regional receipts	1,043	3.20	21,178	22.77
a. Local taxes	188	0.57	8,778	9.43
b. Local retributions	669	2.05	4,598	4.94
c. Profit from local public enterprises	13	0.04	1,350	1.46
d. Receipts from official services	81	0.24	595	0.64
e. Other receipts	92	0.28	5,857	6.30
2.Carry-over from previous year	549	1.68	2,259	2.43
3.Receipts from sharing taxes and non tax charges	1,660	5.09	6,236	6.70
a. Taxes	-		2,014	2.16
b. Non tax charges	-		4,222	4.54
4. Subsidies and Grants	29,339	90.03	63,336	68.1
a. Subsidies	19,109	58.63	22,063	23.72
b. Grants	10,230	31.38	41,273	44.38
5. Development revenues	-		-	-
a. Local loans	-		-	-
b. Borrowing from local enterprises	-		-	-
Total Receipts	32,591	100.0	93,009	100.0

Source: Bappeda, 1994

Table 6.2 reveals that local public enterprises contribute only a very small amount to the local own revenues category for both Bolaang Mongondow and North Sulawesi. This indicates that the potential revenue contributions of public enterprises to local government finance still remain to be fully explored. Local governments operate some form of public enterprises, most of which are inefficiently managed, resulting in pricing deficiencies, poor cost recovery or profit viability, and inadequate maintenance. There appears to be some reluctance to participate heavily in public enterprises, most probably due to the high capital costs, limited availability of financing, and the strict demands for competent management.

Local Own Revenues

The capabilities of district or municipality governments to participate in the economy, especially the freedom and authority to manage local resources by themselves, is one of the indicators of local autonomy. Utilizing local resources is based on Basic Law No. 32 of 1956, which constitutes the legal framework for the balance of finances in Indonesia. The resources of local own revenues (*Pendapatan Asli Daerah* [PAD]) are currently relatively small, or far less than enough to support the expenditures of local government, as indicated in Table 6.2.

Despite being one of the main sources of local revenues, the PAD's proportional contribution to the local budget has been constantly decreasing. In 1995/96, it amounted to only 4.94 percent of the total local budget. In other words, the local budget appears to be becoming more dependent on revenues from both provincial and central governments. In this case, Bolaang Mongondow relies more heavily on the subsidies and grants from the central government, as indicated in Table 6.1. Some of the most important district taxes and fee revenues in the last three years (1993/94-1995/96) are the development tax, street-lighting tax, bus and taxi terminal fees, market fees, and building permit fees.

As mentioned in the previous reviews of the theory of decentralization, the center point of local autonomy is at the district/municipality level (*kabupaten* and *kotamadya)*. However, Table; 6.1 and 6.2 indicate that Bolaang Mongondow depends mainly on the central government's budget transfers, indicating that the capabilities of local governments to exploit their own resources are still weak. It is understandable that the central governments' subsidies and grants dominate the funding of local development. Therefore, it can be said that the current capability for strengthening local autonomy, as based on fiscal indicators of decentralization, is relatively small.

Subsidies and Grants (*Inpres*)

The *Inpres* grants from the central government are classified into `specific grants', such as *Inpres Sekolah Dasar* for the maintenance, expansion or construction of primary schools; *Inpres Kesehatan* for primary health clinics, water supply and sanitary facilities; *Inpres Pasar* for market facilities; *Inpres Jalan* for maintenance and road construction; *Inpres Penghijauan dan Reboisasi* for regreening and reforestration programs; and `block grants' such as *Inpres Propinsi*, *Inpres Kabupaten* and *Inpres Desa* for grant allocations to province, district and village governments respectively. Since the 1994/95 budget year a new *Inpres* grant was released and called *Inpres Desa Tertinggal.* It is for supporting poor villages, and since the 1996/97 budget year, each subdistrict governments get grants (about 2 million *rupiah*) from the central government via district grants or *Inpres Kabupaten* (Kompas, 5 January 1996). The grants are crucial for the provision of basic services to the local population. Furthermore, these funds are important for creating income opportunities for the low-income groups, especially those residing in the periphery. However, the fact that a relatively large proportion of *Inpres* grants are allocated to local governments, with the stipulation that spending follow detailed technical guidelines, implies that these grants are not structured to give highest priority to the self-sufficiency of local governments in the quest for local autonomy (Morfit, 1986).

The block grants such as *Inpres Desa* for village projects, *Inpres Kabupaten* for district projects and *Inpres Propinsi* for provincial projects, are the only grants that are made available and which allow local authorities to exercise judgment about the kind of projects which are appropriate to the region. Even with the block grants, however, there are some restrictions. The general guidelines are strict. For instance, national agencies have determined that approximately 50 percent of the *Inpres Propinsi* funds must be spent only on projects specified by the Ministry of Public Works, mainly road maintenance and irrigation systems. There is also discretionary

spending, although the projects must be approved by central agencies (Ranis and Stewart, 1994). Of total grants received by local governments since the first five-year development plan (1969/70-1973/74) (*Pelita I*) the total number of specific grants is larger than the total number of block grants. Thus the national government has opened a small area of authority to local government for making development plans in the regions.

Village *Inpres* funds are small but relatively unconstrained, and can be used by local authorities on virtually any economic infrastructure project they choose. However, the technical guidelines for village *Inpres* funds restrict their use to the purchase of cement and other building materials such as steel bars, sinks, nails. All of these materials come from Java which is where most of the industries that produce such goods are located. In other words, all the *Inpres* funds flow back to the `center', and there are no spin-off benefits left behind in rural areas. Thus the main purpose of *Inpres desa,* to stimulate the rural economy, has not occurred and the spread effect of the grants has not yet materialized in rural areas.

The local governments are not completely free to determine allocation of funds because the substantial part of the grant is already committed by the central government before it reaches the provinces and districts/municipalities. Local governments become dependent on the central government and lose their creativity and flexibility because they must adjust and follow instructions from the bestower of funds. Therefore, local governments tends to act as instruments for enforcing all instructions from above, rather than as an apparatus with power to make independent decisions, as appropriate to the goal of local autonomy.

Local Government Expenditures

The central government makes large block grants to local governments to cover routine expenditures at both provincial and district/municipality levels. It also makes development grants

to the province, district/municipality, and village through the various *Inpres* programs. The general composition of expenditures for both Bolaang Mongondow and North Sulawesi is shown in Table 6.3. The data indicates that Bolaang Mongondow expenditures are more concentrated on development expenditures. Only in 1985/86 was the proportion of its development expenditures low compared to the proportion of its routine expenditures. For North Sulawesi, expenditures are concentrated on routine expenditures rather than development expenditures. Only in 1995/96 did North Sulawesi's proportion of development expenditures exceed half of the total expenditures.

Table 6.3
Bolaang Mongondow and North Sulawesi: The General Composition of Expenditures, 1985/86-1995/96

Expenditures	1985/86		1990/91		1995/96	
	(Rp million)	(%)	(Rp million)	(%)	(Rp million)	(%)
Bolaang Mongondow						
Routine Expenditures	2,499	89.57	3,306	34.80	11,271	49.30
Development Expenditures	291	10.43	6,192	65.20	11,594	50.70
Total	2,790	100.0	9,498	100.0	22,865	100.0
North Sulawesi						
Routine Expenditures	43,259	73.43	88,100	72.53	49,399	48.39
Development Expenditures	15,655	26.57	33,359	27.47	52,690	51.61
Total	58,914	100.0	121,459	100.0	102,089	100.0

Source: Provincial Government of North Sulawesi, 1996

The detailed expenditures of Bolaang Mongondow and North Sulawesi are shown in Table 6.4. The expenditure patterns of Bolaang Mongondow show that the proportion of routine expenditures far exceeded development expenditures. Routine expenditures accounted for 65.78 percent and development expenditures for only 34.22 percent of spending. The expenditure pattern of North Sulawesi was more concentrated on development expenditures. Its proportion of

the total expenditures was about 53.33 percent, compared with routine expenditures which accounted for 46.67 percent.

Table 6.4
Bolaang Mongondow and North Sulawesi: The Composition of Expenditures, 1993-1994

Expenditures	Bolaang Mongondow		North Sulawesi	
	(Rp million)	(%)	(Rp million)	(%)
1. Routine expenditures	20,982	65.78	42,417	46.67
a. Personnel expenditures	18,980	59.50	20,001	22.00
b. Goods expenditures	1,043	3.27	9,889	10.88
c. Cost of maintenance	144	0.04	1,745	1.93
d. Official government travel	262	0.08	1,704	1.87
e. Others	412	1.29	4,808	5.29
f. Debt installments	10	0.003	20	0.02
g. Subsidies for lower government	0	-	1,872	2.06
h. Pension	0	-	0	0
i. Other operating expenditures	131	0.04	2,378	2.62
2. Development expenditures	10,912	34.22	48,463	53.33
Total Expenditures	31,894	100.0	90,880	100.0

Source: Bappeda, 1994

The routine expenditures for both Bolaang Mongondow and North Sulawesi were mostly concentrated on personnel expenditures, which accounted for 59.50 percent and 22.00 percent respectively. The data indicate that for Bolaang Mongondow, the proportion of personnel expenditures accounted for more than half of the total expenditures. In other words, the funds for the development expenditures were relatively small. Development expenditures in both Bolaang Mongondow and North Sulawesi have concentrated on the construction and maintenance of infrastructure and government facilities, including new buildings. Expenditures for social welfare got only a very small proportion.

The data from Table 6.4 also indicate that Bolaang Mongondow's basic finances were weak compared to the financial structure of the provincial government of North Sulawesi. According to Basic Law No. 5 of 1974, the emphasis of an autonomous region is based on the district/municipality (*kabupaten/kotamadya)* level. However, the structure of financial data in Table 6.4 suggests the opposite. For example, the district government of Bolaang Mongondow used more than half of its total expenditures for personnel and administrative expenditures. It had only a relatively small proportion of the total expenditures which it could freely manage for development expenditures. This shows a clear picture from an "autonomous" government region where the resources and funds are limited and the local government depends highly on the central authorities, as a result of the strict control exercised over funding by the central government through the Ministry of Home Affairs over local governments.

Village Finance

Village administration is different than those at the provincial and district levels, because the financial and administrative services of the villages are not directly controlled by the Ministry of Home Affairs as they are at the higher levels. Finance at the village level follows the model that applied at provincial and district levels, which is a budget divided into routine revenues and expenditures, and development revenues and expenditures.

The revenues accruing to rural villages are expectedly small compared with those accruing to either district or to provincial levels. In fact, however, the villages are less dependent on subsidies than either of the two higher levels. In general, the villages revenues shown in Table 6.5 illustrate that in 1995/96 subsidies from central the government amounted to less than 45 percent, with the exception of only one village where subsidies accounted for more 51 percent of all revenues accruing to the villages. The subsidies from provincial and district levels counted for

less than 18 percent, and in one village only 10 percent, of the total revenues. The subsidies distributed from central, provincial and local governments to the villages indicated that two villages, one nonmigrant and one migrant, received subsidies worth more than 60 percent and another two villages, again one nonmigrant and one migrant, received subsidies of less than 60 percent of the total village revenues. Thus, there is not a clear pattern to indicate the different financial linkages between the three higher levels of government (central, provincial, and local government), and village governments, especially when the data are separated into categories of nonmigrant village and migrant village[6].

Table 6.5
The Composition of Nonmigrant and Migrant Villages Revenues, 1995/96 (thousand)

Source of Revenue	Nonmigrant				Migrant			
	Doloduo		Dondomon		Mopuya Selatan		Mopugad Selatan	
	(Rp)	(%)	(Rp)	(%)	(Rp)	(%)	(Rp)	(%)
1. Village receipts	4,500	32.8	4,400	33.0	5,200	32.8	1,925	16.6
a. Administration fees	500	3.6	900	6.7	2,000	12.6	160	1.3
b. Market	*	-	-	-	*	-	365	3.1
c. Village land	4,000	29.2	3,500	26.3	3,200	20.2	1,400	12.0
2. District government	220	1.6	95	0.7	200	1.3	180	1.6
3. Provincial government	1,464	10.7	2,214	16.7	1,400	8.9	1,500	12.9
4. Central government Grants (*Bandes*)	6,000	43.8	6,000	45.0	6,000	37.9	6,000	51.7
5. Community self-supporting**	1,500	11.0	600	4.6	3,000	19.0	2,000	17.2
Total	13,684	100.0	13,309	100.0	15,800	100.0	11,605	100.0

Note: * Market retributions taken by local government
** Refers to voluntary contribution in cash and kind by the village populations.
Source: Village Offices, 1995

[6] This finding is resembles data from Central Sulawesi, where more than 50 percent of village's revenues were contributed by the three higher levels of government.

In general, the village's routine revenues derive mainly from village land, administration fees, and village market retributions. In the case study, this accounted for more than 30 percent, and in one village less than 17 percent, of the total village revenues. This is because revenues derived from village land and administrative fees are small compared with other villages. Voluntary contributions in money, labor and in kind (*swadaya masyarakat*) for three villages accounted for more than 10 percent, and in one village only about 4.3 percent, of the total village revenues. These facts indicate that in relation to the financial sector, the two higher government levels (provincial and district governments), function as local agents of state authority, and yet although the villages are also controlled by the center through subsidies and grants, they can function as local institutions to accommodate village communities' desires.

The village's expenditures are mostly concentrated on the village's physical infrastructure projects, including improving village irrigation networks, village roads, and bridges. The expenditures for those projects, according to village officials, eat up around 70 percent of the total village revenues. Some part of the village revenues is allocated for maintenance of village offices and administration, and most of the subsidies received from provincial level in addition to some village revenues received from village land is used for the salaries of the village officials.

Local Economic Development

Regional or local economic growth is strongly related to national economic growth, and in some cases its connection creates conglomerate business links. Business patterns found in the center also influence the regions and local areas, as clearly shown in the issues of strong competition between local entrepreneurs (*pengusaha*) and non-local entrepreneurs (entrepreneurs from outside the region) in North Sulawesi, and especially in Bolaang Mongondow. Political authorities have the power to control the flow and level of the development of physical projects,

but usually lack the professional and commercial skills which an entrepreneur provides. The consequence, as happens in the center, is that those political authorities and local entrepreneurs create unique relationships in moving the regional or local economy.

The data in Tables 6.1 and 6.2 also indicate that the grants from Jakarta through *Inpres* and lists of approved project proposals (DIP) have played important roles in increasing the local economy's growth. Therefore, government projects provide many opportunities for local entrepreneurs to do business. As a consequence, the close relationship between local entrepreneurs and the political authorities becomes very important for the local business environment. This is obvious in North Sulawesi, and especially in each of the district capitals (*kabupaten)* and the provincial capital, Manado, where most local entrepreneurs who are dealing with government projects have very strong connections with certain local officials (*pejabat)* and project directors (*pimpro*), especially those bureaucrats who have power both in deciding and carrying out government projects. A local entrepreneur who runs businesses in the region including a construction company, and who has strong connections with both provincial and local bureaucrats, stated that `the likelihood of an entrepreneur "getting" a project is extremely dependent on what percent of the total project budget the entrepreneur is willing to offer to the officials and project directors'. A study by LIPI reveals that this collusion of entrepreneurs could be found in all seven provinces taken as study areas (LIPI, 1993). It is probably difficult to legally prove, however, that the collusion occurs everywhere, and that it is a destructive influence on business ethics and the operations of the formal economy which already exist. The regulations are quite often ignored or by passed over by entrepreneurs because they are involved in business networks and are thus protected (Rudini, 1995).

Another impact of this collusion is that it weakens local potential in business. It is generally agreed that the implementation of central government projects should be closed to the

active business interests of politicians. It is quite often found, however, that the entrepreneurs who received big roles in carrying out government projects are also political authorities, not only in the center but also in both the province and district or municipality, where their companies are run by their children, close family members, or close friends. These situations occur not only in regard to government projects. They are also encountered in the real environment of private business, and are more common in government projects funded by *Inpres* and DIP. The other factor which can be controlled by political authorities, both in the center and local regions, is that related to the lengthy bureaucratic procedures which must be followed to get the permissions, especially for those activities related to industries, trade commodities and business services. In this context, entrepreneurs face heavy burdens in running their businesses, and as a consequence it creates high economic costs at the local levels.

The complexity of regulations is a product of the economic system which gives opportunities for institutions to seek rent. This kind of bureaucracy creates a burden of high added economic costs for import substitution companies, but it is also affects companies oriented to the local market which enjoy strong government protection from imported goods. While export industries are also affected by a rent-seeking bureaucracy, they can not impose that cost on consumers. If they did, their products would not be competitive in national and international markets. As a consequence, in Indonesia, the entrepreneurs become too stingy with their workers. However, even if the high economic costs were decreased, it would not automatically increase laborers' wages to the level which is enough to support their lives and families. These workers are local people who come mostly from rural areas.

An economic structure such as this requires restructuring. However, the main question is how restructuring can be undertaken without negative impacts on political stability. In general, the entrepreneurs have strong links with the government authorities (*penguasa)*. Therefore,

deregulation is also a threat to the collusion between capitalists (*pengusaha)* and authorities (*penguasa)*. Thus it is clear that at certain points, deregulation becomes extremely difficult to implement since it touches the issue of political economy where there is a `symbiotic mutuality' between government and capitalists. However, without restructuring, the capacity for competition is weakened because of increasing domestic costs.

