Population resettlement programs in Southeast Asia

G.W. Jones and H.V. Richter, editors

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Series editor Gavin W. Jones

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Summary

Virgin lands have always attracted the movement of people seeking new opportunities or escaping population pressure in established agricultural areas. Governments have usually sought to encourage such movement, partly for strategic or political reasons, partly to raise living standards of potential settlers or to obtain more crops for home consumption or export. The results of government intervention have ranged from failure or abandonment of the new land to striking success, either from the point of view of the individual or the society as a whole. The methods and costs of official promotion have also differed widely from case to case.

The problems facing governments and settlers in officially promoted land schemes are discussed in this monograph. Some chapters discuss the immediate, strenuous tasks of creating viable economic and social units in virgin lands, where the stress is normally on physical infrastructure and farm services. Others discuss longer term difficulties, where both families and official planners must decide on the best option to be promoted for the next generation.

The studies were originally presented at a one-day seminar held in connection with a conference on population mobility and development in Southeast Asia and the Pacific at the Australian National University in October 1980. The papers of this conference have been published separately as Monograph No.27 of this series.
Preface

This monograph comprises papers presented at a one-day seminar held in October 1980, immediately before the conference organized by the Development Studies Centre on population mobility and development. It also includes the discussion which followed and a paper written later which attempts to fill the important gap in coverage, i.e. Vietnam. The participants and contributors, in Canberra for the full conference, were drawn from many Southeast Asian countries and several disciplines. The seminar provided an opportunity for official planners, academics and field workers to discuss both practical problems of land settlement and wider issues of policy. A list of participants will be found at the end of the volume.

Government land settlement programs need to be seen in the context of the movement of population in general and its changing spatial distribution over time, so that this volume can usefully be read in conjunction with papers from the full conference, also edited by Jones and Richter. These will be found in Monograph No.27, Population Mobility and Development: Southeast Asia and the Pacific, Development Studies Centre, 1981.

The editors would like to acknowledge again the generous support, financial as well as professional, given to the conference by the Australian Development Assistance Bureau. This was the fourth of a series of annual international conferences organized by the DSC and funded by ADAB. Each meeting tackles a different development issue, important to the region, previous conferences having been held on the adaptation of traditional agriculture, the role of forestry in national development and the problems of small island states.

G.W. Jones and H.V. Richter.
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Part A
The general setting
Introduction

G.W. Jones and H.V. Richter

In recent decades, Southeast Asian countries have been attempting to deal with rural problems arising out of rapid population growth, uneven distribution of population, poverty and growing inequality of rural incomes, land hunger and agrarian discontent. One strategy for alleviating these problems is land settlement, either government sponsored or indirectly promoted, designed to raise income earning opportunities in newly opened areas.

All Southeast Asian countries contain, to a greater or lesser extent, sparsely settled areas of considerable agricultural potential, although in regions such as Java and Bali, the Red River delta in Vietnam and the Visayas in the Philippines, the pressure of population on limited land resources is as severe as it is anywhere in the world. Improvements in transportation technology, as well as in agricultural techniques, continually extend the areas which can support the cultivation of crops for home consumption or sale. However, many of the areas cleared for agriculture in recent years have been watershed catchment areas, steep slopes or poor soils which should, from an ecological point of view, have been left under natural vegetation.

Given the availability of land suitable for agricultural development (albeit sometimes perceived by governments to be more extensive than is actually the case), it is not surprising that, just as most of them have adopted specific policies designed to lower the rate of population growth, most Southeast Asian governments have also developed programs to resettle people into rural areas with development potential. The source of the migrants may be the densely-settled established rural localities, people made homeless by natural calamities or dam building projects, hill tribe peoples and shifting agriculturalists whose lack of a fixed settlement pattern makes them hard to control or to supply with government services, and city dwellers who are unemployed or otherwise imposing a burden on urban facilities.

The objectives of such land settlement policies can be quite diverse and sometimes mutually conflicting. Tunku Shamsul Bahrain, in a recently published article (1981:132-3), classifies the objectives of government-directed land settlement programs under
four broad heads: (i) redistributive, to relieve population pressure in congested areas; (ii) economic, to raise national or individual incomes or to increase agricultural employment or production; (iii) social, in that governments can more readily supply services to compactly settled populations, or strategic in peopling frontier zones at risk of incursion; (iv) political, to avoid the confiscation of established farm land entailed by land reform or to serve some particular segment of the population.

The papers in this volume explore the historical antecedents of present-day government-directed population resettlement schemes, the objectives of these schemes, the mechanisms by which they are planned and administered, and the many problems which they face. Different chapters examine the Southeast Asian scene as a whole, Indonesia, Malaysia, the Philippines, Thailand and Vietnam.

Perhaps in briefly outlining the contents of the monograph, it is the similarities, the parallels, the continuities which should be stressed rather than the differences. Differences there certainly are: in scale of financing (the cost per settler in Malaysian schemes is about four times greater than in Indonesian schemes); in the political and economic systems under which the schemes are administered (ranging from a communist system in Vietnam through to right-wing regimes); and in the importance of the resettlement program in the government's total development planning (ranging from very important in Indonesia and Vietnam to relatively unimportant in Thailand).

Nevertheless, the parallels are striking, and concern especially the kinds of decisions facing the planners and the kinds of problems that tend to emerge as the schemes develop. These will be briefly considered here under five heads: the issues of quantity versus quality; settler selection; frictions with local populations; the political dimension; and 'second generation' problems.

**Quantity versus quality**

The areas of potential agricultural land available for settlement in the countries of Southeast Asia are limited, and funds for resettlement programs are also limited. But agricultural populations are growing rapidly, and there is no shortage of potential settlers. The dilemma is therefore a difficult one. Ideally, as many people as possible should be resettled as quickly as possible. This would mean allocating only small areas of land to each and using relatively little government funding per settler so that more could be accommodated within limited budgets. At the same time, it is not desired merely to enlarge the rural population living in conditions of poverty - to 'create another Java in Sumatra', to cite the Indonesian example. Malaysian Felda schemes are highly capitalized so that participants form a
very prosperous peasantry. But for this very reason, they are only able to resettle about 13 per cent of the increase in the Malay rural population each year and are already leading to striking differences between the prosperous Felda settlers and the Malay smallholders in long-established padi, coconut and rubber areas and the coastal fishing villages.

There are two issues here, both involving real costs. These are the size of the plot to be allocated to each settler family in view of the finite limits to suitable land, and the degree of capitalization of schemes, whether in preparation of sites, provision for processing and marketing or in current inputs, including management. Too little and the scheme may fail in its short or longer term objectives; too much and it becomes an elitist privilege for the lucky few.

Settler selection

Issues of settler selection are quite complex. In many countries, clear criteria are used whereby points can be allocated for particular characteristics, such as age, family situation, farming experience and need. In Malaysia, ethnic issues are important, and although non-Malays can theoretically enter the land schemes, in practice well over 90 per cent of settlers have been Malays. In Indonesia, there has not only been a tendency to send the gelandangan - the homeless, unemployed, even vagabond - from the city as transmigrants, but there sometimes appears to be a tendency at the village level as well to encourage 'problem' people to transmigrate - troublemakers, the destitute, the non-conformist. Though this may assist the local administration, it is unlikely to result in the best potential settlers being chosen for the arduous task of land settlement.

By the same token, if only the best farmers and the young and energetic are sent to the land schemes, this may have a deleterious effect on the farming economy and the society at the place of origin.

Frictions with local populations

With the stress on national unity, ethnic and regional animosities are officially played down in all Southeast Asian countries, except that animosity to the Chinese population has been sometimes used as a focus to unite all the other groups. The reality of ethnic and regional animosities, however, can hardly be ignored when people of different groups are brought into close proximity in an atmosphere where rivalry and tension are never far from the surface. Local populations may resent what they see as arbitrary decisions on land claims and government financial assistance to 'outsiders' when the local population receives little or nothing by way of government assistance.
In particular, scant regard is usually paid to the land rights of shifting cultivators (referred to in Burma as *taungya* and in the Philippines as *caingin*) who need far larger areas of fallow to practise their slash and burn techniques than do sedentary farmers. Titles to the use of *taungya* land, which may be communal or refer to crops planted or to shrubs and trees on the land rather than to the land itself, are rarely fully understood by agrarian authorities or the colonists. Nor does such 'extravagant' use of land usually evoke sympathy amongst outsiders, especially in view of the ecological damage which can be done if *taungya* fallow cycles are forced by population pressure to become too short.

These problems are greatly magnified when the newcomers are drawn from different ethnic or religious groups with different (and often, from the viewpoint of the locals, offensive) customs. Frictions are very real in all programs. In Vietnam, not only are Northerners moved south, where customs, language dialects, etc. are different, but lowland Vietnamese are resettled cheek by jowl with hill tribespeople. In Indonesia, Balinese Hindus are resettled in staunchly Moslem areas of Sulawesi and Javanese with syncretist religious beliefs in stricter Islamic areas of Kalimantan. In Malaysia, most states impose quotas to prevent too many 'outsiders' entering their resettlement schemes. In the Philippines, Christian-Moslem animosities in Mindanao have been exacerbated by settlement of Visayans and other Christians in areas with substantial Moslem populations.

The political dimension

Politics is at the heart of population resettlement programs. The programs are, after all, designed to improve the conditions of life of sections of the population with considerable financial input by the government. This can normally be expected to result in improvements in the conditions of those involved compared with many other groups of the population. Therefore politics is likely to intrude into settler selection. At the settlement end, likely frictions with local populations, already mentioned, need to be countered as far as possible by providing some places in the settlement schemes for local people, and some schemes are now doing this. Sometimes, of course, the settlement of people from other areas is quite deliberately designed to leaven an 'unreliable' regional population with settlers whose loyalty to the government is more assured.

While there is still land to spare, governments will continue to regard land settlement as an easy option compared to land reform with its heavy political costs. Unless (very expensive) fair compensation is paid in an appropriate context, as in post-war Japan, land reform must entail elements of expropriation, whether it is seized, bought at government-fixed prices or subject to non-market rent controls. Such reform has been very feebly
implemented in the region surveyed, save in revolutionary Vietnam.

'Second generation' problems

The allocation of land in resettlement schemes is almost always based on the needs of a nuclear family, consisting of husband, wife and young children. What, however, happens when the children grow up? This will depend on inheritance patterns in the region, unless, as in the Malaysian schemes, there are special provisions forbidding the fragmentation of plots received under the program. If normal Islamic or Buddhist patterns or customary laws apply, whereby property is divided in fixed proportions amongst all the children on inheritance, within the space of just one generation a situation of rural prosperity could give way to one of increasing misery. In such a situation, of course, other steps are normally taken. For example, only one or two children might work the land, and the others accept some form of rent and seek work in the cities. However, it is important to recognize that second generation problems are likely to arise. Ideally land would be kept aside adjacent to the resettlement scheme to meet the needs of the second generation, but this would extend privilege to the already privileged, and in any case only postpones the problem.

A different kind of 'second generation' problem may arise precisely in those schemes that are most successful. Enhanced prosperity, coupled with rising levels of education, may lead to different aspirations among the young in the land schemes. Few of them may wish to become farmers, many may want to move to the cities, most may be bored with the limited range of interests catered to and the limited entertainments available. Malaysia has seen this problem at first hand. It has important implications for regional planning, policies toward cities, location of industrial estates and infrastructure required in the land settlement schemes.

This leads us to mention two very significant aspects of population resettlement which are not touched upon in the papers: urban resettlement programs and spontaneous rural land settlement. Both clearly loom large in the adaptation of rural populations to changing circumstances; in fact, in numbers involved and in impact, either positive or negative, they are immeasurably more important. In particular, there are linkages which should be explored between government-sponsored land schemes and other types of resettlement; and between settlement generally and changing patterns of employment in the area, whether urban or rural. But these topics are beyond the scope of the present study.

Nor, save in the discussion, is the question of opportunity costs tackled - that is whether funds spent on land settlement schemes might be more productively employed elsewhere, for example
in agriculture, other sectors, social services and so on. This is a matter of considerable controversy, and the decision must ultimately be a political one, rather than the result of a strictly economic cost-benefit analysis.

The discussion which concluded the one-day conference was able to range more widely than the papers. Speakers' contributions have been left virtually unedited, as it was thought that a verbatim record would better convey the feeling of the meeting. Interestingly this feeling was one of relative optimism. Problems may be acute in some particular segments of the Southeast Asian rural sectors surveyed but, at the same time, participants seemed to agree that progress is being made and that problems are not insuperable in the light of past learning and experience.
Chapter 1

Land settlement policies in Southeast Asia

Colin MacAndrews

Land settlements involving the officially sponsored movement of groups of people into rural areas to settle and cultivate previously undeveloped land are a common feature in Southeast Asia. Depending on the country's development policy, they have at various times enhanced population shifts, opened up new land for cultivation, and attempted to raise the incomes and living standard of the settlers. However, little attention has been given by governments to analysing the full potential of this type of development strategy. Consequently schemes have often been inadequately planned to meet specific developmental goals. Only in a few cases can policy be said to be applied effectively to meet its full potential.

This paper initially examines the various types of land settlement policies in Southeast Asia and their aims and then discusses how these settlement policies might be made more effective.

Types of settlement

Land settlement policies in Southeast Asia vary in their purposes, which include a broad range of economic, political and social aims. They also vary in the settlement model adopted.

However, as I have noted earlier (MacAndrews 1979:117), an examination of the range of different settlement patterns shows four main categories of officially sponsored settlement:

1. Settlements created by spontaneous migration, with virtually no government inputs other than an allocation of land (Type 1).
2. Settlements created by spontaneous migration which are facilitated by government agencies through the provision of site

1 Land settlement or resettlement is used interchangeably with 'scheme' or 'project' in this paper and includes only land officially allocated. Land taken up by settlers outside government-sponsored schemes forms an important share of the extension of the agricultural area throughout Southeast Asia, with the exception of Malaysia, but this is not discussed in the present survey.
and service facilities, and agricultural and social services (Type 2).

3. Government-sponsored and controlled settlements in which settlers are selected from established communities according to a relatively narrow set of age and other criteria and required to follow a closely supervised program of agricultural development (Type 3).

4. Settlements created by compulsory relocation, which are usually a by-product of natural disasters or of large-scale national development programs such as dam construction under which people must be moved from the future reservoir basins. They may also be formed for political or strategic reasons (Type 4).

Of these categories Type 1 settlements created by spontaneous migration exist in some Southeast Asian countries but usually receive little attention from government bureaucracies and thus tend to be inadequately recorded. Semi-government sponsored or fully sponsored schemes of the other three types (2, 3 and 4) are more common and figure most prominently in the literature.

In all four categories of land settlements we can make a useful distinction between settlement types according to the range of services that are provided. These fall into three main categories (MacAndrews 1979:118):

(i) Non-integrated settlements. In these the settler is only allocated land, which may or may not be cleared, and may sometimes be given other facilities such as housing and perhaps limited farm extension services.

(ii) Semi-integrated settlements. In these the settler is provided with land, probably cleared and perhaps planted, a house or housing materials and some form of subsistence payment before his first crop can be harvested. He may also get farm extension services and credit, a market for his crops and perhaps community services such as schools and health facilities. Again the basic characteristic is access to land, with limited services provided to accelerate settlement.

(iii) Fully integrated settlements. In these the settlers are provided with a highly centralized settlement administration, land cleared and planted with first crop, a subsistence payment until the first crop is harvested, credit facilities, and a wide range of support services and community services designed to aid rapid adaptation to the changed environment.

Of these three types, the first is unusual nowadays in government schemes, as experience has shown that in nearly every country some minimal services are needed. The second semi-integrated model is much more common while the third or fully integrated settlement is rare owing to its high cost, both in
terms of capital outlay and administrative resources.

Southeast Asia provides examples of all the four settlement types suggested in this typology as well as a mixture of services in the various kinds of settlements (Table 1.1).

In Indonesia there are to a very limited extent settlements of the Type 1 model originating in the extensive spontaneous transmigration of settlers between Java and the outer islands since 1905, unsupported by any form of government aid. The actual settlements created by this type of spontaneous transmigrant are few as the migrants tend to settle individually, usually near existing government settlements (MacAndrews 1978b:3). Type 2 settlements were created in Indonesia in the colonial period from 1932 onwards when the Dutch colonial government adopted the model of the Bawon system already operating privately, introducing a mixture of spontaneous and sponsored settlers in government schemes (Pelzer 1948:202). Type 3 settlements can be seen in the government run schemes that characterized the Dutch East Indies Colonization program from 1905 to 1940 and the Indonesian Transmigration program from 1950. Type 4 settlements are found in forced resettlement due to such factors as dam construction, natural disasters or to strategic policies in periods of insurrection or war. The provision of services in Indonesian settlements varies, but the fully integrated model is the most common. Indonesian policy purposes are a mixture of economic, social and development aims, and occasionally political.

In Malaysia we find Type 3 and 4 settlements. Type 3 was the model generally followed in the variety of State and Federal land schemes developed since 1957. Malaysian schemes are almost without exception the result of government initiative, under government control and usually subject to extensive bureaucratic regulations. Unlike Indonesia there are no schemes of Type 1 or 2 created by spontaneous transmigration. Examples of Type 4 settlements in Malaysia resulted from the massive relocation of people under the Emergency (1948–60) into the New Villages (Dobby 1952; Strauch 1975).

The objectives of Malaysian schemes (Types 3 and 4) are primarily to provide land, employment and better incomes,

\[2\text{Bawon is the traditional Javanese system of employing labourers in return for a share of the harvest. Under this scheme, pioneer settlers would employ new settlers, usually relatives or friends, for a period, which allowed them to establish themselves. In the early 1930s this mutual assistance scheme, although officially encouraged, was voluntary. Later, settlers in some schemes were required to support newcomers in the ratio of five colonist families to one incoming family (Pelzer 1948:202–4, 266).}\]
Table 1.1
Patterns of officially-sponsored land settlement schemes in selected countries of Southeast Asia

<table>
<thead>
<tr>
<th>Country</th>
<th>Type</th>
<th>Number (type)</th>
<th>Duration</th>
<th>Special characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysia</td>
<td>3,4</td>
<td>543,000&lt;sup&gt;a&lt;/sup&gt; (4)</td>
<td>1950-52</td>
<td>Massive forced relocation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>350,000&lt;sup&gt;b&lt;/sup&gt; (3)</td>
<td>1957-</td>
<td>Successful highly integrated Felda schemes</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1,2,3,4</td>
<td>800,000&lt;sup&gt;c&lt;/sup&gt; (2/3/4)</td>
<td>1905-</td>
<td>Both large-scale free flow and long-term government program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>800,000&lt;sup&gt;c&lt;/sup&gt; (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>3,4</td>
<td>450,000&lt;sup&gt;d&lt;/sup&gt; (3/4)</td>
<td>1913-17</td>
<td>Long-term program. Use of integrated services. Use of private sector.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1918-34</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>1939-</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>3,4</td>
<td>1,200,000&lt;sup&gt;e&lt;/sup&gt; (3/4)</td>
<td>1935-</td>
<td>Large government schemes up to 80,000 ha.</td>
</tr>
<tr>
<td>Vietnam</td>
<td>4</td>
<td>40,000&lt;sup&gt;f&lt;/sup&gt; (4)</td>
<td>1959-61</td>
<td>Forced settlement.</td>
</tr>
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Sources:  
<sup>a</sup> Fisher 1964.  
<sup>b</sup> MacAndrews and Yamamoto 1976.  
<sup>c</sup> Jones (1979), MacAndrews (1978b).  
<sup>d</sup> Pelzer (1948), Castaneda (1976).  
<sup>e</sup> Chirapanda (this volume).  
<sup>f</sup> Zasloff (1962).
especially to ethnic Malays. Malaysia provides examples of both semi-integrated and fully integrated types of settlements. Most of the State and Federal settlements for instance are of the limited service type while the extensive Felda type settlements provide one of the few successful examples in Southeast Asia of the fully integrated model (MacAndrews 1977).

In the Philippines we find Type 3 settlements and a few Type 4 (Castaneda 1976). The motives for land settlement have mainly been social and economic: the better distribution of land, higher production, employment and living standards. The motivation behind resettlements of former Huk guerrillas was clearly political (Castaneda 1976:16). Generally Philippines land settlements are of the semi-integrated model, providing only a limited range of services. One interesting characteristic is the links built up with the private sector in a number of schemes to supplement the government inputs.

In Thailand the Type 3 settlement model is the most common, in which the government takes the initiative to set up schemes. The aims have been to meet economic and social demands and they are usually of the semi-integrated type (Chirapanda, this volume). However, it is interesting to note that in Thailand the initial model of 1940-60, which stressed self-help, has been changed, owing to the pressure exerted on the government to intensify its development policies. This has led to the introduction of the far more fully-serviced type of scheme that we see today in Thailand (Asian Development Bank 1976:6). Some Type 4 settlements have been created in Thailand to alleviate natural disasters and to deal with relocation after dam construction.

The extent of official schemes

Southeast Asian governments have promoted land settlement extensively over long periods of time, under markedly differing conditions, utilizing a wide variety of models. In general they have played an important part in the region's natural development policies.

The scale and time span have varied in different countries. The Indonesian program has moved the largest number of people over the longest time, some 800,000 transmigrants in the 73 years 1905-78. In addition, more people are thought to have moved spontaneously without government aid, giving an overall total of at least 2 million (Jones 1979:1; MacAndrews 1978b:4). This movement has been a long distance one from the central island of Java (or more recently from Bali and Lombok) to the outer islands of Sumatra, Sulawesi and Kalimantan.

Malaysian movements have also been massive, but concentrated into far shorter periods. Thus in a period of two years (1950-52)
under the Malayan Emergency an estimated 548,000 people (mainly ethnic Chinese) were forcibly relocated into the New Villages. This was some 10 per cent of the then population of the Federation of Malaya (Fisher 1964:609). Between 1957 and 1976 government land schemes moved some 350,000 people, the highly integrated Felda schemes alone settling 200,000 (MacAndrews and Yamamoto 1977:76).

In the Philippines, as in Indonesia, state-sponsored migration has been promoted over a fairly long time, the first settlers moving in 1913. Some 400,000 people were moved into organized land settlements between 1913 and the mid-1970s (Pelzer 1948:131-3; Castaneda 1976:116).

In South Vietnam we have, as in Malaya in the early 1950s, an example of quick, compulsory relocation with the resettlement of villagers under the government's Agroville schemes that resettled some 40,000 people between 1959 and 1961 (Zasloff 1962). In Thailand since settlement first started in 1935 an estimated 240,840 families (about 1,200,000 people) have been settled (Chirapanda, this volume:Table 7.2, p.109).

In total these officially sponsored settlers have led to the massive opening up and development of land previously uncultivated, or hitherto lightly cultivated by shifting farmers. In Indonesia such settlement has accounted for the opening up of at least 2 million hectares of land, in Malaysia for some 500,000 to 1 million hectares, in the Philippines for 300,000 hectares and in Thailand for around 288,000 hectares.

