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**The Incorporation of Transmigration Projects
into Regional Planning in Indonesia**

**by
Dwi Abad Tiwi**

A PLAN B PAPER

**Submitted to
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Abstract

The Incorporation of Transmigration Projects into Regional Planning in Indonesia

By

Dwi Abad Tiwi

As in many other countries, Indonesia is experienced by the effects of over population, a high population growth rate and an uneven population distribution. A direct effect of the concentration of population within inner islands is a high rate of migration from villages to cities, and from the outer islands to the inner islands. This leads to the rapid expansion of cultivation area brought about soil erosion, flood, and drought problems within the inner islands. In addition, the uneven population distribution brings about regional differences in educational development, income generation, and labor force participation.

The largeness of Indonesia's population, the rapidity of its growth and uneven population distribution have forced local and national policy makers to deal with the population problems. There have been several attempts to influence migration patterns, in order to obtain a better matching between the distribution of natural resources and the distribution of the national population.

Indonesia's transmigration program is one policy that promotes the movement of people from the inner islands to the outer islands, in response to the rapid rate of population growth within the inner islands and the demand for labor in the outer

islands. The transmigration projects affect population distribution, employment generation, social and environmental systems, and regional development in the outer islands. Transmigration projects also contribute to the development or enlargement of cities in the transmigration regions.

The national-level and provincial governments are giving more attention to the incorporation of transmigration projects into regional planning for the development of each province. In order to support this development, the Government should provide certain conditions in the outer islands that attract and support the flow of spontaneous transmigration, and act as a stimulus for regional planning and development in the outer islands.

The provincial government in the outer islands should capitalize the advantages offered by the establishment of transmigration projects. The planning and policy for the established and future transmigration projects should protect transmigrants' rights, as well as the interests of host populations.

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1. Background

1.1. The Geography of Indonesia

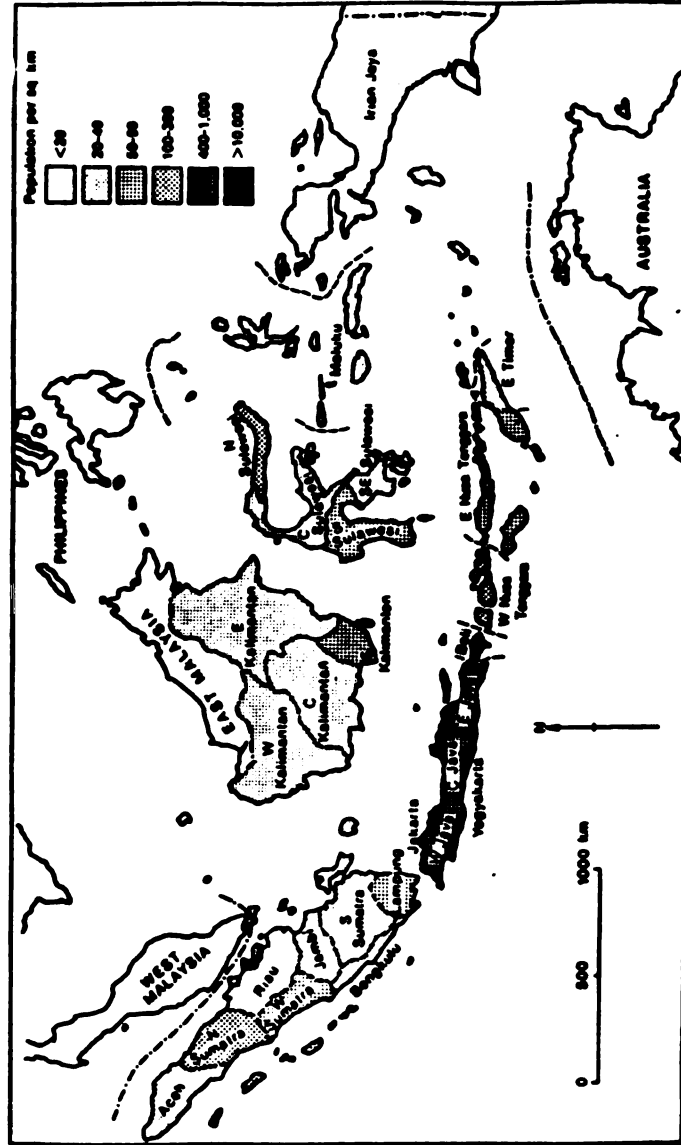
The Republic of Indonesia stretches three thousand miles from the Indian Ocean on the west to the Pacific Ocean on the east, and is located between Asia and Australia continentals. Administratively, Indonesia is divided into 27 provinces, 246 kabupatens (regencies) and 55 kotamadyas (municipalities), 3539 kecamatans (district administrative units) and 67,534 villages (The Central Bureau of Statistics, 1985).

The sea area of Indonesia which is about 7.9 millions square kilometers constitutes about 81 percent of the total areas of the country. The land area is about 1.9 million square kilometers consist of 13,667 islands, though only seven percent of them are inhabited. Those inhabited consist of five larger islands: Java, Sumatra, Kalimantan, Sulawesi, and Irian Jaya and other small islands (The Central Bureau of Statistics, 1985).

With a population of about 168 million in 1986 and an estimated population of 184 million in 1990, Indonesia is the fifth most populous nation in the world. The large population is accompanied by high annual growth rate of 2.3 percent in the period of 1971-1980 and 2.21 percent in the period of 1983-1984. In 1980, Java, Madura and Bali, known as inner islands, contained 63.6 percent of Indonesia's population on 6.9 percent of the nation's land area. Population densities of 759 people per square kilometer exists in Java, and 478 people per square kilometer is found in Bali. In contrast, the outer islands have various

Figure 1.1

Indonesia: Population Density, 1980



Source. Central Bureau of Statistics, 1980 Census.
Reprinted from: The Demographic Dimension in Indonesian
Development, Hugo et. al., 1987.

Table 1.1
Main Regions of Indonesia: Basic Demographic Parameters, 1980

Region	1930		1980		Density (Persons/km ²)	Average Annual Growth 1977-80	Annual Average 1977-80		Rate of Natural Increase (%)
	Population (m)	Per Cent	Population (m)	Per Cent			CBR	CDR	
Java-Madura	41.7	68.7	91.3	61.9	690	2.0	35	15	2.0
Sumatra	8.2	13.5	28.0	19.0	59	3.3	40	13	2.7
Kalimantan	2.2	3.6	6.7	4.5	12	2.8	40	15	2.5
Sulawesi	4.2	6.9	10.4	7.1	55	2.2	41	15	2.6
Other Islands	4.4	7.3	11.1	7.5	19	2.8	45	17	2.8
Indonesia	60.7	100.0	147.5	100.0	77	2.3	38	15	2.3

Sources: Central Bureau of Statistics, 1980 Indonesian Censuses;
McNicolli and Singarimbun, 1983:9

Reprinted from: The Demographic Dimension in Indonesian
Development, Hugo et. al., 1987.

densities ranging from 6 people per square kilometer in Maluku and Irian Jaya islands to 70 people per square kilometer in Sumatra island (The Central Bureau of Statistics, 1985).

Of the Indonesian population, a very large percentage is, and will continue to be, concentrated on the islands of Java, Madura and Bali. Fisher (1967) stated that the basic explanation for the uneven distribution of population lies in the inherent characteristics of Indonesia's soil.

The inner islands have many active volcanoes which have contributed to the soil fertility. The soils are remarkably fertile, and, despite centuries of cultivation, can still produce three crops of rice a year with virtually no fertilization.

Hardjono (1977: 10) added that human population in the inner islands also have been greatly facilitated by the natural terrain of the islands. There are no great mountain chains to hinder movement and communications. The rivers likewise aided early human settlement by providing easy transportation routes, though this function has become less important with modern transportation. Java has further advantages of having no swamps of any significance, and land with a natural slope which is sufficient to permit good natural drainage.

On the other hand, according to Hardjono, outer islands have fewer advantages. Sumatra, the most western island of Indonesia, is very different from Java in almost all its geographical features. They are a result of a very different land use pattern which developed in response to natural conditions. As far as agriculture is concerned, the main handicaps are poor soils,

which in most areas are well leached. In addition, the terrain does not favour settlement and communications, and there are broad areas of swamps.

Hardjono also mentions that Kalimantan has similar disadvantages. First, the terrain is not conducive to human settlement. Human settlement is still limited to land close to rivers, because of their importance as transportation routes and the presence of very dense forest. Large areas of permanent swamps that extend along the western and southern coasts of the islands also contribute to the poor soil drainage.

Sulawesi has the same problems as those found in Sumatra and Kalimantan, though according to Hardjono, the most serious is the lack of flat land for agriculture. As in other outer islands, there is no recently active volcano. Consequently, soils are infertile, having been formed from non-basic parent rock, and most of poor soils are well leached.

Irian Jaya may be said to have every disadvantage existing in the other outer islands, and on a far greater scale: poor soils as a consequent of no recent volcano activity, hostile terrain, etc. Hardjono adds that the high Central mountain ranges cut the island from west to east making transportation difficult. Huge rivers rising in these ranges flow to the north, the shorter one flow to the south, but none provides a real transportation route to the interior of the island.