The presence of big private investors in local regions not only creates new job opportunities for the local people but in some cases creates conflicts with the local people, because they are competing for the same resources. For example, this problem is related to the position of customary law (*hukum adat)*, especially those related to *ulayat* right (*hak ulayat)*[7] of Mongondownese in North Sulawesi. The exploitation of natural resources, such as gold mining, by private companies leads to conflicts with the local people who are living in the exploited areas. The main problem is that the *ulayat* rights are not recognized as law by the local government, and especially the National Land Board and the Department of Forestry (*Kanwil Kehutanan)*. This problem has also arisen in other regions such as in East Kalimantan with the Dayak tribes (*suku Dayak)*, and indigenous people in Irian Jaya whose land is under exploitation by private nonlocal companies, such as timber and mining companies. The government's failure to recognize *hak ulayat* has very negative effects on the welfare of local peoples, such as the Mongondownese, Dayak, and Irianese. These problems need to be given serious attention by both central and local governments, with the focus on how to create a political mechanism that can function as a stream for social interests, the economy, and local people. The process of economic growth too often means an increase in the number of foreign and local investors, who bring with

[7] *Hak ulayat* is the right to use and exploit the unutilized land within the territory of the customary lands by local communities.

them the power to push local people from their own traditional lands because of the economic clout which government shares with entrepreneurs.

Regarding the highly competitive global economy, which will become even more so in the future, local bureaucrats need to change their attitudes and roles from acting as passive bureaucrats who just want to be served, to active professional bureaucrats equipped with entrepreneurial skills for promoting potential local resources to international, regional, national, and local investors. The old way of thinking, such as seeking rents or bribes, has to be changed to one which instead focuses on preparing facilities and services to attract investors. Thus, local governments have to become the main players campaigning for investment. With these investments, the local economy will move forward, absorbing more workers and increasing value-added, profits, and taxes. The final impact of these investments is that multiplier effects will occur in the region. In turn the region can act as a growth center.

Conclusion

The main trend indicated by this study is that the local governments, including both the district (Bolaang Mongondow) and the provincial government (North Sulawesi), depend heavily on central funds, given in the forms of subsidies and block grants. These findings are not surprising since all local governments in Indonesia are facing the same problems (Devas, 1989; Kuncoro, 1995). Local governments' high dependency on central funds is exacerbated by the limited capacity which local governments have to accumulate local own revenues. However, village government funds are relatively less dependent on central government grants. Despite Public Law No. 5 of 1974, which emphasizes local autonomy at district and municipal levels, in terms of financial systems, local governments are still far from the stated goals of local autonomy.

In stimulating and improving local economic development, several actors play important roles in the region (as shown in Figure 6.2). The central government can be identified by its sectoral departments through which are funded most of the projects and programs at district and municipal levels, and `specific grants' or `specific *Inpres*' funds. These funds are designated by the central government for specific uses, especially in areas of health care and primary education, and there is no local decision-making with respect to their allocation. The second actor is the provincial government. Although it has a minor role in terms of contributing funds to local governments, it plays a crucial role in terms of negotiating with the central government and entrepreneurs, and issuing information and permits for both national/international and local entrepreneurs who are involved in regional development. The third set of "players" are the local bureaucrats who make regulations, manage, implement, monitor, and evaluate all projects and programs carried out by both the local government and private sector in the region. The link between local bureaucrats and entrepreneurs is clearly indicated by the dependence of local entrepreneurs on economic opportunities offered by the government projects and programs. In this respect, the entrepreneurs access the governments' projects as they are offered by local bureaucrats. Most of the local entrepreneurs have special relationships with the local bureaucrats such as the ties of close friends, relatives, or inlaws. In other words, there is collusion between local governments and entrepreneurs. The final set of actors are the national and local entrepreneurs. The national entrepreneurs have strong links to almost all levels of government, and also to local entrepreneurs. Therefore, it is not a surprise to find that all big projects (either government projects or private sector projects) in the region are monopolized by entrepreneurs from Jakarta. Thus, the local entrepreneurs are left to deal only with the projects which are relatively small in terms of potential profits.

The study also indicates that the low levels of local own revenues are strongly related to the following factors.

(1) The strictly centralized fiscal system causes most large potential resource revenues to flow to the center.

(2) Only a limited number of the many sources of tax can be relied upon by local governments.

(3) Local enterprises contribute only a very small proportion to the local own revenues.

(4) The quality of service offered by local bureaucracies is quite low.

Improvements in the financing of local development calls for corrective action with respect to both revenue generation and collection, and expenditure allocation. Moreover, the assistance of the central government in resolving the problems of local government finances are as important as the actions to be taken by local governments themselves.

There has been no substantial change regarding the conceptualization of local autonomy since it was announced in Basic Law No. 5 of 1974. So far the usual definition of local autonomy is always related to the issue of how capable local government is of exploiting local resources, or percentage of the local budget which can be contributed by local revenues. Thus, local autonomy is always related to `money'. Since April 1995, central authorities have chosen 26 districts as pilot projects for implementing autonomous regions. Under this project the concept of autonomy concerns the transfer of duties of the local agency (*dinas)* level in the 26 districts. There has been no major change in the conceptualization of autonomy itself.

In short, the findings show that there is a strong relationship between central government funds and the programs/projects implemented in the villages of the case study areas. It is clearly indicated that rural development policy focuses on the goal of rice self-sufficiency. This is accomplished by emphasizing a rice production program and transmigration program which strongly support the policy of rice self-sufficiency and which is directly funded by the central

government. The programs and projects implemented in the villages of the case study areas are directly controlled by development agencies located at provincial and district levels and are supported by village heads and officials. Most of the programs and projects for rural development are directly funded by the central government. Provincial and district governments are only funded for minor programs and projects related to rural development because of limited funds and resources. Thus, rural development in the case study areas is strongly controlled and funded by the central government. Because of this, local governments only deal with administering the system rather than controlling the program and projects implemented in the region. This chapter has discussed the financial linkages among central, provincial, local, and village government and their relation to economic development in the region. The next chapter will concentrate on top-down and bottom-up approaches to planning. The next chapter will also deal with the question of how local people participate in the planning process itself.

CHAPTER SEVEN

THE PLANNING PROCESS

Introduction

The bottom-up planning model—which is intended to balance the top-down tradition of planning—was introduced in 1983 by Indonesia's central government via the Ministry of Home Affairs' regulation No. 9. It deals with the procedures for coordinating projects and programs from the lowest level of government to the central government. Scrutiny reveals, however, that the process of bottom-up planning exists only in theory, rather than in real deeds. The many constraints at the local level (including limitations of resources, bureaucrats' resistance, and the lack of local leaders) are directly contributing to the relatively low participation of village communities in both the planning process and implementation of development programs and projects in the region.

The aim of this chapter is to demonstrate and analyze the process of bottom-up planning which starts from the very bottom level of the government hierarchy at the village level (such as in the case study area), moves to the subdistrict level and finishes at the national level. At the same time, the process of top-down planning is analyzed from the central government level down to the subdistrict level and finally to the village level where programs and projects are implemented. This chapter also identifies and analyzes the concept of development planning in Indonesia. The means to this end is an in-depth investigation of the process of compiling the five-year development plan, development budget, and development control. There will also be an effort to identify some of the characteristics of planning in Indonesia. The second section deals with the process of compiling the regional development plans and, specifically, with identifying

the compilation process for long, medium, and short term regional development plans. The third section examines how the bottom-up and top-down planning processes work, through an analysis of issues such as the roles of the department agencies, the functions of the district or municipality planning and the development board (*Bappeda*), coordination among the institutions and agencies involved in planning, the human resources of the planning board, local autonomy, community participation, and the roles of local leaders.

The Concept of Development Planning in Indonesia

Compiling the Five-Year Development Plan

In Indonesia, prior to assembling the various development programs into the document of a five-year development plan (or *Rencana Pembangunan Lima Tahun [Repelita])*, all government institutions at the district and provincial levels, such as representative offices of central government departments at the provincial level (called *Kanwil*) and at the district/municipality level (called *Kandep*), and all offices of provincial and district/municipality governments that provide services in specific fields (e.g. agriculture, health, education, transportation, etc.) or local agencies (called *Dinas*), and bureaus must create a working plan. The compilation of plans also happens in each department and institution at the national level. Furthermore, all plans which have been decided need to be formulated and synchronized to later become departmental plans, called sectoral plans. At the provincial level, the provincial development planning board (or *Bappeda Tingkat I*) formulates the basic development policies, while the basic development policies work at the provincial level, and at the district/municipality level there is the district development planning board (or *Bappeda Tingkat II*) which prepares the basic development policies for the district/municipality level.

After formulating the national five-year development plan, which is based on all of the department plans and basic development policies of provinces, the national development planning board (*Bappenas*) formulates the statute related to that national five-year development plan and declares it to be implemented in all regions of Indonesia as a national five-year development plan (*Repelita Nasional*), and at the provincial levels as provincial five-year development plans (*Repelita Daerah*).

The central government through the auspices of Bappenas arranges the national five-year development plan (*Repelita*) based on the *Pancasila*[1], the 1945 Constitution, and the Broad Outlines of State Policy (or *Garis-Garis Besar Haluan Negara* [GBHN]). The budget for the national plan comes from the yearly national budget, meaning that all coordination among departments is held at this stage. Coordination among departments is extremely important in order to avoid an unbalanced budget distribution. Implementation is carried out by each department and other government institutions. At the provincial level, the provincial five-year development plan is proposed by the provincial *Bappeda* to the Governor as the head of the province. The Governor then delivers that provincial plan to: first, the Provincial People's Representative Council (*DPRD Tingkat I*), which is especially responsible for regional development; second, the Department of Home Affairs for feedback about the planning itself; third, the President through the Minister of Home Affairs.

Furthermore, the provincial *Bappeda* compiles and synchronizes the regional plans with the national plan. All the heads of provincial agencies (*Dinas)* and other government institutions at the provincial level report directly to the Governor. In order to use the provincial budget,

[1] *Pancasila* is the official ideology of the Republic of Indonesia consisting of five basic principles: belief in God; humanitarianism; national consciousness; social justice; democracy.

approval by the Provincial People's Representative Council (*DPRD I*) is required. All heads of *Dinas* and other institutions also have to report and be responsible for the budget to the finance board through the Governor. The finance board sends all financial reports to the Provincial People's Representative Council.

At the district and municipal level, the roles of district head (*Bupati)* and municipality head (*Walikota)* are very important. They have the same role, function and responsibility as the Governor does. The five-year development plan at the district and municipality level has to be approved by the District or Municipality People's Representative Council (*DPRD Tingkat II*) and then sent to the upper level. The main differences in planning at the district and municipality level are as follows:

First, *Bupati* or *Walikota* proposed a plan for the district or municipality which has been arranged by a special team. That plan must be approved by not only the District or Municipality People's Representative Council but also by the Governor and the Minister of Home Affairs. Second, the *Bupati* and *Walikota* have important roles in coordinating and implementing both sectoral and regional programs, because most of the programs have to be implemented in the district and municipality. Third, the plans at the district and municipal level have to parallel provincial and national plans. In practice, however, some small variations are allowed which many differ with provincial and national programs provided they are not in conflict.

Fourth, the *Bupati* and *Walikota* coordinate planning with all heads of subdistrict (*Camat*), who in turn coordinate with all village and *kelurahan* heads. The budget for programs which are considered district and municipality projects have to be conveyed to the District or Municipality People's Representative Council through the finance boards in each *Kabupaten* and *Kotamadya*. However, the budget for provincial and national projects or sectoral projects that

are implemented in *Kabupaten* and *Kotamadya* must be conveyed to the finance board at the provincial level.

Development Budget

The programs listed in the national five-year development plan are directly funded by the national budget (or *Anggaran Pendapatan dan Belanja Negara* [APBN]). The budget is proposed to the National People's Representative Council (or *Dewan Perwakilan Rakyat* [DPR]) approximately four years before that budget is effectively used. Once the DPR approves the budget, April 1st dates the beginning of the budget year. Based on the national budget, each department and institution at the central level formulates yearly operational programs. Formally, the development budget is delivered by the Minister of Home Affairs via the Governor to each department and to the province before the first of April.

The national budget includes resources from both national revenues and overseas funds such as loans with very low interest rates and grants that can be utilized for financing development programs. Utilization of the budgets is undertaken by each department, institutions, and province after compiling the list of project activities (DIKs) and the approved projects (DIPs) for the development activities plan. The list of project activities is needed for implementing the routine activities that have been identified following the organizational hierarchy from the bottom levels up to the department at the central level.

At the provincial and district or municipality levels, the development plan has to be accepted by the provincial, district or municipality People's Representative Council (*DPRD Tingkat I* or *DPRD Tingkat II*). Those plans include the development budgets called provincial or district plans.

Development Control

Implementation of the national and regional development programs and budgets is controlled by institutions such as the State Auditing Board (*Bapeka*), the Director General of Budgeting, the Director-General of State Budget Auditing, and the Inspectorate of Development. At the provincial and district or municipality levels, the tasks of those central level institutions are delivered and implemented by the Regional Inspectorate. The Inspectorate of Development is directly responsible to the President and Vice President for all its tasks. The State Budgeting Board delivers all its reports, concerned with the activities of implementing national budgets, to the National People's Representative Council (DPR). The Director General of Budgeting reports to the Ministry of Finance. The Regional Inspectorate is responsible directly to the Ministry of Home Affairs via the Governor.

Some Characteristics of Planning in Indonesia

The planning processes and the relationships among various levels of plans have at least six sets of characteristics. First, the five-year national development plan (*Repelita*) is a comprehensive plan and has national characteristics. The plan contains general guidelines to be followed by the central government. The national *Repelita* includes sectoral plans and regional plans from provinces all over Indonesia. In this document, the planning statements list only the important programs to be carried out, such as those already listed in various long-term plans.

Second, the plans of departments and government institutions are classified as sectoral plans, with the main emphasis on the coordination of budgetary issues. Because they only relate to utilization of budgets, these plans are known as budget plans. It can be said that these plans are the main sectoral plans.

Third, ideally, the provincial plan should be a regional comprehensive plan which is adjusted to local conditions. In reality, however, these provincial plans are often `merger plans' derived from various sectoral plans which exist in the province and are combined with some ideas which have been proposed by district and municipality plans, and further adjusted to the national *Repelita*. These provincial plans also include budget plans complete with details. Thus, provincial plans mainly consist of administrative and budget components.

Fourth, the district and municipality plans are almost the same as provincial plans, except for the fact that the former are formulated based on the opinions originating from these regions. Parts of these district and municipality plans are based on basic physical plans. The district and municipality plans consist mainly of administrative and physical plans.

Fifth, the subdistrict plans are likely to include an approach for planning implementation which has been decided at a higher level of government, such as a district or municipality. Implementation is pursued through vertical coordination between district and village, and horizontal coordination among villages located in the subdistrict areas.

Sixth, the village plans in many cases are proposed only with statistical numbers or dreams which will never come true, because often what the villagers hope for does not fit the reality of village conditions.

There is no development process without problems, because differences in local conditions have direct consequences on the strategies and priorities for development. Some problems appear as a consequence of clashes in the functions distributed among national, provincial, district and municipal governments in formulating and implementing plans. It quite often happens that the distribution of authority and responsibility for implementing the plan and development occurs with relatively weak coordination and control, and as a result creates many

problems. There are duplications of authority resulting in a lack of coordination, unorganized investments, and squandering of scarce local resources.

The other general problem is the limited number of personnel who have the necessary skills for implementing development plans. This is clearly evident at the bottom levels such as that of village, subdistrict and district, and at some points it is also indicated at the provincial level. In many cases untrained bureaucrats at the bottom levels play the role of planner. Therefore it is not surprising that the plans they make are more likely to be `shopping lists' rather than real plans. At the national level, the main development plans and guidelines are relatively well-prepared and documented. At the bottom levels the human resources and the systems are relatively weak and unsystematic, so development plans and orders from the center in many cases can be translated or implemented more easily and in a more successful manner than local plans.

Without a good integrated authority for carrying out the government activities at the local level, the priorities listed in the plans become muddled. For instance, the different sets of priorities decided in formulating top-down planning or bottom-up planning often cannot fit each other. This was clearly shown in two of the case study villages. The villages prioritized a plan for repairing the main irrigation system which was broken due to floods. Villagers also expected the budget to come from upper level governments, which had instead given higher priority to providing credit to support farmers in improving rice production. Thus, the budget was not available for the villagers to use as they had expected.

The Process of Compiling Regional Development Plans

The regional development planning system (*Sistem Perencanaan Pembangunan Daerah* [SPPD]) is a part of the national development planning system (*Sistem Perencanaan Pembangunan Nasional* [SPPN]). These national and regional development planning systems

were designed based on the 1945 Basic Constitution and the Broad Outlines of State Policy (*Garis-Garis Besar Haluan Negara* [GBHN]). The planning procedures for district or municipality and subdistrict levels are also based on the provincial and national planning systems, because the subdistrict and district or municipality development efforts are a subset of national development.

With regard to the financial systems, at the national level, the financial aspects of development are stated in the national budget (APBN) and determined by regulation. At the provincial and district or municipality levels, the budget is determined by the provincial budget (*APBD Tingkat I*) and local budget (*APBD Tingkat II*) respectively.

The planning process for regional development (*Proses Penyusunan Perencanan Pembangunan Daerah* (PPPD*)* has to be adjusted to the length of time in which that development will be carried out. Based on the law, there are three kinds of time span mechanisms in the planning process for regional development. First, compiling the long-term regional plan is called the basic patterns of development *(Pola Dasar Pembangunan)*. Second, compiling the medium-term regional plan is called the pattern of regional five-year development plans (*Pola Repelita)* and third, compiling the short-term regional plan is called the national budget (APBN) or project pattern (*Pola Proyek*). Each of these processes of compilation will be discussed in the following section.