Uses and limitations

This brief account of land settlements in Southeast Asia indicates how they have been used in the framework of different national development strategies. We can distinguish several characteristics:

(i) They have been a widely used policy mechanism to achieve short-term political as well as long-term social, economic and developmental goals. These include extending the land frontier, increasing food production, developing natural resources and providing employment. The primary aim has usually been to provide higher incomes and a better way of life for their settlers, although we have seen that other motives may also play a role in government thinking.

(ii) They have been largely bureaucratically directed settlements, in which the various authorities have recruited the settlers, helped to establish them and to develop the schemes into viable communities.

(iii) They have used predominantly semi-integrated models, offering a range of services which appear necessary for their effective
establishment. There are very few examples for instance of the non-integrated type of settlement and, apart from Indonesia and, to a lesser extent, Thailand, few countries that have seen any significant free flow of settlers moving of their own accord over recent times.

Although such schemes have moved large numbers of people and opened up considerable areas of land, they have not generally been given high priority in government planning nor have settlement policies been extensively planned within overall development strategies.

Perhaps the most significant lesson to be learned from the use of land settlements in the Southeast Asian region is that government assistance is an important prerequisite for effective settlement, for, in nearly all cases, there are a common set of problems that have to be faced. Few countries, however, have well thought-out land settlement policies. Designing effective land settlement programs has proved to be a difficult task.

**Common problems in officially sponsored programs**

Common problems in government land schemes include such inadequacies of pre-planning and poor site selection, inadequate staffing, poor settler selection, land disputes, linkages with area development, poor services, and an inability to deal with second and third generation settlers' problems. These can be analysed under three main heads:

1. **Policy.** In most countries in Southeast Asia land programs are devised to meet immediate political or economic pressures. These may perhaps meet well initially but the program then lags owing to the absence of adequate long-range planning. Settlement policies, perhaps owing to this limited time frame, lack the flexibility to meet the new kinds of problems that inevitably arise after the first few years. Thus very few settlement policies take into account the fact that the process of settlement, even for the first generation, can take as long as 10-15 years (MacAndrews 1979:117). Two examples illustrate this problem of inadequate policy. In Indonesia government inter-island land settlement, now termed transmigration, was started in 1905 as a means to relieve population pressure in the central island of Java by moving people to the outer islands. In this it has proved ineffective, yet this is still the accepted aim of the program to many officials today, even after some 75 years. Because of its focus on this specific objective, the program generally does not maximize the potential of this movement of people to meet broader policy aims.3

3These would include the movement of manpower through the settlement process to the outer islands for development purposes, the linking of settlements with area/regional development as well as
Land settlement programs in Malaysia offer a similar example. Small-scale settlement organized by the State governments as well as by a number of central government agencies have generally failed and have had no clear policy aims (Wafa 1972). The one organization involved in large-scale settlement, the Federal Land Development Authority (Felda), has had an excellent record in opening up and creating viable settlements, adapting in this process to changing conditions in its more than 25 years of history with unusual flexibility; yet it too has failed to think through the consequences of its policies and today faces a number of serious problems in the final handing over of schemes to the settlers and in dealing with second and third generation settlers' problems. In both countries government resettlement policies have met immediate pressures and policy aims but have failed either to utilize the program fully or to incorporate adequate long-range planning.

(ii) Organization. There are a wide range of problems of organization, including planning and provision of inputs or services at all stages of settlement, staffing and staff training, care in the choice of the settlers, and management of the projects. Bureaucratic attitudes are always a problem in government enterprises. They are particularly intransigent in land settlement, as settlement is a process that above all needs flexibility and innovative approaches. Specifically land settlements organizationally are weak in the following ways:

(a) Planning. This involves both short- and long-term planning. Land settlements need careful planning in the pre-settlement stage, including initial site and soil surveys, arrangements for adequate land clearing and the design of a complementary set of services to get the settlement established and then help it throughout the period of its development. Site selection is often done haphazardly and without proper surveys. The result is that sites are often not suitable for cultivation, or are too isolated from existing facilities such as access roads, schools and markets. A badly selected site can also cause, or add to, the existing ecological damage in the area, a matter of increasing concern in many countries. Again, land rights are frequently not properly clarified before the settlers arrive, creating conflicts between the local population and the incoming settlers. In other ways, too, the local population near a settlement is usually inadequately consulted, which in turn leads to misunderstandings and resentments.

(b) Services. Government land settlements often suffer from either a general lack of support in terms of services or from services which are badly designed, inadequate and frequently

3(continued)
the use of land settlements to increase national food production. For a discussion of how Indonesian land settlement programs might be utilized see Arndt and Sundrum (1977).
delayed. In practice few land settlement programs in Southeast Asia have a well thought-out set of inputs available when needed that are designed to the settlers' needs and the specific conditions of the area.

One example from Indonesia illustrates this. Housing in Indonesian settlements is usually intended to be built by the time the settlers arrive, or at least the materials are supposed to be supplied. In practice settlers often arrive to find that there are no houses for them and that they must build their own, often with supplies that they have to purchase as the government materials have not arrived. Tools, seeds, fertilizers and other equipment to help the settlers sow and cultivate their first crop are often not available or are unduly delayed.

(c) Staffing. Government land schemes run by government departments usually suffer from a top-down approach which views settlement as an administrative process. As such, departments lack the type of commitment needed in settlement work in which the staff are personally involved in each project's development. As the same time few settlement programs have adequate staff either in quantity or quality, reflecting in many cases the weak position in the government structure of the responsible department as well as the place of land settlement in a government's overall priorities. One essential but often overlooked aspect of staffing is the provision of training directly relevant to settlement work.

(d) Settler selection. This is often haphazard and has little relation to the skills needed in land settlement. Experience has shown that recruits without some agricultural background rarely make successful settlers and that certain types of people, including farmers and retired servicemen, are more likely to make good settlers. While settler selection criteria exist in most countries (Malaysia, Indonesia, Philippines, Thailand) they are not always correctly applied.

(iii) Funding. Programs in Southeast Asia have generally suffered from inadequate funding, reflecting their low priority in budget allocations. Budgets are often small and in many countries delayed in payment. Effective land settlement is expensive and a

4Thus settlements of urban inhabitants such as beggars have failed badly in Indonesia. In Malaysia attempts at youth settlement in Youth Brigades also failed as the settlers were young and single and usually did not want to stay in isolated areas.

5One study showed that 96 per cent of the budget on transmigration in Indonesia in the early 1970s was unspent after 9 months of the fiscal year which reflected in part the delay in authorization of yearly budgets.

6Current costs per settler in Indonesia are quoted as the equivalent of US$5000 per settler for a fully integrated type of
settlement program that cannot show quick results is difficult to defend in setting annual budget priorities.

Designing effective government land programs

If remedial steps are to be taken, the major need is for a clear articulation of policy. This should cover both the short, practical aims and long-range planning that will see a land settlement through the various stages of growth to independence. Apart from the development of the settlement itself, the policy must also ensure that schemes develop to utilize regional resources. Such forward linkages are essential to immediate off-farm employment or to provide for the second and third generation settlers. Although it is unlikely that any one land settlement policy will be ideal, three types of analysis often help comprehensive policy thinking. These are analyses produced for national planning purposes; those produced by planning units within the settlement organization; and those for outside donors from whom it is hoped to attract funds.

(a) Review in national plans. Five Year Plans usually include a section on land settlement policies and aims. These may be useful but consist normally only of very short summaries of targets for the number of settlers to be moved or area to be opened up. This allows little room for concrete suggestions on actual steps to improve land settlement programs. However, they do help to relate land settlement programs to broader development aims.

(b) Research and planning units. Settlement organization in a number of countries provide such units. These may help to articulate policy and translate general aims into concrete recommendations for action, but frequently they are treated mainly as research or training units and their recommendations are lost in the day-to-day decision-making or in the yearly planning process. What is needed is a central unit that has the resources

6(continued)
settlement with the cost of the more usual type of semi-integrated Indonesian project (1980) of around US$1500. Costs in other Southeast Asian countries are approximately the same, save for Malaysia, where they are much higher.

7See, for example, Malaysia Third Year Plan 1979-83:124-7 and Indonesia's Pelita II (1974-79), Book 3, p.46, Chapter 17 or Book 4, chapters on Development of Region.

8Indonesia had had such a unit for a number of years in its transmigration department producing good reports and carrying out useful research on settlement problems. These, however, have not apparently had much impact on overall decision-making or in the articulation of policy. Malaysia's Felda has a roughly similar unit
to focus on policy formulation - both short and long term - and is somehow designed in an action-oriented way so that its recommendations are likely to be implemented. A policy unit should among other things ask these kinds of questions and these in turn should become articulated in policy:

(i) What are the inputs necessary to make each type of settlement viable?

(ii) What are the stages that a settlement must be moved through to become independent?

(iii) How can area or regional resources be integrated with the scheme to the benefit of the settlement?

(iv) How is the settlement going to deal with second and third generation development problems?

(c) Outside donors and loan agencies. The need to supply information to foreign sources of finance often forces national land settlement authorities to look beyond immediate needs and raise important questions as to both short- and long-term viability of schemes. The World Bank has been influential since it usually requires organizational improvement as part of loans for projects. There have been two notable examples of this influence in the region. In 1968, the World Bank helped in Malaysia to set up Felda's Jengka Triangle Authority to handle this very large Bank-supported settlement development. Recently, the World Bank/UNDP assisted in designing a management and monitoring system for transmigration development in Indonesia, specifically related to the Bank-supported Jambi projects.

Organization

There are two principal types of land settlement organization in Southeast Asia. One is the government type program run directly by a department or ministry. There are examples in most Southeast Asian countries, such as the Department of Transmigration in Indonesia, the State Government land schemes in Malaysia and the Thai Department of Land Development. Such programs normally run strictly within the framework of the existing bureaucracy. As a result they are usually oriented to meeting immediate demands and lack flexibility and adequate funding.

The second model is the semi-autonomous land development organization, Felda being the best example. This is a semi-government organization devoted entirely to land settlement whose budget is independent of the usual government line agency funding. This type of organization has generally far more flexibility than

(continued)

(8) (the Institute for Land Development) but this is not located at the Felda headquarters in Kuala Lumpur and tends to concentrate on training.
the normal government department, although it may lack power within the bureaucratic system. Moreover, if it focuses solely on land settlement it is better able to build up expertise.

Whatever organizational model is used there are certain common areas of organizational weakness that can usually be strengthened.

Internal organization. This frequently displays too great a top-down bureaucratic approach. A balanced staff ratio is needed so that there are both adequate staff at the field level and staff who have the authority to make decisions. The type and quality of staffing is also important, with selection based on motivation and relevant skills. A land settlement department has usually to compete with other government departments for staff and unfortunately is often seen as one of the less attractive departments to work in, providing lower than average pay and conditions. Nevertheless it can seek to make a careful selection of staff at all levels. This is particularly necessary at the field level where previous experience is essential. Settlement staff should also seek to utilize any experienced men available in the area. For example, former settlers, especially ex-service-men, have proved to be particularly effective helping in local settlement administration in Indonesia and Malaysia. The same need for qualified staff also applies to semi-autonomous settlement organizations although they do have more flexibility in their recruitment. For both types of organization training is an essential element. Training programs for staff at all levels should provide special skills in land settlement management at the higher levels and in the practical aspects of management, community development and extension work at the field level.

Pre-project planning. Planning has to be comprehensive and detailed. This is particularly important in site selection which is badly carried out in many countries. Pre-selection surveys of the area must be adequate to assess the agricultural potential and economic viability of a settlement scheme, taking accessibility into account. Projects should be sited near other settlements in the area, and should be reasonably near roads and markets. Proper consultation with the existing local inhabitants should form an integral part of such pre-selection surveys, in order to avert land disputes and to minimize the friction between local communities and the incoming settlers. If schemes are opened up before local inhabitants are consulted, they may see only the disadvantages. But if they are consulted their needs may be at least partially taken into account. For example the infrastructure development could include, say, an access road to their village, encouraging local inhabitants to see the positive side of the intrusion of the 'outsiders'.

Services. Adequate, well-planned, services delivered on
time are crucial at all stages in development. These usually include a subsistence allowance for the household for the first few months, seeds, tools, agricultural advice and credit. It is also important that those involved in scheme organization should be able to maximize the potential of all members of the community. If, for instance, there is a community development aspect in a land settlement program, this should not be limited to providing advice on nutrition or women's social organizations. It should also seek to maximize the potential of the wives and female dependants in agricultural production, particularly in home gardens, by enabling them to adapt their traditional roles as family helpmates to the new conditions.

Co-ordination. Good co-ordination of all the various inputs in a settlement program is critical to project development. The best-planned package of services into settlement is ineffective if it is too late or does not arrive. This is particularly important with seeds and other current agricultural inputs, as well as the infrastructure in irrigation (if this is to be provided) and access roads. Just as important is the co-ordination between agencies working together in a settlement program. This is often difficult. In Indonesia, for example, transmigration is organized under a Ministerial Board with ten ministers and a management unit of eighteen representatives from different ministries (see Presidential Instruction No.26, 1978:4-5). Not surprisingly decision-making is very slow. In Malaysia, a Felda scheme has to be cleared for approval by some eight or nine different government departments before development can start (MacAndrews 1977:47).

Choice of settlers. The viability of any land scheme will depend ultimately on the right kind of settler, so that the settler's background, skills and stability are important factors. Settler selection is usually carried out well in Southeast Asian programs and the lessons learned are clear: settlers should be young, preferably married, and have an agricultural background, so that they are able to adapt to the frontier conditions of most land projects. It is often advantageous to encourage the movement of groups of people from the same village or locality as this provides a group basis for their work in the first few years while the settlers adapt to their new locations, besides providing necessary social support.

Adaptation and the process of change

Psychological factors are also important in terms of maximizing land development policy. The experience of land settlement development, whether in Southeast Asia or in other regions, has shown that any policy, however efficient, must take into account the slow process of psychological adjustment and adaptability of the settlers to be effective. A number of observers have discussed
the psychological adaptation of settlers in different circumstances (Scudder 1969, MacAndrews 1977, 1979) and the impact of new settlement, whether psychological or due to the adverse conditions, on the settlers' health (Meade 1974). This process of adaptation is not an easily quantifiable element in land settlement, particularly as we do not know precisely (owing to the lack of empirical research) how various groups adapt and what are the major factors that help or hinder adaptability.

We can see the relevance of this question and its link with settlement policy in two examples taken from Southeast Asia. One is the Felda program in Malaysia, which places its settlers in fully integrated schemes with a wide range of services. The settlers are then programmed into a long and efficient process of project development aimed primarily to make these schemes economically viable. Felda schemes also have the underlying socio-political aim of turning the traditional kampong dwellers into progressive farmers (Felda, press release, 7 April 1975). Nevertheless, in some of the older schemes there is a marked lack of interest and participation in management on the part of the settlers and numerous difficulties in the final handing over of the schemes to settlers. Such difficulties are due to the fact that the settlers do not want to become independent or cannot, even after some 14-18 years of carefully designed development, manage the schemes themselves. Underlying such problems is the question of whether or not these settlers have been made too dependent by the very efficiency of Felda's management and by the provision of its wide range of support services. The question is how to achieve a balance between the adequate provision of management and services and the need to keep settlers' initiative alive.

We see a different picture in Indonesian transmigration projects. Although these are intended to provide good support services these rarely materialize. If one examines the long history of Indonesian land settlement over 75 years, one is struck by the enormous self-reliance of these Indonesian settlers who so often have been thrown back on to their own resources owing to the breakdown of government support. Repeatedly one comes across examples of settlers perhaps finding themselves in different areas from their expected destination, having to clear the land themselves, build their own houses, face disease, death and long-delayed or inadequate provision of services (IRRS 1978: Reports 1 and 2). Yet Indonesian settlers and settlements do survive and, to anyone who has worked on land settlements in other countries, they are remarkable examples of the ability of people to cope in sometimes unbelievably difficult circumstances.

The lesson to be learned from these examples is that land settlement is a slow process and one that cannot be forced. It includes three major stages of adaptation, each with three
distinct periods of development in any one settlement. The first is the initial settlement in which the recruit goes through the pioneering period of adaptation. This is followed by a second period where economic self-sufficiency is achieved. Finally there is a third stage when the new community has achieved a certain level of economic prosperity and can afford innovation and risk. This process has a time frame of some 10-20 years and no amount of well-planned inputs will radically change this process, although it may be accelerated.

At the same time, it can well be argued (MacAndrews 1979) that too great an array of inputs and too great an efficiency in management can have two negative effects. The first is that the settler may be forced to drop too quickly his old but well-tried habits before developing an ability to refashion them in his new unknown environment into ways that he can handle. Ideally the pioneers in a land settlement should test out new ways and methods by careful stages so that they can understand and fully absorb them. Second there is the problem of dependency. If too many facilities are provided and the management is too efficient a paternalistic attitude can well result. This is a general problem in Felda type land schemes in Malaysia and is also a problem in land settlement in other regions such as Africa (Chambers 1969).

Land settlement policy makers must understand that effectiveness is a matter of timing as well as of efficiency in organization. Effective policies must be based on analysis of the settlers' background and needs, and strategies adopted should neither make them too dependent nor too antagonistic to change. Regrettably, few government policy makers have the time or interest to analyse settlement strategies to this extent, owing perhaps to their background or to the immediate pressures of their jobs. Yet one must look for settlement policies that try to suit the individual circumstances, have the flexibility to tailor policy to individual settlement needs and manage to keep a balance between the two extremes of providing too many services and too few.
Chapter 2

The transmigration program in Indonesia

Mayling Oey

A historical synopsis of resettlement programs

Throughout this century, one strategy for dealing with the problems of overpopulation, land shortage and poverty in rural Java has been to resettle people from such areas in islands outside Java which are less densely populated. When the Dutch ruled the archipelago, the government initiated a program called colonization, which became especially important after the adoption of the 'ethical' policy in 1900. After Independence in 1945, when conditions were more stable, the Republic of Indonesia resumed the program under a new label, transmigration.¹

Besides seemingly altruistic reasons, there were also labour demand pressures which led to the implementation by the Dutch of the colonization program. Economic policies for the Netherlands East Indies sought to promote a supply of labour for Dutch plantations in areas outside Java.²

However, during the entire period 1905 to 1941 only about 210,000 people were moved under official programs. This number amounted to little over one per cent of the growth of population in Java during the period, which, according to census, rose from about 30 million in 1905 to 48 million in 1940. It is obvious that the policy did not even approach its objective of alleviating population pressures on Java.

¹Defined as 'large-scale resettlement of people from one area to another, within the boundaries of the state, for the purpose of permanent settlement'. Trans indicated migration over the waters, i.e. from Java to other islands (Amral Sjamsu 1960:78).

²Boeke (1953:143) argued that the tobacco and rubber estates in Sumatra found it difficult to fulfil their labour demands because the indigenous people were enjoying a relatively high standard of living due to rather low population densities prevailing at that time and did not gain sufficiently by hiring themselves out as wage labourers to compensate for relinquishing their independence.
Notwithstanding such meagre achievements, Java's overcrowded conditions compared to far sparser populated areas outside Java led to the resumption of the program soon after Independence. During the Sukarno period its stated objective was the resettlement of the surplus population of Java to Sumatra in order to improve its living standards (Oey and Astika 1978:14-15). Since the New Order government, which is development oriented, assumed office, transmigration is also regarded as an instrument of regional development (Suratnam and Guinness 1976 and Hardjono 1977:92-102). However, one basic aspect has remained constant: the resettlement of people from high density to sparsely populated areas.

The shift in policy objectives is reflected in changes in implementing agencies from one government department to another, and appears to indicate that successive governments have attached an increasing importance to transmigration (Oey and Astika 1978:6-12). In late 1950, when the first post-World War II recruits were resettled, the program was the responsibility of the Ministry of Social Affairs. This location indicates that transmigration was then regarded as a solution to the social problem of poverty on Java, an emphasis which continued throughout the 1950s and most of the 1960s. This was one consequence of high and increasing densities in rural areas in Java, where inheritance rules have led to continuous fragmentation of land, creating masses of peasants who are either owners of miniscule plots or are landless.

In the meantime, the idea of co-operatives as an institution of community development in transmigration settlement gained credibility through its ardent supporter, Dr M. Hatta, the then Vice-President (Hatta 1954:182-92). Improvement in the standard of living of the transmigrants was considered achievable only by collaborating with the Co-operatives Service. Except for a few short-lived intervals, this collaboration between the Transmigration and Co-operatives agencies lasted for over two decades, from 1956 to 1978, although it was not formalized under one Ministry until 1960, when the Department of Transmigration, Co-operatives and Rural Community Development was created (Oey and Astika 1978:10).

While such a collaboration continued, there were significant changes in the purposes of transmigration as a consequence of an overhaul of government after the abortive 1965 coup. Following the economic deterioration in the last years of the Sukarno era, the present government's primary concern was to suppress inflation and increase food production. Food production can be increased by raising yields per hectare or expanding the area cultivated. Priority was to be given to intensification of agricultural practices in Java. Outside Java extension of area was the main objective, transmigration providing the labour. The earliest statements of the New Order government concerning the functions of transmigration date to 1966 when the agency was located briefly in the Department of Internal Affairs. One of its functions was
then defined as the achievement of a more even redistribution of population throughout Indonesia in order to increase the productivity of human and natural resources within the framework of national economic development in general, and in the area of food production in particular. From this point, policies considered transmigration also as an instrument of development. Regional development aspects were again stressed in Repelita I (First Five Year Development Plan) of 1968/69-1973/74. Thus, besides redistributing the population more evenly, labour was to be redistributed for development purposes. In the receiving areas, which are sparsely populated, labour was to be made available to increase food production; where available, also timber production; and for employment on public works to improve the infrastructure outside Java (Indonesia 1968, Vol.IIC:109-10).

In the meantime, there was increasing criticism of the futility of transmigration as the institution to achieve a more even population distribution throughout the archipelago.³ In addition, the hopeful expectations of increasing food production and achieving self-sufficiency in rice were not being achieved.⁴ These two factors are reflected in Repelita II of 1974/75-1978/79, which emphasized the development of communities outside Java, Bali and Lombok,⁵ which were to constitute integral parts of regional development plans (Indonesia 1974, vol.II:453-6). A growing stress on transmigration as an integral part of regional development can be found in the policy outlines for Repelita III of 1979/80-1983/84. The choice of locations for transmigration settlements, the necessary construction and institutions for building viable communities, as well as the linkages with the

³As early as 1952 it was noted that the purpose of transmigration is not only the reduction of population densities on Java (Indonesia 1958:73-6). The same point was made by Amral Sjamsu (1960), Myrdal (1968:2141-7), Swasono (1969:140), and many newspaper articles. In addition, population statistics could no longer be ignored.

⁴Junghans (1974) strongly criticizes the linking of transmigration to increasing food production for the nation because by design transmigration is a program of resettlement on the basis of subsistence farming.

⁵Even though many Balinese have migrated under the transmigration scheme since the early 1960s (especially after the eruption of Mount Agung in 1963), formal recognition that Bali is also a sending area was not given until Repelita II. High population densities and poverty found on Lombok led to the inclusion of this island as another sending area (Indonesia 1974, Vol. II: 451).
population of the wider area and existing communities and towns, are described in far greater detail than in any previous development plans (pp.14-33 – 14-47).