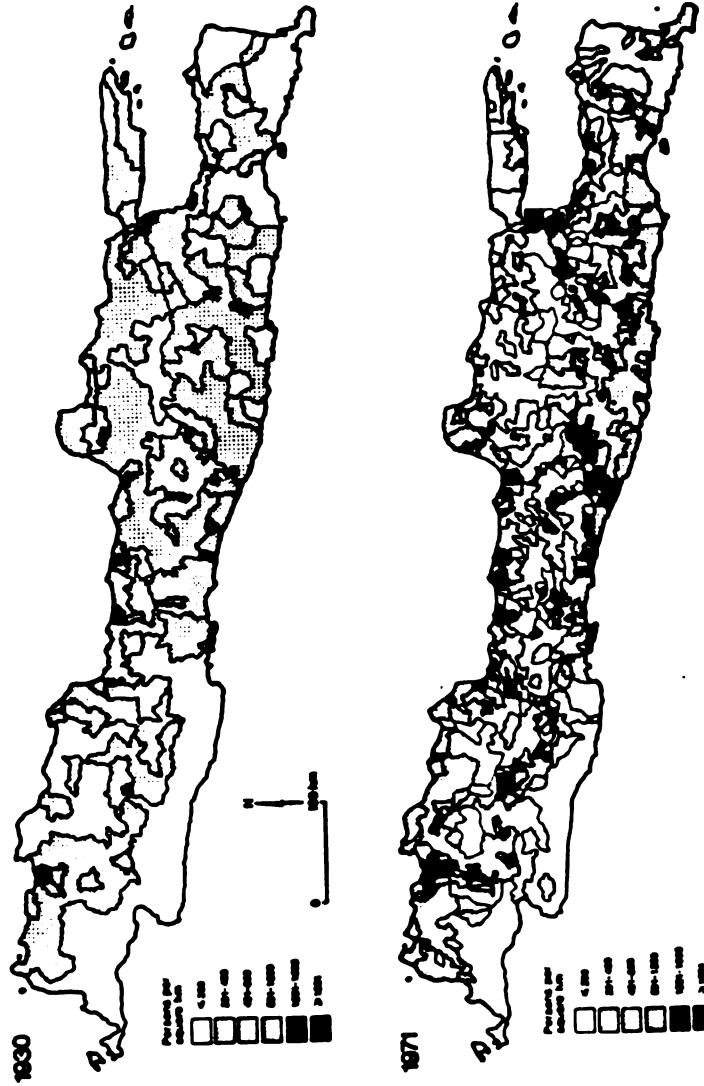
1.2. The Indonesian Population Problem.

As mentioned earlier, a direct problem associated with concentration of population in Java and Bali is uneven population distribution between the inner islands and the outer islands. The inner islands represent 6.9 percent of Indonesia's land area were inhabited by 91 million people in 1980. Outer islands on the other hand, are inhabited by 46.8 million people. Within Java, there are concentrations of population distribution by province. Jakarta, the Capital, has the most dense population of 1,337 people per square kilometer, followed by Yogyakarta with density of 943 people per square kilometer (The Central Bureau of Statistics, 1985).

A direct problem associated with the high percentage of population within Java is the high population growth rate. From 1960 to 1970, the population of Java has increased from 63 million to 76 million, with the population growth rate of approximately 1.91 annually. This annual population growth rate increased to 2.02 for the period between 1971 to 1980, which resulted in a total population of 91.3 million in 1980 (The Central Bureau of Statistics, 1985).

Figure 1.2

Java: Population Density, 1930 and 1971



Source: Volkstelling, 1933-6; 1971 Indonesian Census.
 Reprinted from: Land Use & Environment in Indonesia
 Wolf Donner, 1987.

In addition to the high population increase within Java is the high rate of migration from villages to cities. Jakarta for example, during the period between 1961 and 1970, had net migration equal to + 30.1% of its 1960 population. Of the 1.6 million net population increase experienced during this period, approximately 0.5 million were people who migrated into Jakarta. The net migration number is computed by Hugo et. al. by counting the number of people who did not live in Jakarta at the time of the 1960 Census. Net migration decreased to 28% between the years 1971-1980. This is equal to 0.5 million of the 1.9 million population increased in Jakarta during this period (Hugo et. al., 1987: 177, table 6.4).

In addition to the high rate of population growth and the burden of migration from villages to the cities within Java, there is a huge movement of people from the outer islands into Java who come with hopes of acquiring a better education and earning a better income. Using 1971 Census data which identify the number of persons born in the outer islands but living in Java, Hugo et al. estimates that 0.58 million people migrated into Java during the period between 1930 and 1970. The number has increased to 1.22 million people for the period between 1971 and 1980 (Hugo et. al., 1987: 174, table 6.3). Hugo et. al. also estimated the occurrence of out-migration from Java to outer islands based on the 1971 and 1980 Censuses. By 1970, there were approximately 2 million people who had previously lived in Java living elsewhere. By 1980, these number increased 73% to approximately 3.5 million people, which represents 4% of Java's popula-

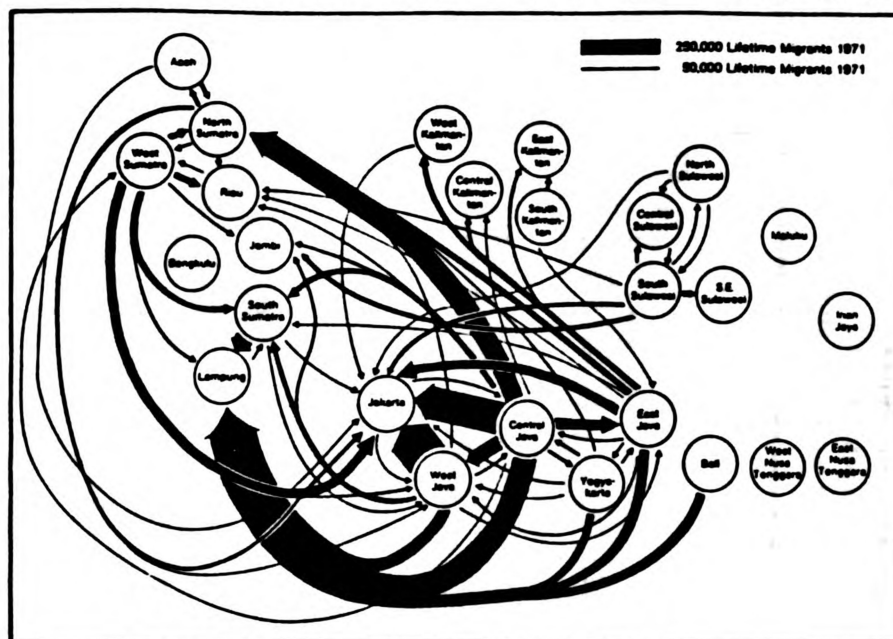
tion of 76 million . The effort of transmigration projects contributes to this out-migration number. The pattern of inter-provincial lifetime migration as seen in figure 1.3.

Donner (1987: 106) states that the rapid expansion of cultivation area brought about by an increase in deforestation activities, the acquisition of land and the increasing cultivation of dry-land with annual crops brought about soil erosion, flood, and drought problems within Java island. According to the 1980 Census, 10 % of Java's land is in the erosion danger category, and that Java alone comprises 18% of all critical land of Indonesia. Critical land is defined by the researchers as land that is dangerous for human settlement due to potential erosion, disturbance in the water capacity, its location in the watershed of a river, etc. The percentage of land designated critical in Java increased to 11.8 percent in 1985 due to the high population pressure on the land within Java during the previous five years (The Central Bureau of Statistics, 1980 and 1985). The critical land condition within Java as seen in Figure 1.4 (Donner 1987: 130).

Uneven population distribution also brought about the regional differences in educational development prior to 1970 (Jones, 1976: 48). He added that these differences are narrowing due to the government policy to expand educational facility

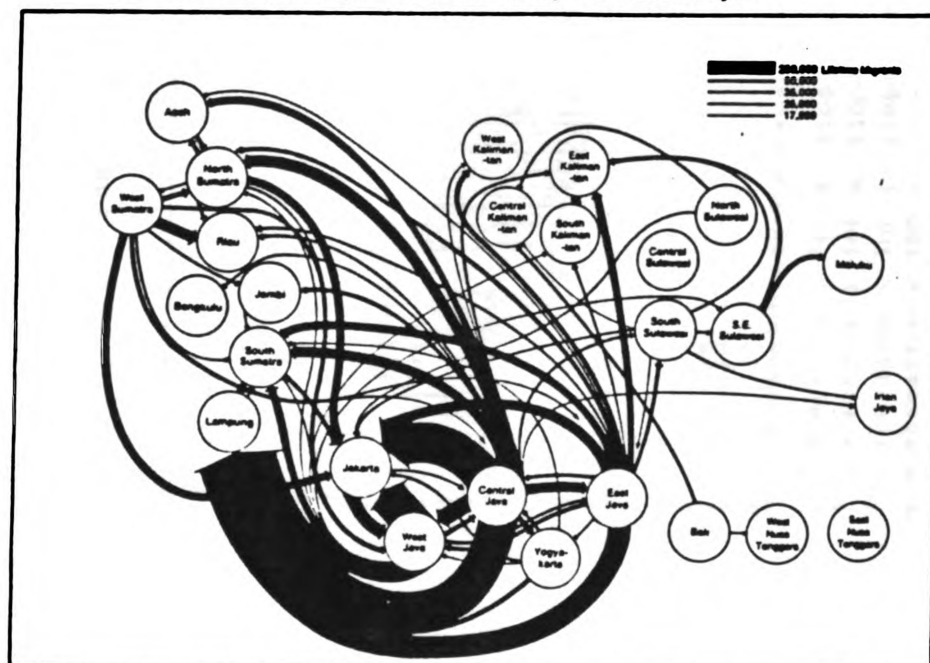
Figure 1.3

**Indonesia: Major Interprovincial Lifetime Migration Streams
(Those with More than 10,000 persons), 1971**



Source: Hugo, 1979a.