The Compilation of Long Term Regional Development Plans

At the regional level, there is the basic pattern of regional development (*Pola Dasar Pembangunan Daerah* [PDPD]) which covers the general integration and sustainability of the regional development programs. In the planning process there are several stages as follows:

Stage I is called the preparation stage. The local government attempts to accommodate the aspirations of all peoples in that region through the representation of their member of the People's Representative Council at provincial and district or municipality levels. These aspirations are taken as statements which have to be considered by all government levels. Local governments can help in gathering information on aspirations from the communities in the region. In this case, some new and improved ideas come from the local bureaucrats.

Stage II is known as the Compilation of Draft I. Planning based on the information and aspirations gathered at Stage I is compiled and discussion begins on how to improve the draft in order to render it feasible for implementation.

Stage III is known as Discussion of Draft I. The discussion with communities is carried out with participation by stakeholders such as informal leaders and elders, social organizations, experts from university, local agencies (*Dinas*), and government institutions. The goals of the meeting are to analyze whether the people's aspirations and needs which were articulated in Stage I can be formulated and operationally implemented. In many cases, this meeting is held several times (as often as possible) to involve stakeholders in the meetings with the hope that the information for the regional development planning can be made more complete.

Stage IV is called the Compilation of Draft II. Based on discussions in Stage III, the draft is adapted. By this stage, it is hoped that the draft is better than the draft of Stage II. Further, the discussions at this stage have to be more prepared and organized, with hopes that the meetings result in something close to the final draft.

Stage V is called Discussion of Draft II. The results of the discussion are expected to be a final draft. The stakeholders in the meeting are the same as those stakeholders who attended the Stage II meeting. Therefore, if there is a need for revision since the early draft has already been

revised, there should be fewer problems completing the draft because of consensus-building in the early stages.

Stage VI is known as the Preparation of the Final Draft. Based on the draft produced in Stage V, the final draft of the basic patterns of regional development is compiled and later sent to the provincial or district/municipality People's Representative Council (DPRD) for approval. It often happens that local bureaucrats lobby to the council in order to ensure that the draft has accommodated the majority of communities' aspirations and needs.

Stage VII consists of delivering the final draft to the People's Representative Council. At this stage, the Governor (for the provincial level) and *Bupati* or *Walikota* (for the district and municipality level) submit the final draft to the People's Representative Council for further discussion and approval. The People's Representative Council establishes a committee for discussing the draft and presents it in the plenary session for formalizing it as a local regulation and which is then proposed and approved by the Minister of Home Affairs.

The long-term planning process of basic patterns of regional development requires a long procedure before it can finally be decided as a local regulation, which then binds all bureaucrats in local government (including local agencies (*Dinas*) and government institutions) to the duty of implementing it. Afterward, if stakeholders complain or disagree with the contents of the development plan, their opinions have to be accommodated through the procedure available at the next meeting.

The Compilation of Medium-Term Regional Development Plans

The medium-term arrangements for regional development planning are shown in the five-year regional development plan (*Repelita Daerah*). The *Repelita Daerah* spells out the Basic Patterns of Regional Development. It is hoped that each end reached by the five-year

development (*Pelita*) can be used as a basic foundation for future development. Thus each five-year regional development plan must also serve as a sustainable development plan. The medium-term planning process consists of the following stages.

Stage I is an evaluation stage. The main task at this stage is to evaluate the previous five-year regional development plan (*Repelita Daerah*), to ascertain which programs have been successfully completed and which programs remain uncompleted. These evaluation duties are jointly held by the provincial and district or municipality development planning boards (*Bappeda Tingkat I and II)*, local agencies (*Dinas*), local government institutions, experts from universities, and informal leaders and elders.

Stage II consists of making guidelines to organize the five-year regional development plan (*Repelita Daerah*). Distribution of guidelines of the *Repelita Daerah* to all institutions in the region (both province and district or municipality) is very important as it is the main manual for compiling the *Repelita* in their own institutions. With a standardized approach, every development activity can work together to move forward the regional interests. Accordingly, the head of the region, either the Governor or *Bupati* or *Walikota,* has to know precisely all the kinds of development processes in the region.

Stage III concerns completion of the evaluation of the previous five-year regional development plan (*Repelita Daerah*). The evaluation results of the previously implemented *Repelita* are gathered from various institutions and local agencies (*Dinas*) and reprocessed as feedback.

Stage IV sets out the plan goals. In deciding the goals of *Repelita Daerah,* it is very important to make some target projections that can be achieved and also to compile alternative targets of development for the future. Alternative selections of development targets are sorted by classifying the projects by priority and screening those projects whose implementation can be

delayed. These alternative selections are extremely important because of the limitations of the available budget.

Stage V is the creation of Draft I. The process of writing the draft of the five-year regional development plan (*Repelita Daerah*) has to follow procedures outlined in the manual published by the Ministry of Home Affairs. After finishing the writing of Draft I, it has to be discussed again with all stakeholders such as the local agencies (*dinas*), local government institutions, elders and informal leaders, and experts from universities.

Stage VI concerns preparation of Draft II. After discussions with all stakeholders, Draft I is rewritten and becomes a final draft for the five-year regional development plan (*Repelita Daerah*). This final draft is discussed and reviewed again in order to improve it.

Stage VII is the final stage. Here the final draft is recognized as a draft of the five-year regional development plan (*Repelita Daerah*), through the Governor's decree for the provincial level and a decree by the *Bupati* or *Walikota* for district and municipality levels.

The Compilation of Short-Term Regional Development Plans

In general, the compiling of short-term plans for regional development relates to all development activities involving projects which do not take more than one year to implement. All project activities are funded through the local budget (APBD). On that account, the short-term planning process is known as the compilation of planning projects. Basically, the short-term planning process of regional development at the lower levels is implemented based on the national and regional basic patterns of development.

The stages in carrying out the short-term planning process of regional development at the district or municipality levels are probably different. However, before formulating the short term planning process, several points have to be considered. Firstly, there is a need to consider plans

which have been determined at both national and regional levels as well as plans already determined at lower levels such as village, subdistrict, district and municipality. Secondly, planners should take into account the communities' interests and involve local people in the process of arranging the local budget. People's aspirations could flow through the council's members or local government.

Other than the two points mentioned above, other considerations include: national or local regulations set by the ministry, the governor, the *Bupati*, the *Walikota* and/or local bodies. As an example, the Minister of Home Affair's regulation No. 9 of 1983 gave instructions about how to carry out consultations for the compilation of development projects.

There are several stages (see Figure 7.1 for a schematic description and Table 7.1 for a detailed chronology of the planning cycle) quite commonly undertaken in the short-term planning process.

Stage I consists of a village development consultation (*Musyawarah Pembangunan Tingkat Desa* [*Musbang*]). The main aim is to motivate local people to be involved in consultations at the lowest level, such as in the village or *kelurahan*[2]. In general, both in the villages and *kelurahan* the consultation meetings are held by the Village Council for Development Planning and Guidance (*Lembaga Ketahanan Masyarakat Desa* [LKMD]) and coordinated by the Village Consultative Council (*Lembaga Musyawarah Desa* [LMD]). The meeting is held once a year (usually during February or March) and led by the chair of the LKMD, who is also the village head, under the guidance of the subdistrict head (*Camat*) or a representative from the subdistrict government. The results of the meeting for rural development projects funded both by local participation and local budgets are to be further discussed at a subdistrict meeting.

[2] *Kelurahan* is the lowest government level in urban areas. In rural areas it is called *desa* or village.

Stage II is called the subdistrict development consultation (*Musyawarah Pembangunan Tingkat Kecamatan*). This forum is carried out in April after village and *kelurahan* level meetings are finished. This meeting is supposed to be attended by all of the LKMD board, village and *kelurahan* heads. The forum is led by the subdistrict head (*Camat)*, under the guidance of the district head (*Bupati*), or head of *Bappeda* at district or municipality level. As is done at the village meeting, the subdistrict development consultations also have to decide the scale of development priorities at the subdistrict level and clearly indicate how many projects will be funded by local participation and how many projects will funded by the local budget (APBD).

The subdistrict development consultation meeting is quite unique because of its requirement for a subdistrict working group (*Unit Daerah Kerja Pembangunan* [UDKP]). The UDKP is an integrated development management unit for the subdistrict area. It is a system of planning, implementing, controlling, and evaluating the general implementation of rural development and integrated development among rural areas in subdistrict areas. Because the subdistrict areas are under the jurisdiction of the district, integrated development in the subdistrict has to be linked to the district or municipality level.

Stage III consists of district or municipality development consultation (*Musbang Tingkat Kabupaten atau Kotamadya*). The meeting is always led by the head of *Bappeda*, who usually gets instructions and guidance from the district head (*Bupati*) or municipality head (*Walikota)*, and discusses each proposal submitted by the subdistricts. The meeting has to be based on the basic patterns of district and provincial development. Hence, in deciding on the projects, priority is given to projects that fulfill people's aspirations and are urgently needed by local people. The meeting is always held in May or June and is attended by subdistrict heads (*Camat*), local agency heads, and local government institution heads at the district level.

Stage IV is the provincial development consultation (*Musyawarah Pembangunan Tingkat Propinsi*). The meeting is led by the provincial *Bappeda* head, who usually gets instructions and guidance from the Governor, and is attended by all district heads (*Bupati*) and municipality heads (*Walikota*), local agency heads, and all government institution heads at the provincial level. It is held in August or September. The essence of the meeting is to discuss all proposals from the districts and municipalities and to produce an integrated development plan at the province level.

Stage V is the regional development consultation. This meeting is very important in discussing the linkages of development among the provinces in the region, for example, the development plan of the Sulawesi highway and Sulawesi sea transport network. Thus, the meeting puts more emphasis on the links of plans in subset regions and the integration of regional plans and development, such as for the Sulawesi region.

Stage VI is the national consultation. The meeting is led by the head of the national planning board (BAPPENAS) and attended by all heads of provincial and district/municipality planning boards (*Bappeda Tingkat I* and *II*), national sectoral agencies and institutions. The meeting is always held in January or February. The main aim of the meeting is to discuss all project proposals from the provinces that would be funded by the national budget.

Figure 7.1 Stages of the Planning Process

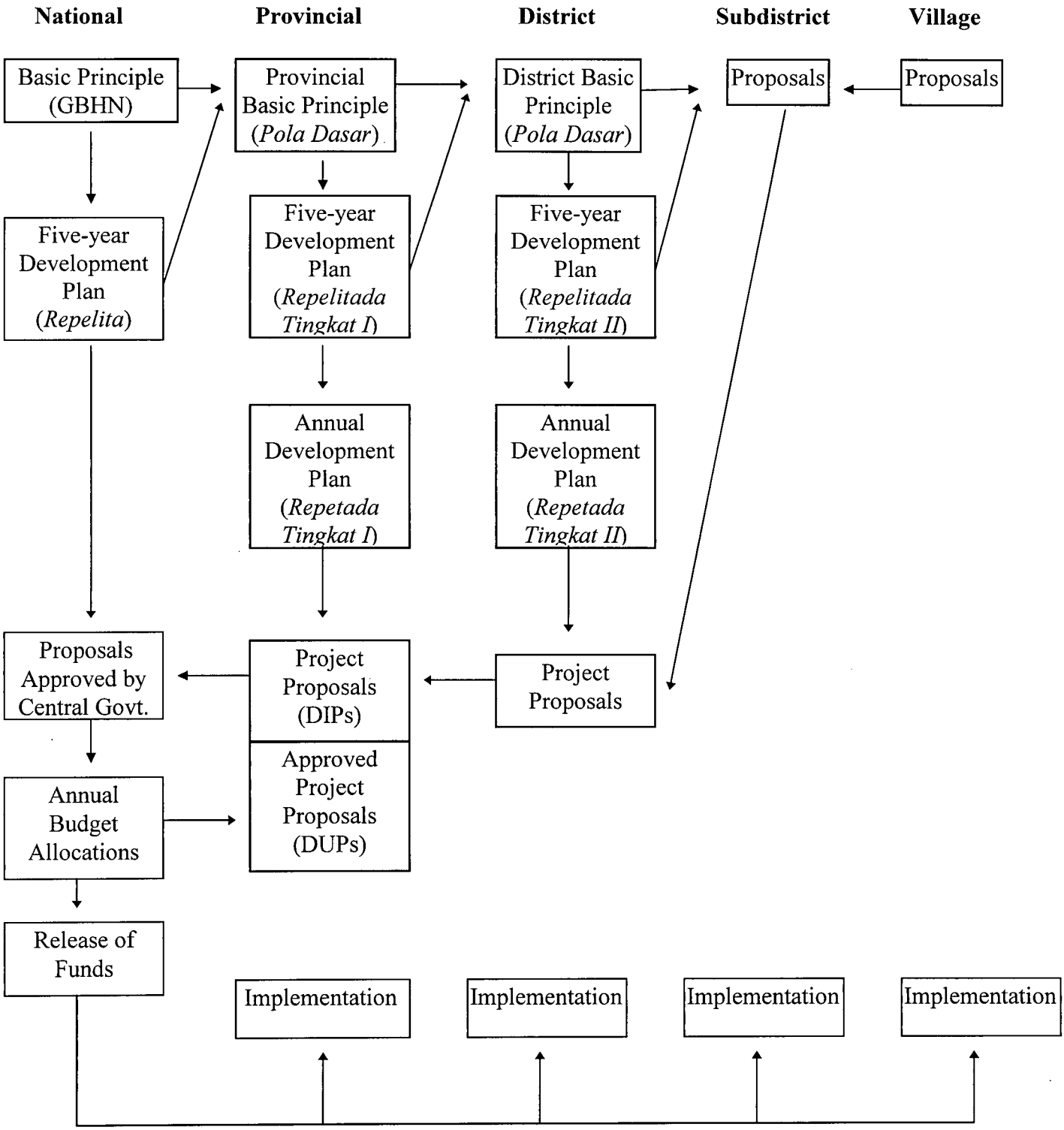


Table 7.1 Government of Indonesia's Mandated Bottom-up Planning Cycle

Administrative Levels	Activities	Organizations	Time
Village (*Desa/ Kelurahan*)	1. Neighborhood meetings 2. Evaluation of previous year's projects Preparation of village development and project lists prioritization and finalization of project proposals 3. Village Consultative Meeting 4. Village head forwards some proposals to subdistrict head (*Camat*)	- Neighborhood head and community members - Village Council for Development Planning and Guidance (LKMD) and Village Consultative Council (LMD) - LKMD and subdistrict representative - village head and subdistrict head	February/ March
Subdistrict (*Kecamatan*)	5. Subdistrict Development Meeting (*TEMU KARYA*) - prioritization of project proposals - discussion of the projects funded by local budget and village communities supporting - proposal categorized by sectors	- subdistrict working group (UDKP), village development section of the Ministry of Home Affairs at district level (BANGDES) agent, district planning board (BAPPEDA Tkt.II) representative	April
District/ Municipality (*Kabupaten/ Kotamadya*)	6. Sectors incorporated selected proposals into formal proposal lists (DUPs) 7. Annual District Development Plan (REPETADA) 8. District Development Coordination Meeting (*RAKORBANG TINGKAT II*) - BAPPEDA Tkt. II explains annual plan Subdistrict heads react to sectoral proposals 9. Coordination meeting between district/municipality Governments and district/municipality People's Representative Council (DPRD Tkt.II) - DPRD Tkt. II proposes projects based on communities' aspirations and make some corrections on the proposal list (DUPs) - DPRD Tkt..II discusses projects funded by sectoral agencies and provincial budget - DPRD Tkt. II prepares compilation of district/municipality budget	- District level sectoral agencies - BAPPEDA Tkt. II, sectoral agencies - Subdistrict heads, BANGDES, sectoral agency Heads, BAPPEDA Tkt. II, Provincial BAPPEDA Tkt. I representative, District/Municipality Head - DPRD Tkt. II district/municipality head, BAPPEDA Tkt II, district/municipality government institutions, sectoral agencies	April/May May June June/July July July July

Adminstrative Level	Table 7.1 Continued Activities	Organizations	Time
Provincial (*Propinsi*)	10. BAPPEDA Tkt. II and sectoral agencies finalize DUPs, sort by budget source and forward to province	- BAPPEDA Tkt. II, sectoral agencies	July
	11. Provincial Development Coordination Meeting (*RAKORBANG TINGKAT I*) - reconciliation of district/municipality and provincial priorities - focus on projects to be funded at the national level	- Head of BAPPEDA Tkt.II, district heads, sectoral agencies representative, BAPPEDA Tkt. I	August
	12. Coordination meeting between provincial governments and provincial People's Representative Council (DPRD Tkt.I) - DPRD Tkt. I proposes projects based on communities' aspirations and making some correction on the proposal list (DUPs) - DPRD Tkt. I discusses projects funded by sectoral agencies and provincial budget - DPRD Tkt. I prepares compilation of provincial budget	- DPRD Tkt. I, governor, BAPPEDA Tkt I, provincial government institutions, sectoral agencies - DPRD Tkt. I, governor, government institutions, BAPPEDA Tkt. I, and sectoral agencies	August/ September September
	13. Informal discussions - advance notice given on levels of grants and development priorities	- Ministry of Home Affairs, BAPPEDA Tkt. I, and sectors	September
	14. BAPPEDA Tkt. I forwards project proposals (DUPs) from all districts and sectors to Ministry of Home Affairs and National Planning Board (BAPPENAS) in preparation for national consultations - includes plans for funding sources	- BAPPENAS and BAPPEDA Tkt.I	September/ October
Regional	15. Regional consultations (e.g., all Sulawesi provinces) - revision of project proposals (DUPs)	- BAPPEDA Tkt. I, governors	September
National	16. National Budget Plans (RAPBN) discussed 17. National Consultations - national development priorities and budget allocation discussed - Projects are modified in intra-sectoral consultations	- Department of Finance, legislative assembly representative, National Planning Board (BAPPENAS), heads of BAPPEDA Tkt. I and II, national sectoral agencies	January-March
	18. National Planning Board (BAPPENAS) announces budget allocations to sectors	- BAPPENAS	January