**Targets and achievements**

In general, designers of the Indonesian transmigration program have been characterized by enthusiasm and optimism. When it was first considered by the government, the plans called for extremely high targets. Not surprisingly, the numbers actually resettled constituted only a small fraction of these. Eventually, the targets were so greatly modified that during Repelita I the achievements overshot them. Targets were then once more raised substantially, so that the gap between targets and achievements again increased.

The transmigration program can be divided into five periods, which coincide with changes in implementations of plans and umbrella Ministries of the transmigration agency. The five periods are: (i) 1950-59: Tamboenan's plans; (ii) 1960-68: Pembangunan Nasional Semesta Berencana Delapan Tahun; (iii) 1969-74: Repelita I; (iv) 1974-79: Repelita II; and (v) 1979-84: Repelita III.

**1950-59: Tamboenan's plans**

When Ir. A.H.O. Tamboenan was assigned to head the transmigration service in 1950, he brought with him a fifteen-year plan he had designed in 1947 under which 31 million people were to be moved. He revised it in 1951 to cover thirty-five years from 1953 to 1987, divided into seven five-year periods. Assuming an annual rate of population increase of 1.5 per cent, Tamboenan arrived at his fantastic target of moving 48,675,000 people from Java in a period of thirty-five years (Amral Sjamsu 1960:81).

It appears that this was designed on the premise of keeping Java's population constant. Clearly Tamboenan did not consider the practical aspects of implementation, such as the financial and organizational capacities of the government to carry out such an ambitious policy. Because of such extravagantly high targets, the achievements of the program, while it was under the jurisdiction of the Ministry of Social Affairs, appear rather meaningless. Just over 244,000 individuals were recorded as resettled over the period 1951-59, less than 4 per cent of the target of 6,072,444 (Oey and Astika 1978, Table 1:49).

**1960-68: Pembangunan Nasional Semesta Berencana Delapan Tahun**

Even though the transmigration agency experienced several

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6This was the growth rate estimated by the Central Bureau of Statistics for the decade preceding World War II (Pelzer 1948:211).
relocations and there was a change in government during this period, 1960-68 is identified as one phase of the transmigration for three reasons. First because it was in 1960 that the agency was taken out of the Ministry of Social Affairs and placed in the Department of Transmigration, Co-operatives and Rural Community Development, where it remained until 1962. Second, the Pembangunan Nasional Semesta Berencana Delapan Tahun (Eight Year Plan for Overall National Development) was designed for the years 1961-69; and lastly because Repelita I started in 1969. According to this design, far more moderate targets for the transmigration program were set. Nevertheless, the targets remained far beyond the capacity of the government at that time. Starting with a target of 15,000 families for 1961 and increasing thereafter by annual increments of 5000-20,000, for 1968 the target came to 100,000 families, so that the total for the overall planning period was 390,000 families. This would perhaps have amounted to nearly 2 million people. Political as well as socio-economic instability characterizes this period in the history of Indonesia. Consequently, the achievements of the transmigration program were far below expectations. For the planning period of 1961-68, 38,591 families were resettled, thus constituting only about 10 per cent of the overall target (Oey and Astika 1978, Table 2:51).

1969-74: Repelita I

The New Order government, which formally took over in March of 1967, started a new tradition of preparing five years plans for its development directives. Repelita I was the first such document prepared in this series and contains very broad outlines of the policies of all government agencies. How policies for transmigration were to be implemented was, however, not specified, nor were targets mentioned. Targets are, however, published as appendices to the annual Presidential Addresses to the Parliament. Since targets set were fairly modest, they were frequently overachieved (Table 2.1).

1974-79: Repelita II

The successes achieved during Repelita I, especially during fiscal year 1973-74 when more than 100,000 persons were moved, led to rising optimism among planners. For Repelita II they felt that a minimum target of 30,000 families during the first year could be achieved. With an increase of an additional 10,000 families during each of the subsequent years, the target at the end of the planning period, 1978-79, was set at 70,000 families. Thus, over the five-year period, a total of 250,000 families should have been resettled.

However, more realistic targets have since been adopted. These modified plans and the original targets are reported in the appendices to the Presidential Addresses (Table 2). Targets were
Table 2.1

**Targets and achievements of the transmigration program during Repelita I, 1969/70-1973/74 (families)**

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Target Original</th>
<th>Revised</th>
<th>Realized</th>
<th>Percentage realized of target Original</th>
<th>Revised</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969-70</td>
<td>5,844</td>
<td>4,489</td>
<td>3,933</td>
<td>67.3</td>
<td>87.6</td>
</tr>
<tr>
<td>1970-71</td>
<td>4,115</td>
<td>3,865</td>
<td>4,438</td>
<td>107.8</td>
<td>114.8</td>
</tr>
<tr>
<td>1971-72</td>
<td>4,600</td>
<td>4,600</td>
<td>4,171</td>
<td>90.7</td>
<td>90.7</td>
</tr>
<tr>
<td>1972-73</td>
<td>10,513</td>
<td>9,300</td>
<td>11,314</td>
<td>107.6</td>
<td>121.7</td>
</tr>
<tr>
<td>1973-74</td>
<td>15,887</td>
<td>15,887</td>
<td>21,313</td>
<td>134.2</td>
<td>134.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40,959</strong></td>
<td><strong>38,141</strong></td>
<td><strong>45,169</strong></td>
<td><strong>110.3</strong></td>
<td><strong>118.4</strong></td>
</tr>
</tbody>
</table>


Table 2.2

** Targets and achievements of the transmigration program during Repelita II, 1974/75-1978/79 (families)**

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Repelita II Presidential Address</th>
<th>Realized</th>
<th>Percentage realized of targets Repelita II Presidential Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974-75</td>
<td>30,000</td>
<td>11,000$^b$</td>
<td>8,934$^c$</td>
</tr>
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<td>1975-76</td>
<td>40,000</td>
<td>8,100$^c$</td>
<td>2,949$^c$</td>
</tr>
<tr>
<td>1976-77</td>
<td>50,000</td>
<td>13,910$^d$</td>
<td>16,697$^d$</td>
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<tr>
<td>1977-78</td>
<td>60,000</td>
<td>22,949$^e$</td>
<td>13,271$^e$</td>
</tr>
<tr>
<td>1978-79</td>
<td>70,000</td>
<td>27,000$^e$</td>
<td>14,421$^e$</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>250,000</strong></td>
<td><strong>82,959</strong></td>
<td><strong>56,272</strong></td>
</tr>
</tbody>
</table>

**Sources:** a Indonesia (1974b, Vol.IIA:17-19 - 17-20).  
b $^b$ (1975:541).  
c $^c$ (1976:533).  

reduced for both fiscal and administrative reasons. Financially they were forced to be more realistic because they were set in conjunction with budgetary allocations for implementing the program during a specific fiscal year. Administratively, planners had to
take into account new requirements on the preparation of new transmigration settlements. According to the new regulations, people are not to be resettled until the whole land project is ready for occupation. The process of preparation of a transmigration settlement is said to take approximately 2.5 years. When an area is designated as a transmigration settlement, several surveys are conducted to determine its feasibility as a settlement area. These surveys consist of various analyses concerning soil fertility, topography, land slope, land use, land status and ownership. Thereafter, the physical plans are drawn, and these are then followed by land clearance and eventually by construction of a complete settlement including the physical and social infrastructure (Indonesia 1979a:XI/41).

Notwithstanding the continuous improvements in plans and implementations being made, however, because of the large scale of the program unanticipated problems will always arise. Consequently, even though the implementing targets have been substantially reduced, the achievements continue to fall short of the targets.

1979-84: Repelita III

While the period of the Second Five Year Development Plan has only recently been completed, and the achievements have been far lower than were planned in 1974, planners of Repelita III have become even more ambitious. During the current planning period, the aim is to resettle half a million families (Table 2.3).

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Number of families</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979-80</td>
<td>50,000</td>
</tr>
<tr>
<td>1980-81</td>
<td>75,000</td>
</tr>
<tr>
<td>1981-82</td>
<td>100,000</td>
</tr>
<tr>
<td>1982-83</td>
<td>125,000</td>
</tr>
<tr>
<td>1983-84</td>
<td>150,000</td>
</tr>
<tr>
<td>Total</td>
<td>500,000</td>
</tr>
</tbody>
</table>

Source: Indonesia (1979b, II:14-48).

Difficulties in carrying out such an ambitious task have lately been admitted by the ministers in charge. The Junior Minister for Transmigration has already acknowledged that the targets of Repelita III will not be achieved (Kompas, 16 December 1979:1).
Structure of settlement programs

Eligibility requirements. Because the transmigration program is a continuation of the earlier colonization program, initially the rules for selecting candidate transmigrants followed those determined for selecting prospective colonizers. Over time, however, in accordance with modifications in policies and objectives of the program, as well as demands made on it, the rules regulating eligibility have been modified.

The 'ten commandments of colonization' were a set of rules compiled in the 1930s to guide officials entrusted with selection of prospective migrants. According to these rules, an applicant should only be selected if he was a real peasant (otherwise he would be a burden to others), physically strong (to withstand the hardships of pioneering), and young (thereby reining in Java's population growth), with a family (the foundation of peace and order), but not with many young children or a pregnant wife (too burdensome). Neither should he be a former plantation worker, recently married, or a bachelor (sources of unrest). Whole villages should be permitted to migrate. In that case all the conditions should be disregarded (Pelzer 1948:209-10).

As a continuation of the colonization program, which in 1937 introduced the keluarga (family) system (Hardjono 1977:30), the first migrants from Java resettled under the auspices of the postwar transmigration services went under a similar scheme. According to the scheme, Javanese participating in Dutch colonization settlements had to sponsor and help settle their relatives, whom the government identified in Java. The first migrants resettled under this scheme in independent Indonesia were therefore referred to as transmigran keluarga or family transmigrants. Because government assistance to these family transmigrants was given in the form of a loan, the rules for selection concerned mainly the financial status of both sponsors and candidates (Oey and Astika 1978:59-60).

While the scheme for family transmigrants continued, new schemes for general transmigrants and local transmigrants were introduced. Although no specifications for local transmigrants have been recorded, there are regulations for selecting general transmigrants. The rules specify that applicants have to be Indonesian citizens, legally married, healthy, and between 18 and 45 years old. In addition, they cannot have a family member who

General transmigrants do not need sponsorship of earlier settlers because many of them are to be pioneer settlers themselves. Instead, they are fully sponsored by the government and their resettlement is carried out by the government transmigration agency. Local transmigration involves the resettlement of people within the same province under government guidance (Hardjono 1977:28-9).
is less than six months or more than 50 years old (Amral Sjamsu 1960:82). At this time, however, applicants' work experience was not a basis for selection. As a result of difficulties faced by those migrants who had no farming experience, in 1954 the rules of eligibility were amended to require candidates to be real farmers (Oey and Astika 1978:61-3).

Except for some minor modifications, these regulations guided the selection of aspirant transmigrants until the formulation of Repelita I. Because of political upheavals in the mid-1960s, additional criteria were added. During the period of Repelita I an applicant had to fulfill the following conditions: (i) he should be an Indonesian citizen; (ii) he should not have been involved in the 30 September 1965 attempted communist coup or be a member of a prohibited political party; (iii) he should be a real farmer or have other relevant skills; (iv) be between 20 and 40 years old, with no member of his family less than six months or more than 60 years old; (v) be legally married and his wife not more than three months pregnant; (vi) be healthy and strong; (vii) adhere to a religion; and (viii) be well behaved, never involved with the police, and never have transmigrated before (Oey and Astika 1978:66-7). Later rules added (ix) he must go voluntarily; (x) be subject to regulations governing the implementation of transmigration (Tambahan Lembaran Negara Republik Indonesia Nomor 3016).

Although in Repelita II there appears to be a shift from an emphasis on population redistribution in agricultural settlements towards regional development, it remains acknowledged that the majority of the transmigrants are to be peasants (p.454). The growing class of landless or almost landless peasants and the promise of becoming landowners through transmigration has resulted in long waiting lists of aspirant transmigrants. In Repelita II, priority sending areas were determined, which fulfilled the following criteria: (i) critical areas and those which are to be rehabilitated; (ii) natural disaster prone areas; (iii) areas where densities exceed 1000 persons per square kilometre; and (iv) areas which are to be inundated for the construction of a dam (Indonesia 1979b:xi/39). Repelita III gives similar specifications of the general criteria of sending areas and also states that priority is to be given to kecamatan (sub-districts) which are densely populated, relatively poor, experiencing deterioration in their environment or acute problems of unemployment. At a lower

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8This emphasis on age alone is consistent with an earlier reference to Tamboenan's plans, which imply a concern only for keeping down population pressures on Java.

9McDonald and Sontosudarmo (1976:61 and 3-5) found that these criteria seem to be being followed. The authors stated that, of the transmigrants originating from Yogyakarta, 58 per cent came from Gunung Kidul as opposed to 16 per cent from Bantul, 14 per
level, according to the regulations, the poorest villages are to take precedence, and landless labourers are to be given priority.

This description is of the formal written regulations concerning eligibility criteria. The question, however, often arises as to how decisions are actually made as to who does or does not transmigrate. Notwithstanding the existence of rules guiding the selection of 'suitable' or 'preferred' transmigrants, regulations have not always been followed. The main criterion tended to be the willingness to migrate. Although in some instances, notably in natural disaster areas, pressure was brought to bear on the homeless to migrate, in other cases the urban unemployed have also often been strongly encouraged to transmigrate (Hadjono 1977:26-7).

In order to be eligible for transmigration an aspirant transmigrant registers at a local office through the village headman who then forwards the application to the camat (head of a kecamatan) who in turn forwards it to the kabupaten (regency) representative of the transmigration office. There are no written documents guiding the selection of individual potential transmigrants. Hence, how actual selection is carried out varied from one place to another. Consequently, there can be cases when undesirables of a community are recommended by village heads and therefore 'selected' for transmigration. However, in terms of the overall number of transmigrants such cases are relatively few because the program is so large.

Government assistance. The kind of assistance provided by the government has undergone changes over time. The government categorizes the different types of transmigrants according to the composition of assistance.

When the first Javanese were resettled under the family transmigration scheme of the 1950s, the government provided each family with: free transportation from place of origin to place of destination, food and some pocket money; cleared land consisting of 0.25 hectares for their house and vegetable garden and 1.75 hectares for farm land; and agricultural tools, seeds, kitchen utensils and clothing which were given as a loan, and therefore

9 (continued)

cent from Sleman, and 11 per cent from Kulon Progo. Gunung Kidul is the poorest kabupaten in Yogyakarta, consisting of infertile limestone hills, while Bantul and Sleman lie in the fertile Yogyakarta-Solo plain, and Kulon Progo is characterized by a combination of the two extremes. Consequently, in the fertile kabupaten rice is grown while in Gunung Kidul only cassava and maize can be grown.

10 As was the case with the Balinese after the eruption of Mount Agung in 1963, and people who were living on the slopes of the Dieng when it leaked poisonous gases in 1978.
had to be repaid. When the scheme for general transmigrants was instituted, the kinds of assistance were increased. In addition to the kinds of assistance given to family transmigrants, general transmigrants were also provided with a house, and food rations for 6-10 months, which were similarly considered as a loan\(^\text{11}\) (Amral Sjamsu 1960:82).

While some of the types of assistance were straightforward, others were not. The government provided transportation. Upon arrival, each family was assigned their particular piece of land. Some families found a house already constructed while others were given some building materials instead. Also on a per family basis, transmigrants were given agricultural tools, seeds, kitchen utensils, food and clothing. Over time, more changes have been introduced. Food assistance has become less generous in terms of variety as well as amount, but owing to reported difficulties experienced by the transmigrants in getting settled, the period of food rationing has been extended from 6-8 months to 12-18 months (Indonesia 1979b:14-15 - 14-54).

Similarly, in some areas, land allotments have been expanded while preparatory work prior to settlement has also been improved. The expansion of the transmigration program has led to the creation of new settlements in previously uninhabited or very sparsely populated regions which were almost always the less well endowed areas. In fact, the availability of appropriate land has been rapidly declining. In the beginning of the program, it was intended that settlements were to be based on wet rice farming, thus requiring the availability of water and irrigation systems. Eventually, however, because public works could not keep up with the construction of irrigation systems in the rapidly increasing number of new settlements, it became acknowledged by the government that transmigration settlements had to be built on the basis of dry farming also. In addition, tidal areas have had to be utilized.

During the early period of colonization, migrants were given a total of one hectare of land, because that was the area the Javanese considered *cukupan* (enough).\(^\text{12}\) The most significant change introduced since is that they were to be given a total of two hectares, including 1.75 ha of wet rice land. By current standards prevailing on Java, this should have been sufficient to bring them out of the cycle of poverty which they suffered there. However, as mentioned before, because the program was more concerned with quantity, resettling as many as possible, and further exacerbated by social and economic instability, the Department of Public

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\(^{11}\)As was to be expected, it was very difficult to collect repayments, so that, by 1958, 99.6 per cent of all the loans remained outstanding (Oey and Astika 1978:87-90).

\(^{12}\) *Cukupan* for a Javanese peasant family means that they farm 0.7 ha of *sawah* (wet rice field) and a house garden of 0.3 ha on which fruit, vegetables and spices are grown (Penny and Singarimbun 1973:2).
Works was not able to keep up with the expansion of irrigation systems required. Consequently, most transmigrants were resettled in areas where they had to practise dry farming. Even dry land was not always available and transmigrants have also been resettled in tidal areas. It was not until Repelita II that a few new irrigation systems were constructed in transmigration areas. In the meantime, an increasing number of studies have pointed out the misery suffered by many transmigrants as a result of the quality and size of the land allotments. In response, since Repelita II, the size of the land allotments has been increased. If transmigrants are resettled in irrigated areas, then they continue to be eligible for 2 hectares only. However, if no irrigation system can be made available, the transmigrants are to be given 4-5 hectares, to be used for subsistence and cash crops (pp.456-7).

Spontaneous migrants are also an important category, requiring little aid, which the government is especially keen to promote. Many such spontaneous transmigrants have been found in Lampung (Santoso and Wardhana 1957; Utomo 1975). The spontaneous transmigrants require limited or no government assistance. For administrative purposes they are classified into two categories, Transmigran Spontan Dengan Bantuan Biaya (spontaneous transmigrants with financial aid) and Transmigran Spontan Tanpa Bantuan Biaya (spontaneous transmigrants without financial aid). The first group receives transportation, housing materials and land while the second is given land only (Hardjono 1977:30).

Shortly before the end of fiscal year 1973-74 a new program, Transmigrasi Spontan Bantuan Presiden (Spontaneous Transmigrants with Presidential Aid), known as Banpres, was commenced to encourage greater numbers of partly assisted migrants to leave Java and Bali. The limited assistance consisted of transportation and basic necessities for four months (Hardjono 1977:33).

Problems of the transmigration program

There are basically two types of interrelated problems in contemporary Indonesian land settlement programs. The first concerns administrative difficulties in implementation and is essentially a problem of management spread between government

Difficulties experienced by transmigrants in tidal areas have been documented by Indonesia, Direktorat Jenderal Pengairan (1972), Suratnam and Guinness (1976), Suratnam (1977) and Suratnam et al (1977).

Amral Sjamsu concluded that such should be the goal of transmigration (1960:136). Keyfitz (1964) suggested also that the success of the program can be judged by the extent to which it stimulates a spontaneous flow. Such expectations of the spread effects of successful programs are also expressed in Repelita II (pp.454-5).
The second concerns the consequences of insufficient preparation by the authorities as suffered by the transmigrants. The hardships suffered by the transmigrants are experienced at various stages of the resettlement process.

**Management.** From the beginning, implementation of the transmigration program has never been the sole responsibility of one transmigration agency. The magnitude and complexity of implementation has always demanded the co-operation of several government ministries or departments. For instance, the Ministry of Information is responsible for informing prospective transmigrants in sending areas. Land allocations for transmigration settlements are worked out through the Department of Internal Affairs. Expenditure plans for the creation of new settlements have to be approved by the Planning Board. Land clearance and settlement construction is executed by the Ministry of Public Works. The Ministry of Communications bears the responsibility of moving people from the sending to the receiving areas. Social amenities are provided by the Departments of Health, Education, Religion and Social Affairs. Of course no program can be implemented without the co-operation of the Department of Finance. Since transmigration projects are designed as agricultural settlements, the Department of Agriculture also plays an important role in the resettlement process. Notwithstanding the necessary co-operation of various government departments, the final burden remains with the transmigration agency (at present the Department of Manpower and Transmigration) which is responsible for the recruitment and administration of transmigration settlements for at least the first five years of each project or until such a settlement is regarded as self-sustaining, when responsibility can be transferred to the Department of Internal Affairs.

When co-operation is required among such a large number of government agencies, difficulties in interdepartmental co-ordination can be expected. Furthermore, development plans used to be far more fragmented and less integrated, with each department setting its own priorities. In addition, political processes and forces often create instantaneous demands on the program without allowing sufficient preparation time to co-ordinate the activities of all the departments involved. Such factors contribute to the often found unsynchronized preconditions for resettling transmigrants. Bintoro Tjokroamidjojo (1977) has carried out a detailed study of the problems that arose in the Way Abung transmigration project. The author attributes the basic problem as originating at the planning stage when the budgetary components of the various agencies involved were not synchronized.

In addition, it has also been claimed that poor communication between the regions and the central government and between various departments has in the past been a major constraint in synchronization. Consequently, there have been unnecessary delays between
the various phases of the development of a project (Letta 1974).

Interdepartmental co-operation. The consequences of the lack of co-ordination and synchronization between departments are of course borne by the transmigrants. Even before departure their lives can be affected. When targets have been set – both overall and by region of origin – recruitment procedures are started. There is, however, a time lag between the dates of registration and departure. Since this is indefinite, recruiters are not able to inform prospective transmigrants how much more time they have to settle their affairs. Consequently, a long time can pass by without further news, until suddenly they are told that they have to leave.

It has been reported that as a result some prospective transmigrants have withdrawn their names from the registration lists because they have found new occupations. Others suffered hardships because they had sold their assets after being registered and selected as candidates, thus losing their major sources of income. Others again suffered losses because they had to sell their belongings at rather low prices because of the short notice of their departure, making it impossible to obtain a fair price.15

The nature of the hardships suffered by the transmigrants varies from one project to another. In the Way Abung project, for instance, the earliest arrivals were faced with a settlement site where nothing had been done, not even land clearance. In other cases the cleared land had become overgrown again by the time the transmigrants arrived. Consequently, when they arrived after a strenuous trip from their villages of origin and were tired, weak and poor, they had to start their new lives with land clearance and the construction of temporary living accommodation.

Another way that ineffective interdepartmental co-ordination and synchronization affects the lives of the transmigrants is in the timing of their arrival in the new settlement. The subsistence allowances provided by the government are determined on the basis of the time required by the transmigrants to reap their first harvests, assuming that they can start planting soon after arrival. However, the agricultural cycle is determined by the seasons. Planting has to be done before the rainy season, so that if the

15See, for instance, Letta (1974:17), who discusses ways to improve the management of the program, thereby reducing the hardships borne by prospective transmigrants. Another study which compared the Rimbo Bujang and Sitiung projects, located in Jambi and West Sumatra respectively, also notes such complaints by the transmigrants (Markas Besar TNI-AD 1977:9). Davis (1976:159) has noted similar criticism from Balinese transmigrants in Parigi, Central Sulawesi.
settlers arrive after it has ended they will have to wait much longer for their first harvest. In the meantime their subsistence rations may be withdrawn.