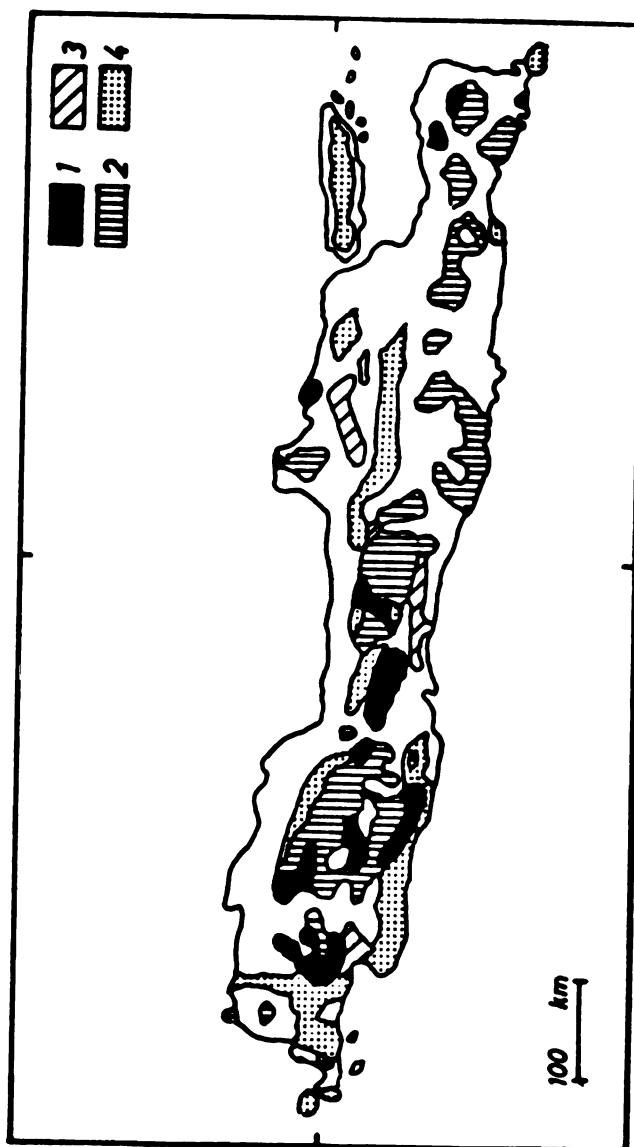
Indonesia: Major Interprovincial Lifetime Migration Streams, 1980



Source: 1980 Census.

Reprinted from: The Demographic Dimension in Indonesian
Development, Hugo et. al., 1987.

Figure 1.4
The Erosion Danger in Java



- 1 = elevation > 500 m; slope > 30%; very serious erosion danger
- 2 = elevation > 500 m; slope > 30%; serious erosion danger
- 3 = elevation < 500 m; slope > 30%; serious erosion danger
- 4 = elevation < 500 m; slope > 15%, erosion danger

Source: Wiersum 1980b; and FAO.

Reprinted from: Land Use & Environment in Indonesia
Wolf Donner, 1987.

development. According to the 1980 census, there were 66,312 primary schools in the inner islands which served 14.5% (13 million pupils) of the population. In the outer islands, there were 53,712 primary schools which served 20% (9.4 million pupils) of its population. However, only about 27.9% (25.5 million people) of the inner islands population age 20-24 years were able to complete their lower secondary school in 1980, and only 20.9% (9.8 million people) of the outer islands' population finished their lower secondary school (The Central Bureau of Statistics, 1985).

A regional income study conducted by the World Bank (1984) has examined the difference in income due to uneven population distribution. The study has produced recent estimates of per capita Gross Domestic Product (GDP) for each province. They found out that there was a very large differential per capita product between provinces. In 1979, the per capita GDP in the highest province was US \$1,872 for East Kalimantan province and that the lowest was around US \$97 for East Nusa Tenggara province. However, in East Kalimantan, the figure includes income derived from oil and timber extraction, which mostly accumulates to the central government and foreign and private companies. For Java island, the per capita GDP for the five provinces were classified as the lower level. For Jakarta, the capital, the per capita GDP was \$448. The four other provinces of Java range from \$119 to \$152. It should be noted that these Java's five provinces contain some 44% of the total national population (Hugo et al., 1987: 71).

Based on an analysis conducted by the World Bank in 1984, there also appears to be an incidence of poverty in urban and rural areas in both the inner and outer islands. The study defines the poverty line as an expenditure per person on food equivalent to 1.25 times the price of 16 kilograms of rice per month. For Java, 46.5 % of the 91 million total population were categorized below the poverty line. For the outer islands, approximately 29.5 % of the 46 million outer islands population were in below the poverty level (Hugo et al., 1987: 77).

One other significant aspect of the uneven population distribution is the difference of working-age population (age 10 and over) which is economically active (known as labor force participation rate) between the inner and outer islands. According to 1971 Statistics data, from 78 million of the inner island population, 51% (40 million people) participated categorized in the labor force. At the same time, 45% (18.5 million people) of 41 million in the outer islands are in this category. In 1980, those labor force numbers increased to 51.2% (46.7 million) of 93.5 million people for the inner islands' population, and 46.9% (22 million) of 54 million people for the outer islands' population (the Central Bureau Statistics, 1985). These 22 million people populate 93.1 % of the Indonesia's land area.

1.3. Policies and Programs affecting Population Distribution.

The largeness of Indonesia's population, the rapidity of its growth and uneven population distribution have forced local and national policy makers to deal with the population problems.

There have been several attempts to initiate programs which have a direct influence on migration patterns. These are aimed at obtaining what the planners perceive to be a better matching between the distribution of natural resources and the distribution of the national population.

1.3.1. Transmigration.

In response to the poverty in Java and uneven distribution of national population, the national government initiated a planned transfer of large number of people through transmigration. The program, started in 1950, promotes movement from the overcrowded parts of the country to sparsely populated areas, and from the inner islands to the outer islands. In response to the rapid rate of population growth in Java and the demand for labor in outer islands, the transmigration program has undergone extensive modification (Department of Information RI, 1985).

1.3.2. Tribal Resettlement

The Dutch colonial administration initiated programs to resettle nomadic tribal groups. Continued during the independence period, the national government has a program to socialize these tribal groups, part of which involves resettling them in communities based upon sedentary agriculture. It is estimated that there are some 1.5 million people living in isolated areas in the rural areas of the provinces of Irian Jaya, Riau, Aceh, Bengkulu, North Sulawesi, West Java and Kalimantan. Up

to the beginning of the Repelita III plan, 86,157 people had been socialized under the program (Hugo, 1981: 147).

1.3.3. City and Region Closure

In attempted to discourage migration into large metropolitan areas, some local governments in Java initiated "closed city" legislation. The best known legislation was enacted in 1970 in Jakarta. The regulations required immigrants wishing to settle in Jakarta to register and deposit a sum of money equivalent to twice return fare to their village of origin. If after six months the immigrant could satisfy the authority that he had a permanent job and place of residence, the money was returned and he could purchase an identity card. If he failed, he was given his fare and escorted to the point of departure of public transportation to go back to his village. The regulation was active for several years. Then, the government admitted that the closed city policy has failed to stem the flow of migrants to the capital and the legislation was repealed (Governor of Jakarta, 1970).

1.3.4. Urban Policies

Some programs have been initiated by local governments to discourage migration movement into large cities. The first example is a program to clear of huge number of squatter settlements along railroads and rivers, and put those people into transmigration program. Other related programs have had the effect of reducing job opportunities in occupations which

recent migrants have traditionally tended to seek and obtain work. For example, cities ban sidewalk vendors and horse-traders from selling their wares along the main street, declare sections of cities closed to the pedicab vehicles, and so forth (Governor of Jakarta, 1971).

1.3.5. Family Planning

The Third Five Year Plan of Indonesia (Repelita III) states several objective regarding national population policy. Those are lowering of the fertility rate through family planning; decreasing the level of mortality especially of infants, through healthy nutrition distribution and immunization; and balancing the distribution of population, especially the labor force. Regarding the rapid rate of population growth, the emphasis is on lowering the national fertility levels through the family planning program. The program distributes information including the government suggestion that having two children is enough. Started in 1980, the program that previously was introduced to some provinces, was spread universally to other provinces. The family planning program has reduced the population growth rate from 25.3 percent in 1971 to 23.3 percent in 1980, and reports 30.7 % of eligible woman to be family planning users (Suryaningrat et al., 1980: 320).

1.3.6. Decentralization

Beside transmigration, there have been a few direct attempts to decentralize development activities. Actions include the division of Indonesia into four development regions, and a

policy to spread the employment opportunities to other cities and regions through industrial development. As a result there has been a substantial increase in decentralization of secondary industry, service activities and a wide range of public and private enterprises throughout the country. In addition, the satellite-based national communication system and the rapid expansion of transport, especially the airline system, greatly supported the effort of decentralization (Hugo, 1981: 57-80).

1.3.7. National Development Policies and Strategies

In addition to the direct policies regarding uneven population distribution mentioned above, the government also has developed strategies which indirectly influence the distribution of population. These policies are embodied in the series of Five Year Development Plan (Repelitas). The government believes that it will take at least six of these plans to establish the foundations of development. There are eight basic goals to the plans: a) more equal access to basic needs, particularly food, clothing and housing; b) more equal distribution of income; c) more equal distribution of educational opportunities and health facilities; d) more equal distribution of employment opportunities; e) more equal opportunities to engage in business; f) more equal participation in the development process, especially for youth and woman; g) more equal regional spread of development; h) more equal access to justice (Hugo, 1981: 57-80).

2. The Transmigration Program

2.1. The History of Transmigration Projects.

2.1.1. The Dutch Administration Era

The first officially promoted transmigration was initiated by the Dutch colonial administration in 1905. Motivated by a certain extent to decrease a population pressure in Java, the colonial government established migration program described as a colonization policy, to develop colonies of settlers from Java in the outer islands. It was no coincidence that the program was preceded by the establishment of several Dutch plantation entrepreneurs in the outer islands, especially in Sumatra. The Dutch administration was aware of the advantages of a larger supply of labor resulting from the colonization program (Hardjono, 1977: 16).