Administrative Level	Table 7.1 Continued Activities	Organizations	Time
National	19. Ministry of Home Affairs announces regional allocations at governor's conference	- Ministry of Home Affairs	January
	20. Provincial People's Representative Council (DPRD Tkt.I) considers and approves draft of provincial policy statement (REPELITADA or REPETADA) and consults with budget team. Reconciles draft budget and policy statement	- DPRD Tkt. I, budget team	January
	21. National government team visits province to advise on budget preparation and technical revisions required for DUPs approved for national funding	- Ministry of Home Affairs, BAPPENAS, Department of Finance	February
	22. Budget team meets with sectoral agencies to set targets. Lists of approved projects proposals (DIP) prepared (both provincial and national funded projects)	- Budget team, sectoral agency heads	March
	23. Approved project lists (DIP) sent to Regional Development division (BANGDA) in Ministry of Home Affairs	- Budget team	
	24. Governor receives letter of approval from central government		March
	25. Budget team prepares draft budget for regional funds (APBD Tkt. I)	- Budget team	March
District/ Municipality (*Kabupaten/ Kotamadya*)	26. All district and municipality heads (*Bupati/Walikota*) meet with governor to be briefed on provincial grants to the districts and municipalities	- Governor, *Bupatis*, and *Walikotas*	March
	27. Provincial team visits districts and municipalities to advise on budget preparation	- BAPPEDA Tkt. I rep., Finance Agency, and sectoral agencies	March
	28. District budget and project proposals (DUPDAs) forwarded by sectors to district and municipality levels BAPPEDA *Tkt. II* and Financial Section	- sectoral agencies	March
	29. District budget team formed to meet with sectors to fix spending target and prepare draft district budget (RAPBD II)	- District/municipality budget team, sectoral agencies	March/April
	30. Draft district budget submitted to district and municipality head for approval	- Budget team, district/municipality heads, BAPPEDA Tkt II, governor	
	31. District and municipality BAPPEDA send district and municipality budget (APBD II) to province for approval	- Head of BAPPEDA Tkt. I, governor	April April/May

Source: Modified from Department of Home Affairs, 1983; Ferrazzi et al., (1993) and based on field observations

How Does the Bottom-up Planning Process Work?

The Role of Development Agencies

Most national ministries and departments have their field offices or extension services at the provincial, district or municipality, and subdistrict levels. The field or extension offices are responsible to the national office and perform functions under the authority, supervision and control of national offices. In most cases, the field offices of the national government are not responsible to the local government. They do usually coordinate with the latter. Their relationship is confusing because any particular rural development function is under the technical supervision of a national ministry and at the same time is within the administrative jurisdiction of the local government.

Rural development projects are invariably implemented under national programs which are in turn administered by the field offices of national agencies. For example, there are rural development programs designed to motivate the rural masses to undertake community projects, participate in developmental activities and promote self-governing institutions like cooperatives. The community development program is administered through the local government and supervised by the Ministry of Home Affairs.

Various national ministries implement rural development programs through their provincial, district or municipal and village extension staffs. The coordination of different sectoral programs and their integration with local development plans is undertaken through various planning and development committees at each level of administration. Heads of the field organizations of national ministries are always members of such committees. In most cases, these local development and planning committees are not functional and if ever, the representatives of the national ministries display strong loyalty to their parent departments and not to the implementation of local development plans which were formulated at that level.

Several limitations have been noted in the administration of rural development programs through field offices of the central agencies. Since the field offices perform their functions under the guidance and authority of the national government, there is little flexibility and innovation in program implementation. On the contrary, government administrators emphasize uniformity and fixed procedures in managing development projects. With such a pattern, regional variations are difficult to accommodate.

The Role of the Local Development Planning Board (*Bappeda*)

The National Development Planning Board or *Bappenas* is charged with the coordination of government ministries' sectoral development efforts. It is also responsible for the coordination of all foreign development assistance. The rural and urban development activities at provincial administration levels are carried out by two types of government agencies; those under direct control of the central government through department or sectoral agencies at provincial level (called *Kanwil*) and district or municipality level (called *Kandep*), and those which are under control of the provincial government or local agencies (*Dinas*) (see Figure 6.1). There is a persistent lack of clarity regarding the limitations of responsibilities in development planning between these provincial organizations.

The provincial branch offices of the central government sectoral ministries are known as *Kantor Wilayah Propinsi* (*Kanwil*). Most of the ministries are also represented at the district (*Kabupaten*) or municipality (*Kotamadya*) levels. These agencies are known as the *Kantor Departemen Kabupaten* (*Kandep*). Selected ministries, among which is the Ministry of Education and Culture, are represented by such agencies at the subdistrict level. Both the *Kanwil* and *Kandep* are fully financed and staffed by central government ministries.

The regional government's executive arm, which is headed by the governor, implements development activities through the local agencies (called *Dinas*). The provincial head has a dual role; as an executive head of the regional government, and as local representative of the President (through the Ministry of the Home Affairs) the role in which he exercises overall supervision in this area. This supervisory task includes the coordination of all central and provincial government agencies. Therefore, a head of department sectoral agencies (*Kanwil*) is subordinate to both the relevant sectoral ministry as well as to the governor. The head of the district (*Bupati*) is responsible to the governor. In his area, similar lines of authority exist.

In practice, however, clear lines of responsibility for a particular activity between central government and regional authorities (i.e., between the *Kanwil/Kandep* and *Dinas* agencies) as briefly outlined here, are not present. Consequently, the regional planning boards (*Bappeda*) at the provincial and district levels which are to support the coordination of the central and provincial government programs, face difficulties in performance of this task. These bodies have to cope with the fundamental lack of authority over the sectoral agencies active in their areas. Although involved in the process of project selection, they do not have any say in the total resource allocation pattern in their respective planning regions (Soetrisno and Mubyarto, 1988).

The planning process is complex. Development budget submissions from both the sectoral agencies and the local and provincial government take place on an annual basis according to a rigid time frame. For all development activities the annual lists of project proposals (DUPs) and of approved projects (DIPs) are of key importance for allocation and control of funding. The former list is subsequently compiled at village, subdistrict, district and provincial levels. Each compilation exercise is finalized in a meeting of all stakeholders involved, during which some discussion takes place. At district and provincial levels, the *Bappeda* are involved in the process of compilation and selection which largely occurs before the

meeting is held. These agencies formulate recommendations according to the five-year regional development plan (*Repelita Daerah*), at their respective levels. The plans closely follow the priorities as expressed in the Broad Outlines of State Policy (*Garis-Garis Besar Haluan Negara* [GBHN]). They do not provide more than a compilation of regional data. An identification of regional priorities is mostly absent. Therefore, the *Bappeda's* guiding role in the tailoring exercise is not strongly supported by information on regional potential and problems. The list of project proposals ultimately issuing from the annual coordination meeting is sent for approval to the next higher level of government for review and amendment. Subsequently, new lists of projects are compiled. These lists are organized according to sector. This allows for the submission of the various sector lists to *Bappenas* via the relevant sectoral ministries.

After approval has been given by *Bappenas*, a project then becomes a DIP project, which implies an authorization of expenditure according to a specified outline of activities. The formal information flow about the approved development projects of the sectoral agencies is often limited to vertical communication channels. This pattern severely hampers the functioning of the *Bappeda* when it finally arrives at the realities of supervision and coordination of implementation. Often informal contacts have to be used to obtain information on the actual implementation of projects. These operating mechanisms clearly subject the various regional level authorities to a very dependent position vis-a-vis the central ministries and their representative offices. Another major flaw is related to a practice apparently adhered to by local level sectoral agencies. While consolidated submissions are prepared and sent up to the central government as outlined above, sectoral agencies are reported to incidentally prepare separate submissions through their central departments. Obviously, this bypass implies that those proposals do not correspond to *Bappeda* attempts at coordination at both district and provincial levels.

Based on interviews with some planners working at the District Planning and Development Board (*Bappeda Tingkat II*), the main issue facing district *Bappeda* with regard to compiling the yearly regional development plan are as follows. First, only a few staff members have planning or economics backgrounds. Most staff have a limited knowledge of planning. Second, the local institutions and local agencies and agencies in the region delay their submission of the proposed program plans and the program evaluation reports. Third, the quality of staff managing the programs at local institutions, local agencies and agencies, and subdistricts is low.

One of the planners at the district level emphasized that the planning process is strongly affected by political interests and that the bureaucrats are more oriented to their careers rather than attentive to the planning process and implementation of projects and programs. Therefore, a good plan is often defeated lack of by political will. The function of *Bappeda* is only limited to monitoring the projects and programs, because implementation of the programs and projects is usually done by department agencies and local agencies in the region.

Coordination

The problem identified above is a lack of coordination in planning and implementation. This issue has been much discussed in the literature on rural development planning, particularly in the context of the growing consensus that there needs to be an holistic, integrated process (Demaine, 1986; Cheema and Rondinelli, 1993). One of the advantages of the decentralized framework of planning is that coordination of the work of the line department agencies involved in rural development becomes more practical. Unfortunately, in practice it has proved difficult to bring about such coordination. The problem relates to the continuation of the high degree of central control which means that representatives of line department agencies at the local and regional levels remain firmly set in a vertical command structure, while at the same time the

coordination mechanisms at the decentralized level are not strong enough to weaken this attachment.

In fact, the problem of coordination takes on an extra dimension even where local and provincial planning offices have been established, if they do not constitute a unitary framework for rural development activities. The case is clearly indicated in special programs for agriculture which bypass the decentralized planning system. This is obviously true also of all special poverty and employment-oriented programs that have been directed from the center and outside the framework of district level planning.

The problem of coordination between department agencies and local government not only exists at the provincial level, but also at the district or municipality and subdistrict levels. Only some department agencies have their representative offices at the subdistrict level and they have a strongly hierarchical system. Field data indicate that the main constraints affecting the complicated coordination between department agencies and local government, especially provincial and district planning and development boards (*Bappeda Tingkat I* and *II*), are the following: First, there are too many institutions that have to be coordinated and each institution develops many programs to meet urgent needs. Second, the time available for planning and implementing the programs is limited to only one budget year. Third, many plans that have been developed at district or municipality and provincial levels are not supported by funds, thus giving higher priority to the implementation of programs from the center that already have funds. Fourth, the plans that have originated in the center or are called national plans usually get the top priority, because of the difficulty of coordinating and suggesting new inputs for those national projects to be implemented in the region. Fifth, the control of the bureaucracy compels all plans and programs from the center to be implemented based on the determined budgets.

Aspects at the local level that affect the complicated coordination of development programs include: the limited number of qualified staff; the relatively huge area covered by the region; aspects of social relations and custom (*adat*); and the ability of local officials to understand the central programs in order to implement them in the region. Thus, coordination at local levels is extremely complicated, because it must also deal with hierarchical structures. The implementation of policies related to the hierarchical system requires integrated coordination at the local level, supported by qualified and professional staff, especially those trained in planning.

The complexity of the government's structure in relation to the planning and implementation of development has become clear. Top-down sectoral measures occupy a central place in the process of development planning and implementation. Financial relations reinforce the centralized control over the development process; the vertical linkages at the sub- national level are more important than the horizontal linkages. Much of the budget is under the control of the regional representative offices of the national government ministries (*Kanwil* and *Kandep*). This greatly impedes an efficient and effective execution of the supervisory and coordinating activities of *Bappeda* and is likely to frustrate problem-oriented development intervention at the regional level.

The weaknesses of coordination, both at provincial and district or municipality levels are also related to the quality and commitment of bureaucrats who hold strategic positions in planning and implementing development projects in the region. According to the head of the Commission of Economic Development at the Provincial People's Representative Council (*DPRD Tingkat I*), many strategic positions in the district and municipality governments are dominated by non-local people. She stressed that this was the reason that the motivation to develop the region is relatively weak. Furthermore, she emphasized the commitment of many bureaucrats to the regional plans that have been decided is vague. Quite often in the early stages,

the bureaucrats who are responsible for the projects negotiate with the contractors (mostly private companies) who will implement physical projects about what percent of the project's total budget the developers are willing to offer to the project manager and his/her superiors. Because such negotiations can delay the project's implementation, many projects start behind schedule, and some are not completed on schedule and/or according to the plan that had been decided.

Coordination is always related to project implementation. The facts from the field indicate that many project reports do not fit real conditions. Some projects are never implemented or built yet the project reports state that they are completed. They are called "fictive projects", and quite often happen on to be sectoral projects funded by department agencies at the central level. According to the head of the Commision of Economic Development at the DPRD *Tingkat I,* the fictive projects are a result of project managers colluding with their bosses and the contractors. Many projects funded by APBD share the problem of not being based on communities' needs, but instead on bureaucrat's or private interests' needs. She emphasized that these are some of the other reasons why the coordination of programs and projects at provincial and district or municipality levels does not work well.

Local Autonomy

In Indonesia, the Minister of Home Affairs' Instruction No. 4 of 1981 states that development planning is to be carried out based on bottom-up planning. Theoretically, the bottom-up planning approach is suited to supporting the implementation of local autonomy, because this approach offers almost equal room to each of the levels of government and communities (through the Village Council for Development Planning and Guide [LKMD]) to participate in the planning process. However, in reality, the implementation of bottom-up planning faces problems which affect the potential for local autonomy.

The main obstacle to implementing bottom-up planning is the Minister of Home Affairs Regulation No. 9 of 1982, a mechanism which stipulates that bottom-up planning is be done through eight stages[3]. The first stage is a development meeting at the neighborhood level, followed by others at village, subdistrict, district, province, regional, and finally at the national level. Each stage includes discussion and selection of project proposals (DIPs) that have been proposed by each government from the lowest level.

As a consequence of the stages, this hierarchial mechanism makes it possible that the list of project proposals (DIPs) originally developed at the lowest level of government could be refused by government at the upper levels. For example, the list of project proposals determined by villagers and proposed by village governments could be refused at a development meeting held at the subdistrict level. Subdistrict officials might reason that the refusal is necessary to make projects compatible and integrated among various villages at that subdistrict level. It could also happen that project proposals that have been discussed and decided at the subdistrict level could be refused at the district level, and so on to the upper level. In the end, the list of project proposals that `pass' through the selection stages may be quite different from the projects proposed by the lowest level of government. The difference in proposed projects is difficult to avoid, because of the goal of making projects compatible and integrated within the region (Silalahi, 1995). Changes and adjustments to the list of project proposals are discussed in development coordination meetings at each government level.

In other words, it can be said that the projects that originally come from the central government are those which are more likely to be chosen as national projects than those projects that have been planned by local governments. These tendencies occur because all of the sectoral

[3] The detailed explanation of each stage has been described at the beginning of this chapter (see Table 7.1).

development funds flow through local department (*Kanwil*) in the regions. They do not flow directly to either local governments or provincial governments.

When decisions are made at higher levels of governments to cancel the proposed projects from the regions, i.e., those that have been appropriately prepared and discussed in the first stages, it may extinguish grassroots initiatives to participate in the planning process for development, even though projects are greatly needed by the region. The decisions from above to cancel clearly show that the governments at the lower levels are no longer playing as stakeholders in the planning process, but rather only as channels for "wish lists". Local feelings of powerlessness are a recipe for apathy and anger.

Although bottom-up planning is an ideal approach for development planning in support of local autonomy, it is important to specify the limits of the `up' in bottom-up planning. Is that `up' just limited to district levels, or must the process go up to the national level in order to determine the development projects needed by local government. The evidence indicates that regarding government decisions aimed at encouraging local autonomy for district and municipality levels, the concept of `up' in bottom-up planning would be better limited to the district and municipality levels.

It would be preferable if, in the context of a national development planning system, the project proposals which have been approved by the district or municipality government through development coordinating meetings were accepted as final proposed projects, without the further stages of selection and refusal by higher levels of government. As a consequence, district or municipality governments could plan and manage development more effectively in their own regions. At the same time, limiting the bureaucracy of the planning process also brings real local autonomy to district and municipal governments.

The top-down planning model which has thus far dominated development planning in Indonesia has some basic weaknesses such as being too expensive because the programs and projects are planned in a relatively short period of time and thus often are not suited to local needs and cultures. The centralized planning model is also inadequate as it may blunt the local apparatus' search for new ideas and alternative development strategies which are required to support local development.

Therefore, in order to implement development projects which are appropriate to local needs and cultures, local governments must play the main role in the planning process because they know more about local conditions. However, more emphasis on bottom-up planning will not completely eradicate problems, because even if more authority is delivered to local governments to make plans and decisions by themselves, they will still confront the limitation of funds. Thus, decentralized planning without decentralized funding is impossible for local development.