Site selection. The final choice of a site within a province remains within the jurisdiction of local provincial governments, even though transmigration is a national policy and selection of the receiving provinces is determined by the central government. In the past, procurement of suitable land was often not integrated into provincial plans for regional development. Since 'beggars can't be choosers', soil conditions of the areas designated by provincial governments for transmigration projects are often poor with little water available. Most or all fertile land has in any case usually been occupied and cultivated. As a result, transmigration sites are generally not the best quality.

However, proper planning and sufficient investment can turn even fertile land into reasonable agricultural land. This has, however, not always been provided. First of all investment in any transmigration project has been and will continue to be rather limited because of the emphasis of the program on sheer numbers. Second, the planning and designing of settlements have in the past also been rather limited. Thus, the location of a transmigration project can be poorly chosen.

An example of poor choices for transmigration sites are two tidal area projects in Kalimantan, Marabahan and Balandean, which were opened in 1958-59 and 1960 respectively. In both areas water and soil quality are major problems. Without high quality irrigation and drainage systems, such selected tidal areas are either inundated or have no water. At the time when these projects were opened very limited investments were made, even though they were said to be planned for irrigated rice fields. The Marabahan project is located too far from the Barito River so that neither can the swampy waters with a high degree of acidity be drained into the Barito nor can the Barito's water be used to irrigate the fields. Similar difficulties are faced by the transmigrants in the Balandean project. Such problems, and the almost non-existent opportunity for wage labour, have caused most transmigrants from these project areas to abandon the settlements (Soetanto and Kasnadi 1971).

These examples are of course among the worst. It is not suggested that most, or even many, transmigration settlements have failed as badly as this. Indeed, if measured on the basis of population growth, no other project has failed. On the other hand, neither can it be claimed that most other projects have been very successful in improving the standard of living of the settlers.

The government is confronted by a dilemma in its transmigration policy. If, on the one hand, it invests sufficiently in an area,
as the government did in some of the areas during the colonization period, then the population growth of such an area soon surpasses the growth in its food production. Whether through natural increase or immigration of independent migrants, well developed transmigration areas are often found after a time to have population densities as high as the sending areas. For example, in the more successful areas of Lampung the second and third generation of settlers are again faced with having no agricultural land. However, if, on the other hand, the government does not make sufficiently large investments, then transmigrants and their offspring will not become better off after resettlement, thus belying the expectations for a better future which makes transmigration attractive. Moreover, such failures support the frequently heard accusation by provincial governments that transmigration serves in fact as a mechanism transferring rural poverty (Hardjono 1977:37).

**Land utilization.** Insufficient government investment in transmigration areas has also resulted in only part of the land allotments being cultivated. As mentioned before, transmigrants were given 0.25 hectares of land for their house and vegetable garden, and 1.75 ha for wet rice land, or, since Repelita II, 3-5 ha of non-irrigated land. It has been the policy of the program to clear only part of the fields given to the transmigrants. Consequently in some projects only a small proportion of their allotments has been cultivated. A report on the Way Abung project and several projects in Southeast Sulawesi notes that after five years on average less than half of the allotments had been cultivated. The reasons given were: (i) the government had not cleared all the land allotted which meant that the transmigrants themselves were expected to do so; (ii) the settlers were not able to complete land clearance operations themselves because they did not have adequate labour and capital; and (iii) transmigrants did not possess sufficient farm traction power. In Southeast Sulawesi additional reasons have been mentioned, such as crop loss hazards due to animal and other pest attacks, and availability of paid employment outside the settlements (Hameed 1975:iii-iv; and 1976:ii).

**Land rights.** Another important problem facing the transmigrants concerns land rights. This stems mainly from the ambiguity

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16 This is the argument posed by Junghans to favour intensification rather than extensification of irrigated rice fields (1974:68-83). The author, however, observes only the relation between extensification and population growth in a particular area, and has not paid sufficient attention to the fact that economic development in a particular area, which can also be the outcome of intensification, may in itself also be a stimulus for rapid population growth.

17 A detailed study on land tenure has been prepared by R.T. Ratnatunga (n.d.).
of the basic agrarian law, Law No.5 of 1960, enacted fifteen years after Independence. This law took so long to draft because of conflicting views on whether existing *adat* (customary law) should be revised instead of promulgating a new law. This conflict has not been fully resolved in the present law which stipulates that 'the Agrarian Law for the whole of Indonesia is the *Adat* as far as it is not in conflict with National and State interests based on the unity of the Nation, with Indonesian socialism as well as with regulations stipulated in the act and with other legislative regulations, all with due regard to the elements based on Religious Law' (Article No.5 quoted by Ratnatunga n.d.:19). Thus, according to this law, *adat* takes precedence, subject to its not being in conflict with acts and regulations at higher levels. Consequently, when an area is designated for transmigration, local transmigration authorities settle the status of such an area in accordance with the local *adat*. The situation is further complicated because *adat* is place and time specific, hence there is no uniformity in the laws applicable to transmigration areas. As a result, no standardized arrangements and agreements can be made between local representatives of the departments of Manpower and Transmigration and Agrarian Affairs on the one hand, and *adat* governing bodies on the other, and agreements will continue to be reached on a case by case basis by local authorities. Thus, unclearly defined tenure of transmigration settlements continue to be a source of conflict between transmigrants and local people.

Furthermore, according to existing regulations, an area opened for transmigration remains in principle the responsibility of the Department of Manpower and transmigration for five years, beginning from the time of arrival of the first settlers. Thereafter, its management is to be transferred to the Department of Internal Affairs. In practice, however, it remains under the authority of the Department of Manpower and Transmigration far longer than the stipulated five years. As long as an area remains under the jurisdiction of the transmigration agency, the settlers are supposed to be issued a so-called 'Tillage Permit' or *Sertipikat Hak Pakai*, the right to use the land assigned to them. After a transmigration project area has been transferred to the Department of Internal Affairs, the regulations call for the issuance of a *Sertipikat Hak Milik* or full ownership rights to transmigrants (Ratnatunga n.d.:75). Since transmigration projects have in the past not been transferred after the stipulated five years, proper land title deeds have also often not been issued (ibid.:vi), thus leaving transmigrants in an ambiguous situation as to their rights on the land.

Such ambiguity in the status of their land has often resulted in an ambivalence among transmigrants as to how best to utilize

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18The permits contain information regarding the land allotment and the recipient as well as necessary conditions to be met by the recipient in order to retain the title to the land (Ratnatunga n.d.:61).
their scarce resources. The lack of proper land title is one reason for not having cultivated all their land (Institut Pertanian Bogor 1971:7). Settlers' unwillingness to cultivate all their allotted land stems also from litigation and land disputes with the indigenous people. Because transmigration areas are not precisely demarcated after agreement with the indigenous people, who may farm under quite different systems of tenure, there are often disputes about rights to resources on the land, like the trees, fish ponds and grazing rights (Mangunrai 1977:91-115). In some cases, conflicts arising from land disputes were the result of promises of compensation made by local transmigration authorities to local adat representatives, which were not fulfilled (Hardjono 1977:39). Or, as in the case of South Sumatra, adat requires subjection to the marga (territorial group) system of land tenure, which had not been declared freed by the State (following settlement agreements with the adat council). The workings of the marga system were often unknown to the transmigrants, who therefore did not submit themselves to it.\(^{19}\)

Such land tenure problems have been recognized by the Department of Manpower and Transmigration, and new policies are being designed to deal with them. However, since title deeds are issued by the local representatives of Agrarian Affairs of the Department of Internal Affairs, an understaffed agency which cannot possibly handle all the necessary work involved to issue deeds, it remains questionable whether such a change of attitude will help greatly. Furthermore, it appears that provisions have not yet been made which will speed up the process of granting such deeds to older settlers.

\(^{19}\)Land problems in South Sumatra have been discussed in several letters from the Djawatan Transmigrasi Sumatera Selatan No.Aa/3567/3, dated May 1958, which follow up on earlier letters from the Djawatan Agraria No.Pda.31/1 dated 22 February 1958 and from the Djawatan Transmigrasi No.Aa/187/3 dated 5 March 1958.

\(^{20}\)There are of course also some fairly successful transmigrants. Among those who have succeeded in improving their standard of living, many have lived in the transmigration area for a long time. This is not to say that there is a causal relation between duration of stay in the transmigration areas and income but, if
Since the main objective of program implementation is quantity rather than quality, the investment allocation per family has been kept to a low minimum. Observers suggest that the main aim is not so much to enable settlers to pull themselves out of the cycle of poverty as to continue their lives at a subsistence level growing only subsistence/basic food crops (Junghans 1974:77).

Transmigrants thus feel obliged to supplement their household needs by working outside the settlements if possible, especially if food rations are inadequate. The logging industry in Kalimantan and the sugar and rosella fibre factories around Way Abung, for instance, provide opportunities for wage employment (Hardjono 1977:71; Suratnam and Guinness 1976; and Kelompok Abung Jaya 1976:20-1 and 26). In other areas other types of income earning opportunities may exist. Of course, working for wages outside the settlement area is in the short run far more attractive to the settlers than the longer perspective of preparing and cultivating their own allotted land.

This is not to say that in the absence of opportunities to work for wages outside the settlements the agricultural land allotments would be better cultivated. There are numerous reasons for poor land cultivation. Some of them include the lack of input factors such as labour, traction power and, more importantly, capital (Hameed 1975 and 1976).

In transmigration settlements capital is not only scarce but also difficult to accumulate. Indeed, running down of assets often occurs, since without the necessary inputs the soil fertility declines after having been cultivated for several seasons. With declining soil fertility, productivity also declines over time. Especially in areas where cassava is the major crop, productivity declines very rapidly from one harvest to the next (Junghans 1974:74).

Incomes thus also decline. The economic conditions of the settlers can only spiral downward if no further aid comes their way. Over time, transmigrants rely more and more on the tengkulak or middlemen, especially when the ijon system sets in, under which farmers sell their products forward before harvest time at a substantial discount on harvest prices. The tengkulak play a very important role in the economic lives of the settlers. Generally, new settlements are dependent upon markets outside their area, and therefore upon the tengkulak, who act as middlemen between the transmigrants and the outside world. Usually, the inhabitants of new settlements are homogeneous in terms of their

20(continued) there are developments in the area, incomes improve over time, especially in older areas which are more likely to be irrigated than relatively new ones (Oey and Sigit 1977, Table 11:31-2).
economic conditions, mostly poor, and often grow the same or a very similar range of crops. At harvest time there may be an over-abundance of the same crop while during the slack period preceding the harvest there are no supplies for sale. Third, the infrastructures connecting the settlements with the outside world have often been so poor that the transmigrants cannot reach the market themselves. In particular, very poor feeder roads lead in and out of the settlements (Wuisman 1977). Fourth, the concept of co-operatives is practically non-existent in such areas, in spite of long theoretical advocacy. In general, the farmers are not capable of organizing themselves co-operatively to bring their products to the market, by hiring a truck for instance. The easiest way is to sell their products to the tengkulak. As a result of the lack of linkages to outside markets, after harvest time household consumption increases markedly, stimulated by selamatkan (celebrations) and other social occasions, to decline later again towards the slack season when little or no supplies are available.

It is obvious from the above discussion that no simple solution is available to improve the standard of living of the transmigrants. Some of the problems could be overcome if only capital were available to them, although it should be kept in mind that capital is a necessary but not sufficient condition for raising incomes. Through larger amounts of investment, production could be increased and incomes of the settlers raised. Agricultural production and the value of their product could in turn be increased through extensification, intensification and diversification, the achievements of which are dependent upon the availability of credit and other inputs.

Social services. All over Indonesia social services are in short supply, but more so in transmigration areas compared to Java. The inadequacy of health services in the transmigration areas is reflected by the prevalence of such common diseases as malaria, dysentery and skin and eye diseases (Institut Pertanian Bogor 1973:7). It is of course acknowledged that these diseases prevail not only because of inadequate health services but more so because of poverty. Even if health services were made available in all transmigration settlements they would not necessarily be accessible to the transmigrants because of costs and distance, which often account for the low utilization of available health services.

Educational facilities are also insufficient and of rather poor quality in the settlement areas. Hameed (1975) noted that in the Way Abung area education also falls within the responsibility of the transmigration agency. Being so preoccupied with the settlement, the agency has paid insufficient attention to providing and running schools. There are primary but no secondary schools. Even the primary schools were faced with problems of
shortage of school furniture and teaching aids while the teachers were paid by the agency at a salary which constituted only a small fraction of the salaries paid by the Department of Internal Affairs (Hameed 1975:31-3). Consequently, the parents are required to contribute to school fees, part of which is used to supplement the salaries of the teachers. Starting in 1977, students of grades one to three in state primary schools are exempted from tuition fees and starting in 1978 this rule applies to all students from grades one to six. However, these exemptions are made for those schools which are the responsibility of the Departments of Education and Culture and of Internal Affairs. It is not known whether the same applies in transmigration project areas.

It is of course desirable to make secondary schools available in transmigration areas, but if such facilities are not accessible to transmigrants because of poverty or distance, provision may not be an asset. If the transmigrants have to make a building available and also to pay for its maintenance as well as the school's administration, teachers, and all the necessary teaching materials, education will instead be a burden.

There is therefore a dilemma concerning social services. On the one hand health and educational facilities are basic requirements for further development of the people and their settlements, but if the people for whom the services are intended are unable to afford them then they appear rather wasteful. Since cost is the major deterrent in utilizing such services the first step to increase utilization should be the reduction or, better yet, the elimination of such costs to the intended beneficiaries.

Integration with local people. The objectives of the transmigration program include national integration and unity, a goal difficult to achieve under past patterns of settlement. Transmigration areas used to be assigned by local governments without taking into consideration the potential of such areas for local or regional development. As a result, there are transmigration settlements which are completely isolated, far from settlements of indigenous people and therefore with little communication between the settlers and the locals. In other cases, where transmigration settlements were established in enclaves in the neighbourhood of indigenous settlements, these were not conducive to integration either. The size of the transmigration settlement makes in-group identification sufficient and there is no need to go outside. In addition, aid was given to the transmigrants but not to the locals, a factor which has at times accentuated differences between the two groups. Different opportunities combined with diverse cultural patterns of behaviour and religion sometimes lead to resentments of one group towards another, and ultimately conflict.
An important source of conflict is the vagueness of the rights to land and its contents, which has already been discussed. Claims made by indigenous people have led some transmigrants to withdraw by not cultivating their allotted land. In other cases conflict was simply unavoidable.

Another source of conflict is cultural difference. As the archipelago has experienced various waves of cultural influences, each of Indonesia's numerous ethnic groups has developed its own cultural heritage and language. The settlement of a large number of people of one ethnic group into the land of another group in a segregated area is not conducive to integration. Instead, majority-minority relations flourish, underscoring the differences between the cultural attributes of the members of each of the groups. The social and ecological conditions under which the transmigrants find their livelihood further contribute to prejudices which can at times lead to conflict.

As described by Geertz (1960) many Javanese are Abangan, Moslems who have adapted Islamic teachings to earlier cultural influences of animism and Hinduism. The Moslems in the other islands adhere more strictly to the teachings of Islam. The flexibility of the Javanese with regard to Islamic tenets often appals their indigenous neighbours.

In a study comparing the difficulties of the Javanese with the relative ease by which the Mandailing Batak assimilate into Minangkabau life in West Pasaman, West Sumatra, Mochtar Naim (1976) attributes the differences to disparities in attitudes towards religion and the degree of religiosity. The Minangkabau are conservative Moslems, not very tolerant of other people's religion or religious practices which deviate from their own. Religion to the Minangkabau is tightly linked to adat and an offence to their religion is similarly an offence to their adat. The Mandailing Batak are also strict and conservative Moslems. Their degree of religiosity is shown by their observance of the rituals with a strictness equaling that of the Minangkabau. Although to the Mandailing Batak religion is not viewed as part and parcel of their adat, this view is tolerated by the Minangkabau in West Pasaman because the two groups share other norms concerning religion. The case is different with the Javanese. According to Naim, for the Minangkabau religion is part and parcel of their adat and supersedes individuals. For the Javanese religion is a personal matter and to them the external behaviour of their neighbours is not important. It does not matter greatly to a Javanese what the religious affiliations of other Javanese are and there is tolerance of Javanese who have turned to Catholicism. To the Minangkabau such a conversion would mean not only a break with Islam but a break with adat and society as well. Naim (1976:36-40) holds that the contradiction between the Minangkabau view of religion as a community concern and the Javanese view...
that religion is an individual matter is the major impediment towards assimilation and integration of Javanese into Minangkabau society.

Similarly, Balinese religion and customs often clash with local traditions prevailing in the wider region of transmigrant settlements. Consequently, mutual distrust, prejudices and stereotypes tend to develop. To the strict Moslems of these islands Balinese are offensive; they eat pork and moreover they are dirty because they keep pigs and dogs on their premises (Mangunrai 1977:33-130). As a consequence of the differences in cultural norms and values, members of opposing groups tend to accuse each other of being ill-mannered.

Corrective measures

Some of these problems have been recognized by the government and attempts are being made to improve the quality of the service.

In order to reduce the lack of co-ordination and synchronisation, in 1974, with Presidential Decree No.29, Transmigration Development Co-ordinating Boards were established at three levels: the central government level; the provincial level; and the kabupaten level. These Co-ordinating Boards consist of representatives from the various departments at each administrative level. Furthermore, with Presidential Decree No.26 of 1978 the organisation and functions of the Co-ordinating Boards have been improved. At the central government level this institution is called Bakoptrans (an acronym for Transmigration Implementation Co-ordinating Board). The Bakoptrans is headed by the Minister of Manpower and Transmigration and the secretary is the Director General of Transmigration. The membership of this board consists of ministers heading each of the relevant departments (of which there are ten in addition to Bappenas, the National Planning Board, and the Bank Rakyat or People's Bank). At the provincial level this board is headed by the governor with similar representation. At the kabupaten level it is headed by the Bupati (Regent). These boards are responsible for co-ordinating plans and implementing the program's activities.

The major change affecting the transmigrants directly is the decision that transmigrants are not to be moved in until a settlement is ready for occupation. This includes partial land clearance for agricultural purposes as well as the construction of houses and the physical and social infrastructure. This means that movement cannot now in theory take place until construction is completed.

In order to meet past criticism from regional governors, often reluctant to acquiesce in their land being used for purposes of transmigration because of a general belief that it moves
poverty into their lands, transmigration settlements have been
designed since Repelita II as part of overall regional development
schemes. For example, several older transmigration settlements
can be found in isolated areas with no roads connecting them with
other settlements. By contrast, the new schemes are to be located
in the vicinity of highways being planned and constructed on
islands outside Java. The new emphasis on integrated transport
planning can be regarded as an attempt to respond to the problem
of marketing of agricultural surpluses produced in transmigration
settlements.

Site selection for good soil quality where wet rice farming
can be practised is generally no longer possible. Since the
Department of Public Works will not be able to expand irrigation
networks to all settlement areas in the foreseeable future,
transmigrants are now allotted 3-5 hectares of land. These land
allotments are to be used for the following purposes: (i) 0.25
ha for house and vegetable garden; (ii) 1.75 ha for food crops
for mixed farming; and (iii) 1-3 ha for cash crops. The new
designs call for growing rubber or palm oil as cash crops. The
expanded agricultural land allotments combined with greater
government investments, especially in the provision of agricultural
services and materials related to growing the cash crops, are
expected to provide a sufficient basis for transmigrants to
improve their standard of living.

In order to deal with the problems of the lack of integration
with local people several measures have been taken in designing
new projects. One of the major changes is that provisions are to
be made to include the local people in some transmigrant settle­
ments in order that they may also share in the benefits of this
particular development strategy.

Whether such attempts by the government will ultimately affect
the transmigrants as anticipated remains questionable. The
designs of the new projects strongly emphasize the physical aspects
of the prospective transmigration settlements. However, little
emphasis has been given to implementation, management and adminis­
tration of the projects, which in Indonesia have often been the
sources of weakness. Social aspects have equally been omitted in
many of the project designs. Calculations of expected incomes to
be earned by transmigrants have been made on the basis of rather
technical criteria following particular designs. Few alternatives
are provided for the possibilities of less ideal situations.

Of course, little evaluative work has yet been done on how
the intended improvements in the transmigration program implement­
ation are working out, since the Repelita II projects are either
still under construction or only recently opened. This is a
research gap which should be filled in future. It is clearly
important that extensive monitoring and evaluation be undertaken.
if weaknesses and strengths of the various models of transmigration schemes and of their implementing agencies are to be identified as guides to further policy formulation and adaptation of appropriate administrative practices.
Chapter 3

Transmigration problems affecting population mobility
in South Sumatra

Sediono M.P. Tjondronegoro

The province of South Sumatra, with Palembang as its capital city, has become today's most important province, after Lampung, to develop transmigration projects. This is not surprising as, since the early years of the current century, population movements from Java have been in the northwest direction so that some of the southernmost areas of Sumatra have already filled up. Indeed in 1979, around the end of Indonesia's Second Five Year Development Plan or Repelita II, Lampung, separated only by the Sunda Strait from Java, was formally declared closed for migrants and new settlements.

Having been involved in inter-island migration since 1905, Lampung provides a wealth of experience. Under colonial administration government-sponsored population movements to Lampung, but also to Sulawesi and Kalimantan, were referred to as colonization. After Independence the Indonesian government coined the term transmigration for virtually the same effort to redistribute the population from Java and Bali to other larger islands of the archipelago.

In these two Sumatran provinces the Dutch colonial administration selected two locations for their nucleus colonization program. The first was Metro, close to the Way Sekampung River in Central Lampung and the second Belitang, close to a river bearing the same name in Central South Sumatra. In these schemes irrigation was designed to play an important role and a land allocation to settlers of 1 bau (approx. 0.71 ha) was considered adequate to raise the farmer from a subsistence level in the village of origin to a self-sustaining livelihood.

Consequently the project beneficiaries in Metro and in the Belitang area were small and often landless farmers from Java. Today a second and even third generation of settlers are populating the two areas and after 40 years the migrant villages still have many characteristics of villages of Java. Not only is it the presence of lowland wet rice (sawah) fields which gives this strong impression but also the houses, the well maintained
homeyards and even the language, not to mention many customs, which remind the observer of a typical village in Java.

Practically all settlement projects designed by the colonial administration were based on an irrigation system, planned for further extension over the years. Such an extended system was designed for the Way Sekampung and Way Seputih watersheds which have also been utilized by the Indonesian government in the 1950s as transmigration areas.