Hardjono adds that the movement of people through colonization program to the outer islands continued until 1921. These migrants had been given everything required for an agricultural settlement with an allocation of one hectare of land per family, housing materials and tools. Because of the attempts to reduce government expenditure, the migrants still receive the land but they have to repay money lent by the government to purchase housing materials and tools. According to Jones, the colonization program transferred 189,938 families during the period between 1905 and 1945 when the Dutch stopped their Colonization program (Jones, 1979: 212).

2.1.2. The Indonesian Administration Era.

In 1950, the Indonesian government resumed the transmigration program in response to the high population pressure in Java island with all its problem and the low population in the outer islands. The purpose of the transmigration program at that time was similar to those under the Dutch administration, as an attempt to alleviate the population pressure in Java, and to improve the transmigrants' standard of living. These aims continued throughout the fifties and sixties.

In 1947, the Transmigration Program began the implementation of a fifteen-year Transmigration Plan which aimed to move 31 million people. With respect to the needs of the receiving areas, the plan was reformulated in 1951. The target number of people being moved was placed at 48.7 million for period from 1953 to 1987. The administration soon realized that this would be impossible to implement. In 1953, the target was changed to 100,000 families per year. This target was implemented until 1968, when Transmigration program become a part of the Five-Year Development Plans (Hardjono, 1977: 22).

2.1.3. The Five-Year Development Plans.

Beginning with the First Five Year Development Plan (Repelita I, 1969/70-1973/74), transmigration was no longer seen as a solution to the population problem on Java. The transmigration program was used as a device for population redistribution, for regional development and labor redistribution on the outer islands. The redistribution of labor was intended to in-

crease food production and to develop local infrastructure in the receiving areas (Indonesian Department of Information, 1968, Vol. II C: 109-110).

According to Oey (1981: 3), the transmigration program did not achieve those objectives during the First Plan. However, she added that if one compares the targets to the number of migrants who were moved, the transmigration program was success. The total number of people targeted to be moved was 38,141 families and the realization was 45,169 families (Oey, 1980: 17, table 2).

The goals of transmigration program during the Second Plan (Repelita II, 1974/75-1978/79) were different than those of the First plan. The priority of the transmigration program was to develop the outer islands (Indonesian Department of Information, 1974, Vol. II: 543-456). The success achieved during the First Plan resulted in an increased target placed for the Second Plan. The transmigration target for Repelita II was placed at 250,000 families. Though the target was modified to be more realistic, according to Oey (1980: 18) achievement was far below the new target.

For the Third Plan (Repelita III, 1979/80-1983/84), the transmigration target was doubled than that of the Second plan. About 500,000 families were to be moved into 250 resettlement areas located mainly in Sumatra, Sulawesi and Kalimantan, and 18% of the proposed resettlements were in swamp reclamation areas. Similar to those of the Second Plan, the goals of transmigration for the Third Plan were intended to relieve population pressures and improve the welfare of the rural poor. The other objectives

were to protect critical lands in the inner islands, and to foster regional development and food production in the outer islands. The existence of spontaneous migration was also recognized. The government started to encourage both pure and partly spontaneous transmigration for the purpose of increasing migration flow while reducing government costs. In the first years of the plan, progress was slow because of the lack of preparation and inadequate interagency coordination. At the end of the Third Five Year Plan, the total achievement (A World Bank Country Report, 1988: 8-9) totalled 336,000 families, including about 22,000 local families and 42,000 spontaneous migrant families.

The Fourth Plan (Repelita IV, 1984/85-1989/90), emphasized job creation and labor redistribution in transmigration program. The transmigration program was seen as a device for job creation, and high priority was given for employment generation through labor-intensive investment. Inspired by targets achieved during the previous five year plan, the Fourth Plan hoped to settle 750,000 families in the outer islands. Of these, 60% were to be settled under fully sponsored program, the rest were to be spontaneous transmigrants. The implementation of this program did not meet the expectations (World Bank Country Report, 1988: 15). During the first three years of the plan period, some problems were encountered in tendering land clearance and settlement contracts, and there was a slowdown in the development of swamp reclamation areas.

In January 1986, as a result of the 44% reduction of the proposed budget due to the reduction of Repelita IV budget, the

government revised the transmigration targets for year 1986/87, from 100,000 families to 36,000 fully sponsored program (World Bank Country Report, 1988: 16). In May 1986, a further reduction in transmigration budget caused another modification of the program. The priority then was placed on the maintenance and upgrading of existing sites, and on the completion of projects already undertaken.

For the Fifth Plan (Repelita V, 1989/90-1993/94), the goals of transmigration are to protect critical lands in the inner islands, to resettle people from designated critical areas such as flooding areas, and to further distribute labor and jobs. The other objectives are to develop the settlements based on consideration of the agricultural and economic development in order to improve income of the transmigrants, and to incorporate local people as well as spontaneous migrants into transmigration projects.

For the Fifth Plan, the government plans to resettle 750,000 families. Of these, 86,000 families are to be general transmigrants (20%), and 130,000 partly spontaneous transmigrants families with 20% of that allocated for local transmigrants. The 534,000 families was set for spontaneous migrants who came on their own to the outer islands (Department of Transmigration, 1988).

The summary of goals, target and achievement of transmigration projects since the First Plan (Repelita I) to the Fourth Plan (Repelita IV) are as table 2.1 and figure 2.1.

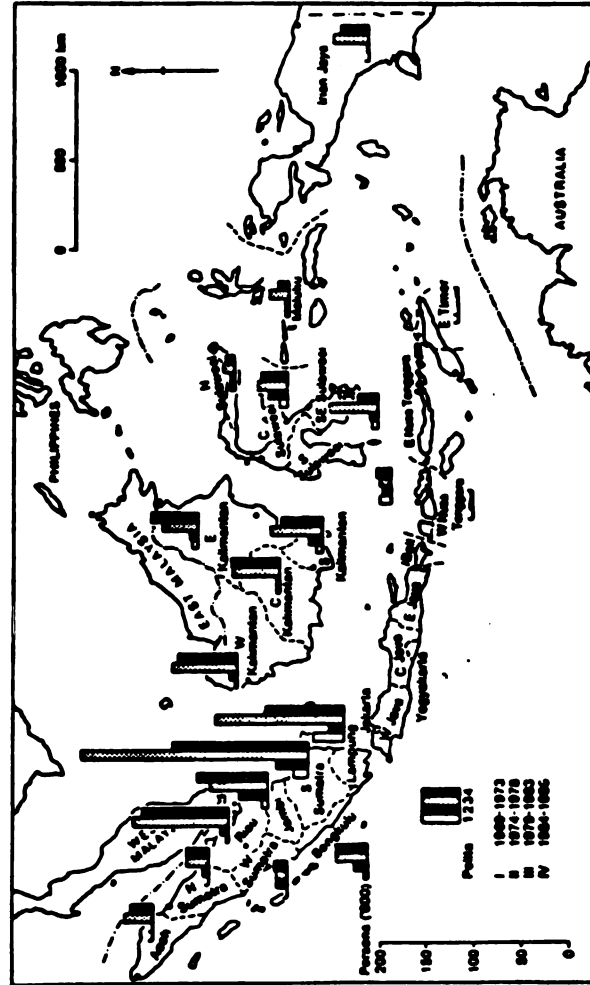
Table 2.1

**Transmigration projects for Repelita I - V
(1969/1970 - 1993/1994)**

	Goals	Target (families)	Achievement
Repelita I (1969/70 - 1973/74)	Pop. redistribution Regional development Agriculture expansion Labor redistribution	38,191	45,169
Repelita II (1974/75 - 1978/79)	Relieve pop. pressure Improve transm.' welfare Protect critical lands Labor redistribution	82,959	62,364
Repelita III (1979/80 - 1983/84)	Relieve pop. pressure Improve transm.' welfare Protect critical lands Spontaneous migration encouragement Labor redistribution	500,000	535,474
Repelita IV (1984/85 - 1989/90)	Relieve pop. pressure Improve transm.' welfare Protect critical lands Job creation Labor redistribution Regional development Maintenance & upgrade existing projects	750,000	272,520 (1st half period)
Repelita V (1989/90 - 1993/94)	Relieve pop. pressure Improve transm.' welfare Job & Labor distribution Resettle people from critical lands Incorp. of spontaneous & local transmigrants Regional development	750,000	

Figure 2.1

Distribution of Settlement of Transmigration in Indonesia's First Four Five-Year Development Plans, 1969-1986*



Source: Directorate General of Transmigration, Jakarta, Indonesia.

*The data for the fourth Five-Year Development Plan are from January 1984 until 13 May 1986 only, i.e. only half of the five-year period. For the later years of the third and fourth plans, the figures include 'transmigran swakarya' (those who moved with little or no government assistance) and local transmigrants (Hardjono, 1986: 29-30, 41-4).

Reprinted from: The Demographic Dimension in Indonesian Development, Hugo et. al., 1987.

2.2. The Transmigration Process

The management of project sites from the first year of transmigrants arrival until the fifth year of operation is in the hands of transmigration agency. After five years there is expected to be sufficient facilities for economic growth, and the settlement is expected to become self-supporting. When the settlement is ready to be self-supporting, the management of transmigration projects will be transferred into the local government, and the settlements will be incorporated into their administrative provinces (Basic Transmigration Act Statute, 1972).

2.2.1. Types of Transmigration.

As stated on the Basic Transmigration Act-Statute no 3 of 1973, there are two kind of transmigration:

General transmigration, is fully sponsored transmigration carried out by the government transmigration agency from recruitment until the placement on the selected receiving areas in the outer islands.