Community Participation

In general, the relationship of local government with the local community can be seen through the participation of communities in decision-making at the local level. Practically, it can be identified via the planning mechanism of the annual list of project proposals (DUPs). At the bottom level (rural and *kelurahan* communities) villagers' aspirations are accommodated and channeled through proposals to the Village Council for Development Planning and Guidance (LKMD). Theoretically, this channel should be capable of expressing all of the people's aspirations for the next budget term. All proposals at the village level are combined into the subdistrict's first draft of project proposals (DUPs), which are later combined with other proposals from different subdistricts to become an integrated package of project proposals sent to the district or municipal level and then called the district or municipal list of project proposals

(DUPs). These project proposals are combined with other project proposals from other districts or municipalities to become the provincial list of project proposals (DUPs). At the last level, these proposals have to be endorsed by provincial governments in order to get funding from the central government through Bappenas.

All of these procedures indicate the ideal of planning and implementing development from the lowest level, or bottom-up planning. In practice, however, various constraints make that process difficult, if not impossible, to implement. The difficulties are caused by factors such as the structure of the Village Council for Development Planning and Guidance (LKMD), the quality of planning and the planners, the relatively limited period of time, funding, the overlapping of competence, and the importance of vertical organizational structures at the provincial and district or municipal levels of government.

The Village Council for Development Planning and Guidance (LKMD) is designed as a forum for accommodating local community aspirations and controlling potential disintegration at the village level. Its preventive function, however, is more obvious where the head of the village is also as the head of LKMD. This indicates that those community interests which are channelled through the LKMD overlap the village government bureaucracy. Under these conditions, the powerful players in the village are relatively strong and the initial planning of the list of project proposals (DUPs) may be manipulated by local elites to maintain the status quo of power in the village. It often happens that different opinions and perceptions are held by the villagers compared to village officials. Therefore, the community participation element of development through the mechanism of the DUP planning process is distorted at the lowest level.

Development planning requires certain standards of both the people who are involved in planning and the final result of the planning itself. It is difficult to find qualified staff involved or working at the district level and lower. At the village level, the scale of priorities of development

identified by The Village Council for Development Planning and Guidance (LKMD) are totally different than planning priorities which might be chosen by observers from outside the village. Actually, the community members who are not involved in the body of the LKMD could also participate as a category of observers. The very differences in planning priorities within the community show a gap or weakness in the structure of community participation in the planning process.

In the early draft of the project proposals list (DUPs) at the subdistrict level, the substance of community participation almost disappears because the bureaucrats (village heads and subdistrict officials) play the most important roles. At this level, decision-making considerations are more related to administrative concerns such as adjusting the budget, than social and political aspects. Adjustments of development priorities that are made to the list of project proposals at the subdistrict level (and offered by the LKMDs) are worrisome and risky because there is no planning section at the subdistrict level and it is rare to find qualified subdistrict staff who have backgrounds in planning. In other words, the opportunities for communities to fully participate in the planning process at the village level are scarce. At the subdistrict level, there is probably no room anymore for communities to participate.

The whole planning process from initiation to the final documents takes one year. The time for the LKMD to formulate its proposal is limited to March. The coordination at the subdistrict level is held in late April. The final draft planning priorities, after meeting some adjustments, are sent to the district or municipality level as late as May. June is the time that the district development coordination meeting (*Rakorbang Tingkat II*) is held to discuss the prioritization of DUPs from the districts or municipality. The same procedure is repeated two months later at the provincial level and the final document sent to the central government through the national development planning board (*Bappenas*), where the document is examined

and discussed by Bappenas and the Finance Department in order to determine the detailed budgets. In March, those documents become approved projects (DIPs) and the allocation of budget for funding the projects comes the following April. The process of bottom-up planning thus also faces problems related to time allocation. In fact, there are some districts which have difficulties meeting the tight schedule.

This planning procedure indicates that there is only a very small chance for local people to participate in development planning, and only at the beginning when the Village Council for Development Planning and Guidance (LKMD) discusses the first draft list of project proposals (DUPs) in the villages. After this first step, there is no more public accountability because the rest of the process and procedure is taken over by bureaucrats.

When respondents were asked about their participation in the planning process ("Have you been invited by the village government or the Village Council for Development Planning and Guidance (LKMD) to a village meeting to discuss village development plans during the last year?"), almost 40 percent of both nonmigrants and migrants answered that they had attended the village meeting[4]. Respondents were also queried "Did you ask questions or suggest ideas about rural development during the meeting?". Most respondents (more than 95 percent both nonmigrants and migrants), including respondents from Central Sulawesi, answered that they had not asked any questions or suggested ideas.

The relative lack of community participation in the village meeting, both in terms of attendance and discussion or sharing of ideas in the meeting, was explained by a village primary school teacher, who stated that village community members very rarely make a protest to village

[4] Data from villages in Central Sulawesi also indicate that less than 40 percent of both nonmigrants and migrants had attended such as a village meeting.

government because they are afraid or less able to articulate their opinions, probably because they have attained only a low level of education. She advocated the need to appreciate `the low people', to seriously consider their opinions, and to support them in expressing their ideas. Many respondents expressed that they attend the meeting only to hear the speech of the village head about the village programs and plans that have been prepared by village officials. An elder in one village said that the implementation of rural development in the village is organized only by the village head. Other village officials are not active anymore because the village head manages everything by himself.

An informal leader and entrepreneur in the villages, also said that in many cases the planning process in the village was prepared only by the village head. The informal leaders and elders were invited to the village meeting but the village head dominated the discussion and made the decision. He added that if the village planning process and implementation of programs were to improve, it would be necessary to involve community members to participate in parallel with the village government. Only a few respondents mentioned that they attend the village meeting because they want to propose some ideas to the village government about rural development. However, due to the limited time allowed and the fact that the meeting was dominated by the village head and officials, they had only brief moments to express their ideas.

The respondents were also asked "What do you think about the rural development that has been done so far in this village?" Some respondents responded by saying that they were quite satisfied with development in the village. However, other respondents answered the question with several critiques. First, most respondents (both nonmigrants and migrants) said that many rural roads and bridges are in poor condition because those infrastructures were built by local and village governments, and are of very low quality. Some irrigation networks no longer function. Second, some respondents (both nonmigrants and migrants) expressed that the implementation of

central government grants (*Inpres Desa*) for village development are relatively hazy, and neither village government nor the Village Council for Development Planning and Guidance (LKMD) have clearly explained this issue to the village communities. Third, some respondents (mostly the nonmigrants) mentioned that economic conditions in the village communities are still poor and the government tends to give more attention to transmigrants in the region.

When another question for respondents was, "What are your opinions about making rural development suitable with village communities' needs?" The suggestions of respondents were as follows. First, conduct a routine general meeting to allow discussion **between** community members and village officials of the village plan and to give more opportunities to members of the community to express their opinions. This suggestion was supported by some informal leaders in the village, who also expressed the opinion that in order to make good rural plans, it would be better to hold a village general meeting and to invite the village community members, informal leaders, elders, and village governments to discuss the rural plans. Before talking about the new plans, the Village Council for Development Planning and Guidance (LKMD) should have completed an evaluation of the previous rural programs and delivered that evaluation to the general village meeting.

Second, village officials have to be more fair, honest and open to the communities in implementing the rural projects funded by central grants (*Inpres Desa*). This issue was also identified by a member of the People's Representative Council of Bolaang Mongondow District (*DPRD Tingkat II*), who stated that the planning and implementation of the programs in villages is not very accessible to the village communities, and especially to the many villagers do not understand the rural plans and programs due to their limited education. Further problems which he mentioned were that the rural project management is too weak, the project budget reports are unclear, the village heads are not open to the village communities about the projects that have

been developed in the village, and finally the Village Council for Development Planning and Guidance (LKMD) and the Village Consultative Council (LMD) do not function. The arrogant attitudes of both village and subdistrict officials, in many cases unsympathetic to concerns of many villagers, cause many village communities to be unwilling to participate in rural development.

Third, the implementation of rural development has to be based on the rural plans. Some informal leaders stated that their village lacked a real plan on paper because there never is a meeting to talk about rural plans, and probably only the village officials know about the rural plans. Fourth, the implementation of rural development needs to be worked out together with the village communities, however, the sole successful example of this appears to be in the village of Mopugad Selatan, comprised mostly of migrants from Bali. The village has a regular meeting of the village community, including informal leaders, elders, the Village Council for Development Planning and Guidance (LKMD), the Village Consultative Council (LMD), and the village officials, to discuss the plans and programs for rural development. According to members of the Village Council for Development Planning and Guidance (LKMD), the community participation, both in the planning process and implementation of the programs is relatively high, perhaps due to the fact that the village head and the vice head of the LKMD each have a bachelor degree and are relatively young. He is the only village head in the region who has post-secondary education and the vice head of the LKMD also works as a junior high school teacher. According to a primary school teacher in Doloduo, the character of the village head is a major factor influencing community participation in the planning and program implementation process. If the leader is good and honest, the level and quality of community participation improves.

The Role of Local Leaders.

In rural areas the local leaders play especially important roles both in the planning process and program implementation. The local leaders or elites are a relatively small group usually respected by the local community, due to their wealth and control of power. They are a minority group of high status. They can control economic activities and dominate the decision-making process, especially those decisions that most strongly affect local communities. In many cases, they are the bestowers of legitimacy and the guides of communities. In this study they are classified into three groups, namely, village officials, informal leaders, and rich farmers.

In interviews, respondents indicated that in all village meetings or elections for selecting the head of farmer groups, the village officials usually enjoy the dominant position. In general, they usually direct the meetings and make the decisions. On the other hand, the roles of both the informal leaders and rich farmers are becoming less effective, and in some cases their opinions are not taken into account at all.

In the village meetings, for example, to discuss the rural plans related to central grants (*Inpres Desa*), the village officials dominate the problem identification and decision-making, whether at neighborhood meetings or the Village Consultative Council (LMD) and the Village Council for Development Planning and Guidance (LKMD) meetings. They are also quite often involved in the informal discussions, either with the village head or subdistrict head to identify projects suited to the village. On the other hand, the informal leaders and rich farmers are only involved in neighborhood meetings, which are the earliest stage of identifying the projects that could be proposed. The project proposals are most deeply discussed and decided at the LMD and LKMD meetings.

It quite often happens that the village head does not pay close attention to the community, because his loyalty is to the subdistrict head (*Camat*) and district head (*Bupati*). The village head

knows well that the *Bupati* is the one who confirms all files for those who want to run for village head and that he could be replaced. He also knows that all projects also come from the top. The villagers also know that project budgets have been cut for unreasonable reasons by the time the project are finished. All people who work with village heads know the facts about what more common people call the culture of seeking "project rents" (*budaya rente projek*).

With Basic Law No. 5 of 1974 it was hoped that the village could organize itself with regard to all aspects of life in the village. In fact, the domination of the top level is so strong that the participation of local people has become weak. Democracy in the village is also very weak, and the initiatives of village bureaucrats are limited because they want to avoid repercussions from above and are "afraid not to offer appropriate instruction". The participation of local people in the planning, implementation and control of the many sectoral and *Inpres* projects in rural areas is weak.

The implementation stage is often marred by collusion among the village head, superior, his superior(s), and members of the Village Council for Development Planning and Guidance (LKMD). The superiors are supposed to concentrate on controlling, but in fact s/he often becomes involved in the planning and implementing of projects. Thus it is not a surprise to find that the village head more involved in arranging for a crowd to listen to speeches from the superiors who are visiting the village than he is in motivating local people to take part in the work contracted. The village head is further limited by that the many points of guidance or "*petunjuk*"[5] from the head of the subdistrict.

The administrative system operates most strongly in villages that are accessible to a town, usually the headquarters of a government administrator. Thus the village council in fact becomes an instrument of the central government rather than a community-based and community-oriented

[5] *Petunjuk* or guidance in this case is another word for command from the top leader (head of subdistrict or district).

institution. The village administrative system dedicates more time to carrying out instructions from the subdistrict head (C*amat*) than to responding to the wishes and aspirations of the community. In theory the new law (Basic Law No. 5 of 1974) provides for a collective system of village administration, in which members of the community have the opportunity to participate. In reality the village head, especially when he is a strong leader, plays a central role that far exceeds the role of any other person in the system.

Human Resources

The availability of well-trained and high quality staff for planning becomes an important aspect in the implementation of both national and regional programs and projects at the local level. In fact, however, the want of human resources is more an issue of quality than quantity. The problem of making district or municipality planning more effective also relates to the limited technical and managerial skills of the planners at that level. The evidence demonstrates that few have been specifically trained for the job they are now expected to do, and that if they have received training, it tends to be limited to an explanation of the planning system rather than extended to techniques of real analysis. In circumstances where there is little advantage in terms of financial incentives or promotional prospects for those taking the role of planner at the provincial or district level, it will be both difficult to find well-trained personnel and to encourage high motivation and performance from them.

Even if the planners at the district and provincial level were willing and able to take on the new responsibilities often required of them, it is questionable whether they are equipped with the necessary information to undertake effective planning at this level. Development of the provincial and district or municipality information base is recognized as a crucial aspect of the whole process of decentralization. In recent years, a national village data base has been

established by the government, but even here political issues have clouded the concept. The centralized design and processing have rendered the data base of limited use to local planners and the conclusions derived from the data are not always accepted by villagers.

Another human resource problem reported by junior planners at the district and municipality planning boards is that career promotion paths at local planning boards are unclear. They emphasize that there is no guarantee that staff who have trained in the planning field will always work in a planning bureau. One planner explained that although he has a background in planning and is working in the planning section, he can be moved at anytime by his `boss', a top manager in his department, to other sections unconnected with planning matters. Thus he would need to start anew in his new position and quite possibly require training relating to his new job, as would be the case for the person taking his former position. He said that such transfers create a vicious circle.

The junior planners also emphasized that to increase the productivity of staff incentives, both salaries and rewards (especially those direct from the manager) are needed. They claimed that the rewards currently are not based on work achievements but on enhancing personal relationships with the boss and his family. There are subjective aspects in job placements. A civil servant does not settle into one section. S/he may be moved at any time to other sections or departments, either because the job needs her or his expertise, or because the boss wants them to move from a certain position.

Because career promotion at the local level is limited, motivated staff seeking promotions must escape to the upper levels of government. As a consequence, the highest quality staff tend to be concentrated at the provincial and central levels. Therefore, solutions for the human resource problem are not only related to education and training, but also to career promotion. A clear career promotion path will enhance the motivation, competency, creativity and perception

of planning staff, who thus may be more innovative in their main tasks of monitoring, evaluating, and planning.

Conclusion

A planning model which was to combine bottom-up and top-down planning has been implemented in Indonesia since 1983, but it remains strongly dominated by top-down or central planning. This is due to the fact that all project proposals proposed from the lowest level of government are decided by the central government via its department agencies and the National Planning Board (*Bappenas*). The majority of budget funds for the projects and programs for rural and urban development flow from the center and the implementation of projects and programs in the region are directly controlled by department agencies, located in both provincial and district or municipality levels.

The findings clearly reveal that there is only a very narrow opportunity for district or municipal governments to make political decisions because of structural constraints within the structure of the government authority. It is clearly shown by this study that the district or municipal development planning board (*Bappeda Tingkat II*) has been playing a very small role, and is limited to monitoring the projects and programs implemented in the region. The commitments of bureaucrats, especially those who hold key positions, tend to be weak. They are content just to follow all instructions from the upper levels in order to maintain their 'comfortable positions'.

Planning procedures offer only a very small chance for local people to participate in development planning, and only at the beginning of the planning process, when the Village Council for Development Planning and Guidance (LKMD) discusses the first draft of the list of project proposals (DUPs) in the villages. After this, public accountability flies out the window

because the rest of the process and procedure is taken over by bureaucrats. The local and provincial representative councils which could be involved in the regional development planning process and contribute and participate in planning do not have direct access to the planning process.

The factors which deter decentralization and participation in rural development include: a lack of visible political commitment to development, bureaucratic resistance, inadequate resources, poor coordination and the lack of sufficient human resources. These constraints include historical factors, derived from both recent history as well as unfavorable experiences in earlier development efforts, and sociological factors, such as the domination by local elites and the persistence of a poor communication network.

Several factors which can facilitate participation and decentralization include: supportive national policies and a bureaucratic culture that promotes negotiations between the central and local jurisdictions. Program and project designs that are flexible and relatively simple, and which use existing institutional resources also facilitate effective decentralization and participation. Local authority to generate resources, combined with resource commitments by beneficiaries, is important, especially if augmented by efforts to build local capacities to manage these resources.

Theoretically, the planning process in Indonesia is based on a combination of bottom-up and top-down planning. In reality, as is indicated in the case study area, the process is dominated by top-down planning. Almost all programs and projects implemented in villages (such as the programs to increase rice production, to give credit for rice farmers, to improve village roads, and to build primary schools) are organized and funded directly by the central government. Some of these funds are called "specific grants". Implementation of programs and projects has to be based on general guidelines released from the central government and directly controlled by development agencies located in province and district level. Such strong control as this by the

central government weakens the role of local government and the local development planning board in the region.

At the same time, the participation of the rural community is very weak in the planning process for programs and projects in villages. Proposals from villages have to pass all the procedures and bureaucratic systems from the subdistrict level up to national level. Thus, it is clearly shown that programs and projects proposed from the village level have to be approved by the central government. This is a lengthy and time consuming process. In order to improve bottom-up planning, more power needs to be given to local government and local development planning boards to plan, implement, monitor, and evaluate programs and projects in the region. Community participation in the planning process of implementing programs and projects is urgently required to facilitate this. Participation will give more opportunities to rural people to participate actively and be directly involved in the village decision-making.