However, by the 1950s one of the major constraints was a lack of state capital to invest in irrigation, with the result that settlement areas were developed either without irrigation or with serious retardation of their construction. An example is the Way Seputih scheme (Institut Pertanian Bogor 1971) which was provided with irrigation water more than 14 years after the first migrants settled there in 1954-55. Even today a number of villages within the area are not getting irrigation water, since the water supply has become inadequate owing to problems of watershed management in the upper part of the river. Forest areas protecting the watershed have been cleared both by shifting cultivators and sedentary farmers, causing water shortages in the dry seasons and floods in the rainy seasons.

From experiences in the first decade after independence the government drew the conclusion that irrigation schemes for settlement areas were too expensive, and it would not be able to absorb greater numbers of settlers in the foreseeable future. Meanwhile the flow of migrants to Sumatra grew stronger under increasing population pressures in Java.

Several reasons have been advanced by the government to justify the promotion of transmigration, amongst which the most important are:

. a purposeful intention to redistribute the population from densely populated to scarcely populated provinces (demographic argument);

. a concomitant intention to provide a chance to the small farmers and farm labourers of Java and Bali to improve their living conditions by allocation of a piece of land (welfare);

. an anticipation that settlement areas will generate new jobs and occupations so that a growing labour force can also be absorbed in the non-agricultural sectors; that commercial activities will develop and subsequently also processing industries will be established (spread effects);

. a view of population redistribution as a logical requirement stemming from the need to defend the country's boundaries (security).
These considerations also explain the rationale for consistently raising transmigration targets despite serious failures and unfulfilled expectations.

The target for Repelita II was a quarter of a million families. In the event, perhaps only one-sixth of the target could in reality be moved (see Oey, Chapter 2 in this volume). The next target for Repelita III was set at half a million families, for which Indonesia also requested foreign loans.

The government realized that it had increasingly to deal with marginal lands, be they vast areas overgrown with *alang alang* (*Imperata cylindrica*) or swamp areas along the east coast of Sumatra and South Kalimantan. New approaches are clearly required and, given the limited experience on such marginal lands, the government encouraged more experimental transmigration projects both in upland areas and tidal swamp areas. Some of the problems encountered will be discussed in this paper by referring to transmigration projects in South Sumatra, and to a lesser extent in the northernmost *kabupaten* (regency) of Lampung province. It will, however, discuss patterns and processes rather than present quantitative data.

**South Sumatran upland projects**

Several projects can be found in the province of South Sumatra which has a relatively poor infrastructure compared, for instance, to Lampung. As indicated earlier the first (1939) colonization project site was at Belitang, about 50 kilometres from the little sub-district town along the railroad between Martapura and Palembang.

There are, however, other projects of which some are 'dry' and some are 'wet'. Among the first category there was a big experiment in the same district of Ogan Komering Ulu (OKU) where in 1958 the government introduced mechanized farming on about 10,000 hectares of marginal land for food crops. The idea was to develop a fully mechanized rice estate, which would serve two chief functions. First, it was expected to boost the country's rice production as part of the national campaign to attain self-sufficiency in food. Second, it was to provide services of land clearing and field preparation to other farmers who would be farming on about 100,000 hectares in the immediate vicinity of the nucleus estate, and thus have spread effects.

A similar project was developed to the west of Palembang on the lower slopes of the Bukit Barisan mountain range close to Pagar Alam. In both instances the sedentary farmers felt that the tractors and bulldozers were useful to clear forest land. But in subsequent stages of land preparation the heavy machines were rather harmful to the soil structure, lowering its fertility at
least in the two or three seasons following mechanized land preparation. In many instances the disc ploughs buried the more fertile top soil below root forage levels.

In the nucleus estate itself the same phenomenon led to the accelerated growth of *Imperata cylindrica*, and weeding became a serious if not unsolved problem. As a consequence rice production remained extremely low and yields of 300-400 kg per hectare were not exceptional, condemning as it were the highly capital intensive projects to failure. In 1965 large-scale mechanized farming was no longer practised in transmigration areas of South Sumatra.

One experience in Way Tuba (1964) turned out to be such a big failure that the project had to be moved to another site called Jabung, Lampung. There too, however, although the soil was relatively more fertile, the same weeding problems were faced. The service-providing tractor station, though, was more successful in helping the better-off settlers to clear more land for the cultivation of food as well as of cash crops such as pepper and in a few cases rubber.

**Tidal settlement areas**

On the east coast of South Sumatra earlier in 1964 a transmigration project of spontaneous migrants was established on a swampy area, called Cintamanis (Institut Pertanian Bogor 1969). Located on the east bank of the River Musi it could not claim to be a fully fledged tidal swamp area, despite the fact that it could utilize to some extent the ebbs and flows of the river water.

An example of true tidal swamp area reclaimed for transmigration is the Upang Delta close to the Musi estuary some 72 kilometres to the east of Palembang, which has been developed since 1969. The Upang *pasang surut* (tidal) area was developed on a triangularly shaped island in the big river cut across by primary canals through which the water flows into the secondary and tertiary canal system. One of the physical problems in tidal areas is the thickness of the peat soil layer which should not exceed 100-150 centimetres (Pons and Driessen 1975) if reasonable rice yields are to be expected. These requirements have been met in both these projects: in the Upang Delta peat soil layers were approximately 90 centimetres thick and in Cintamanis the situation is even more favourable, the project being less of a typical tidal area.

A discussion on the economic feasibility of such tidal areas in the longer run is still going on (see Institut Pertanian Bogor 1975). Some experts argue that the reclamation will be expensive in the longer run because the output will decline since intensive farming will accelerate the oxidation of the peat soil's organic matter.
From small random samples in the Upang Delta region it was learned that settlers are confronted with tremendous ecological and environmental problems in the first year or two. Often quite ignorant about working conditions in tidal swamp areas, of which they had no imagination before they arrived on the project site, settlers have to adjust themselves to the acid water and mud.

In the first year swamp clearing is as tough as clearing primary forest because of the mud. After the third year living conditions usually improve and the availability of water enables settlers to plant rice twice a year. If the area is freed of pests, rice yields are more plentiful and riskbearing less heavy compared to rainfed sawah on upland where only one rice harvest a year is possible. For the first 5-7 years little population mobility was noticed in such areas.

Many who succeeded and enjoyed a good harvest were able to improve their houses and purchase better farm equipment. From house to house interviews with settlers conducted in early 1980, it was learnt that those who have been in the area for five years or somewhat longer, and who enjoyed a good harvest, had spent their excess earnings on housing improvements and purchase of better quality farm equipment. Similarly those who had recently arrived expected to follow the same pattern.

Seeds of perennial crops such as citrus and other fruit trees were purchased to cultivate the homeyard, since these provide the settler family with additional cash income from their gardens. The Directorate General for Transmigration provides seeds of perennial crops for settlers, most often coconut. Other seeds, however, such as clove, which are becoming popular, are bought by the settlers themselves. It appears that the planting of perennials reflects the state of mind of settlers. Whenever they feel comfortable and want to stay on their lot, they start planting coconut, clove and fruit trees.

A rather serious handicap for the settlers of tidal settlement areas is the relative inaccessibility of the markets, which weakens their economic position. Urban-based middlemen therefore move in and can more easily offer credit as well as consumption goods, obviously at a higher interest and price than in the more distant town.

A warung or mini-grocery is another agency from which settlers can ask for short-term credit so that the indebtedness rate may rise after several poor harvests in succession. Much of the loan and credit is repaid in kind and in a sense this is preferred by the settlers who are often short of cash, particularly in the first stages of settlement. The mini-groceries are scattered over the area and in flourishing settlements there are such groceries for every 30-40 families, or one per block.
In both types of settlement, i.e. upland or tidal areas, the greatest population mobility is found in and around the market place. It is also where spontaneous migrants from neighbouring areas often settle. Although no figures can as yet be presented, purchasing, selling and mortgaging of land is most frequent in and around such market places. This is understandable also because more people have cash (from commercial activities), enabling them to spend or reinvest in valuable assets such as land.

There are other isolated projects in South Sumatra, difficult to reach over bumpy dirt roads; Pematang Panggang is such an example (Directorate General for Transmigration 1974). Their relative isolation from Palembang as well as from one another slows down the speed of development.

As a consequence, the South Sumatran Belitang area has not grown with the same speed as for instance the better linked Metro zone in Central Lampung.

Baturaja-Martapura

Perhaps an exception in the general picture delineated is the rather new project (1976) about halfway between the two towns Baturaja and Martapura, which are located along the railroad from Telukbetung to Palembang. The site has been selected by the Directorate General for Transmigration and the World Bank and is believed to be representative of upland areas in other parts of Indonesia. The soils (red yellow podzolics), overgrown by *Imperata cylindrica* on rolling land, are better for perennials, but the idea is to cultivate food crops, mainly rice and cassava, and also rubber to be cultivated by smallholders. A land allocation of 5 hectares per settler family comprises a home lot of 0.25 ha, 0.75 ha of *ladang* (dry land), 1.00 ha of rainfed *sawah* and 1.00 ha of rubber lot. The two remaining hectares are pasture and/or reserve land which can be used for extension of either food or cash crops. In principle, the farm land is no further than 2.5 kilometres from the settler's home lot so that he can easily reach it daily by bicycle.

So far experience has shown that even after five years or longer of settlement, the average settler is capable of clearing only the one hectare closest to his home lot for food crop cultivation. Food crop cultivation is in most instances intercropped (*tumpang sari*) and, depending on the type of soil, one could find rice, cassava, maize and sweet potatoes as the crop rotation. Rice and maize are suitable for growing simultaneously; legumes follow after the rice harvest and then after the rainy season cassava is planted. Peak harvest months for cassava are August

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1This section draws on Institut Pertanian Bogor (1977).
and September, although cassava is planted throughout the year in the dry fields (ladang), particularly if marketing conditions for cassava are good.

Settler problems

The traditional dry land cultivation on unirrigated fields such as in Baturaja has proved that in general the productivity of land diminishes after the second year. For instance, if no fertilizer is used cassava planted in the third year only reaches one sixth of the yield obtained in the first year. Therefore it is understandable that if the fourth year happens to be a critical one because of a poor harvest, the settlers tend (or worse, are forced) to look for more fertile land elsewhere, not infrequently outside the project area.

This problem obviously stimulates greater mobility among male settlers, without moving the whole family. Yet while looking for and eventually clearing more fertile land a new and more advanced frontier is established. Only if the settler is convinced that the newly gained land will provide a better life for longer will he move to the new frontier and either sell or mortgage his less fertile land. Studies of this sort of mobility are being undertaken, but no quantitative data can as yet be presented.

The economic consequences of such mobility are fairly serious, since everytime the settler has to move to new and more fertile land he needs to make another investment. Family labour is often inadequate to work the previous lot at home fully and the easiest thing to do is to plant cassava, which does not need intensive weeding. It is the most suitable cash crop by which the settler can meet the daily needs of his family.

At these levels of subsistence income, investments are hard to make, so that only a small and slow improvement of technology can be expected from the average settler. The first years are the most difficult, but after five years if soil fertility declines he may not have enough capital to reinvest in his land. Even in cases where the settler has ownership title to adequate areas of land, there is often inadequate manpower (let alone draught animals) to work it. Draught animals are considered as precious assets but the average settler is not in a position to pay Rp.200-250 thousand (US$320-400 approx.) for one cow (1980: local price) even after almost ten years. It is therefore feared that in fact many settlers will not have sufficient marketable surplus to dispose of from their agricultural produce to enable them to grow steadily from subsistence to more efficient farmers.

Being caught in such an apparent cycle, the younger generation seems to become discouraged from getting involved in agriculture, and whenever they can get adequate education the tendency is also to leave the village searching for jobs in nearby cities. A
clear example was found in the Way Abung, Lampung settlement where a number of tapioca factories and a sugar plantation and mill have been established to process the agricultural produce of the area. While there is still a shortage of farm labour, the youth of both sexes were fonder of earning cash at the factory and plantation than of working at home clearing and cultivating the lots closer to home.

The older settlers, usually more experienced farmers, prefer to work their land and feel themselves responsible for at least one rice harvest a year to assure the family's staple food supply, especially as rice is an easier commodity to store and to barter in times of emergency. It also sells easier for cash while its price does not fluctuate as significantly as corn, cassava or sweet potatoes.

Resilient ABRI groups

A good example of greater economic resilience is provided by the community of Angkatan Bersenjata Republik Indonesia (ABRI) settlers, being ex-military transmigrants. They are scattered in smaller groups over several units in the Baturaja area and are also found in Way Abung. The ABRI settlers are better treated in several ways. Although many heads of households are close to retirement age, they receive a monthly allowance of approximately Rp.60,000 (about US$100). In addition, ABRI settlers receive the same 'package' as that allocated to a government-sponsored settler's family. Such a package comprises housing, the land, home lot, farm equipment and rations for one year.

These ex-soldier settlers have by and large a better education and more technical training, so are more willing to adopt new technologies. Because the average age of ABRI settlers (heads of households) is higher, they also tend to bring larger families with them, which means bringing more manpower to the settlement area. Many ABRI communities maintain good communications with their former units and with the army's office for transmigration affairs. Through this office it is still possible to request additional support in periods of emergency. In sum, the total package received by an average ABRI settler is larger than the one extended to other government-sponsored migrants. In the latter category there are more sub-categories with a variety of packages. For instance settlers under the sponsorship of the Department of Social Affairs are given smaller packages, i.e. no allowances, rations for shorter periods, and often no farm equipment, pressure lamps, etc.

Apparently there is correlation between the size of the package at initial stages of settlement and the success among government-sponsored settlers after a certain period.
Another sub-category is the spontaneous migrants who have come at their own expense to the project area and were then allocated land by the government. Spontaneous migrants are further sub-divided into those who get some support from the government, and those who are only allocated a piece of land.

Obviously on average the ABRI settlers are in the best position, since they can afford to take greater risks owing to the fact that their monthly allowance will be paid anyway. They can also afford to pay wages of farm labourers whom they employ. Thus they have become the middle class in the new settlers' community, in many cases patrons to poorer migrants (often spontaneous). Although it is true to say that many settlement schemes are in fact designed to create a resilient middle class farming community, the ABRI settlers have gained a status ahead of others with relatively less effort than the other categories of government-sponsored migrants.

The ABRI settlers have proved advantageous in several ways. They are to a limited extent labour absorptive; they have been progressive in the acceptance and spread of modern farming techniques; and they have moreover accelerated the establishment of shops for more consumer goods because of their greater demand. It is also said that the larger families they brought, with older children, have promoted the development of high schools, more particularly junior high schools. The parents of these children have initiated the building of private schools and attracted teachers. Thus, in fact, they pioneered the establishments and facilities for a second generation of young settlers.

With all the positive contributions they made, however, there are some problems to be faced. A new social class has been formed and perhaps social differentiation has also been generated. There is no doubt that the ABRI settlers have become economically less vulnerable and more independent in comparison with other settler categories, although in many cases it has not made them good farmers. Moreover, it does not seem likely that the next generation will remain as farmers in the area. Children of ABRI settlers differ in age from those of the average non-military settlers, but both categories of settlers tend to send their children to or keep them in Java or Bali for education if they can afford to. Many of these children who have reached higher levels of education will not return to settle in their parental domicile. The stronger pull is towards the cities for white collar or government bureaucratic jobs. Farming is less attractive to many, and therefore the second generation of settlers is moving towards the urban centres, or, in the case of the less successful, to a new frontier. A move back to the village of origin in Java or Bali seems to be weakest among alternative directions of movement.

It is somewhat early to conclude that the ABRI settlers will become the successful entrepreneurs in the new settlement areas.
Taking advantage of their lead in knowledge, technology and community organization, some have indeed become successful farmers. They too, however, like other government-sponsored migrants, depend upon the productivity of their land and the price of commodities at the nearest local market. What the majority will turn out to become remains as yet an unanswered question.

Conclusions

With the lessons of Metro and Belitang in mind and from more than half a century of experience, government planners seem to be showing an increasing interest in designing transmigration projects in the context of a wider area development program. Once this idea is accepted it is only logical to think about the potential resources in such an area, of which land is no doubt the most important. If projects are to be carried through successfully it will be necessary to embark upon arrangements concerning land utilization, allocation and titles to land, as in the supplying areas from which the transmigrants came. Otherwise, population mobility even in transmigration areas and the shift of the old frontiers may extend the pattern and agrarian structure so characteristic of Java to other areas outside Java, restraining the healthy development of a strong agricultural base which the government's planned efforts are said to pursue.
Chapter 4

Transmigrants in South Kalimantan and South Sulawesi

Patrick Guinness

Government land resettlement programs probably assume more comprehensive control over people's lives than virtually any other field of government planning. Potential settlers are selected by officials, in theory according to strict criteria; they are then, according to the plan, trained and prepared for their new lives. Because they are moved to a new area they are assumed to know little and be thus even more dependent on the government for housing, land and livelihood in the new area. There is in all this an assumed tight control by government agencies and an unnaturally large determination by others of the conditions of the settlers' lives. Because of these assumptions there is often less respect for the opinions or feelings of the settler families than would normally characterize government activities. The cases of resettlement to be discussed here, however, point to developments among settlers that do not conform to government planning and are thus often considered subversive to the program. I hope by discussing these divergences to illustrate the need for greater flexibility in resettlement planning which will in turn allow the potential of settlers to be better realized.

In 1976 a survey of transmigration settlements in South Kalimantan and South Sulawesi was undertaken by the Population Institute, Gadjah Mada University of which I was a staff member. The team visited the settlements of Barambai and Tambarangan in South Kalimantan and six settlements in the district of Bone-Bone, Luwu, South Sulawesi. Barambai is set in tidal swamps where irrigation channels control tidal flows and allow swamp land to be cultivated with rice. Of the population of 890 families there we interviewed 368 family heads. Tambarangan is set in hilly country with no irrigation and a scarcity of water at certain times of the year, even for drinking and washing. There 211 heads from a population of 500 families were interviewed. Both these areas had been settled with families from Java and Bali in the years between 1970 and 1973. The Bone-Bone settlements included both irrigated and dry land occupied first by Javanese and Balinese in 1970-72. Of a population of 1519 families in the six projects we interviewed 400 family heads.

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Kind of person being resettled

Despite specific selection criteria that set conditions of age, family size, physical capabilities and experience and moral conduct, there were a large number of non-conforming transmigrants who appeared to have slipped through the selection net, perhaps because of pressure on officials to satisfy quota requirements from each district of Java and Bali. A third of the respondents were over 40 years of age on departure for the transmigration area, that is over the stipulated age range for applicants of 20-40. People of this age faced serious disabilities in the heavy physical work of clearing virgin and secondary forest, erecting houses, etc. in the new area. More than a third of the families interviewed numbered over five members when they transmigrated, which put a severe strain on the stipulated rations issued during the first year, as these rations provided for a maximum of two adults and three children. Although many of the families were large this did not guarantee a plentiful supply of labour for the tasks in the new area. In 1976 half the families interviewed had only one male member over the age of nine, and many continued to complain of the lack of labour to work their blocks.

The transmigrants were also ill-experienced for the tasks ahead of them. The vast majority were the poorer people of the villages of Java and Bali; 61 per cent had owned no land in their home area, and a majority of these had no prospect of ever inheriting land. Of those who owned land the average holding was 0.43 hectares, insufficient to guarantee a livelihood for their families. Seventy per cent had, however, worked either their own or others' land in the year before departure, but their average cultivation was only 0.38 hectares and their harvests insufficient to feed their families there. Those who had no land to work, and those who had too little land, depended on labouring work and subsistence-level trading and home industries for a livelihood. Their farming experience in Java and Bali, then, ill-equipped them for the task set them in the new area. In addition their prior knowledge of the transmigration area was probably scanty – only 17 per cent of family heads had completed primary school, while 41 per cent had never attended school at all, and even for those who could read there was little information available on the area of destination.

Preparation of the new area and of the transmigrants

Most potential transmigrants heard of the new area and the program generally only through village officials who themselves had no first-hand and little second-hand knowledge of the conditions there. Transmigration officials were in short supply and generally only attended village meetings on the day of registration. Even then applicants were ill-prepared for the adventure ahead of them, for we heard frequent stories of transmigrants not knowing to what
area they were being sent and when. Thirty-nine per cent were kept waiting over three months after registration, and a fifth over six months, when the general understanding was the departure immediately followed registration. As a result applicants sold their property, neglected to replant their fields, and paid off all debts, and then had to rely on their meagre savings, intended as capital in the new area, to support them during the waiting period. A third of families consumed over 60 per cent of their savings during this period. Finally on departure half of all respondents took less than Rp.6000 (roughly $15) with them, only 18 per cent took any precious jewellery, and less than 3 per cent took radios, bicycles or sewing machines. Expenditures during the journey further reduced their savings, as travel often took weeks, and although food and accommodation was provided by the government, children had to be bought presents and extra food purchased. With such meagre savings and scanty knowledge of the new area families were completely dependent on the government.

In the new area preparation of sites was often incomplete. In two Bone-Bone settlements families arrived before completion of their homes. They had to be billeted out with nearby settlers and then to build their homes themselves. In Barambai, houses had been completed so long before settlers' arrival that the roofs were rotting and the houses hidden in thick undergrowth. Of all respondents 21 per cent were not able to occupy their houses immediately. Apart from their house and house block of a quarter hectare, only 30 per cent were immediately assigned other farming land, and half of all respondents had to wait over six months for this land. In some settlements in Bone-Bone four years after settlement some settlers had still to receive their full allotments, because the land was in dispute. Although transmigrants were promised a hectare of cleared land on arrival, few saw this realized. Barambai settlers received an average of 0.7 ha cleared, Tambarangan 0.6 ha and Bone-Bone 0.3 ha. This meant that in the first year, when settlers were still supported with rations, much of their efforts were taken up with clearing land, a process still unfamiliar to them.

Projects were not always well sited or well planned. House sites in some projects were set on damp ground while rice fields were located on dry ground. Tambarangan slopes were so steep that tree crops rather than cassava and corn should have been planted to prevent erosion. In Bone-Bone floods annually inundated house plots in two of the settlements.

Guidance was seldom available for transmigrants on their arrival in the settlements. The period of rations passed before many of them had successfully established gardens, and farmers desperately needed advice on agricultural methods, crop selection, pest control and the like. Such advice was hard to obtain, for transmigration staff were generally not trained in agricultural
matters, and were only equipped to handle the administrative side of the project. In addition few prior trials of crops had been undertaken, so that no proven advice or tested crops could be passed on to settlers.

Preparation of local populations to receive the transmigrants was also poor. In Barambai, where the local Banjarese were themselves immigrants from elsewhere and were more interested in trading than agriculture, the new settlements posed less of a threat than an opportunity for trade. However, in Bone-Bone land was already in short supply. In order to open transmigrant settlements the government was claiming any land not cultivated for three years, even though the Buginese considered three years quite insufficient time for land to remain fallow and be restored to fertility. The government also considered many plantings of Buginese coffee, coconut, and fruit trees and groves of bamboo as abandoned because the Buginese owners had allowed secondary forest to grow up around them. Land was allotted to transmigrants where Buginese still cropped sago or maintained fishponds. No respect was shown for Buginese patterns of agriculture or land ownership and this situation caused widespread resentment from the local population and frequent disputes over land, which in some cases still prevent settlers farming their assigned blocks. Because of the settlement of Javanese and others in the area from before Independence, land was becoming short. Buginese traditionally allowed their cattle to roam at night, but as grazing land grew scarce transmigrant crops were foraged by these cattle. When some settlers sought to kill the marauding beasts violence broke out between Buginese and settlers. In addition to these differences between Buginese and settlers' cultures which transmigration officials were ill-prepared to deal with, too little attention had been paid to providing the local population with facilities at least equal to those provided the settlers. Buginese complained of the preferred treatment transmigrants got, and the fact that their children had no schools of their own nearby, nor had roads been constructed into their villages. Health clinics were provided for transmigrants, but the local population was expected to walk into transmigrant settlements to receive their health treatment.