Spontaneous transmigration, is the movement of people who receive little or no government assistance to areas of their choosing. This group falls into two categories: Pure spontaneous and Partly spontaneous transmigration. Pure spontaneous transmigrants are independent migrants who come on their own directly into transmigration projects, while partly spontaneous transmigrants are carried out by the transmigration agency and receive little government assistance.

Hardjono (1977: 29) added that there are three more classifications of transmigrations:

Special transmigration, is the movement of a number of people for special reason or purpose. Usually this classification is carried out by the Department of Social Welfare to help victims of natural disasters such as floods and earthquakes. It also deals with homeless people in urban areas, and people who must be relocated for development project such as dams and highways.

Local transmigration, is the resettlement of people within the same island or province sponsored under fully government assistance in the purpose to integrate the local people into transmigration projects.

Armed forces transmigration, is the resettlement of armed forces to sensitive or uninhabited regions bordering on foreign countries for defense purposes.

2.2.2. The Recruitment Process

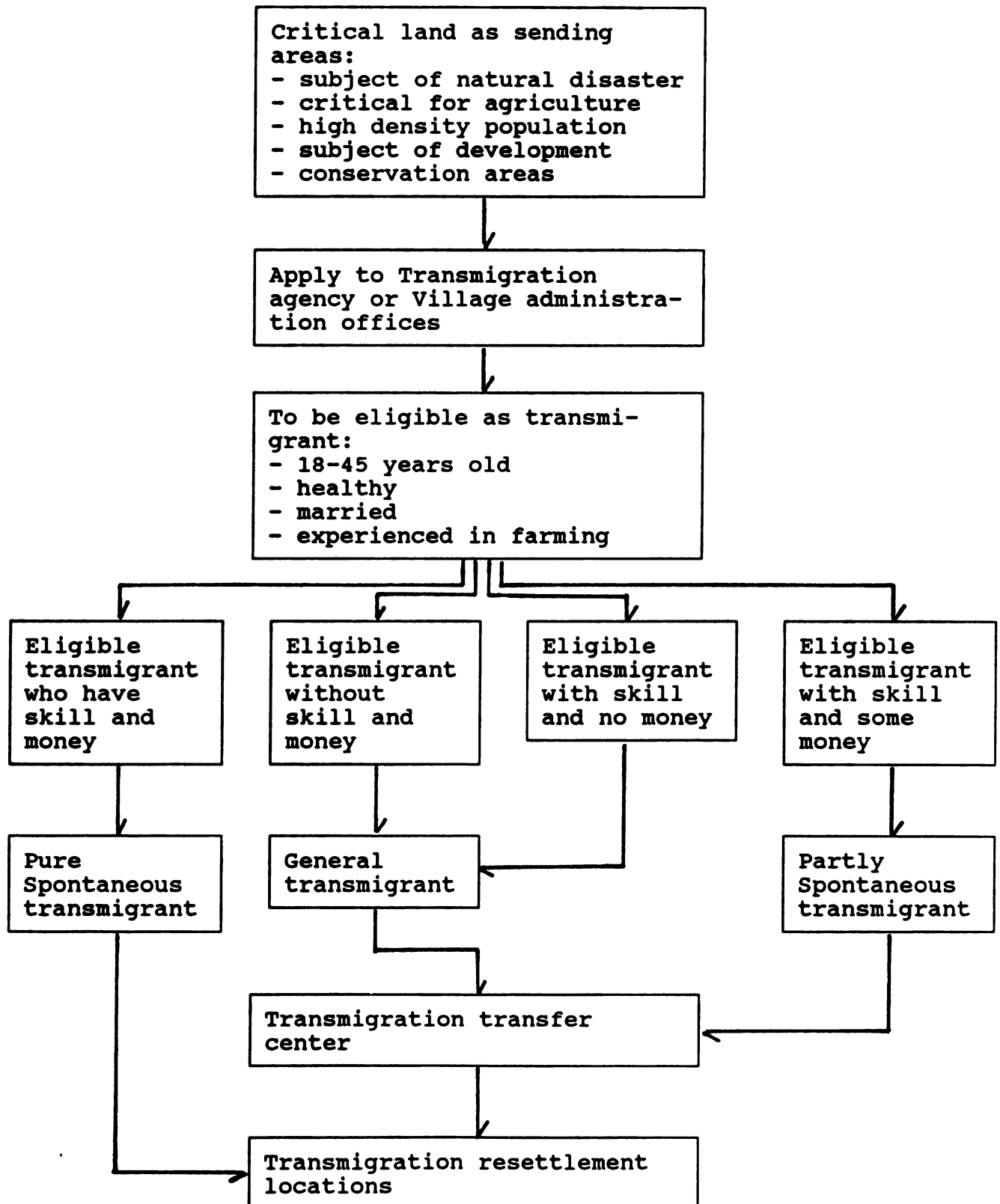
Recruitment process starts with the distribution of transmigration information publicized by the government throughout the country. People who want to be transmigrants register with the transmigration agency in their home village. To be eligible to be a general transmigrant, the head of household must be 18 to 45 years old, healthy, and married with family members' age from 6 months to 50 years. He should also have farming experience.

In the recruitment process, all eligible transmigrants are grouped into general transmigrants, partly spontaneous transmi-

grants and pure spontaneous transmigrants. Eligible people who have both money and skills are grouped into pure spontaneous transmigrants. They can go to the transmigration transfer center first or directly to the transmigration settlements in the outer islands. Eligible people who have neither money nor skills are grouped into general transmigrants, and those who only have skills such as paramedics, teachers, and agriculture extension are also grouped into general transmigrants. Eligible people who have skills and some amount of money are designated into partly spontaneous transmigrants. The transmigration process can be seen in figure 2.2 (Department of Information, 1985: 90).

Once a sufficient number of eligible people apply, the day of departure is decided. Before departure to the receiving areas, all transmigrant groups spend some days at the transmigration center. In the center they receive some information about their designated sites, their rights and regulation to be transmigrants, and information regarding difficulties they will face in the outer islands (Department of Transmigration, 1985: 27).

During their transfer to the receiving areas in the outer islands, the general transmigrants are provided transport, food and some money. In the receiving areas they receive two hectares of land, which has been previously prepared by the government.

Figure 2.2. Transmigration Process

The pure spontaneous transmigrants only receive the land, and partly spontaneous transmigrants receive the land and some financial assistance. The general and partly spontaneous transmigrants receive a house, beds and kitchen utensils, seeds and farming tools, which they must pay for over five years. They also receive food and clothes for the period of approximately six to twelve months (Department of Transmigration, 1985: 27).

2.2.3. The Site Selection and Preparation Process.

According to Hardjono, no clear procedure for obtaining the land for transmigration projects were established. Sites are selected based on the availability of empty land, with regard to the national defense and security, without coordination with other departments which have interest such as Interior, Forestry, Mining, etc. Sites are selected based on the available of empty land, and are usually located in remote areas, with no consideration of the future infrastructure network development. There has been a lack of detailed information about the nature of soils and the availability of water throughout the year. No real thought has been given to the type of crops suited to the soil and water conditions of each different district. Not enough attention has been given to make sure whether or not there were local claims to a site that had been selected (Hardjono 1977, 36-41).

As reported by the World Bank, there are several stages in the site preparation process: land clearing, road construction, housing construction, public facilities construction, and

drainage construction (The World Bank Country Report, 1988). Since 1972, there are three kind of sites utilized for transmigration settlements. The clearing process for each site is as followed:

- a. Tidal Sites: land clearing is generally done with chain saws and manual labor since the soil cannot support heavy machinery.
- b. Upland Food Crop Sites: semi mechanical methods (using chain saws and hand labor) were generally used to clear upland transmigration sites until the beginning of Repelita III, when the program shifted mainly to the use of mechanical methods such as tractors.
- c. Tree Crops: since the sites are used for roads, houses, food crops and tree crops, and the area does not need to be completely cleared, thereby land clearing is done using semi-mechanized methods (World Bank Country Report, 1988: 69).

Following the land clearing, boundaries of the settlement are decided and mapped. This mapping identifies the exact boundaries, topography and land use of the site. These maps are utilized to observe the present land use, condition of land ownership, and to measure how large the site can be used for land cultivation and settlement. After the land settlement boundaries are decided, the site is divided into parcels for housing, and some is allocated for public land and infrastructure. Following the measurement of lots, the construction of housing, and the

drainage and road systems begins (Department of Transmigration, 1985).

2.3. The Documented Impacts of Transmigration

2.3.1. Population Redistribution

Among the transmigration program's aims are to relieve population pressure and poverty in Java. At the same time, the high fertility rate in Java generates a number of people that exceeds the number of people settled by the transmigration program. According to 1985 Statistics, the net population growth (including net migration) in Java alone from 1971 to 1980 amounted to 16 million, and at the same time the total of sponsored transmigrants to the outer islands amounted to 1.1 million people. That number represent only seven percent of Java's net population growth for those ten years (Hugo et. al., 1987 and the Central Bureau Statistics, 1985). It is hard to say that the transmigration goals with respect to population distribution are achieved. Mantra (1985: 177), and Donner (1987: 47) conclude that the transmigration program did not solve the uneven population and poverty problems in Java. They claim the problems should be solved by agriculture intensification, industrialization or other policies within Java itself.

In terms of spontaneous migration flows, according to Mantra, transmigration projects have created patterns of flow migration which occur spontaneously to the outer islands. Transmigration settlements have become nodal points that stimulate spontaneous migration between areas in Indonesia. The

transmigrants who are already settled in the receiving areas act as an information agents. They are expected to draw their friends and relatives to come to the new areas. Based on 1980 Indonesian Census and Ministry of Transmigration records, there were 961,400 families of sponsored migrants from 1950-78 that successfully attracted 5,300,300 families of spontaneous migrants as measured by language spoken at home for rural areas (World Country Report, 1988: 77, Table 4.5).