CHAPTER EIGHT

CONCLUSIONS, IMPLICATIONS, AND FURTHER RESEARCH

Introduction

This study of rural-urban linkages and development in the cases of four villages, a rural center (subdistrict capital), and a small town (the district capital) in Bolaang Mongondow District of North Sulawesi, Indonesia, is not intended to provide a general conclusion. Nor is that the aim of the supporting case studies of the three villages in Parigi Subdistrict, in Donggala District of Central Sulawesi Province. The main conclusions derived from this study are with regard to migrant and nonmigrant villages' linkages to the urban hierarchy, and the general aggregate of rural-urban linkages and development as an entity in the region. One might expect that the findings of this study would be replicated in studies at other locations having relatively similar characteristics and conditions. It is hoped that this study will stimulate interest and prompt similar future studies, in order to allow comparisons to be made and perhaps, eventually, general conclusions which could support new theories of rural-urban linkages and development within the broader context of regional planning.

The ultimate rationale of the study lies in the policy implications which it holds for rural-urban development in Indonesia. Before drawing out the policy implications, some summary is required. Since the major findings are many and varied, it is necessary to reduce the findings to a more general set of observations. A brief review of the government policies which affect rural-urban linkages and development will provide an historical foundation for the later sections dealing with suggested alterations in these policies and future research needs.

Major Findings

Given the limited knowledge of rural-urban linkages and development in North Sulawesi, Indonesia, the study has attempted to answer some basic questions. The first objective of the study was to examine the impacts of rural development policies as expressed through transmigration and rice intensification programs, by analyzing the major demographic, economic and social characteristics of nonmigrants, and comparing these with the characteristics of migrants. The list of tentative generalizations based upon empirical results follows.

It is evident from the findings that the nonmigrants were quite distinct from the migrants, with important differences in their social and economic structures, specifically in terms of education, and to a lesser degree in occupation and employment, income, consumption expenditure patterns, investment, land ownership, production tools and household goods ownership. Education continues to play an important role in the processes of family and community development, and in adopting new technology applied to agriculture. The migrants are better educated than nonmigrants. Some migrants had some vocational training which shaped their skills. Educational achievement was found to be very strongly related to adopting information, agricultural technology, and to consumer goods ownership. Some evidence was found that the process of economic adjustment to rural life was more successfully carried out by the well-educated (both nonmigrants and migrants) than those who had only a low level of educational attainment. These findings clearly indicate the need for continued efforts to expand and upgrade educational services within the region.

Occupational status played a crucial role in the family and was an important variable indicating the success of the family and their socioeconomic status in the community. The occupational status of nonmigrants differed substantially from that of the migrants. The nonmigrants are mostly laborers, while the migrants are landlords or independent farmers (who

own their own land). Some migrants also work as hired labor in the wet rice fields, where they tend to dominate most of the job activities. This is due to the fact that the majority of migrants used to work in wet rice fields in their places of origin (Java and Bali) prior to migrating to Dumoga Subdistrict, North Sulawesi. The prior skills and experiences of working in wet rice fields make the migrants more successful at managing their own wet rice fields. The nonmigrants are more familiar working the dry land or crop fields.

The size of land ownership for the farmers in rural communities is a symbol of success in accumulating wealth in the village. The findings reveal that the average land ownership (especially of wet rice fields) for migrant households is around three times that of nonmigrant households. This is explained by the fact that when migrants settled in the region, they received two hectares of dry land from the government which could easily be transformed into wet rice fields after the dams and irrigation systems were developed. The migrants also practice their entrepreneurial skills by investing their money in buying land, especially wet rice fields, mostly from the nonmigrants surrounding the village. The average land ownership of crop fields or dry land is larger for nonmigrant households than for migrant households, but in terms of the average size of ownership, it is still relatively small. Most of the dry land owned by nonmigrants is inherited land and some is land purchased from other nonmigrants in the village.

The agricultural yields in the village mainly depend on the size of the plots and the adoption of high technology agricultural inputs such as fertilizer, pesticide, and high-yield seeds. The case study shows that average rice production is higher for the migrant households than for nonmigrants. This is due to the fact that migrants dominate the ownership of wet rice fields in the region, and because their advanced knowledge of managing rice fields makes it easier for them to adopt new information and technology relevant to rice farming. The other reasons are that many migrants own relatively complete production tools (compared with nonmigrants), and some

migrants use hand tractors which are more efficient in terms of production costs and time, which also allow them to work outside their own fields. In contrast, the proportion of nonmigrant households producing seasonal crops such as corn, soybean and peanuts is much higher than the proportion of migrant households.

Table 8.1
Summary of Nonmigrant and Migrant Characteristics

Characteristics	**Non-migrant**	**Migrant**
Demographic		
- Age	Younger	Older
- Education	Low	High
- Number of children	Three/Four	Three/Four
Occupation		
- Main occupation	Laborer	Farmers who own their land
- Part-time occupation	Nonagricultural activities	Agricultural activities
Ownership		
- Land	Low	High
- Production tools	Moderate	High
- Household goods	Moderate	High
Economy		
- Income	Low	High
- Average consumption expenditure per day	High	Moderate
- Sold properties	High	Low
- Access to informal credit institutions	High	Low
- Investment	Low	High
- Remittances	Low	Low
- Capital outflow	Low	High
Production		
- Rice	Low	High
- Seasonal crops (corn, soybean, peanut)	High	Low

Source: Sample Survey Data

In the rural communities studied, both nonmigrants and migrants earned income from both agricultural and nonagricultural activities. The study indicates that the average income of migrant households is higher than that of nonmigrant households. More specifically, the average

household income gained from agricultural activities is more than two times higher for migrants than for nonmigrants. The main reason for this gap is that the average wet rice field ownership of migrant households is larger than that of nonmigrant households. However, the average income which nonmigrant households earned from nonagricultural activities is slightly higher than that of migrant households, because some nonmigrants work in rural small-scale industries, rural services and trade, and in rural mining activities, located either in the village or outside the village. This shows that even though rural communities are mostly engaged in agriculture, villagers are not wholly dependent upon agriculture, but obtain income from a variety of sources.

Nonmigrants' consumption behavior showed that they tend to spend their disposable income on daily needs and other household goods. The finding shows that the average costs for daily needs and the average expenditures for utensils and furniture of nonmigrant households is slightly higher than those of the migrant households. This difference is not related to the number of people in the household (nonmigrant households are not bigger than migrant households), but occurs because most nonmigrants buy their daily needs in village markets or small shops (*warung*). On the other hand, most of the migrant households produced the vegetables, fruits, and other daily needs themselves in plots surrounding their houses. This self-sufficiency strategy could not be applied by the nonmigrant households due to the limited plot areas surrounding their houses. Average annual expenditures of migrant households for education, health, clothing and other items are high compared with those of the nonmigrant households. This finding indicates that the migrant households tend to spend their income on "human investments" to improve their life, and for production tools to increase their agricultural production. Thus, the nonmigrants and migrants have entirely different patterns of using their income. The nonmigrants spend more income on fulfilling their basic daily needs and buying some luxury goods, while the migrants tend to spend their income on improving their quality of life.

The findings above clearly indicate that the migrant households are better off compared with the nonmigrant households. The success of migrant households in developing and managing their resources and land is strongly supported by their motivation to improve their lives by means of the skills they have developed since they were children in their place of origin (Java and Bali), working the wet rice fields. Those skills are the comparative advantages that migrants have, unlike the nonmigrants who are mostly familiar working in the dry land or crop fields. The migrants have made a significant contribution by increasing rice, corn and soybean production in the region. However, the success of migrants in terms of socioeconomic development is not only a consequence of their high motivation and skills but is also due to the strong support from the central government which provided them with cleared land, house, tools, and food support for one year. The government has also built, mainly for transmigrants, basic infrastructure such as dams and irrigation systems, rural roads and transportation networks, education and health services, all of which have been paid for with enormous investments from the central government with loans from the World Bank.

The second objective of the study was to analyze how the rural center and small town stimulate rural development, and to discern the impacts of the linkages on rural development by analyzing the dynamics of various stages of government intervention and the planning process. Based upon the empirical study, the list of tentative generalizations on these issues is as follows.

The linkages of rural to urban areas are quite unique because they do not precisely follow the levels of urban hierarchy. The findings clearly reveal that only a small proportion of respondents visit the rural center (subdistrict capital) for buying kinds of food which are not available in village markets or small shops (*warung*). Many respondents visit markets located in the small town (district capital) for shopping, dealing with local government, education, health services and visiting families and relatives in town. Only a small proportion of respondents,

mostly the landlords in the villages, have visited the medium city (provincial capital) mostly to deal with education, health, and shopping.

The village markets and rice mills play an important role in absorbing rural production. The findings show that the majority of rural production of rice and crops are directly sold in the village markets and rice mills. At the same time, many urban products flow to rural areas through the bypass marketing distribution of wholesalers from the medium city who link directly to village markets and small shops (*warung*) in the villages in order to respond to the demands of rural consumers. In other words, rural and urban linkages mostly occur through consumption linkages rather than production linkages. The findings also show that the capital outflow from the villages (remittances by migrants) was higher than the capital inflow to the region. Part of rural farmers' incomes is spent for goods produced by the manufacturing sector located in urban areas and for educating their children in the towns. All of these facts suggest a constant flow of wealth from rural areas to urban areas.

The study shows that although the rural center and small town have status as urban centers, their roles are limited to being centers of administration and political control. The role of the rural center in the region is too weak, and both the rural center and the small town tend to function more as service centers since most education, health, and other public facilities and all local government institutions are located in both the rural center and the small town. The subdistrict capital, as a rural center, has not accelerated rural development, due to the fact that only a small proportion of rural farmers, mostly the elite in the villages, have strong purchasing power. Most of the village elite tend to spend their income directly in the small town and

Table 8.2
Main Linkages and Types of Policies Based on Government Levels

Main Variable	Type of Policies	Government Levels		
		Cent-ral	Provin-cial	Local
Technology				
- Information and communication	- Special programs of agricultural development via radio and television	S	M	W
	- Newspapers program called `newspapers entering the village'	S	M	W
- Agricultural inputs (e.g. fertilizer, pesticides, new seeds)	- Mass Guidance (*Bimas*) program and Mass Intensification (*Inmas*) program	S	W	W
Infrastructure				
- Transportation	- Road construction and maintenance	S	M	M
	- Public transit (*Damri*)	S	W	W
	- Public transit license and fare	W	S	M
- Irrigation system	- Irrigation construction and maintenance	S	M	M
	- Water distribution	W	M	M
- Electricity	- Power construction and maintenance	S	W	W
	- Services	S	W	W
Services Delivery				
- Education	- Building construction and maintenance	S	W	W
	- Nine-year compulsory education	S	M	M
	- Curriculum development	S	M	M
	- Services	W	M	S
- Health	- Building construction and maintenance	S	W	W
	- Services	W	M	S
Economy				
- Local markets	- Building construction and maintenance	M	M	M
	- Retribution	W	W	S
- Marketing	- Floor and ceiling prices of rice	S	W	W
- Production	- Rice intensification	S	W	W
Migration				
- Rural to rural, rural to urban, and urban to rural	- Indirect policies via transportation and off-farm employment opportunities	W	W	W
Political Administration				
- Financial flow	- Sectoral budgets and grants	S	W	W
- Planning process	- Top-down and bottom-up planning	S	W	W

Note: S = Strong, M = Moderate, W = Weak
Source: Sample Survey Data

medium city, which offer more alternatives for spending their money. Another reason for the stagnation of the rural center is the marketing distribution system by wholesalers located in the medium city. These wholesalers sell directly to small shops or *warung* located in villages thereby bypassing the rural centers. Improving transportation networks has negatively affected the market activities located in the small town and especially in the rural center. Thus, the

development potential of the rural center and the small town depend on the surrounding farmers having the land, access to extra local and regional markets, and good fortune to choose to grow a crop for which prices will remain high or at least stable in real terms, and the capital to afford intensive production.

The evidence shows that through improvements in the transportation and communication networks, and due to the growing commercialization and specialization of production, the region has become increasingly functionally integrated in wider political and economic networks, both national and international. This is attended by a hierarchical structuring of space, resulting in, among other things, the emergence and growth of the medium city. The lesson that could be learned from this study is that when we want to acquire insight into the potential development and role of rural centers and small towns as urban centers, the regional context should play an important part in the analysis.

Another important conclusion that can be drawn from this empirical study on the role of rural centers and small towns is that the quality and diversity of their functions depend on the developments in their hinterland, instead of the other way around. This finding is similar to that of de Jong and van Steenbergen (1987) from their study of urban centers in Central Java. When the rural economy is more commercialized and based on the surplus production of independent producers, then the economy and functions of rural centers tend to be more differentiated and more resistant to the dominance and bypass effects from the higher order centers.

Moreover, the study makes clear that the role of the rural center does not condition the development of its hinterland, in either a positive or negative way. The most important impulses for the development and transformation of the rural areas come directly from the high order centers, or are determined by central governments and world market mechanisms. The result is that local or regional service centers are often completely bypassed. This applies particularly to

centrally guided government programs in the fields of food production, cooperatives, rural industrialization, credit supply, electrification and infrastructure development.

In this case the small town and rural center are allotted only subordinate and supporting roles. It is also true that socioeconomic changes in the rural hinterland lead to the loss of function and bypassing of these centers. Especially when agricultural intensification and innovation bring forward increased production and economies of scale, traders from higher order centers find it attractive to shorten the circuit directly to the small-scale trade chains located in rural markets. Growing purchasing power and changing consumer behavior of the rural middle class can also lead to the bypass of local service centers, particularly for durable consumer goods and specialized services. Under these conditions, rural centers may not be able to function as centers of innovation and modernization. It is also clear that under these conditions their exploitative function will remain limited.

The function of the administrative hierarchy in the rural center and the small town for stabilizing the employment base of urban centers does not imply that an urban center's designation as an administrative center necessarily provides a long-term stimulus to its development. By being designated an administrative center, that particular center was likely to become the first within its area of jurisdiction to be linked by road to other areas or regions. It was also likely to monopolize most public investments and to contain most of the public employees within its area of jurisdiction. But this has rarely been sufficient to provide a sustained stimulus for its economic development.

It is clear that the administrative hierarchy of national, provincial, district or municipality, and subdistrict capitals imposed to consolidate political control within existing national boundaries has had a profound effect on the location of public investment. The fact is that this administrative hierarchy, when imposed over any national, provincial or local territory,

essentially imposes the first urban system. The establishment of the current administrative hierarchy usually predates an urban system developed to the point where there were substantial interregional and interurban flow of goods, people, capital, and information. The study indicates that the rural center and the small town do not even serve the limited commercial needs of their own rural areas and instead provide the location for political and administrative control. As interregional production and trade develop, the administrative centers are usually the main nodes on the transportation network which thus stimulates their development relative to other urban centers nearby. This essentially creates the `backbone' on which the urban system develops because it provides the interregional transport and communication infrastructure which allows such development.

As administrative roles have helped support urban centers' development, the public sector is important for the employment it creates directly or indirectly. Those employed within the local and district administrations include: laborers, traders, transportation workers, and public sector employees of all kinds, such as teachers, hospital staff, policemen, office personnel, and road workers. The demand they generate for goods and services, including maids to do housework, makes up one of the most important sources of employment in the small town of Kotamobagu. The government is likely to continue as a major source of employment in urban centers.

The role of local governments in regional development appears to be weak and small compared with the role of provincial and central governments, as indicated in Table 8.2. The findings reveal that most government policies related to rural development, i.e., pertaining to communication and information, transportation, irrigation systems, electricity, education, health, marketing, cooperatives and banks services flow directly from central government agencies and are implemented via their agencies located at the provincial and district levels. The local

government only has authority to organize those services related to village public markets, education and health.

Theoretically, the creation of local government units is perceived to be advantageous for the promotion of rural development. Through their unified structures, local governments can facilitate greater internal coordination, motivation and accountability for an area-wide rural development effort, thus overcoming the sectoral divisiveness of separate government agencies. It is also a viable means to physically locate legal authority in the actual area of administration.

Local governments can provide a better understanding of the relationship between the desired project objectives and the resources available to implement them. In the process of mobilizing local resources, they promote participation of the people, facilitate horizontal coordination, and encourage innovation and experimentation in rural development strategies and programs. Finally, the administration of rural development programs by local units generates more employment within the area of local jurisdiction than do projects undertaken by the central government.

However, there are various problems with the devolution of power to local government units. Local elected officials are perceived to be not so capable and efficient. Although some strategic key positions in both the provincial and district government levels are occupied by non-locals, in general the local governments are dominated by locals, leading not only to an unequal distribution of benefits within the community, but also graft, corruption and nepotism. Local officials tend to spread inadequate resources too thinly and to duplicate the work of other agencies. Finally, centrally-based politicians see a danger in sharing political power with them. This could possibly result in a conflict of interest with the central government and would consequently weaken the state authority. Thus, efforts are not usually made to strengthen local

governments and district administration, as the central administration fears that by doing so it would threaten its own power base and instruments of control.

There are many weaknesses associated with the future development of rural centers and small towns. Rural centers and small towns do not have their own administrative or political structures. Their administrative structures are directly under the control of the subdistrict government, and a planning section does not exist at this government level. Second, the basic economic structures of rural centers and small towns depend mainly on the agricultural sector and are weak due to the relatively low incomes of the population in the surrounding areas, and the lack of investment. Thus, rural centers and towns have only limited attraction for the establishment of manufacturing. Despite these deficiencies, rural centers and small towns will continue to act as important administrative centers offering a range of services to their rural hinterlands.