Problems

After dealing with the immediate problems of settlement, the major difficulties for settlers were in the agricultural field. There was a lack of guidance on suitable crops, except in Barambai where a university test farm had been established. The condition of the blocks they received was poor. Land in Barambai and Bone-Bone was poorly drained, planned irrigation had not been installed in Tambarangan, channel water in Barambai was acidic, and some plots in Bone-Bone were separated by large distances, even untraversed bush or swampland.
Settlers were ill-equipped to handle attacks by pests on their crops. Cattle, pigs, monkeys, rats and insects invaded their blocks from neighbouring forests, and they had to mount all-night guards to defend their harvest. Little advice was available on use of fertilizers, and settlers tended to assume that the soil required the same dosages as land they had tilled in Java. In Barambai over-use of pesticides was threatening to poison the water supply for both irrigation and domestic consumption. A combination of such adverse factors, including shortages of family labour, meant that even five years after arrival few transmigrants had been able to work the full two hectares provided them. In Barambai settlers had cultivated an average of one and a half hectares, owing to the relative ease of preparing swampland for tidal cultivation, but in Tambarangan and Bone-Bone only a hectare on the average was cultivated by each respondent. They complained of a shortage of both human and animal labour and many asked for tractors to help prepare their blocks.

The poor progress made by settlers is reflected in their 1975-76 harvest figures. In Barambai only a quarter of all respondents produced an equivalent in value of 1296 kg of milled rice, the minimum annual requirement for the average transmigrant family of 5.4 persons. In Tambarangan and Bone-Bone only 6 per cent had reached this figure. Marketing of produce presented further problems as their settlements were isolated from major markets. Bone-Bone produce was purchased by middlemen for sale in Palopo and Malili markets more than 100 kilometres away over rough roads, while produce from Barambai was transported by Banjarese middlemen to Banjarmasin, 50 kilometres away by boat. For these reasons the producers had little say in the market and middlemen allowed prices to fluctuate wildly. On one day of our survey prices for unhulled rice fell 50 per cent as farmers began to bring their harvest to market.

Community relations within each settlement also posed another problem as families of very diverse backgrounds came together. Generally settlers were placed in neighbourhood groups of roughly similar origin and within these groups they co-operated in house building and agriculture, discussed common problems and shared contiguous farming land. However, as these neighbourhood groups tended to recreate the culture of their home, tensions developed between groups of different origins. The most obvious tensions existed between Balinese, who kept and hunted pigs, maintained less tidy homes, and practised the rituals and worship of their Hindu religion, and others, particularly the stronger Muslim

1The official estimate for sufficiency in family income assumes an average daily allowance per person of one-third of a kilogram of milled rice or similar grain and one-third of a kg of other food. Taken together the milled rice equivalent (MRE) is 0.66 kg x 365 = 240 kg per caput per annum.
settlers. Some proselytization of other groups by Christians further added to tensions. Language distinctions also kept groups apart, and in Barambai fighting had broken out at one stage between Balinese and others. The situation between settler groups was worst, however, at Tambarangan, where theft had been rife, and verbal clashes occurred repeatedly over the distribution of fertilizer or cattle. These clashes were no doubt heightened by the wretched conditions in which many of the Tambarangan families lived.

Settler response

Faced with farming difficulties many transmigrants felt forced to seek a livelihood away from the land, while continuing to reside at least for part of the year on the settlement. Thirty-seven per cent of Barambai respondents, 57 per cent of Tambarangan and 41 per cent of Luwu respondents were employed in off-farm labouring work during 1975-76. For the most part these labourers continued to cultivate their own farms, but the lack of work opportunities nearby forced many of them to seek employment long distances from the settlement where they needed to stay until the job was completed. Barambai settlers worked as far away as Central Kalimantan clearing land for potential transmigration settlements. In Bone-Bone 17 per cent of respondents worked as sawmill labourers in the twelve months preceding our study. As timber became scarce around Bone-Bone settlers were recruited to areas more than 200 kilometres away where they remained for weeks or months. Income from this work reached Rp.1000 a day, but, because the contractors were able to bind the labourers for long periods with food, goods and entertainment provided at high prices on credit, few of the settlers ever returned with savings and some required government intervention to free them from oppressive contracts. While they were away their blocks commonly grew over, becoming havens for pests to neighbouring holdings, and their farm production decreased drastically. In one settlement in Bone-Bone most affected by absent labourers two-thirds of respondents had less than a quarter of a hectare of cultivated land.

Others who worked off-farm were established as business people such as traders, artisans, office workers or operators of rice hullers. Very few in Barambai or Tambarangan had become involved this way, but because of the greater opportunities in Bone-Bone in an area relatively densely populated by settlers and local population, 19 per cent of respondents were involved in business. Most of these were traders, often of farm produce or as foodstall proprietors. Some processed cassava and soy bean, others made bricks and tiles, others bred pigs and others were builders, repairers or barbers. These people were essentially supplementing their farm income and were generally able to enjoy a higher standard of living that either the labourer or the
stay-at-home farmer. More of those involved in business had improved their homes with more durable materials and with extensions than the other two categories. Similarly more of them owned luxury items such as pressure lamps, bicycles, radios and watches.

A different response to the difficult agricultural conditions was to seek other land for farming. Eleven per cent of respondents in Barambai, 9 per cent in Luwu and 25 per cent in Tambarangan had bought extra land, while some in Tambarangan were cultivating strips of irrigated land by the stream and others in Bone-Bone were using 'green strips' set aside by the government for future needs. In some cases respondents had bought the land of other settlers who had got into financial difficulty although the purchase of transmigrants' land was strictly illegal. One settler in Tambarangan had purchased 12 hectares from local villagers. A settler in Barambai bought 8.5 ha from neighbours whom he then employed as share farmers on their allotted land, while he served as a clerk in his son's contract clearing business. Many of those who had bought or otherwise acquired the use of extra land planned to create plantations of coconuts, cloves and coffee. Seedlings of these trees were issued to transmigrants in the first year of settlement, but many of them sold them for good prices on the local market; but as other crops failed transmigrants have become interested in cash crops like these, though not to any large extent at the moment.

A consequence of the emergence of business people and labourers, large landholders and cashcroppers is that quite large wealth differences are beginning to appear among transmigrants. One of the more unfortunate examples of this concerned a system of ijon credit which developed in Barambai, where some of the Javanese settlers were acting as agents for Banjarese money-lenders. Loans were repaid at harvest with produce set at blatantly low prices, so that farmers were barely able to cover their debt, and with resentment watched their fellow settlers grow rich with improved houses and motor-boats as a result of acting as agents for the money-lender. The case of those who have had to sell land to neighbours for whom they now act as share-farmer illustrates similar wealth differences that are beginning to emerge. Our team observed extreme poverty in Tambarangan, and many in the other settlements were living in derelict houses because of repeated failures of their crops.

An extreme response to agricultural and other difficulties in the settlements was abandonment and migration either home to Java or to the nearest town. Sixteen per cent of all original Barambai settler families had left since the project started, and 10 per cent had left Tambarangan, where 35 of the 50 families from Jakarta were said to have migrated to the local capital of Banjarmasin, as well as a group of Banyuwangi settlers. Such instances have caused some observers to note that transmigration
is proving only to be a transplantation of Java's poor living conditions to the outer islands.

These case studies are all of settlements in early years of establishment and as such cannot indicate the ultimate success or failure of the transmigrants' adaptation to their new surroundings. One impression that continues through the preceding discussion is that the government has done little to ensure that success, for its emphasis has been overwhelmingly on moving people to the outer islands rather than on developing those settlements as viable units. If the settlers have succeeded it is virtually despite the government, and when they have failed it is for the lack of government services and assistance. The stress within the transmigration program of strict government control of all aspects of the move and settlement possibly created a dependence on government protection that was in the long run misplaced. To illustrate this point I want to discuss another group of settlers we contacted in Kalimantan who had not moved under government protection.

**Spontaneous settlers in Binuang**

We spoke to 52 families in four settlements in Binuang, South Kalimantan, all of whom had moved directly there from Java. Since they settled in the Binuang area hundreds of other families have moved from official government settlements to join them. One of the key factors in their successful adaptation in Binuang, for they came from similar backgrounds in Java to those transmigrants discussed above, was their settlement near an Army Veteran Settlement project, which comprised 735 veteran families from Java and 181 veteran families from South Kalimantan. Twenty of the spontaneous settlers interviewed had relatives among the veteran settlers, and thirty-six of them had friends or relatives living in the Binuang area as settlers before their arrival. Thus many had heard of Binuang before they arrived and had a clear idea of where they wished to settle.

Because many of the families arrived with no capital with which to buy land, earlier settlers including the army veterans played a vital role in their adjustment to the area by employing the new arrivals as labourers. In addition some of the spontaneous settlers were given cattle to look after on the understanding that one of every two offspring would become their own. This initial period accustomed them to the agricultural conditions in Binuang and they were able to save up the capital to purchase land and cattle. They also laboured for local villagers, learnt agricultural techniques and finally purchased land from them.

Another explanation for the relative success of the spontaneous settlers at Binuang was their early emphasis on the production of bananas, which they introduced as a new commercial
crop in the region. Rice did not grow well in the area, but settlers soon found that bananas flourished on the rolling hills and marketed well in the local and Banjarmasin markets. Forty-two of the farmers interviewed grew bananas, fifteen of them earning over Rp.50,000 and ten over Rp.120,000 from that crop alone in 1975. The relative wealth of the spontaneous settlers is indicated in the houses they have each financed, the property of cattle, lamps, radios, and watches that they mostly own, and the proliferation of shops in the nearest town to serve their increasing demand for consumer goods.

These settlements of spontaneous settlers are a lesson for transmigration planners. Personal links with established settlers provided the newcomers with a basic knowledge and security, and with their high motivation and independence they discovered ways to succeed in the virgin areas. In doing so they were naturally brought into contact with local villagers with whom they formed both work and social relations. From this start they had developed a crop that was contributing positively to regional development, as bananas from Binuang had completely replaced fruit previously flown in from Java to Banjarmasin.

Conclusions

Unless the tight control assumed in government transmigration projects is supported with adequate planning and supervision of settlers through the early years of settlement, it would appear that more flexibility and independence should be encouraged among the settlers. Many will neglect their farms for outside work, set up businesses, diversify their crops and buy and sell settlement and other land. If the government is clear as to its priorities in the region, it can encourage appropriate development while allowing a greater degree of settler participation in the determination of their lives.
Chapter 5

Land settlement, income and population redistribution
in Peninsular Malaysia

Paul Chan and Hazel Richter

The purpose of this study is to examine the experience of Peninsular Malaysia in land settlement schemes as instruments to effect aspects of the government's population and incomes policies. The repercussions of various urban and industrial policies on migration in Peninsular Malaysia have been discussed elsewhere (Chan 1981), a study which also gave a broad outline of relevant land policies. Here the impact of land settlement measures on population distribution and income objectives will be discussed in more detail.

Land settlement has been one of several strategies evolved to realize three of the basic aims of the government's New Economic Policy within its general objective of eradicating poverty and restructuring society. These are to reduce income inequalities between rural and urban areas; between backward and more progressive regions of the country; and in particular between the country's several ethnic groups, largely by raising the income earning capacity of the Malays.

There seems little doubt that since Independence rural development programs have influenced population distribution, as they have to a lesser extent influenced income distribution. Such programs partly explain Malaysia's relatively slow rate of urbanization compared to other developing countries. The 1957 census showed that about 73 per cent of Peninsular Malaysia's population of 6.3 million was rural. The rural share had hardly declined by the 1970 census. The type of land development which was taking place, together with other programs which expanded rural income earning opportunities, doubtless played a part in retaining population in the rural sector.

The development of land settlements over the years has affected migration in two ways. First, it has encouraged rural-rural movement, either from within the State where a settlement is located or from beyond its boundaries of people able to participate. Second, it has served to prevent the movement of such local people in a settlement area as are able to benefit either directly or indirectly from its development, people who would otherwise
have joined a migration stream, probably to a town.

But the program does not yet appear to be achieving its planned spatial or overall income distribution objectives, especially over the longer term. This will be discussed below.

Land development priorities

Land development has had fairly high priority in government planning, fulfilling the need to provide small holdings to the largely Malay peasant electorate through expansion into new lands, without the disturbance to existing social and property relationships that agrarian reform would necessitate.

Since the formulation of the Second Malaysia Plan in 1970, the government has aimed to take further measures to stimulate conditions in the countryside, especially in the poor regions, which would raise opportunities there and check the flow of rural labour to the towns. This objective was stressed again in the Third Malaysia Plan (TMP) of 1976-80.

The government will ensure that there will be adequate urban-to-rural flow of capital and skills to provide for the employment needs of the rural population and check the rural-urban migration (Malaysia 1976-97).

Land settlement was chosen as the chief instrument to achieve these goals, and seen as especially suited to assist the poorer States:

New land development will continue to be a major means by which the government will seek to push the location of future growth in agriculture ... towards the poorer States (Malaysia 1976:209).

The development of new land was allotted 43 per cent of funds for all public sector agricultural programs in the TMP (10.8 per cent of all proposed public development expenditures), and this was raised to 48 per cent (11.6 per cent of total) under the more ambitious plan adopted after the mid-term review. The TMP target for land to be developed during 1976-80 in Peninsular Malaysia by all state agencies was originally set at 600,000 acres (240,000 ha), a target enlarged to over 300,000 ha during the review. This was the largest component of the overall 400,000 ha 1976-80 target throughout Malaysia, which included land to be opened up in Sabah and Sarawak and in collaboration with private enterprise.

Land was available at Independence for development in many regions, especially in the eastern States. Problems in meeting the great demand for land, mainly from Malays, lay not so much in supply as in administration and local funds.
Land is a prerogative of the States under the Federal constitution, subject to co-ordinating policies adopted by the National Land Council, on which the central government and all States are represented, to formulate common policies on land use. The States were, however, not adequately staffed to deal with land administration after Independence; nor had they sufficient funds from their own resources to open up extensive areas.

The role of Felda

These were the reasons for the establishment of the Federal Land Development Authority (Felda) in 1956. Initially given only lending and technical assistance functions, its ambit was soon extended. This was partly at the initiative of Pahang, the sparsely populated but land-rich eastern State, which asked the Federal agency to develop land there itself. The expansion of Felda's role was also due to recognition of its growing skills and the impetus given by a powerful Minister of Rural Development, deputy Prime Minister Tun Abdul Razak. Central government was able to operate under a 1960 Act which allows any State to declare part of its land as a 'group settlement area', to be vested in a Federal land development authority for the period of development. All Felda schemes are fairly large scale and involve settlement.

In addition to Felda, there are other Federal land agencies operating schemes, some of which involved settlement and some which do not. In 1966, the Federal Land Consolidation and Rehabilitation Authority (Felcra) was created to take over some of the State schemes which had fallen into difficulties, notably some of the Fringe Alienation Schemes. These are schemes intended to provide peasants operating subeconimic lots with extra land and incomes in the neighbourhood of their kampungs. The Rubber Industry Smallholders Development Authority (Risda) also has something of a salvage function in extending plantations and so does not involve settlement either.

The States similarly control schemes with and without settlement, often with Federal financial assistance. These schemes are controlled by State Land Development Boards (SLDBs) and State Agricultural Development Corporations (SADCs) which run the various alienation schemes and settlement projects such as Youth Schemes and Public Estates. The estate-type schemes are operated by State Economic Development Corporations (SEDCs) either solely or in joint ventures with private enterprise.

Since the 1960s Felda's activity has greatly increased, so that it is now one of the world's largest land developers. In 1961-70, it developed 120,000 hectares of land, an annual average

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1 The Land (Group Settlement Areas) Act 1960.
of 12,000, whereas the separate States opened up 155,800 ha, or 56 per cent of total public sector new land. In 1976-78, Felda opened up 127,000 ha (Table 5.1) accounting for 64 per cent of new public sector land in Peninsular Malaysia. Felcra and Risda together contributed 35,450 (18 per cent) and the agencies in the States also 35,450 ha, excluding in the latter figure joint ventures between SEDCs in Peninsular Malaysia and private enterprise.

When targets for new land development in 1976-80 were set under the Third Malaysia Plan, it was expected that half the 400,000 hectare program would be carried out by Federal agencies in Peninsular Malaysia, with Felda the prime mover. The other half was made the responsibility of the States, and included schemes in Sabah and Sarawak and joint estate-type ventures with private enterprise. In the event, all the main public agencies were more or less on target with their own schemes in Peninsular Malaysia by the time of the Mid-Term Review. It was State schemes in Sabah and Sarawak and their joint ventures with the private sector that pulled back the States' overall total (Table 5.1).

Felda was especially successful in carrying out the land development program, having by the end of 1978 already completed nearly 90 per cent of its TMP 1976-80 target, compared to 58 per cent by other Federal agencies in Peninsular Malaysia. Moreover its expenditures appear to have been well within budget, since its percentage of target sums was 70.4 (Malaysia 1979:Table 9-3, p.141). Felda's TMP area target for 1976-80 was thus raised from roughly 140,000 to about 200,000 hectares (actual figures 350,000 and 500,000 acres).

Table 5.2 and Appendix A record the area developed in 1976-78 according to State income group. From these data it can be seen that over three quarters of new land developed in the period in Peninsular Malaysia was in the middle income States. Over two thirds of the total was in three southern States, Pahang, Johore and Negri Sembilan, which were estimated to have per capita annual incomes in the M$1500-1700 range in 1978, in constant prices of 1970, compared to M$600-1000 in Kelantan, Kedah/Perlis and Trengganu (Malaysia 1979:Table 5.3, p.80). Under a fifth of new land was provided in these latter poor northern States.

The only Federal agency with a substantial proportion - 42 per cent - of its land development in low income States was Felcra, which had been created to take over moribund State schemes. Felda was only able to carry out 12 per cent of its area expansion in poor states (Table 5.2), largely because of the comparative shortage of land there (Table 5.3).

2Federal land agencies do not operate directly in the States of Sabah and Sarawak, which accounted for 10 per cent of new land developed under government programs in Malaysia in 1976-78 (Table 5.1).
Table 5.1
Malaysia: Land development by government agencies, 1976-78a
'000 hectares

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<th>Area developed</th>
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<th>Felcra</th>
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<td>127.0</td>
<td>11.6</td>
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<tr>
<td>Subtotal</td>
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TMP targets f

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<td>-</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>140.0 e</td>
<td>20.0</td>
<td>40.0</td>
<td>200.0</td>
<td>200.0</td>
<td>400.0</td>
</tr>
</tbody>
</table>

% of TMP target
developed 1976-78 h

<table>
<thead>
<tr>
<th>Area developed</th>
<th>89.6</th>
<th>57.4</th>
<th>58.9</th>
<th>80.4</th>
<th>87.5</th>
<th>81.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peninsular Malaysia</td>
<td>89.6</td>
<td>57.4</td>
<td>58.9</td>
<td>80.4</td>
<td>44.2</td>
<td>44.2</td>
</tr>
<tr>
<td>Sabah and Sarawak</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>37.2</td>
<td>37.2</td>
</tr>
<tr>
<td>Joint ventures d</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>89.6</td>
<td>57.4</td>
<td>58.9</td>
<td>80.4</td>
<td>49.2</td>
<td>64.7</td>
</tr>
</tbody>
</table>

a Details can be found in Appendix A. Original data are in acres. Errors in totals due to rounding.
b New planting.
c Excludes joint ventures with private enterprise, which are mainly in Sabah and Sarawak.
d Joint ventures with private enterprise in estates.
e Includes some joint ventures in Peninsular Malaysia.
f Targets for 1976-80 set in Third Malaysia Plan.
g Revised in Mid-Term Review to 200,000 hectares.
h Percentages based on acreage returns.

Source: Derived from Malaysia (1979: Tables 5.5, p.84 and 9.2, p.132).

This highlights the development dilemma previously discussed (Chan 1981) of whether to attempt to provide better income earning opportunities in the poor regions, which are usually poor because they are disadvantaged by economic constraints of one kind or another, or to provide them in other regions with comparative advantages, and then encourage the movement of labour from poorer States.
Table 5.2

Peninsular Malaysia: land development by agencies 1976-78\textsuperscript{a}, according to State income groups (hectares and per cent\textsuperscript{b})

<table>
<thead>
<tr>
<th>State group\textsuperscript{c}</th>
<th>Fielda</th>
<th>Felcra</th>
<th>Risda\textsuperscript{d}</th>
<th>Agencies in States</th>
<th>Total</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle income</td>
<td>111,120</td>
<td>6,760</td>
<td>16,430</td>
<td>45,370</td>
<td>179,680</td>
<td>75.8</td>
</tr>
<tr>
<td>Low income</td>
<td>15,460</td>
<td>4,860</td>
<td>7,400</td>
<td>16,470</td>
<td>44,190</td>
<td>18.7</td>
</tr>
<tr>
<td>High income</td>
<td>360</td>
<td>-</td>
<td>-</td>
<td>12,670</td>
<td>13,030</td>
<td>5.5</td>
</tr>
<tr>
<td>Total</td>
<td>126,940</td>
<td>11,620</td>
<td>23,840</td>
<td>74,500</td>
<td>236,900</td>
<td>100.0</td>
</tr>
<tr>
<td>Middle and high %</td>
<td>87.6</td>
<td>58.2</td>
<td>68.9</td>
<td>77.9</td>
<td>81.3</td>
<td></td>
</tr>
<tr>
<td>Low %</td>
<td>12.2</td>
<td>41.8</td>
<td>31.1</td>
<td>22.1</td>
<td>18.7</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{a} Details can be found in Appendix A. Original data are in acres. Errors in totals due to rounding.

\textsuperscript{b} Percentage calculations based on acreage returns.

\textsuperscript{c} Per capita incomes 1978, in constant prices of 1970, were estimated in M$ at: High income Selangor 3083; Middle income Penang 1901, Pahang 1740, Johor 1572, Negri Sembilan 1482, Perak 1414, Malacca 1218; Low income Trengganu 1006, Kedah/Perlis 901, Kelantan 630.

\textsuperscript{d} New planting.

\textsuperscript{e} Excludes joint ventures with private enterprise.

Source: Malaysia (1979:Tables 5-3, p.80 and 5-5, p.84.)

It will be seen from Table 5.3 that, of all land judged to be suitable for agriculture in Peninsular Malaysia and not yet alienated in 1975, two-fifths lay in Pahang and a further fifth in Johore. Among the poor States, only Trengganu had substantial areas available for agricultural development. The poorest, Kelantan, had only 3.5 per cent of Peninsular Malaysia's land still available for agricultural development, and projects planned for the period 1970-90 will take up nearly nine-tenths of this.