2.3.2. Employment Generation and Redistribution.

The transmigration projects generate both temporary employment in the development phase of the transmigration sites, and permanent employment in the agriculture and services at the transmigration sites. In the development phase, the projects create jobs to clear the land, construct houses, buildings and roads, build drainage systems, and plant tree crops. When the transmigrants have settled, they generate agriculture activities and many service businesses which permanently offer job opportunities. Indirect permanent jobs are also generated in transportation, marketing, social services, and the supply of inputs to transmigrants (World Bank Country Report, 1988: 77).

The World Bank report estimates that during the Third Plan (1979/80-1984/85), the transmigration program generated about 500,000 to 600,000 full employment, permanent jobs. This figure excludes employment generated indirectly by transmigration for local residents and spontaneous migrants. Data on temporary em-

ployment suggest that about 18 million days or 63,000 years of full-time employment were generated by land clearing alone.

2.3.3. Social Impacts.

Transmigration projects also generate social impact during the implementation of the projects. The process affects both population in the sending and receiving areas.

The social impacts start during the selection of transmigrants in their home village. The selection is based upon the willingness to move, and emphasis is on the quantity and not the quality of applicants. In special transmigration cases where the movement of people is to make room for some development project, the transmigrants usually do not have experience in agriculture and are reluctant to move. Because they have no experience in farming and are not prepared to deal with the difficulties facing them in the new settlements, these transmigrants often abandon their land. In many cases, they prefer to leave to find a new job, or return to their home villages in the inner islands. The government estimates that return migration is about 1-2% during the third five-year period, but these figures have been disregarded since higher return rates are typical of large-scale resettlement programs (World Bank, 1988: 32).

In the outer islands, transmigration projects often have negative impacts on local people due to inadequate transmigration planning. There is sometimes a problem between the transmigration agency and local people over land compensation. If the local people are not satisfied with the transaction, the land disputes

continue between the transmigrants and local people. Often disagreement centers around compensation for productive trees (World Bank Country Report, 1988: 92).

2.3.4. Environmental Impacts.

Transmigration projects generate both positive and negative environmental impacts. The positive environmental impact of transmigration projects to the inner islands is the reduction of population pressures on critical lands and therefore, reducing erosion. The environmental degradation that often happens in the outer islands as a consequence of the transmigration program occurs in two ways: the impact of individual transmigrants who have settled in the receiving areas and the implementation of transmigration project as a whole.

All transmigrants receive two hectares of land as they arrive in the resettlement areas, which is enough to feed a family on the fertile soil in Java. However, land in the outer islands is not as fertile as that in the inner islands, and the promised irrigation facilities are often not prepared when the transmigrants arrive. Because of the unfertile soils, the lack of fertilizer, and reliance on rain to irrigate, the agricultural yields become lower and lower overtime. The decreasing soil fertility and the increasing number of spontaneous transmigrants (Donner, 1987: 49) force the settlers to open more and more forest land for cultivation to feed their families. Consequently, widespread deforestation occurs in many transmigration sites.

The environmental problems start during the site selection and continue to its preparation before the arrival of transmigrants. During the site selection process, the projects require the clearance of a large area of tropical rain-forests which are rich in natural vegetation and animals. Since 1980 the government has moved about 500,000 families (World Bank Country Report, 1988: 106), and could possibly move 500,000 families by the year 2000. At two hectares per family, this means that some 2.0 million ha. of forest land will possibly be put into cultivation by sponsored migration. This figure will actually be higher due to the activities of spontaneous migrations in opening additional forest land.

By the destroying the natural forest system, a number of species will vanish, water become scarce and the soil humus and the nutrient levels will decrease and soil erosion will result. In most cases, site selection has been done without consideration for the carrying capacity and sustainability of the land (Donner, 1987: 253).

In the clearing of tropical rain forests for transmigration sites, private contractors, who's primary concern is to complete the job as fast as possible, use heavy machinery to clear the forest. This brings about damage to the soil. In many cases, only the valuable trees have been cut down, and large tree stumps are left behind (The Ecologist 1986/16: 77). The transmigrants who then come are unable to finish the clearance by themselves because they do not have the money, time or machinery to do so.

The lands are then gradually abandoned which then contributes to deforestation.

2.3.5. Regional Development

Transmigration projects have significantly contribute to the development of regions to which transmigrants are sent. Up to the Fourth Plan, the government successfully resettled 4,372,118 general transmigrants and many thousands of spontaneous transmigrants. It is estimated that those people produce about 2 million tons of unmilled rice annually, or about 33% of the increase in rice production in the outer islands since 1950 (Hugo et al., 1987: 183).

Transmigration also affects infrastructure construction. In addition to the development of resettlements throughout the country, transmigration projects have also constructed roads between the resettlements and adjacent cities. During Repelita III, transmigration programs built 4,200 km of new access roads, 7,700 km of new main roads and 14,000 km of village roads, increasing provincial totals by an average of 20% (World Bank Country Report, 1988: 86).

Transmigration projects also contribute to the development or enlargement of cities in the transmigration regions. This is as a result of incoming spontaneous transmigrants, the construction required by transmigrants, and the search for non-agriculture job by transmigrants. Transmigration projects have also lead to the expansion of other services in the outer islands, such as education and health (Hugo et al., 1987).

Transmigration also contributes to the development of the agricultural system in Indonesia. It introduces several different farming systems: rainfed system, swamp areas system, and tree crop system. Rainfed system are an agriculture package which include planting materials, fertilizer that is distributed to support rainfed agriculture on the less fertile soil. The swamp areas system is the reclamation of swamp areas to be used as rice fields taking advantage of tidal movement for irrigation. The tree crop system is a new system which allows the transmigrants to grow tree crops such as rubber and palm on government plantations and sell the product to established companies nearby.

However, many of the transmigration settlements that could be described as successful have not been without their problems in marketing their products. Where migrants have succeeded in dealing with difficulties in cultivating their land and producing more than they need, they have often found that they can not trade excess products due to lack of marketing facilities. Bad roads, broken bridges and lack of transportation in sites that were poorly selected, result in difficulty marketing the transmigrants' products (Hugo et al., 1987).

2.4. Involuntary Resettlement in some Transmigration Projects

One special case of Transmigration which has not been documented is Involuntary Resettlement. This is important because the people who are resettled through involuntary transmigration are not necessarily willing to relocate, unlike regular transmigrants.

Involuntary Resettlement, according to Scudder and Colson, is a term for "a permanent collective movement of people from one geographic location to another, where the people are relocated because of natural disasters or to make room for development projects. These transmigrants must cope with the consequent stresses and the need to adapt to new or radically changed environments" (Hansen et. al., 1982: 267-287). They divide relocation situations into two types, refugee relocation and development relocation. Refugee relocation varies according to whether the victims are of natural disasters such as drought, floods or as a subject of political action. In the one case they may have a chance to plan, in the other they are usually forced to relocate. Development relocation is brought about by national development policies. This is becoming common in the era of national development plans, such as the construction of dams or other engineering projects, and urban development.

In the past, some transmigration projects dealt with people who were subjects of either natural disasters or development projects. These resettlements were undertaken during Repelita I-IV. During Repelita V such resettlement can be categorized as involuntary. In the past, the handling of transmigration projects as an involuntary resettlement experienced some economic, social and cultural shortcomings due to inadequate social and environmental planning. The handling of such involuntary resettlement was grouped into the general transmigration classification and treated as regular voluntary movement. The preliminary studies of these projects concentrated on engineering aspects only, on the

preparation for housing and land settlements, and few studies have been made on the social and economic opportunities of both transmigrants and local people.

3. Transmigration and Regional Planning

3.1. Integrating Transmigration and Regional Development

Between Repelita I and Repelita IV, the transmigration program has experienced some goal modifications. This is as a result of serious population problems in the inner islands and an understanding of the real deterioration of the natural environment in parts of Java. Also, it is now generally accepted that development in the less populated parts of the country is essential to national development as a whole.

The national-level and provincial governments are giving more attention to the incorporation of transmigration projects into regional planning for the development of each province. There are many potentially productive areas in the outer islands with population densities so low that regional development is not feasible. In such areas, transmigration has been used to provide the critical mass to justify investment in infrastructure and services such as agricultural extension, education and health services, and to provide labor and markets (The World Bank, 1988: 5).

One of the most important factors promoting regional development and contributing to the integration of transmigration activities into regional economic planning is the construction and maintenance of roads. An extensive, reliable transportation network is essential to the marketing of agricultural commodities, and to finding non-agriculture jobs and maintaining household incomes. Other services which have been greatly expanded

due to reliable transportation network include extension of agricultural supply, education and health services.

In addition, transmigration projects also contribute to the development of conditions in the receiving areas that will stimulate an increasing flow of spontaneous population migration. The incoming spontaneous migrants are expected to stimulate economic activities in the regions where transmigration projects are located.

Large scale transmigration activities also have a major impact on urban development in their regional jurisdictions. Even small towns in transmigration regions often experience a boom of activity either as a result of construction, the relocation of civil workers and their consumption expenditures, or the search for informal sector jobs by the transmigrants themselves (Hugo et. al., 1987).

However, not all these transmigration goals are achieved. As mentioned in chapter 2, transmigration projects have generated expected positive impacts in population redistribution, employment generation and distribution, spontaneous migration encouragement, and in stimulating regional planning goals. Unfortunately, transmigration projects also generated unexpected impacts, primarily in the receiving areas.

One example of a transmigration project that has been categorized as successful is located in Lampung province, an area in the southern Sumatra.