Local governments are more dependent on central government budgets than the village governments. The main trend indicated in this study is that the local governments, including both a district (Bolaang Mongondow) and a provincial government (North Sulawesi), depend heavily on central funds, given in the forms of subsidies and block grants. Local governments' high dependency on central funds is compounded by the limited capacity of local governments to accumulate their own local revenues. However, village government funds are relatively less dependent on central government grants. Despite Basic Law no. 5 of 1974, which emphasizes local autonomy at the district and municipal levels in terms of financial systems, local governments are still far from the stated goals of local autonomy. Implementing decentralization in Indonesia must first deal with the reality of centralization.

The relatively low level of local own revenues is strongly related to several factors. First, the strictly centralized fiscal system causes the largest proportion of revenues to flow to the

center. Second, only a limited number of the many sources of tax can be relied upon by local governments. Third, local enterprises contribute only a very small proportion to the local own revenues, and finally, the quality of service offered by local bureaucracies is relatively low.

In practice, the concept of planning which was intended to combine the bottom-up and the top-down has resulted in a system which is strongly dominated by top-down or central planning. This is due to the fact that all project proposals proposed from the lowest level of government are decided by central government via its department agencies and the National Planning Board (*Bappenas*). The majority of the projects and programs for rural and urban development flow from the center, and the implementation of projects and programs in the region are directly controlled by department agencies located both at the provincial and district or municipality level.

Another problem identified was related to coordination in planning and implementation. In its current role, the district planning and development board (*Bappeda*) has only limited room to participate in planning and implementing the programs and projects in the region. One of the advantages of the decentralized framework of planning is that coordination of the work of the line agencies involved in rural development becomes more practical. Unfortunately, in practice it has proved difficult to bring about such coordination. The problem relates to the continuation of the high degree of central control, which means that representatives of department agencies at the provincial and local levels remain firmly set in a vertical command structure. At the same time the coordination mechanisms at lower levels are not strong enough to weaken this attachment.

The problem of coordination takes on an extra dimension in the fact that even where provincial and local planning board offices have been established, they do not constitute a unitary framework for rural development activities. Some special programs bypass the decentralized planning system. This is obviously true for projects such as farmer's credit, special poverty and

employment-oriented programs, rural water supply, and projects for improving the rural environment which have been directed from the center and outside of the framework of district level planning.

The two questions of commitment and coordination highlighted above come together in the figures of departmental level planning officials. The continued commitment to their line agencies via the strong vertical linkages of the existing administrative system, rather than to whatever decentralized planning authority is established in the region, is clearly a conflict which affects the effectiveness of the decentralized planning framework.

The study has examined rural and urban development planning in North Sulawesi, showing the main dimensions of planning both for rural and urban development, with special attention to the planning environment. It has also provided an assessment of the dominant factors that affect the nature of and relevance of government interventions in the case study areas.

The essence of the findings clearly reveals that there are many actors who have been active simultaneously in intervention although without effective coordination. The department agencies located both at provincial and district level are strictly organized along sectoral lines. These agencies have carried out their interventions with an emphasis on economic and technical aspects via standardized projects and programs implemented in the region. The top-down approaches applied in the planning process and implementation of the programs and projects have rendered impotent the participation of rural communities. The differential needs and problems of communities resulting from the specific nature of the wider planning environment are not properly taken into account.

The common interpretations of the planning environment, including the context in which planning boards operate and the decision environment in which planning occurs, were found to be too general. The political-administrative structure, type of development policies pursued, type

of national and regional economy, and the macro regional political and economic conditions are all components which influence, directly or indirectly, planning and implementation of development activities. Those variables require attention in the pre-planning process.

The complexity of the government's structure in relation to the planning and implementation of development has become clear. Top-down sectoral measures occupy a central place in the process of development planning and implementation. Financial relations reinforce the centralized control over the development process; the vertical linkages at the subnational level are more important than the horizontal linkages. Much of the budget is under the control of the regional representative offices of the national government ministries, *Kanwil* and *Kandep*. This greatly impedes an efficient and effective execution of the supervisory and coordinating activities of *Bappeda* and is likely to frustrate problem-oriented development intervention at the provincial and local level.

This study reveals that rural development policies as expressed in rice production programs (*Bimas*), and resettlement programs (transmigration), have resulted in a transformation of rural communities which appears to have improved the living conditions of the majority of the rural population. The process of transformation can be identified mainly through the expanding output and productivity of agriculture, gradually improving the job opportunities for off-farm activities, increasing the villagers' income levels and changing consumption behavior, and increasing the availability and accessibility of basic social services such as health clinics, education, communications, cooperation and rural banks. This process is made possible by the planned interventions of both central and local governments, and an important part is the increased formal participation of farmers in the community.

The implementation of the rice production intensification programs (*Bimas*) has largely been geared towards the realization of production volume growth. In practice, the landless and

crop farmers have mostly been ignored. A skewed impact has been observed in the region. Certain strata were found to capture most of the benefits, making others just onlookers to the intervention process. Although production-oriented government interventions have contributed to regional economic growth, their impact on rural development in terms of income and employment equity is considerably less substantial.

The overall impact of rural development programs is reflected in the narrowing social and cultural gaps between the urban areas and the vast rural areas. The cultural isolation of rural life which has prevailed for many generations is now broken largely as a result of the massive information that is reaching the villages through a multitude of channels (including television, radio, and village newspapers). The deluge of information may not be timely and readily comprehensible to the average villagers, but as a whole, the input of urban-originated information has created a new social and cultural environment that poses a challenge to the traditional customs (*adat*) and way of life.

General Conclusion

In general, the implementation of agricultural policies (especially the intensification of rice production through *Bimas* programs) in the region has had positive impacts in increasing rice production, increasing household incomes, and creating new job opportunities outside agriculture as a direct consequence of increasing the demands for industrial goods and services. However, these policies tend to favor the migrants, since most of them own more of the wet rice land and already possess the skills for managing wet rice fields. Because of this, the migrants more easily accept and benefit from the introduction of the new inputs for agriculture, such as fertilizer, pesticide, and high yielding variety (HYV) seeds. As a consequence, the migrants are better off than the nonmigrants in terms of income and land ownership. These disparities could become

seeds of jealousy for nonmigrants, and thus aggravate future relations between nonmigrants and migrants in the region.

The study indicates that current policies for rural development are intended to increase rice production rather than decrease the income gap between rural and urban areas. The agricultural policies which strongly control the price of rice keep it relatively low via DOLOG at the provincial levels, while constantly increasing the price of agricultural inputs such as fertilizer and pesticides. Such policies do not help farmers to increase their real incomes, but rather serve to protect consumers, most of whom are living in urban areas.

The introduction and diffusion of new technologies for the wet rice fields has not resulted in basic changes in the role of the government. The role of the government, however, has changed since the first five-year development plan (in 1969). The role of central government agencies in village development has increased, and the heads of villages have, more and more, become tools in the hands of central and provincial governments for the execution of programs and projects for rural development. The pattern has continued and has been used in the process of diffusion of new technology, including use of tractors. Some slight changes could be observed in the migrants' villages. It seems that more initiative was coming from the migrants themselves in applying new technologies to increase rice production. With this development, a decrease in the importance of village government relative to the growing influence of the richer farmers and entrepreneurs could be observed.

The evidence shows that the role of rural centers is only limited in the medium term and is relatively weak in stimulating economic activities in the areas surrounding rural centers. As rural areas develop and the incomes of the rural population increase, these people tend to visit markets located in small towns and medium cities rather than to visit markets located in rural centers. This is because markets located in rural centers are relatively small and have limited

goods and services to offer to rural consumers. On the other hand, markets located in small towns and medium cities offer many kinds of goods and services that consumers can choose from. Another reason why people visit markets in small towns and medium cities is related to the availability of transportation from rural areas to urban areas. Transportation networks served by minibuses make it easy for rural people to access markets located in urban areas such as small towns and medium cities. In other words, the limited role of rural centers is a consequence of the "bypass" effect. This indicates that the strengthening of rural development and rural-urban linkages favors higher points on the urban hierarchy.

The new priority within the field of regional planning studies—especially with reference to this case study—should be to understand the new underlying forces of regional development by focusing on the roles played by networks. In the context of increased communications and information flows, networks are pervasive in many aspects of the integration of regional economies. Another priority for study is to examine how essential development aspects such as the shortage of capital and/or diffusion of credit affect the local development of dry land areas.

The study shows how linkages between rural and urban areas are identified and facilitated through sets of main independent variables—economic, migration, services delivery, physical infrastructures, technology and political administration. However, the findings clearly reveal that the political administration variable does not stand alone as an independent variable. It bridges the rural and urban areas via financial and planning process linkages as indicated in this study. Political administration variables have strongly influenced other independent variables (i.e., economic, services delivery, physical infrastructures, and technology) through direct and indirect policies by different levels of government—central, provincial and local. Although local governments directly stand at the front of local communities, serve their needs, better understand local problems and desires, and have a very crucial role to play in ensuring the equitable

distribution of benefits derived from economic development, they have little authority in deciding the policies and implementing the programs and projects in the region.

As a part of regional development, developing rural and urban areas requires special and focused attention from both central and local governments. Problems arising in rural and urban areas connect one to the other, and make it more difficult to solve problems by addressing each sector in isolation. Rural and urban areas are one entity: a region that needs integrated and comprehensive development management. As a consequence, implementing development requires readjustment in establishing sectoral development by giving special attention to the linkages between rural and urban areas. The social and economic linkages between rural and urban areas must be the basis for formulating development policies for both rural and urban areas in the future.

The study also shows that the implementation of urban development has strongly emphasized the development of urban infrastructure. Relatively less attention has been given to improving urban management and municipal development, especially in medium cities and small towns, where such strategies are directly related to such relevant issues as; the improvement of local government capability in increasing local revenues, the control of physical urban development, the management of urban infrastructure and land, the promotion of direct participation by the private sector and communities in urban development, the upgrading of a legal framework to support urban development, and the improvement of human resources for urban development.

Development practitioners and planners should adopt a holistic perspective when dealing with rural development, rural centers and small towns, in contrast to the situation at present where the focus is on actual settlements and physical planning. Rural centers, small towns and rural areas must be viewed as elements of wider regional, national and international systems, and

factors such as the impact of the global economy and telecommunications, which have profound effects, should be taken into account. Thus, development practitioners and planners must conceive of small towns as part of wider national, regional and international systems. Moreover, their concern must ultimately be people rather than place-centered. The focus should be on those people most in need of assistance (the rural and urban poor), and on the necessity for the new perspective to embrace recent shifts in the conceptualization of regional spatial planning and policy.

With regard to developmental terms, the objective should be the formulation of multifaceted, integrated policies sensitive to different group needs, which embody the most positive elements of both top-down and bottom-up planning. Neither of these two opposite approaches alone will achieve the desired results. The guiding questions should be: what mechanisms, forces and structures determine the incidence of benefits and costs; and, secondly, who benefits, how, and where? The rationale of such an approach is to provide a comprehensive analytical framework which combines structure and human agency, thus providing the flexibility necessary to focus on the critical dimensions of a particular situation.

Ultimately, significant improvements in the capacity and the autonomy of local level government and lower level planning (i.e., more opportunities for local communities and institutions to act as partners of local government, participating in the planning and implementation of programs and projects in the region) require political will and political courage from both central and provincial governments. The higher levels of government would have to relinquish some decision-making power and the necessary resources in order to support incentives that engage local government and the local population in an integrated and participatory planning process.

Policy Implications and Recommendations

The third objective of the study was to obtain a greater understanding of policy impacts on rural-urban linkages and development in order to shed more light on types of intervention that are most useful for rural-urban development goals. The list of policy recommendations for rural-urban linkages and development based upon empirical results follows.

Future agricultural development needs to be based on improvements of the existing agricultural base, not from the large development programs (which characterized past rice productivity gains) that tend to benefit only wet rice farmers. Agricultural growth will not likely come from a single commodity, as was the case with rice. Instead, it will come from production improvements in many crops. Therefore, agricultural development should emphasize new sources of growth, especially to expand the benefits of modernization of the crops and small-holders' tree crops (for certain crops, the returns are higher than that of rice), animal husbandry and fishery production.

Agricultural diversification will remain necessarily limited in scope if marketing outlets cannot be found for the new range of agricultural produces. It would be useful if public bodies or independent institutions promoted the community level diffusion of information on marketing potential for a range of agricultural or small-scale industrial products.

In order to be able to compete in both national and global economies, there is a pressing need to reorient agricultural development. In the past, emphasis was placed on increasing agricultural production, especially rice. In the future, however, greater emphasis should be placed on the income generation and income distribution aspects of agricultural development. It is believed that income generation can be promoted through added value activities in the agricultural sector. One promising avenue for achieving this is the promotion of agribusiness, including agroindustries.

Rural development policies should encourage village economic activities in rural industrialization or agroindustries. The main argument for this is that the growth of small-scale industries, home-based industries, and some activities in the service sector have direct linkages to agricultural activities. The development of agroindustry activities will generate both on-farm and off-farm job opportunities in rural areas and therefore will contribute to poverty alleviation and gradually decrease the process of urbanization and the problem of land ownership in rural areas. However, because each region has its own characteristics of economic structure, resources, and environmental conditions, careful attention is needed to select the policy instruments that will set in motion sustainable rural development.

The lesson learned from the present case study is that technological improvement has proved to be an effective stimulus for rural development. Experiences also suggest that the government investment in basic infrastructure such as rural roads and irrigation facilities has enhanced technological change in agriculture and rural development. To promote further adoption of new technologies in rural areas, the key strategy to be followed is the government's initial investment in basic infrastructure, particularly roads and irrigation facilities. Other strategies include improved marketing facilities, access to credit for the poor, and the expansion of education and health facilities.

The findings indicate that although the level of education for migrants is higher than for nonmigrants, in general the level of education of the rural population is still significantly lower than that of their counterparts in urban areas. Encouraging private sector or independent organizations' participation in improving education (including higher education, developing education, and vocational training) should be emphasized to further reduce the education gap between rural and urban areas. However, the main factor leading to disparities in the rural population's access to education remains financial, because the costs of higher education are

beyond the capacity of most rural households. The policy response could partly consist of providing students from poor rural households with scholarships that may benefit local development.

Traditional saving and credit systems should be integrated with decentralized formal banking institutions in rural areas. By participating in traditional saving or credit activities, the rural population does not have to deal with bank officers but with fellow villagers or facilitators in rural independent institutions who are likely to better understand their needs. This alternative enables the rural communities to avoid the long and tiresome formalities that are usually requested by formal banking and other credit institutions. The efficiency of the procedure necessary to obtain a loan should be improved. Procedures should be accelerated without complicating the process of reviewing proposals by loan applicants.

Learning from the experiences of migrant farmers (transmigrants) in the region and adopting their experiential wisdom for use by nonmigrants could improve conditions of local populations. Such long-term integrated development planning approaches should be implemented directly by local governments who are closer to local communities and their problems. In general, improving the conditions of nonmigrants and all poor peasants could be done by enlarging the opportunities and resources that they can access, by efforts such as providing basic services in education and health, enlarging the role of village cooperative units, increasing the terms of trade of agricultural products and, most importantly, formulating a simple procedure for rural credit with low interest rates without requiring collateral (since most rural citizens do not have land title certificates for collateral). This program could help poor peasants improve their lot in both agricultural and nonagricultural activities. Independent institutions or NGOs set up in rural areas can serve as valuable facilitators for rural development and the planning process as well as centers for information on rural activities (including tips on access to

rural credit, improving home-based industries, establishing small-scale enterprises and current information on agricultural commodities' prices in both rural and urban markets). Finally, independent (NGO) institutions and local institutions should be given more opportunities to directly participate in the planning process, decision-making, implementing and evaluating the programs and projects that they desire. Creating partnerships between these people, local institutions and local government is a step towards improving rural life and developing the region.

Improvements in the financing of local development calls for corrective action with respect to both revenue generation and collection and expenditure allocation. Moreover, the assistance of the central government in resolving the problems of local government finance are as important as the actions to be taken by local governments themselves.

There are some areas of local government finance which require closer attention if local governments are to be expected to fulfill a greater role in the overall development effort. The critical areas include the following:

(1) improvement of yields from existing revenue sources

(2) promotion of the use of public enterprises

(3) rationalization of expenditure allocations

(4) allocation of central government transfers

(5) staff capability building, and

(6) increasing services to communities with professional staff who are equipped with entrepreneurial skills.

It is understandable that both the district and the provincial governments cannot make the necessary changes alone. There is a pressing need to tackle the problems of fiscal decentralization and the distribution of subsidies and grants at the national level. The most

important policy changes are as follows. First, decentralized planning and managed development are priorities which must be supported by the transfer of adequate financial resources from central to local governments. The policy change not only concerns the amount of funds allocated to the local government but, more importantly, it requires transferring authority to local governments for using funds based on local conditions and needs. In other words, financial relationships between the central and local governments require new regulations in order to give more room and authority to local governments to manage affairs by themselves.