The peasant sector in Peninsular Malaysia is preponderately Malay, principally operated in very small rice or rubber holdings. (Indians and Chinese in the agricultural sector are mainly either plantation labourers or operate larger than average holdings.) Poverty was widespread among the rural Malays after Independence and the government aimed to create a prosperous peasantry (Fisk 1963:166). Such prosperity was defined in the early 1960s as provided by a family income of M$400 a month\textsuperscript{3} (ibid.:167).

\textsuperscript{3}Then about US$1600 a year.
Table 5.3
Peninsular Malaysia: availability of land suitable for agriculture, 1975, and projected land development, 1970-90

<table>
<thead>
<tr>
<th>Income group</th>
<th>Suitable for agriculture</th>
<th>Planned projects</th>
<th>% Res.(col. 2 less col.3)</th>
<th>% col. 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alienated</td>
<td>Available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Middle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pahang</td>
<td>747</td>
<td>1,030</td>
<td>479</td>
<td>37.1</td>
</tr>
<tr>
<td>Johore</td>
<td>725</td>
<td>518</td>
<td>237</td>
<td>18.3</td>
</tr>
<tr>
<td>Negri Sembilan</td>
<td>278</td>
<td>136</td>
<td>124</td>
<td>9.6</td>
</tr>
<tr>
<td>Perak</td>
<td>539</td>
<td>210</td>
<td>90</td>
<td>6.9</td>
</tr>
<tr>
<td>Malacca</td>
<td>141</td>
<td>9</td>
<td>9</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>2,430</strong></td>
<td><strong>1,903</strong></td>
<td><strong>939</strong></td>
<td><strong>72.8</strong></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trengganu</td>
<td>225</td>
<td>354</td>
<td>177</td>
<td>13.7</td>
</tr>
<tr>
<td>Kedah/Perlis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perlis</td>
<td>469</td>
<td>101</td>
<td>61</td>
<td>4.7</td>
</tr>
<tr>
<td>Kelantan</td>
<td>287</td>
<td>88</td>
<td>76</td>
<td>5.9</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>981</strong></td>
<td><strong>543</strong></td>
<td><strong>314</strong></td>
<td><strong>24.3</strong></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selangor</td>
<td>336</td>
<td>60</td>
<td>36</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,810</strong></td>
<td><strong>2,505</strong></td>
<td><strong>1,289</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

a total includes very small areas in Penang.

Source: Derived from Malaysia (1976).

As already stressed, the central purpose of land settlement schemes has been to tackle Malay rural poverty in a way politically acceptable to the States and the Malay rural establishment and electorate. The development of large private estates, dominated by expatriate capital or local Chinese enterprise prior to Independence,4 is no longer acceptable on the Peninsula save as a last resort, while the question of agrarian relations in the

4 An estate is defined as a holding over 100 acres (40 ha). Some such rubber estates were Chinese owned, but most Chinese holdings were in the under 40-hectare category, although of a much larger average size than Malay rubber smallholdings.
rice sector, where Malay landlords are important, is a most sensitive political issue. Landlessness remained widespread in the late 1970s, with a high proportion having no land or working subeconomic plots, in spite of the extensive areas of potentially cultivable land still available elsewhere. Moreover, average peasant holdings have been small for many years. According to the 1960 Census of Agriculture (Ministry of Agriculture 1960), only 3 per cent of peasant farms were in the size group 15-99.9 acres (over 6 ha) and 68 per cent of Malay farms were under 5 acres (2 ha).

The smallholder model

Because of the political pressures generated by Malay land hunger, most new land developed since Independence has been in smallholdings. Of all land developed on the Peninsula from 1961 to 1970, 73 per cent was in smallholdings, and the share rose to 92 per cent on public sector schemes (Lee Hock Lock 1978:408-9).

The size of the plot offered to the settlers in public sector land schemes is designed to utilize family labour to produce an acceptable family income (Ho 1967) and therefore varies according to such factors as fertility of land, the crop to be grown and expected prices at the time of the decision, net of costs. The size thus varies, but it has usually been in the range of 6-10 acres (2.4-4 hectares), the 1957-78 average for all Felda schemes being 3.3 ha. In general, the size of plots has tended to expand over the years, as has the size of schemes. This is partly to take advantage of economies of scale and partly to offset falls in commodity prices on international markets, which have made the smaller plots less economically viable.

Smallholding is labour absorbtive, so that the number of settlers involved in public sector schemes has been really sizeable. For example between its establishment in 1956 and 1970, Felda developed 90 schemes and resettled about 21,000 families. By 1978 about 120,000 hectares of land were developed which involved 36,000 settler families (Table 5.4). If the average settler household size is 6.0 (5 dependants and the settler) Felda has moved more than 200,000 people. This does not include labour needed during the initial period of establishing the land schemes, such as the use of migrant casual labour in land clearing, road construction, etc. It was estimated that Felda accounted for 6 to 8 per cent of the total migrants in Peninsular Malaysia during the intercensal period of 1957-70 (MacAndrews, n.d.). The share must have been higher during the 1970-75 period when seventy-seven new land schemes were set up, and Felda helped to implement three massive regional integrated land development schemes in Pahang (Jengka Triangle and Pahang Tenggara) and in Johore (Johore Tenggara).
<table>
<thead>
<tr>
<th>State of origin</th>
<th>Johore</th>
<th>Kedah</th>
<th>Malacca</th>
<th>Negri Sembilan</th>
<th>Pahang</th>
<th>Perak</th>
<th>Selangor</th>
<th>Trengganu</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of destination&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Johore</td>
<td>Kedah</td>
<td>Malacca</td>
<td>Negri Sembilan</td>
<td>Pahang</td>
<td>Perak</td>
<td>Selangor</td>
<td>Trengganu</td>
<td>Total</td>
</tr>
<tr>
<td>Johore</td>
<td>8384</td>
<td>94.9</td>
<td>-</td>
<td>-</td>
<td>51</td>
<td>4.7</td>
<td>252</td>
<td>5.5</td>
<td>760</td>
</tr>
<tr>
<td>Kedah</td>
<td>24</td>
<td>0.3</td>
<td>1451</td>
<td>95.9</td>
<td>7</td>
<td>0.6</td>
<td>35</td>
<td>0.8</td>
<td>1561</td>
</tr>
<tr>
<td>Kelantan</td>
<td>15</td>
<td>0.2</td>
<td>10</td>
<td>0.7</td>
<td>-</td>
<td>-</td>
<td>31</td>
<td>0.7</td>
<td>1552</td>
</tr>
<tr>
<td>Malacca</td>
<td>121</td>
<td>1.4</td>
<td>-</td>
<td>-</td>
<td>982</td>
<td>89.9</td>
<td>375</td>
<td>3.1</td>
<td>685</td>
</tr>
<tr>
<td>Negri Sembilan</td>
<td>35</td>
<td>0.4</td>
<td>1</td>
<td>0.1</td>
<td>26</td>
<td>2.4</td>
<td>3627</td>
<td>78.7</td>
<td>339</td>
</tr>
<tr>
<td>Pahang</td>
<td>37</td>
<td>0.4</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>0.4</td>
<td>23</td>
<td>0.5</td>
<td>4428</td>
</tr>
<tr>
<td>Perak</td>
<td>64</td>
<td>0.7</td>
<td>10</td>
<td>0.7</td>
<td>8</td>
<td>0.7</td>
<td>64</td>
<td>1.4</td>
<td>1348</td>
</tr>
<tr>
<td>Perlis</td>
<td>1</td>
<td>0.0</td>
<td>10</td>
<td>0.7</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>0.1</td>
<td>284</td>
</tr>
<tr>
<td>Pulau Pinang</td>
<td>18</td>
<td>0.2</td>
<td>23</td>
<td>1.5</td>
<td>1</td>
<td>0.1</td>
<td>16</td>
<td>0.3</td>
<td>801</td>
</tr>
<tr>
<td>Selangor</td>
<td>37</td>
<td>0.4</td>
<td>1</td>
<td>0.1</td>
<td>5</td>
<td>0.5</td>
<td>155</td>
<td>3.4</td>
<td>1056</td>
</tr>
<tr>
<td>Trengganu</td>
<td>47</td>
<td>0.5</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>0.2</td>
<td>10</td>
<td>0.2</td>
<td>566</td>
</tr>
<tr>
<td>Others&lt;sup&gt;b&lt;/sup&gt;</td>
<td>51</td>
<td>0.6</td>
<td>7</td>
<td>0.5</td>
<td>6</td>
<td>0.5</td>
<td>16</td>
<td>0.4</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>8834</td>
<td>100</td>
<td>1513</td>
<td>100</td>
<td>1092</td>
<td>100</td>
<td>4607</td>
<td>100</td>
<td>13413</td>
</tr>
<tr>
<td>%</td>
<td>24.9</td>
<td>4.3</td>
<td>3.1</td>
<td>13.0</td>
<td>37.7</td>
<td>6.9</td>
<td>5.0</td>
<td>5.1</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Perlis and Pulau Pinang are excluded since these states do not have Felda schemes, nor did Kelantan when the Census was carried out in 1976.

<sup>b</sup> Settlers not born in Peninsular Malaysia.

Source: Felda Settler Census 1976.
Location and size of schemes

State sensitivities have ensured that regional land development, including that undertaken by central authorities, has followed a course largely defined by State boundaries and that strong preference is given to local candidates for settlement. Most States have a quota system requiring a minimum of 50 per cent of the settlers to be from within the State in which the scheme is located. In practice, the local share is normally much higher than this. In Felda schemes, for example, the proportion of settlers drawn from within state boundaries in schemes up to 1976 ranged from 76 per cent in Selangor to 96 in Kedah, the only exception being Pahang with 33 per cent (see matrix in Table 5.4).

The population redistribution impact of Felda is thus not confined to actively sponsoring potential migrants. It also helps to regulate and stabilize rural population movement within the rural areas. It can be seen from Table 5.4 and Appendix A that Felda schemes are located in eight different States. The largest with 52,850 hectares is in Pahang, followed by Negri Sembilan (24,400 ha) and Johore (24,360 ha).

In considering scheme size, Felda originally judged that 4000 acres (1600 ha) with about 400 families would be a sensible strategy, modified of course by such factors as terrain, soil type, land availability and choice of crop. It was thought that some 2000 settlers would form an efficient management unit, a viable base for a social and economic infrastructure, and might develop into a small 'growth point' in the future.

From the mid-1960s, however, in the switch of emphasis from rubber to oil palm as the main crop grown, the size of schemes has expanded. This is mainly because of the costs of providing the extensive processing facilities necessary for modern production especially of oil palm. In general, available larger land is assigned for oil production, provided physical conditions are suitable, and areas of less than 7000 acres (2800 ha) are used for rubber planting.

In recent years Felda has become even more ambitious and has moved into land development on a wider regional basis, collaborating, in theory at least, with other government agencies responsible for non-agricultural development and stimulating private off-farm investment. The prototype of this is the Jengka Triangle project in Pahang, a project identified as early as 1963 by a World Bank mission. When the project is finally completed it will have resettled more than 90,000 people in strategically designed rural townships and settlements which were originally jungle land.
Settler characteristics

A criterion laid down in the 1960 Act was that land for a group settlement area should be alienated only to landless citizens, landless being defined as those owning not more than 2 acres (0.8 ha). The government also requires preference to be given to ex-servicemen, who should form 20 per cent of federally aided schemes. It was not stipulated that candidates are required to possess farming skills.

Since 1961, a points system has been evolved for Federal schemes, taking into account these criteria (citizenship and landlessness) and others as follows. Applicants should be between 18 and 35 years old; preferably married, the wife's suitability for settlement also being evaluated; preferably from a farming background; and physically fit. Lately some attention has also been paid to the applicant's education and skills, and to the family size.

Of course in practice there is no rigid adherence to selection criteria. In theory ethnicity is not a criterion of choice. In reality, strong preference is shown for Malays, who form 96 per cent of Felda settlers. Apart from such administrative biases which always tend to arise when such choices must be made, one other major constraint is where the land has already been occupied de facto if not de jure. Some areas assigned for development are already in effective occupation, either by cultivators operating under a Temporary Occupation Licence (TOL) or by squatters. If on a small scale, such people naturally tend to get priority.

Choice of crops

'Modernization' is one aim of government policy in regard to the Malays, and this includes encouraging an entrepreneurial spirit amongst the peasantry, as well as their ability to choose the most profitable crop and most efficient production function. These two aspects tend to clash in practice. This is partly because government is apt to assume that it is better able than most farmers to choose the optimum crop mix and cultivation practice. But it is mainly because tree crops have comparative advantage over field crops in the Malaysian environment, and production from tree crops is more efficiently organized on the plantation model, which limits scope for individual initiative.

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5Section 19 of the Land (Group Settlement Areas) Act 1960. Under section 19(2) an extension to 6 acres is permitted if the scheme is intended to supplement uneconomic holdings.

6Earlier the age minimum was 25. This was brought down to 18 in recognition of the problem of rural youth unemployment.
Direction naturally applies especially to settlement schemes, although for that matter non-settler farmers are also constrained. Those who work within a government-run irrigation system must conform narrowly to schedules for the various farming operations, while others who hold land under licence from state agricultural authorities are permitted to grow only crops specified in the licence, and this can be altered only by a process taking many months.

None of the settlement schemes are based on rice cultivation. Land suitable for rice is almost all alienated and both the Federal government and the States are far too wary of disturbing agrarian relations on established lands to consider redevelopment. Rice cultivators have habitually been among the poorest of the peasantry (Aziz 1960), and government attempts to assist them have taken forms other than dealing with the land question. Instead, it has concentrated on raising productivity through upgrading irrigation and drainage, providing technical assistance and credit for input purchase, as well as supporting paddy purchase prices.

Initially, the main crop planted in all Felda schemes was rubber. Oil palm was introduced in 1961, and surpassed the area devoted to rubber in 1966. These two perennial crops remain the principal ones planted in all Felda land schemes. The introduction of oil palm production involved some additional infrastructural developments. Oil palm production, unlike rubber, is essentially a capital intensive plantation crop. There are certain gains to be obtained from large scale planting, economies of scale in production and processing, and the practice of minimal quality and marketing control. These requirements are not easily accessible to the smallholder or producer. When oil palm was introduced by Felda this effectively meant that it had to provide both the processing and marketing facilities.

The projects of the State governments have generally continued to emphasize rubber rather than oil palm, as have Felcra and of course Risda. Rubber accounted for 68 per cent, and oil palm for only 14 per cent, of the area developed for agriculture by public sector agencies other than Felda between 1961 and 1970. In this period, Felda accounted for 44 per cent and other agencies for 56 per cent of land developed by the public sector in Peninsular Malaysia. Thus the overall total crop share at this time amongst all public agencies was brought down to 58 per cent rubber and 31 per cent oil palm. But, in all these projects, the settler had no choice of main crop.

For the smallholder settler the whole pattern of production is established from above. In early Felda schemes, an element of diversification was provided in that, in addition to 2.4 ha of rubber, 0.8 ha was provided for fruit growing. But even this has since been phased out in the streamlining for commercial production and marketing.
Prior to 1960, Felda settlers had to clear the jungle and plant the crops themselves and in some cases build their own houses. Work progressed slowly and standards were generally poor. It was therefore considered more efficient and economic to have contractors undertake the basic work of clearing, planting and house construction. Settlers thus now enter a scheme after about 1½ years of the actual planting of the crop and about 30 months after clearing begins.

This well prepared initial provision, combined with extensive management facilities and physical and social infrastructure, creates both high capital and running costs. Such schemes are expensive. 'Felda absorbed M$645,140,000 in the Second Malaysia Plan to settle 13,700 families, a cost of more than M$47,000 [>US$20,000] per family' (Peacock 1979:385). Against this, one could, however, legitimately offset part of the sizeable revenues accruing to the government through rubber export duties. These amount to an income tax on the gross incomes of rubber producers, including Felda settlers, which is equivalent to rates far in excess of ordinary income taxes.

Long-term financing of Felda schemes is theoretically divided into two parts. First is that portion of costs attributable to direct agricultural development and settlement, such as clearing, planting or providing materials, tools and fertilizers, and house construction, together with settler allowances paid until the main crop matures (Lee Hock Lock 1978:317n). Although financed from public funds, this portion is on a loan basis, to be recovered from settlers before land title is granted. (Such loans, at nominal rates of interest, are repaid in monthly instalments deducted from produce sales over 15 years, starting when crops come into bearing.) The second part is that portion, which must now be a growing share of the whole, which is non-recoverable. This consists of costs attributable to scheme management and administration, including roads, buildings and machinery, as well as staff salaries.

Other public sector land programs generally expect a greater part of costs to be borne by the settler, and are less expensive to initiate and maintain. The self-help model has been emphasized in the poor State of Kelantan in its State Land Development Authority projects for rubber. In this approach, jungle clearing and land preparation is done in stages by groups of settlers in joint effort. By and large, however, co-operative organization and community development efforts have not proved successful. In the Fringe Alienation schemes, contract labour has been used to prepare the land to be given to the participants after six months.

There have been experiments with other financial and ownership arrangements. For example, Kejora, a regional land development
authority in Johore Tenggara, does not grant land ownership to settlers. Instead, settlers own shares which are based on an equivalent of 4 hectares of land per settler-worker. Besides wage-income the settlers also receive dividends. But this does not appear to satisfy the land-hunger of the settlers. Evidence suggests that they prefer the Felda approach (Chan 1980). At the same time, the settlers are not so discontented that they want to leave the land scheme.

If migrant settlers are not dissatisfied with the wage-cum-dividend arrangement and being used as rural wage labour then the labour-land relationship question in land schemes development could develop along the plantation system model. The immediate question is one of low incentives and productivity among the settlers who are working on land which they feel is not theirs to own. On the other hand, with the demand for land increasing, 'universal' land ownership is impossible. The question must be resolved in the longer run from both the demographic angle of population control and from the political-economic dimension of redistributing access and rights to the use of land.

**Income effects**

For applicants fortunate enough to obtain a Felda holding, incomes have been very much higher than family averages in their home *kampungs*, at least for the first generation (Ho 1965). This generally applies also to a lesser extent to settlers participating in other public sector land schemes. Settlers, of course, share with the bulk of non-rice cultivators in Malaysia a dependence on fluctuating international markets for produce prices, although even here they have advantages in being less vulnerable to manipulation by merchants, because they participate in centralized marketing.

Apart from price levels, income of course differs according to main crop grown, the stage of development that each settler's crop has reached and other income earning opportunities, both inside and outside the schemes, as well as the personal qualities of each settler. An income, expenditure and savings survey (IESS) was conducted in 1977-78 of over 800 settlers in two Felda schemes, a rubber project and an oil palm project (Felda and Chan 1980). This divided the samples according to the stage of development of each settler's main lot. Some of the results are given in Tables 5.5 and 5.6, which describe the stages. (i) Income from the main lot\(^7\) ranged from M$237 to M$345 per month for settlers on the rubber scheme once the plot was past the first production season and were M$246-436 for oil palm growers, this being 85-64 per cent of total earnings from all sources for the former and

\(^7\)All from rubber or oil palm. There is no interplanting of other crops on the main lot.
<table>
<thead>
<tr>
<th>Income from</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main lot C</td>
<td>85.2</td>
<td>40.8</td>
<td>345.0</td>
<td>82.7</td>
</tr>
<tr>
<td>Other lot</td>
<td>8.0</td>
<td>2.8</td>
<td>16.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Other Felda</td>
<td>11.1</td>
<td>5.3</td>
<td>20.9</td>
<td>5.0</td>
</tr>
<tr>
<td>Total Felda</td>
<td>102.3</td>
<td>49.0</td>
<td>381.9</td>
<td>91.5</td>
</tr>
<tr>
<td>Outside, agriculture</td>
<td>8.9</td>
<td>4.3</td>
<td>0.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Outside, non-agric.</td>
<td>94.5</td>
<td>45.3</td>
<td>17.2</td>
<td>4.1</td>
</tr>
<tr>
<td>Sunday</td>
<td>2.9</td>
<td>1.4</td>
<td>18.2</td>
<td>4.4</td>
</tr>
<tr>
<td>Total</td>
<td>208.6</td>
<td>100.0</td>
<td>417.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Table 5.5**

<table>
<thead>
<tr>
<th>Number sampled</th>
<th>92</th>
<th>83</th>
<th>157</th>
</tr>
</thead>
</table>

a. Income of previous month from all sources.

b. Stages: A entry to first year's production; B 1.1-4.0 years; C 4.1-8.0 years; D 8.1-14.0 years.

c. Plot size 10 acres (4.05 ha).

Source: Felda and Chee 1980.
Table 5.6
Total income\textsuperscript{a} by source and stage\textsuperscript{b} of development, settlers in oil palm scheme
(M$ per month and per cent)

<table>
<thead>
<tr>
<th>Income from</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>%</td>
<td>$</td>
<td>%</td>
</tr>
<tr>
<td>Main lot\textsuperscript{c}</td>
<td>107.1</td>
<td>50.7</td>
<td>374.9</td>
<td>82.7</td>
</tr>
<tr>
<td>Other lot</td>
<td>36.4</td>
<td>17.2</td>
<td>15.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Other Felda</td>
<td>16.2</td>
<td>7.7</td>
<td>21.8</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total Felda</strong></td>
<td>159.7</td>
<td>75.7</td>
<td>412.5</td>
<td>91.0</td>
</tr>
<tr>
<td>Outside, agriculture</td>
<td>0.8</td>
<td>0.4</td>
<td>0.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Outside, non-agric.</td>
<td>32.1</td>
<td>15.2</td>
<td>35.9</td>
<td>7.9</td>
</tr>
<tr>
<td>Sundry</td>
<td>18.5</td>
<td>8.8</td>
<td>4.3</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>211.1</td>
<td>100.0</td>
<td>453.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Income of previous month from all sources.

\textsuperscript{b} Stages: A entry to 3 years' production; B 3.1-5.0 years; C 5.1-9.0 years; D 9.1-14.0 years.

\textsuperscript{c} Plot size main lot 12 acres (4.86 ha).

\textbf{Source:} as Table 5.5.
82-70 for the latter. (ii) Income from each settler's other lot, usually planted to vegetables or fruit, provided helpful supplements, especially to oil palm settlers. (iii) Useful small contributions were made by wage labour for the schemes' management, such as assisting in pollination, general field labour, harvesting and working at the mill or collecting station. (iv) Earnings outside agriculture were of major importance while the main plot was coming into maturity, providing 45 per cent of total income to rubber smallholders in stage A and 15 per cent to Stage A oil palm growers. Labouring provided by far the largest number of outside jobs, followed by a miscellany of occupations from driver, fitter, teacher to business agent.

A feature perhaps unexpected in such schemes of equal sized plots was the spread of income from the main crop revealed in the IESS survey, which admittedly covered lots at differing stages of development (Table 5.7). The survey found greater inequality in income from plots amongst rubber than oil palm producers and generally somewhat lower earnings. Twenty-five per cent of respondents on the rubber scheme had earned under M$100 the previous month from their plots, compared to 20 per cent for oil palm. At the other end of the scale only 1 per cent of rubber growers earned over M$700 compared to 7.5 per cent of oil palm producers.