3.2. Lampung as a case study.

Lampung province makes up an area of 33,707 square kilometers in southern Sumatra. Lampung was the designation of first colonization resettlement opened in 1905, where the first 155 households migrants from Central Java were relocated (Hardjono, 1982). Since that time the flow of sponsored migrants to Lampung has continually increased, both sponsored under Dutch administration and Indonesian administration. The Dutch administration, which ended in 1940 was able to resettle 144,619 Javanese people. Between 1950 and the end of Repelita III in 1984, Lampung has been the primary destination of transmigrants. The Indonesian government was able to move 1,208,683 people to Lampung (Hardjono, 1977; Hugo et. al., 1987; The Central Bureau Statistics 1985). The total transmigrants to Lampung between 1905 and 1983 total 1,353,302 people.

The close proximity of Lampung to Java, and the success achieved by the pioneer settlers made Lampung a favorite destination for Javanese migrants, and for spontaneous in-migrants from other islands. At the 1980 Census, some three-quarters of the resident population of Lampung reported that the language they used at home was Javanese or Sundanese, indicating that they came from the inner islands. The 1985 census indicated that the density of Lampung had gradually increased between 1961 and 1984. In 1961, Lampung had a density of 30 people per square kilometer. This density increased to 139 people per square kilometer in 1980, and reached 181 people per square kilometer in 1984 (The Central Bureau Statistics, 1985). The increased population den-

sity of Lampung province pushed the government to close Lampung and Southern Sumatra as a destination for transmigration projects in 1984 (Repelita IV).

According to Hardjono (1977), the reason for Lampung's success is due to the advantages offered by its location, and the effort spent by the Indonesian government during the development of the transmigration project.

Lampung is located very close to Java and transportation facilities connecting these two areas are very good. A railway line and ferry connects South Sumatra and Java which brings about the smooth flow of passengers, vehicles and goods. There has always been a steady movement of people from Java to southern Sumatra.

In the early transmigration period, from 1952 to 1969, the government established transmigration projects mainly in Lampung and South Sumatra provinces. The government was attempting to obtain maximum results with minimum expense by utilizing the available infrastructure (Hardjono, 1977: 46-66). Most of the projects established in Lampung between 1952 and 1968 were really an extension of existing Dutch colonization projects. The land selected for the Dutch pioneer settlements was reasonably fertile and well-watered.

In an effort to incorporate transmigration settlements into the administration of provincial authority, the government transferred some settlements which it believed to be self-supporting to the provincial government of Lampung. Of the 24 transmigration projects established in Lampung between 1952 and 1968, seventeen

of them were transferred to the provincial government by the end of 1970. Fourteen of these, with some rearrangement of project boundaries and the inclusion of non-project land, have become kecamatan (administrative districts). The incorporation of several settlements into administrative districts resulted in an increase in the number of districts in the administration of Lampung province. Following the incorporation of settlements into districts, the government started to give land titles to the older settlers. Since 1973, the government has decided to place migrants in older projects that had been transferred to the local government administration due to the lack of available land to accommodate further transmigration projects (Hardjono, 1977).

However, despite all its successes, Lampung also experienced some failures. Some projects that were originally planned as irrigated-rice settlements, failed to provide irrigation water in the early years when the transmigrants arrived. The transmigrants had to depend on rain to irrigate the land, and in many places, this forced the farmers to turn to the cultivation of cassava when they found that dry-rice yields were too low. The continuous cultivation of cassava brings about a decrease in land fertility. These areas have experienced very little economic growth in the twenty years since the first migrants settled (Hugo, et. al., 1987).

In some areas, the failure to provide promised irrigation forced the settlements to abandon their land and open additional land. In some cases, some transmigrants who could not cultivate their land preferred to migrate again and sold the land to local

people or to spontaneous migrants. This brought about disputes in land ownership when the government started to give land title to the transmigrants (Hugo et. al., 1987).

Problems in land ownership also exist between local people, private companies and transmigrants. The site selection processes of transmigration projects usually were not accompanied by maps showing the exact boundaries of land held by parties such as the Forestry Department, private companies and individuals who own the land surrounding transmigration sites. As a result, land disputes over land allocation occurred between transmigrants who often received the less land than they were promised, and the private companies and local people (Donner, 1987).

Some projects have experienced over-crowding and high population pressure recently. This is a result of the fact that, when the projects were first established, no thought was given to the expansion within the project area itself, which today is densely populated. No attempt was made to keep the land available for decedents of the original migrants, either for settlement or cultivation. Lack of available land has forced the settlers to open forest land illegally, which, in turn, has brought about the destruction of forest land or conservation land of some areas in Lampung province (Donner, 1987).

The destruction of forest land in Lampung also occurred as a result of thousands of spontaneous migrants who open the forest land in order to obtain the land for settlement and cultivation. Spontaneous transmigrants who came directly to the transmigration

settlements following their friends or relatives did not obtain land through the transmigration agency (Donner, 1987).

The successes and failures experienced by Lampung province in administering transmigration projects can be used as guidance for recommendations of new transmigration policies in order to mitigate social and environmental problems.

3.3. The Need for Social and Environmental Planning.

The most sensitive issues in the transmigration projects are social and environmental concerns. In general, past transmigration projects have brought enough benefits to the regions in terms of labor, public investment, infrastructure and services that they received a generally positive responses. Therefore, the main social concern has centered on the fairness of the process by which land was acquired. For example, in Lampung province in the early years of Repelita III, rapid land clearing without adequate planning led to conflicts between transmigrant interests and those of local people, mostly over land allocation and compensation for productive trees. As planning improved and the role of regional planning agencies in mediating land claims increased, these conflicts declined (World Bank Country Report, 1988).

Concern also exists where local people who have different ethnicity, religions, culture and language have to share their land and natural resources with the incoming transmigrants. Transmigrants who have different ethnic backgrounds and languages often do not change and have trouble communicating with the local people. These transmigrants, who in some cases are not prepared

to cope with the difficulties facing them on the outer islands, often must also deal with jealous local people.

In term of environmental issues, transmigration has had a positive impact on the environment in the inner islands by reducing demographic pressures on critical lands, and thereby permitting reforestation and reducing erosion (World Bank Country Report, 1988). However, most environmental concern has been focused on the outer islands where resettlement implementation has reduced the forest land and placed pressure on conservation areas.

The spontaneous migrants also contribute to the environmental degradation in the outer islands. In Lampung, they came to the outer islands following their friends or relatives who already settled through fully sponsored government programs. Once spontaneous migrants are in the receiving area, the major factor limiting settlement is the inability to find appropriate land and to acquire legal rights to it. According to the World Bank, this problem is due to (a) traditional systems of land tenure in the outer islands, (b) difficulties in land registration, (c) problems in providing compensation to land owners (World Bank Country Report, 1988: 135). Facing all those constraints, they attempt to find land free from local land claims. The available area is often either poorly suited to agriculture, or forest land which sometimes categorized as conservation forest lands. The enormous number of incoming spontaneous migrants brought about significant deterioration of natural resources on the outer islands.

For transmigration projects designated as involuntary resettlement, planning should be conducted differently. Involuntary

transmigrants should be treated differently than the regular voluntary movement in order to minimize the negative effects of such relocation on individuals and on the regional and national economy. The emphasis should be placed on the pre-resettlement process, not on the post-resettlement process. The transmigrants' right and their participation should be carried out throughout the relocation process. Furthermore, time should be allowed to conduct socioeconomic studies to influence planning and plan implementation.

The social and environmental issues related to transmigration projects require careful planning. The existence of spontaneous migrants has to be taken into account in the planning process. Therefore, any program to encourage spontaneous migration must also be accompanied by strong consideration for environmental protection. In term of social problems, careful social studies prior to the resettlement should be conducted for the respect of both transmigrant applicants and the host population.

3.4. Prospects for the Future of Transmigration

Land availability is a serious constraint to future transmigration projects, both for sponsored transmigration and spontaneous migration. The implementation of large-scale transmigration projects require the opening of enormous areas of forest land, the development of swamp areas into both the settlement and land for cultivation.

The main constraint for spontaneous migrants is their inability to find land free of claims and obtain legal right to it.

This is due in part to systems of land tenure based on traditional law. Outsiders using community land may be subject to requests from local people for compensation. The huge number of spontaneous migrants which are expected will face difficulty in finding land for their settlement and cultivation.

Future land availability regarding the second or third generations of transmigrants also need to be taken into account. As experienced in Lampung, their need and use of land for settlement and cultivation will create a significant environmental problems. Uncertainties about land availability need to be resolved for rational planning to occur for any future settlement program.

It is likely that future generations will also have a tendency to go back to the inner islands to find better education and jobs. By that time, their life should be successful. In order to acquire better education, they may wish to go to the inner islands where better education facilities are available unless good facilities are available in local areas. Once there, they may try to find better jobs there. In this case the same situation would exist as what has been experienced by the inner islands now, a high flow of migration from the outer to the inner islands.

In relation to regional planning, it would possible for local government to ignore the presence of transmigration settlements because of their awareness that those settlements would burden them during future development. This is because the transmigration agency is only responsible for the construction of the infrastructure, and no agency is responsible for the mainte-

nance of the infrastructure during the first five years. By the time the projects are handed over to the local governments, it is likely that the condition of the infrastructure will be poor. The local governments who are already burdened by their own administration areas are facing the difficulties associated with the poor condition of transmigration settlements.

4. Recommendations

4.1. Policies for Regional Planning in the Outer Islands.

The Government should provide certain conditions in the outer islands in order to attract and support the flow of spontaneous transmigration, and as a stimulus for regional planning and development in the outer islands regions through several alternatives.