Second, distributing national resources equitably to and among the regions is a difficult task in Indonesia. It requires a wisdom which is oriented to the state's interests but also attentive to concerns of economic growth, unity, and justice. It is also understandable that the central government controls most national resources, including taxes and fees applied, because of the heterogeneity of local economic development in Indonesia. Transferring the big tax sources to local governments to manage by themselves without adequate preparation will create a wider gap among the regions. Indonesia is a huge and diverse archipelago state, consisting of many islands with varying degrees of political power, population density, and economic growth. Therefore, it is a wise policy for the central government to bring together all the main resources/revenues and then redistribute them through block grants to the regions based on systematic criteria which reflect local potentials (such as: economic growth, absorptive capacity, and contribution to gross domestic product) and regional needs (such as: population size, land area, and special attention to the regions consisting of many islands with huge sea areas; for instance, Maluku, Riau, Southeast Sulawesi, and North Sulawesi. The mechanism of national wealth redistribution requires delicate management to avoid regional jealousies.

Indonesia, in spite of its size and diversity, has evolved a reasonably efficient system of government. It reflects the need to balance authority between a strong central government and the

local governments. It provides a well-defined and articulated structure for local government down to the village level, and it has performed well in the New Order period in meeting the different demands placed on it. However, this system is still a relatively new system (particularly at the local government level), one that has to prove itself and to demonstrate that all levels can reflect and fully articulate government policies. It certainly requires considerable improvements in human resources training and changing bureaucrats' attitudes from inflexible authority to professional managers oriented to entrepreneurship. This is especially important as local governments become progressively preoccupied with marketing local resources and mobilizing private investment. The combination of such partnership arrangements will in turn stimulate local economic development (Harvey, 1989; Leitner and Garner, 1993, Hsing, 1996b).

There has been no substantial change regarding the comprehensive understanding of local autonomy since it was announced in Basic Law no. 5 of 1974. So far, the usual definition of local autonomy is always related to the issue of how capable local government is of exploiting local resources, or what percent local revenues can contribute to the local budget. Thus, local autonomy is always related to `money'. Since April 1995 central authorities have chosen 26 districts as pilot projects for implementing autonomous regions. Under this project the concept of autonomy concerns the transfer of duties to the level of the local agencies (*Dinas)* in the 26 districts. There has been no major change in the conception of autonomy itself.

Autonomy can be viewed from a variety of perspectives (Gaffar, 1995). First, autonomy has to be connected to increasing citizens' capacity to democratize political life, because it will be formed from and support the existence of local institutions, including the District People's Representative Council, party institutions, nongovernment organizations, and also government institutions which offer opportunities for local communities to participate in regional development. Second, autonomy can be viewed as a tool to improve the efficiency and

effectiveness of both local governments and finally, the nation-state, Indonesia. However, the realities encountered in the field work indicate that autonomy is prioritized differently. Thus, the current Indonesian concept of autonomy, which is more oriented to the local potential resources, should be reconceptualized, with more concern given to the authority which can be possessed by local governments.

Since the role of rural centers is limited only to administration and political control, future development of the urban hierarchy (especially for rural centers) needs to be based on the improvement of services. Education, public health, agricultural extension, banks and credit institutions, rural cooperatives, and other activities of subdistrict institutions are all services that need to be improved. Small towns need to be promoted not only as service centers but also as centers for accelerated rural development by agroindustries. Because these industries are directly linked to raw materials from rural areas, they will create new job opportunities in both rural and urban areas. Some rural people may move to small towns as seasonal migrants to work in agroindustries. These new jobs will increase income for both rural and urban people, and later on create new demands for manufactured goods and agricultural products.

Development of rural and urban areas needs a comprehensive approach and integrated implementation with direct local participation motivated by a sense of community mutual assistance. As stated in the Broad Outlines of State Policy 1993 (GBHN), development is to be implemented by communities and government. Thus, community is the main actor of development and government has responsibility for directing, assisting, guiding, and creating conditions to support the implementation of development. Furthermore, priority is given to balancing the growth rates between rural and urban areas.

The important prerequisites for a relevant model are the political will and courage to increase the surpluses of rural producers and regional centers, and to ensure a well-developed

physical infrastructure and access to external resources. It is doubtful whether the model is applicable to regions with weak infrastructure and/or resource base and with a predominantly rural economy. Such regions lack the basic conditions for surplus production oriented to export and trade. Besides, such production is hardly feasible considering the high cost of investment and the social, economic and demographic problems involved. Under these adverse conditions, an agropolitan model, the somewhat idealistic philosophy of bottom-up development based on intraregional trade and regional consumption (Friedmann and Douglass, 1978), is probably the most appropriate development model to be applied in the region.

To ensure the success of rural and urban plans, rural development intervention needs to draw on the potential local resources available. Local governments should work to strengthen the roles of local communities so they can directly participate in the planning, decision-making, and implementing of programs and projects. Both traditional and nontraditional local institutions contain substantial local capacities for generating local development, which should be seen as fundamental and based on partnership principles, not on the establishment of institutions or unpopular exercises of hierarchial power.

Considering that the main aim of rural development is to improve rural living conditions, great caution should be taken of district-specific constraints and needs. This requirement implies coordination and local participation in development efforts instead of top-down intervention. This requires a strengthening of the district planning board (*Bappeda*) in the political administrative structure. The relatively weak district planning board restricts access to information, hinders coordination of sectoral interventions, limits the influence of proposals originating from below, and prevents adequate control of implementation. Strengthening measures to combat these weaknesses will also contribute to institutional capacity.

Popular participation in planning and implementation does not guarantee problem-oriented development efforts because of the different interests at the village level. Therefore, the local development planning board (*Bappeda*) should be involved in the planning, coordination, implementation, monitoring, and evaluation of programs and projects. Such discretionary power requires special staff-training, upgrading of facilities and adequate resources to run the agencies.

Another aspect to be emphasized is the necessity of well-coordinated, monitored and evaluated implementation of plan activities. Apart from the horizontal coordination of activities of the various sectoral agencies, vertical coordination within agencies is of crucial importance so that plans can be linked up properly from one administrative level to another. Second, there is a need for classified, recognized status of planning subjects in the political administrative structure. Such a status implies some degree of autonomy in decision-making and budgeting. This will facilitate the building of relevant planning databases and effective horizontal and vertical coordination of activities, provided that the given discretionary power is adequately supported by personnel and the other resources required to run the agencies.

There is also a need to recognize that under certain circumstances, rural development cannot be stimulated successfully. The limits posed by the wider planning environment should be the prime concern of both policymakers and planners. It is unrealistic to expect that an enabling environment can be created out of a situation characterized by severe constraints or problems that frustrate economic growth. In this respect planners should not only consider the national economic situation but also the position of the region and country in the macro-regional political economic context.

The District People's Representative Council (DPRD) could be revamped as an alternative to accommodate local perceptions and needs in the planning process. This mechanism could be modified in two ways. First, the DPRD could be given an opportunity to work with the

local *Bappeda* to discuss and decide the development programs and projects which are needed in the region. Second, through meetings and hearings with nongovernment organizations and local institutions in the region the DPRD could also help local government in arranging programs and projects which address the needs of local people. If it is too difficult for the DPRD to participate in the planning process because it is legally a part of local government, another alternative is to involve local voluntary organizations (NGOs) directly in the planning process. Local NGOs have the benefit of experience in planning programs which are relatively good in structure and accountable based on their experiences working with national and international institutions. Through this model it is hoped that all interests of the local community could be accommodated. Nevertheless, there is also the risk that the NGOs later may become too bureaucratic since they must deal with the lowest level of bureaucracies. Eventually, NGO personnel may "burn out" and lose their ideals and motivation to work through the planning process for the needs of local people.

Participatory planning needs to be conceived as a long-term process for all actors involved so that locally-initiated projects matched with supplementary government resources can be effectively planned and executed. Institutional requirements must be met and local planners need adequate training, precise job assignments with compatible administrative authorities, and personal commitment. Arranging the planning initiatives of local communities according to a framework in which people clearly identify their needs, priorities and objectives depends heavily on planners' capabilities. Local communities should be assisted to undergo the following steps in a planning process.

First, there must be analysis of the situation in the area concerned, including the identification and prioritization of problems, needs and potentials. For this step, the village or *kelurahan* data base has to be developed in order to analyze the current development problems,

needs and potentials. It should comprise an inventory of all relevant human and natural resources, as well as an assessment of economic activities, social services, socioeconomic infrastructure and organizations actually or potentially engaged in village or *kelurahan* development activities.

Second, planning objectives and targets should be set based on a realistic scenario of the desired outcome at the end of the planning period. Third, in regard to the identification, formulation, appraisal and prioritization of project proposals, the program and project ideas should be fully developed in a realistic framework for action. A prioritization of project proposals is required for determining the rank order for project implementation. Fourth, the implementation and monitoring procedures for selected programs and projects are important elements in project funding negotiations and approval. Fifth, the selected programs and projects should be evaluated, providing final results which can be used to revise the planning process for preparing the next planning cycle.

The planning process outlined above mainly depends on the availability of qualified local planners, who will need mediation skills to involve as many community groups and factions as possible in this planning process. Sustainable development will only take place when everyone's living conditions gradually improve and a sense of community solidarity has developed. Community members' perceptions of future benefits are instrumental for motivating them to participate. The implementation approach starts with small-scale, short-term projects and modest objectives supported by resource inputs. Each project needs to be built step by step, with each successive project step drawing on prior experience. Local communities must be allowed time to adjust to new project related activities and gradually enhance their planning and managerial capabilities.

Further Research

Some empirical findings from the present study raise questions for further and more detailed analysis. Clearly the disparities in land ownership promote unequal income distribution in rural communities. Will the strengthening of rural-urban linkages through the generation of non-agricultural employment alternatives help reduce disparities in income levels, by reducing land ownership as a factor in social disparities, and ultimately increasing social mobility? Does land ownership, by enabling capital to be raised that can be further invested in emerging nonfarm activities, prolong the role of land as a factor in income disparities? Are emerging rural-urban linkages bringing about a new class of entrepreneur that would be distinct from the class of landlords?

Similarly, the developmental roles of local leaders deserve further attention. What are the roles of local leaders (both formal and informal leaders) in promoting rural centers and small towns as catalysts of regional development? What kinds of relationships are being established between local leaders and upper level or lower level leaders and between local leaders and local residents and entrepreneurs? Do emerging rural-urban linkages entail changes in the political structures of rural and urban communities, such as in the economic profiles of local leaders, in community life, and in local organizations that may ultimately have an impact on rural-urban development?

In order to better understanding the nature of rural-urban linkages in Indonesia, it is also important to study and to understand rural-urban linkages outside the region of North Sulawesi. It is expected that the results would be different if we were to examine these issues in Java, Sumatra, Kalimantan, and Irian Jaya. We could expect results to be different due to different economic structures and conditions (such as production, consumption, capital flow, and marketing), as well as different population densities and mobility, transportation and

communication networks. A comparative analysis across regions within Indonesia would be of great value for the further articulation of national decentralization policies.

Abbreviations and Glossary

ani-ani	finger knife
APBN	(*Anggaran Pendapatan dan Belanja Negara*) National Budget
APBD	(*Anggaran Pendapatan dan Belanja Daerah Tk.* I) Provincial Budget
APBD	(*Anggaran Pendapatan dan Belanja Daerah Tk.* II) District/Municipality Budget
arisan	rotating credit association
bahasa	language
BAPPEDA	(*Badan Perencanaan Pembangunan Daerah, Tk.. I*) Provincial Level Development Planning Board
BAPPEDA	(*Badan Perencanaan Pembangunan Daerah, Tk. II*) District/municipality Level Development Planning Board
BAPPENAS	(*Badan Perencanaan Pembangunan Nasional*) National Development Planning Board
bawon	a system of harvesting rice in which the owner of the crop allows his or her neighbors (usually women) to participate in the harvest, and then pays them a set fraction (for example, one-twelfth or one-fifteenth) of the rice that each harvests as their wages
BIMAS	(*Bimbingan Massal*, "guidance to the masses"), the program for the intensification of food crop production, with primary emphasis on rice cultivation during the 1970s
bendi	a kind of horse carriage
BRI	(*Bank Rakyat Indonesia*) the state-owned bank principally responsible for distributing agricultural credit in rural areas
BUMD	(*Badan Usaha Milik Daerah*) local government enterprises
Bulog	(*Badan Urusan Logistik*) Food Logistics Board, the

	national food stock authority
bupati	chief administrative government official of a district (*kabupaten*)
camat	chief administrative government official of a subdistrict (*kecamatan*)
Dinas	office of a provincial government that provides services in specific fields (e.g., education, health, agriculture) at the provincial and district/municipality levels. It reports to the governor but receives technical direction from the appropriate central government
DIP	(*Daftar Isian Proyek*) list of approved project activities
Dolog	(*Depot Logistik*) Regional Food Depot, *Bulog's* regional operating agents
DPR	(*Dewan Perwakilan Rakyat*) the People's Representative Coincil
DPRD	(*Dewan Perwakilan Rakyat Daerah Tk. I*) Provincial level People's Representative Council
DPRD	(*Dewan Perwakilan Rakyat Daerah Tk. II*) District/ Municipality level People's Representative Council
DUP	(*Daftar Usulan Proyek*) list of project suggestions
GBHN	(*Garis-garis Besar Haluan Negara*) General Outlines of State Policy
GDP	Gross Domestic Product
GRP	Gross Regional Product
gotong royong	mutual help activities; voluntary collective work
gubernur	province head; governor of a province
hak ulayat	*Ulayat* right is the right to use and exploit the unutilized land within the territory of the customary lands by local communities

hukum adat	customary law
INMAS	(*Intensifikasi Massal*) Mass Intensification; an agricultural extension program for rice and other food crops. The Inmas program, in contrast to the BIMAS program, supplies participants with subsidized inputs but does not include credit
Inpres	(*Instruksi Presiden*) presidential instruction-based subsidies of various types to the local government
IUDP	Integrated Urban Development Program
IUIDP	Integrated Urban Infrastructure Development Program
kabupaten	administrative district
Kanwil	(*Kantor Wilayah*) representative office of a central government department in a province
kampung	village; traditional urban residential area
kecamatan	administrative subdistrict of the *kabupaten* or *kotamadia*
kelurahan	administrative unit below the *kecamatan*, the same as a *desa*
kepala desa	village head
kelompok tani	farming group
KCK	(*Kredit Candak Kulak*) Petty Trading Credit Program
KIK	(*Kredit Investasi Kecil*) Small-Scale Investment Credit
KMD	(*Koran Masuk Desa*) village newspapers program
KMKP	(*Kredit Modal Kerja Permanen*) Permanent Working Capital Credit
KUPEDES	(*Kredit Umum Pedesaan*) General Rural Credit
KUT	(*Kredit Usaha Tani*) Small Farmers Credit

kotamadia	municipality, having the same administrative status as a *kabupaten*
KUD	(*Koperasi Unit Desa*) government-supported village cooperative
kurus	lean
LIDAP	Local Institution Development Action Plan
LKMD	(*Lembaga Ketahanan Masyarakat Desa*) Village Council for Development Planning and Guidance
LMD	(Lembaga Musyawarah Desa) Village Consultative Council
lurah	the village head or *kepala desa*
mapalus	reciprocal aid group
MPR	(*Majelis Permusyawaratan Rakyat*) the People's Consultative Assembly
NGO	Non-government organization
Paceklik	the period of time (often several months) immediately preceding the rice harvest, when rice and other food for household consumption are in short supply
oplet	small eight-seater cars
ojek	motor-cab
PAD	(*Pendapatan Asli Daerah*) local own revenues
Pancasila	the five basic principles of the Republic of Indonesia: belief in God; humanitarianism; national consciousness; social justice; democracy
pasar	market
PBB	(*Pajak Bumi dan Bangunan*) property tax
pejabat	officials
pekarangan	home lot

pengusaha	entrepreneur
penguasa	government authorities
petani biasa	ordinary farmers reluctant to adopt new techniques
petani maju	more progressive farmers
pimpro	(*Pimpinan Proyek*) project director
PJP I	(*Pembangunan Jangka Panjang I*) Long-Term Development I
PLN	(*Perusahaan Listrik Negara*) the State Electric Power Corporation
POOMMS	Performance Oriented Operation and Maintanance Management System
PPPD	(*Proses Penyusunan Perencanaan Pembangunan Daerah*) the planning porcess for regional development
PDPD	(*Pola Dasar Pembangunan Daerah*) the basis pattern of regional development
PPN	(*Pajak Pertambahan Nilai*) value-added tax
province	the autonomous level of government immediately below the central government
Rp	*rupiah*
RAKORBANG	(*Rapat Koordinasi Pembangunan Tk. I*) Provincial Development Coordination Meeting
RAKORBANG	(*Rapat Koordinasi Pembangunan Tk. II*) District/Municipality Development Coordination Meeting
Repelita	(*Rencana Pembangunan Lima Tahun*) Five-Year Development Plan
RIAP	Revenue Improvement Action Plan
SUPRAINSUS	(*Supra Intensifikasi Khusus*) Special Intensification; a new

	government program which promulgated markedly higher fertilizer recommendations for particular areas of rice intensification
UDKP	(*Unit Daerah Kerja Pembangunan*) Unit for Coordibating Development Activities at the district level
SLA	Subsidiary Loan Agreements
SPPD	(*Sistem Perencanaan Pembangunan Daerah*) the regional development planning system
SPPN	(*Sistem Perencanaan Pembangunan Nasional*) the national development planning system
swadaya	official classification for a village that is least developed and not influenced from the outside
swakarya	official classification for a village that is at a medium level of development and has been influenced from outside
swasembada	official classification for a village that has attained a high level of development and can continue to develop with little outside assistance
UDKP	(*Unit Daerah Kerja Pembangunan*) subdistrict working group
UMTP	Urban Management Training Program
UFRD	Urban Functions in Rural Development
warung	small food stall

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