The government should equalize the education facilities, both in quantity and quality between the inner and outer islands. Following the construction of rural primary schools in the 1970s, the government should continue the improvement of high schools and universities with better educational facilities in the outer islands. Priority should be given to the regions where transmigration projects are located, in the hope that they can attract more people. In addition, satisfactory incentives to teachers should be provided to attract more teachers to the outer islands. This condition will stimulate the education activities of the regions and prevent the people who live in the outer islands from going to the inner islands in order to get a better education.

The government should minimize the imbalance of regional development between the inner and outer islands. Priority for development should be given to the regions where the transmigration projects which do not have private resources are located. This policy will stimulate the development of these regions and private companies.

The government should carry out regional integration planning between regions where transmigration settlements are located in order to extend the domestic market and internal demand. This alternative should be accompanied by simple methods of packaging, transporting, and marketing the commodities to stimulate the economic development between regions.

The government should provide conditions that encourage spontaneous population transfer through the development of enterprise/industry in the regions where transmigration projects are located; and supporting labor intensive activities by the help of government expenditure. Following the establishment of industries, training centers should be developed to train the migrants. The type of training given should vary according to the need of the industries.

Finally, the development of new towns/cities as satellites of large cities in the outer islands should be encouraged, with the development and improvement of transportation and communication facilities as well as other necessary facilities in the outer islands. The region where transmigration projects are located should have a city as a growth center. Thereby, the village people who want to migrate to the inner islands will be attracted first to the large city in their region.

If such conditions and facilities are provided in the outer islands, it is very probable that the people will be happy to come to the regions spontaneously as they can find jobs and live more inexpensively than in the inner islands.

4.2. Policies regarding Transmigrations' role in long-term Regional Development

The transfer of people under transmigration projects as pioneers in the destination areas followed by spontaneous transmigrants will in fact greatly benefit both the sending and receiving areas. It will lessen urban population pressure in the inner islands and open new sites for economic development in the outer islands. The problem is that the transfer of population does not yet run smoothly. In order to speed the movement of spontaneous transmigrants and to avoid all the impacts generated by transmigration projects underway with respect to the regional planning, the government has several alternatives.

The government should utilize transmigration projects as a supply of labor for industry and infrastructure development through coordination with other departments and private companies. The government should consider the possibility of privatization of the transmigration projects. All expenses involved in settling the migrants in the new locations, including land clearing, housing and site development, and supply of food, could be the responsibility of the project requiring the labor. This effort will lessen the government budget regarding transmigration projects in the future.

The government should carefully choose proper locations for transmigration settlements based on transportation and environmental considerations. This effort will support the development of future resettlements based on environmental planning consider-

ations, and therefore, stimulate the economic development of the region where resettlements locate.

Infrastructure development, especially roads connecting the transmigration resettlements, should be emphasized in the future. This development will facilitate the movement to and between regions in the outer islands, and will probably lead to more organized pattern for population and development. This alternative will also help transmigrants in marketing and trading their harvests.

Convenient procedures should be provided for spontaneous migrants in finding the land free of alternative local claims, both in land registration and credit for land purchase, particularly in areas where spontaneous migrants have already settled.

4.3. Policies for Transmigration Projects.

4.3.1. Planning for Future Transmigration Projects.

The planning and policy for future transmigration projects should have some basic principles that address the government responsibility, consideration for the rights of transmigrants and their responsibilities, and protection of the interests of host populations.

The government should be responsible for the improvement of national policy and legal regulations with respect to the rights of those who transmigrate, or the formulation of new policies and legislation regarding resettlement. In cases where most of the transmigrants come from different ethnic, religious or cultural backgrounds, the government should consider the ethnic and reli-

gious backgrounds of the host population with whom the transmigrants will have contact in the future in order to prevent social conflicts between them. When transmigration projects dealing with people who are subjects of either natural disasters or development projects, the government should address the social, technical, economic and political implications of the resettlement. The government should permit the people to choose their future from several acceptable alternatives and consider their right to manage themselves.

Since transmigration planning implies critical decisions regarding the future of the transmigrants, it is important that the agencies seek the participation of the transmigrants, to consider their choice of future locations, future occupations in the receiving areas, etc. In dealing with involuntary resettlement, the government should consult the affected population, directly or through their formal and informal leaders, representatives or non-formal organizations about their rights, compensation procedures, etc. This will improve the understanding of their needs, prevent costly mistakes, help the people to achieve a better future.

Since the government is rarely able to find empty lands on which to resettle the transmigrants, the government should consider the carrying capacity of the land and the natural resources available to both hosts and incomers on a sustainable basis. The government should anticipate the feeling of jealousy that will likely arise among the hosts over the land, services and housing provided to the transmigrants. The government should prevent the

potential social conflict between the hosts and incomers through equal treatment between them. Education, water, health, and other services should be provided for both groups, and a positive social climate should be generated for their integration. To create this climate, the payment of compensation over lands or other assets should be provided on a fair basis based on negotiation with the host population.

The social, economic and cultural integration of the transmigrants with the host population is a slow process. This process can not happen through administrative rules, but can be assisted by policy-driven planning that aims to integrate the needs of how to minimize negative environmental effects both host and resettler.

4.3.2. Planning for Established Transmigration Projects.

For the transmigration resettlements which are already established, the government should carefully plan the development of the region. The planning at the district level where several resettlements are located should be carried out, while the population density is still low and the expansion still further away. Even though it will be less perfect than the planning and development of large cities, the cost will not be great. The such district planning can be carried out by a person with a bachelor's degree and some additional training in town planning. With a rough plan, the planner of the district can guide the development of the district under his control. For example, the location of market, small hospital, industry, offices, etc. can be estab-

lished. Those districts where transmigration projects are located will be developed as expected and gradually will become growth centers. One growth center should be linked to the other growth center by adequate transportation facilities which will eventually support the economic activities between those growth centers.

The provincial government in the outer islands should take advantage of the opportunity offered by the establishment of transmigration projects, and merge it into their regional planning. The growth centers where the resettlements are located can generate a variety of socioeconomic activities, and become centers of commerce, education and communication. The local governments should integrate the development of those growth centers with industrial development in their regions in order to utilize the available employment. To expand the regional economic activities, they can utilize the agriculture output of the transmigrants, both in processing and in marketing.

Bibliography

- The Central Bureau of Statistics, 'Statistic Yearbook of Indonesia, 1985', Jakarta, Indonesia.
- Cernea, M.M. (1988), 'Involuntary Resettlement in Development', in Finance and Development magazine, September 1988.
- Department of Information, Republic of Indonesia (1985), 'Transmigration in Indonesia'.
- Department of Transmigration (1985), 'Official Summary of Transmigration Program'.
- _____, Basic Transmigration Act-Statute No 3 of year 1972, and Supplement to the Statute, No 2988 of 1972.
- _____, (1988), The Fifth Five Year Development Plan, 1989/90-1993/94) for Transmigration Projects.
- Donner, W. (1987), 'Land Use and Environment in Indonesia', University of Hawaii Press, Honolulu.
- Fisher, C. A. (1967), 'Economic Myth and Geographical Reality in Indonesia', Modern Asian Studies, 1, 2: 155-89.
- Hadi, H. (1984) 'Kecamatan Towns can Stem the Invasion of Large Cities', in The Indonesian Indicator Urban Development: The Turmoil of Number, Prisma Magazine No 32, LP3ES, Jakarta, Indonesia.
- Hardjono, J.M. (1977), 'Transmigration in Indonesia', Oxford University Press, Kuala Lumpur.
- Hugo, J.G. (1981), 'Levels, Trends and Patterns of Urbanization', pp.57-80 in ESCAP, Migration, Urbanization and Development in Indonesia, Comparative Study on Migration, Urbanization and Development in the ESCAP Region, Country Reports III, United Nations, New York.
- Hugo, et. al., (1979), 'Patterns of Population Movement to 1971', pp 177-192, ' Migration to and from Jakarta', pp 191-203, in R.J. Pryor (ed.), Migration and Development in South East Asia, Oxford University Press, Kuala Lumpur.
- Hugo, et. al. (1981), 'Population distribution and redistribution', pp.32-55 in ESCAP, Migration, Urbanization and Development in Indonesia, Comparative Study on Migration, Urbanization and Development in the ESCAP Region, Country Reports III, United Nations, New York.

- Hugo et. al., (1987), 'The Demographic Dimension in Indonesian Development', East Asian Social Science Monographs, Oxford University Press, Singapore.
- Jones, G.W. (1976), 'Religion and Education in Indonesia', 36-56. Oxford University Press, Kuala Lumpur.
- Jones, G.M., (1979), 'Indonesia: The Transmigration Programme and Development Planning', pp. 212-21 in R.J. Pryor (ed.), Migration and Development in South East Asia, Oxford University Press
- Oey, M, 'Poverty, Economic Change and Migration in Indonesia, pp.209-36 in Urbanization and Migration in Asean Development(1985), National Institute for Research Advancement, Tokyo.
- Secrett, C. (1986), 'The Environmental Impact of Transmigration', in The Ecologist, Vol. 16 No 2/3 1986, Penwell Ltd., Parkwood, Dupath, Callington, Cornwall, UK.
- Scudder, T. and Colson, E. 'From Welfare to Development: A Conceptual Framework for the Analysis of Dislocated People', pp. 267-287 in Hansen et al., Involuntary Migration and Resettlement: The Problems and Responses of Dislocated People (1982), Westview Press, Boulder, Colorado.
- Swasono, S.E. (1986), 'Transmigrasi di Indonesia: Suatu Reorientasi' (Transmigration in Indonesia: a Reorientation), in Transmigrasi di Indonesia, University of Indonesia Press, Indonesia.
- World Bank (1988), ' Indonesia: The Transmigration Program in Perspective", A World Bank Country Study, Washington, D.C., U.S.A.

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