<table>
<thead>
<tr>
<th>Income group</th>
<th>Rubber No. of cases</th>
<th>Rubber %</th>
<th>Oil palm No. of cases</th>
<th>Oil palm %</th>
<th>Total No. of cases</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-100</td>
<td>107</td>
<td>24.8</td>
<td>80</td>
<td>20.1</td>
<td>181</td>
<td>22.6</td>
</tr>
<tr>
<td>100-300</td>
<td>163</td>
<td>37.8</td>
<td>186</td>
<td>46.7</td>
<td>349</td>
<td>42.1</td>
</tr>
<tr>
<td>300-500</td>
<td>121</td>
<td>28.1</td>
<td>67</td>
<td>16.8</td>
<td>188</td>
<td>22.7</td>
</tr>
<tr>
<td>500-700</td>
<td>36</td>
<td>8.4</td>
<td>35</td>
<td>8.8</td>
<td>71</td>
<td>8.6</td>
</tr>
<tr>
<td>700-1000</td>
<td>4</td>
<td>0.9</td>
<td>24</td>
<td>6.0</td>
<td>28</td>
<td>3.4</td>
</tr>
<tr>
<td>&gt; 1000</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>1.5</td>
<td>6</td>
<td>0.7</td>
</tr>
<tr>
<td>Total</td>
<td>431</td>
<td>100.0</td>
<td>398</td>
<td>100.0</td>
<td>829</td>
<td>100.0</td>
</tr>
</tbody>
</table>

a Income for previous month from main lot.

Source: as Table 5.5.

Second generation dilemma

The particular income problem for settler families lies in the second generation. Aware of the fact that fragmentation of holdings was a cause of rural poverty, a point stressed by such
influential academics as Ungku Aziz (Aziz:1960 passim), the
government stipulated in the 1960 (Group Areas Settlement) Act
that no subdivision of allotments would be allowed.8

The second-generation problem was not given much consideration
during the early planning period of Felda and other schemes, which
focused primarily on the physical aspects of land development.
Plot sizes of around 4 hectares were designed for maintenance
chiefly by the settler and his wife, and not to afford full employ-
ment to other adult family members. Nor, for such non-seasonal
tree crops, is significant outside casual labour required. At
the same time, owing to the isolated location of many projects,
there is usually little opportunity for outside earnings.

Such concentration on the physical aspects of land development
only means that the employment, income and land-ownership issues
have been postponed. Utilization of a single, indivisible holding
of land fails to solve these issues over the life cycle of the
family. Out-migration of young adults thus becomes inevitable.

Nor are such young people especially well equipped for
employment in the modern sector if they have to leave home. In
the original planning, it was hoped that such well managed land
schemes would serve as a 'modernizing' function for Malay kampung
dwellers. But, in the event, there is little opportunity for the
acquisition of modern skills or for the stimulus of an entre-
preneurial spirit that might facilitate movement into modern
sector occupations.

The overall impact

Apart from such longer term family problems, such expensive
land development schemes can have only a limited direct impact
throughout the economy, even in such a relatively prosperous
country as Malaysia, which still has land available for development.
Very large migration movements are taking place during the process
of structural change going on in the economy. A recent estimate
suggests:

In the absence of urban-rural migration, the natural increase
of the rural Malay population would have been about 580,000
during the first half of the 1970s. Of this potential
increase in numbers, about 13 per cent has been absorbed in
land settlement schemes. Urbanward migration has almost
certainly settled much larger numbers (Sidhu and Jones 1981:
26).

8An attempt to persuade Muslim authorities to modify in general
Islamic laws of inheritance, which govern division of estates in
fixed proportion, failed, but religious leaders agreed to permit
the restriction of fragmentation of inherited land on new settle-
ment schemes (Rudner 1975:85-6).
It seems clear that the limited absorptive capacity of the type of land development strategy adopted by Malaysia cannot satisfy the ownership, income and employment objectives of an important share of the client group - the rural Malays.

Indirectly, however, the effects of government land schemes on the peasant sector may well be significant, especially those of Felda. The adoption of high yield rubber stock, with attendant techniques, undoubtedly spreads well beyond settlement schemes through their example, which helps to diffuse the new technology introduced by the estates and government agricultural extension networks to cultivators often in rather isolated locations. Moreover, the diversification of peasant producers towards an alternative and remunerative crop, oil palm, is promoted, as are export earnings. There are also linkage effects to other sectors of the economy, through contracting, transport and marketing.

On balance, it might well be argued that, at this stage of the country's development, the government land settlement strategy has produced benefits to those not directly involved which outweigh its costs. The immediate dilemma lies in the increasing scarcity of land reserves, which are becoming ever more expensive to develop, while the opportunity costs of the program rise in relation to other options.
## Appendix A

### Peninsular Malaysia: land development by States, 1976-78[^3]

<table>
<thead>
<tr>
<th>Agency</th>
<th>Felda</th>
<th>Felcra</th>
<th>Risda[^c]</th>
<th>Total land developed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State income group[^d]</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>High income:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selangor</td>
<td>12,670</td>
<td>360</td>
<td></td>
<td>13,030</td>
</tr>
<tr>
<td><strong>Middle income:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johore</td>
<td>21,530</td>
<td>24,360</td>
<td>3,120</td>
<td>-</td>
</tr>
<tr>
<td>Malacca</td>
<td>400</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Negri Sembilan</td>
<td>2,880</td>
<td>24,400</td>
<td>1,380</td>
<td>1,900</td>
</tr>
<tr>
<td>Pahang</td>
<td>16,600</td>
<td>52,850</td>
<td>200</td>
<td>10,560</td>
</tr>
<tr>
<td>Perak</td>
<td>3,970</td>
<td>9,510</td>
<td>2,060</td>
<td>3,970</td>
</tr>
<tr>
<td>Pulau Pinang</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal, MI</strong></td>
<td>45,370</td>
<td>111,120</td>
<td>6,760</td>
<td>16,430</td>
</tr>
<tr>
<td><strong>Low income:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kedah/Perlis</td>
<td>6,270</td>
<td>4,210</td>
<td>1,460</td>
<td>-</td>
</tr>
<tr>
<td>Kelantan</td>
<td>3,040</td>
<td>1,130</td>
<td>1,210</td>
<td>-</td>
</tr>
<tr>
<td>Trengganu</td>
<td>7,160</td>
<td>10,120</td>
<td>2,190</td>
<td>7,410</td>
</tr>
<tr>
<td><strong>Subtotal, LI</strong></td>
<td>16,470</td>
<td>15,460</td>
<td>4,860</td>
<td>7,400</td>
</tr>
<tr>
<td><strong>Peninsular Malaysia</strong></td>
<td>74,500</td>
<td>126,940</td>
<td>11,620</td>
<td>23,840</td>
</tr>
<tr>
<td>Sabah</td>
<td>18,940</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sarawak</td>
<td>6,190</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>25,130</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Malaysia</strong></td>
<td>99,630</td>
<td>126,940</td>
<td>11,620</td>
<td>23,840</td>
</tr>
</tbody>
</table>

### TMP targets

<table>
<thead>
<tr>
<th>Year</th>
<th>Target (hectares)</th>
<th>Achieved (hectares)</th>
<th>% Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976-80</td>
<td>200,000</td>
<td>140,000[^e]</td>
<td>40,000</td>
</tr>
<tr>
<td>1976-78</td>
<td>49.2</td>
<td>89.6</td>
<td>57.4</td>
</tr>
</tbody>
</table>

[^a]: Original in acres. Errors in addition due to rounding. Percentages based on acreage returns.
[^b]: Includes joint ventures with private sector.
[^c]: New planting.
[^d]: Per capita income by states 1978 estimated, in M$ per annum, as high 3000; middle 1200-1900; low 630-1000 (Malaysia 1979:Table 5.3, p.80).
[^e]: TMP target revised in Mid-Term Review to 200,000 hectares.

Source: Malaysia (1979:Table 5.5, p.84).
Overview of land settlement schemes in the Philippines

Rey Crystal

Land settlement programs have been an important component in the expansion of area cultivated in the Philippines, which up to the 1960s was the principal means of raising agricultural output. Official programs date from the beginning of this century and have been of two main types: those designed to encourage the movement of spontaneous migrants to take up land in frontier areas; and those creating government-directed land colonization schemes in empty lands. In numbers involved, private movement promoted by government has greatly exceeded colonization directly organized.

In addition, there have of course been large numbers of families who migrated either intra-regionally or inter-regionally to take up land with no help or stimulus from government. Such private land settlement will not be discussed in this paper, which concentrates on officially sponsored movement, save when describing general migration flows.

Basically, the population movement has been from north to south. Some four-fifths of Philippines' estimated reserves of arable land were thought to lie south of Mindoro in the late 1940s (Spencer 1952:122-3, 147). In 1948, such reserves throughout the country were put at 6.4 million hectares in preliminary surveys (ibid.). Such estimates were admittedly very vague. No accurate surveys were available to guide policy makers or would-be migrants. In fact, estimates of potential arable land still differ widely and adequate surveys are still lacking.

The legal instruments

In 1903 the Public Land Act was passed to allow distribution of land in the public domain, that is former Spanish crown land, to spontaneous settlers and corporations ready to pioneer in virgin areas. This law was inspired by the United States Homestead Act of 1862, as amended. Such settlers were to receive grants under free patent to areas up to 16 hectares identified by themselves, provided that they fulfilled certain obligations of cultivation and residence, or individuals could buy or lease lots of the same

1Failure to cultivate at least a fifth of the land grant within five years led to cancellation of application.
size without such restrictions. Purchases or leases by corporations were limited to 1024 hectares, to prevent the alienation of Filipino land to large estates or plantation interests (Pelzer 1948:104-7). In 1919 the permitted size for individuals was raised to 24 hectares by grant procedures and to 100 hectares (later 144 ha) by purchase or lease, but no change was made for corporations (ibid.).

In 1919, however, the practice of granting loans to homesteaders to help them to establish themselves was discontinued. Thus the program became even more oriented towards those settlers better able to provide for themselves. Help under the homesteading system was largely confined to a free grant of land, identified either by the settler or by the government, and to free transport to the site of the family and its tools and livestock. The agency responsible for dealing with homesteaders at this period was the Bureau of Labor which, through its Division of Interisland Migration, operated the program from 1918 to 1939.

There were already acute agrarian problems early in this century in the densely populated parts of central Luzon and some Visayan provinces, where impoverished tenants operated small plots on large haciendas. The homesteading law, offering land mainly in sparsely populated Mindanao ('the land of promise') and also in such lightly populated regions as Palawan, Samar, Mindoro and northeast Luzon, was intended to meet peasants' demand for land without disturbing property relationships in established areas.

The 1903 Public Land Act initially evoked only a limited response, since it required some capital and considerable initiative from smallholders, whilst precluding big plantation development. Interest, however, gradually built up. In the 31 years to November 1935 (the end of the direct American regime) roughly 212,000 applications were received by the Bureau of Lands, of which 103,000 were rejected or cancelled and 90,000 approved. Bureaucratic processing of all land titles lagged badly, and 19,000 homesteader applications were pending at this date (Pelzer 1948:111).

Most spontaneous movement by peasant settlers at this time was fairly short distance, mainly within the island of Luzon. Some migrants from the Visayas settled on the north coast of Mindanao, as they had done in Spanish times (Fisher 1964:708), but there was little long distance inter-island movement or settlement away from the coastal strip of Mindanao. Settlement in the interior of Mindanao was held back not only by lack of roads and accessible markets, but also by the hostility of the indigenous inhabitants, either 'Moros' (Muslims) or ethnic communities. Many of these people were shifting cultivators operating on communally held land at this period, needing large areas for long fallow systems. They thus resented the incursion of strangers for economic as well as social reasons.
In 1913 a more active, interventionist land settlement policy was adopted, under which government-sponsored land schemes were to be created. This was partly in order to extend land settlement more rapidly and partly to promote harmony between the ethnic groups in Mindanao by offering the Muslims plots and government services on such schemes, side by side with Christian settlers from the crowded northern islands. From 1913 to 1917, nine government agricultural colonies were established, covering 21,760 hectares. Of these, six totalling 16,620 ha were in Mindanao, principally in the province of Cotabato (Pelzer 1948: 128-32).

Socially these schemes had some success, since about half the Mindanao settlers were Muslims and no major ethnic or religious strains created problems for the authorities. But the numbers involved were not large. In the Cotabato colonies settlers numbered about 8000 in 1928 including dependants. Moreover, the schemes proved expensive and efforts to recover costs gradually from settlers failed (ibid.).

Over 30,000 people were transported free under these programs for colonizers and homesteaders between 1918 and 1934, mostly to Mindanao (Fisher 1964:708-9). Substantially larger numbers of people migrated without such help in this period (ibid.). Of the three types of settlement, free, sponsored homesteading and government colonization, the last was least important numerically. Nevertheless it often had, as it continues to have, an influence beyond its numbers, by opening up the way for other settlers to follow.

After the Philippines attained the partial independence of the Commonwealth in November 1935, the colonization program was reactivated. Two basic decisions were taken at this time: first, to put the land schemes on to a viable economic basis by efficient management and the charging of current costs to settlers; second, to select potential colonizers carefully and lay down conditions which would help to establish them successfully as cash crop producers, at the same time tightening up the terms for them to acquire unrestricted title, mainly to prevent them losing their land to land grabbers.

The bulk of government land settlement schemes were to be run by a semi-autonomous statutory body, in the expectation of achieving business-like efficiency. The aim was to create a system under which projects would be self-financing in the longer term, indeed which would generate surpluses for reinvestment in further colonization schemes.

In the same spirit of commercial orientation, the government diverted funds from the program in order to build an extensive road network in Mindanao in this period. This provided new main
roads and feeder roads for homesteaders and free settlers, as well as for the government land colonization schemes.

In 1939, the National Land Settlement Administration (NLSA) was set up with a capital of 20 million pesos and given borrowing powers. The new corporation was directed by a five-member board, appointed initially for three years, which in turn appointed a manager, responsible for hiring and firing staff. The corporation had extensive powers to take up and improve land by creating irrigation systems and so on, and to survey, clear and assign to colonist settlers parcels not exceeding 24 hectares. (In practice the average was about half this.) The NLSA was also empowered to engage in marketing, manufacturing, milling, lumbering, retailing, sale of agricultural inputs to settlers and to supply settlers with credit, electric power and water (Pelzer 1948:137-41).

Intending settlers had to sign a very strict contract. In particular (i) full costs of establishing the colonizer - other than roads and basic infrastructure, together with costs of special services provided - were to be charged as a loan to be paid off over 20 years. Such costs included survey and preparation of the plots, transport of the family, tools and livestock to the site, materials and assistance for housing and subsistence allowances. (ii) Full title was not to be granted until such loans had been repaid and the entire plot brought under cultivation. (iii) Up to that time and for a further 10 years after the acquisition of the title, the plot was not to be disposed of save by inheritance, nor was any lien to be made against it. (iv) The settler was required to plant such crops and to breed such livestock as were prescribed by the Administration. (v) Marketing of produce was to be done through the NLSA, which could use part of the proceeds to discharge a settler's loan. (vi) The farmer was to devote himself exclusively to the cultivation of his assigned plot and not to engage in any other occupation without permission.

Needless to say, these regulations were rarely enforced. Settlers appear to have moved from plot to plot fairly commonly, or to have taken on off-farm work opportunities, especially in hiring out as wage labourers to other farmers. The severe impact of World War II and its aftermath in any case prevented the NLSA from operating normally.

The postwar colonization schemes

Postwar land settlement programs have been attempts to deal with two interrelated problems at least social cost: political

2The NLSA could lease land from the state for 25 years with the option of renewal for a further 25 years.

3The full text of the contract will be found as Appendix A in Pelzer (1948:244-7).
dissidence and agrarian discontent, both originating largely in rural poverty and landlessness. Initially most ex-dissidents to be offered land were those who had been involved in the communist-led Huk guerrilla movement in central Luzon, more recently Muslim ex-rebels of Mindanao and Sulu who returned to the folds of government. Resettlement is also seen as a component part of the 1963 land reform, which has been more aggressively applied since the martial law of 1972.

Over time, as such political aims were more stressed, the agencies made responsible for state schemes have moved progressively from the semi-autonomous, commercial-type body (requiring in reality constant subsidies) to one directly controlled by agrarian authorities. There were a number of such changes in the 1950s and 1960s. The NLSA was abolished in 1950, having accumulated debts of over P2 million, and its functions, assets and liabilities taken over by the Land Settlement and Development Corporation (LASEDECO). In 1953, the Economic Development Corps (EDCOR) was set up under army leadership to resettle ex-Huks and other dissidents in frontier areas. LASEDECO was superseded in 1954 by the National Resettlement and Rehabilitation Administration (NARRA). The NARRA was abolished in 1960 and replaced by the Land Authority, which in turn ended in 1964. From 1964 onwards the colonization schemes have been directed by the Ministry of Agrarian Reform (MAR) through its Bureau of Rural Settlement.

The number of settlers dealt with by these earlier agencies was not large, compared to the needs of the landless. LASEDECO and EDCOR together resettled about 1400 families (Golay 1961:284 citing Pfanner 1958:80). NARRA was more active and was reported to have settled over 22,000 families by the end of 1957 (Golay 1961:284). But on the whole, none of these agencies was very successful (Murray 1972). In 1979, MAR was responsible for 49,000 resettled families altogether, mostly on Mindanao.

General migration flows

Families involved in government colonization schemes form a minority of the total of postwar settlers, although, as suggested earlier, the schemes have often led the way for homesteaders and free settlers. Some indication of numbers involved can be gained from census returns showing place of birth. For example, Simkins and Wernstedt (1971:3) have calculated that between 1948 and 1960 the population of the eleven provinces of Mindanao increased by 1.25 million more persons than could be expected from natural increase deriving from the pre-1948 population. The six major provinces

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*For an account of a Palawan settlement originally established by NARRA, of the 16-year development phases planned by the Administration from recruitment to the granting of land titles, and of the differing actual experience of the pioneers, see Fernandez (1972).
target areas for migrants were the Cotabato and Aguson valleys, the Digos-Padada valley in southern Davao, the provinces of Northern Davao and eastern Zamboanga del Sur and the Bukidnon plateau (ibid.).

There are no data showing the number of migrants who settled on the land. The figures given in Table 6.1 show total movement of population between regions within census dates, and include both intra-island and rural-urban movement. The main urban stream was to Metro-Manila and environment, fueled chiefly by migrants from within Luzon.

Table 6.1
Number of inter-regional migrants by broad area of origin and destination

<table>
<thead>
<tr>
<th>Broad area of destination</th>
<th>Broad area of origin 1948-60</th>
<th>1960-70</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Luzon</td>
<td>Visayas</td>
</tr>
<tr>
<td>Luzon</td>
<td>828,985</td>
<td>219,134</td>
</tr>
<tr>
<td>Visayas</td>
<td>33,875</td>
<td>129,629</td>
</tr>
<tr>
<td>Mindanao</td>
<td>78,100</td>
<td>422,837</td>
</tr>
<tr>
<td>Total</td>
<td>940,960</td>
<td>771,600</td>
</tr>
<tr>
<td>%</td>
<td>49.4</td>
<td>40.5</td>
</tr>
</tbody>
</table>

Sources: Census returns; W. Flieger and B. Koppin, Geographical Patterns of Internal Migration in the Philippines (1960-70), UNFPA-NCSO Research Project Monograph No.5, NEDA, National Census and Statistics Office: Tables 18, 19, 20.

Table 6.2 gives the same figures excluding inter-regional movement within each island and thus reveals better the rural to rural flow. From this table it will be seen that up to four-fifths of inter-island migrants came from the Visayas in both periods. In fact, movement from the Visayas to Mindanao accounted for over half of all inter-island movement in 1948-60 and for 47 per cent in 1960-70. Mindanao remained the chief target area in
both periods, but its share of the larger total flow declined from 62 to 52 per cent. A minority of the 5-600,000 people moving to Mindanao in both intercensal periods were doubtless in families headed by workers in non-farm occupations. But the bulk must have been aiming to acquire land, either soon or after a period of work for other farmers.

Table 6.2
Number of inter-island migrants by broad area of origin and destination

<table>
<thead>
<tr>
<th>Broad area of destination</th>
<th>Luzon</th>
<th>Visayas</th>
<th>Mindanao</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luzon</td>
<td>-</td>
<td>219,134</td>
<td>25,835</td>
<td>244,969</td>
<td>30.4</td>
</tr>
<tr>
<td>Visayas</td>
<td>33,875</td>
<td>-</td>
<td>25,450</td>
<td>59,325</td>
<td>7.4</td>
</tr>
<tr>
<td>Mindanao</td>
<td>78,100</td>
<td>422,837</td>
<td>-</td>
<td>500,937</td>
<td>62.2</td>
</tr>
<tr>
<td>Total</td>
<td>111,975</td>
<td>641,971</td>
<td>51,285</td>
<td>805,231</td>
<td>100.0</td>
</tr>
<tr>
<td>%</td>
<td>13.9</td>
<td>79.8</td>
<td>6.4</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

1960-70

<table>
<thead>
<tr>
<th>Broad area of destination</th>
<th>Luzon</th>
<th>Visayas</th>
<th>Mindanao</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luzon</td>
<td>-</td>
<td>340,344</td>
<td>53,882</td>
<td>394,226</td>
<td>34.3</td>
</tr>
<tr>
<td>Visayas</td>
<td>94,400</td>
<td>-</td>
<td>67,058</td>
<td>161,458</td>
<td>14.0</td>
</tr>
<tr>
<td>Mindanao</td>
<td>100,686</td>
<td>493,386</td>
<td>-</td>
<td>594,072</td>
<td>51.7</td>
</tr>
<tr>
<td>Total</td>
<td>195,086</td>
<td>833,730</td>
<td>120,940</td>
<td>1,149,756</td>
<td>100.0</td>
</tr>
<tr>
<td>%</td>
<td>17.0</td>
<td>72.5</td>
<td>10.5</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: As Table 6.1.

Resettlement schemes of the 1970s and the 1980s

Dam projects. The 1970s saw the start of major investment in irrigation and power generation projects which involve the construction of dams and resettlement of families affected by them. Foremost among these projects is the Pantabangan dam, whose construction in 1971 led to the relocation of 2268 families into five resettlement areas, namely: Tanauan, Delacay, Marikit, Lublub, and Palayan. Another project is the Chico dam project in northern Luzon. Both projects involve dealing with peasants who have developed strong ties with their traditional home area and who object strongly to moving.

In 1978, another resettlement scheme became prominent in Central Visayas for its aim to make the water resources of the
area available to the residents of Metro Cebu. To this end, the construction of a storage dam on Balamban River and the establishment of a water reservoir around the confluence of the Balamban and Boco-Bobo Rivers have been proposed. Implementation of this infrastructure phase of the Lusaran dam project is scheduled for 1982.

Agrarian reform. The land reform's Operation Land Transfer project is finishing up and the Ministry of Agrarian Reform (MAR) is shifting its activities towards resettlement projects for the landless farmers who are not beneficiaries of the Operation Land Transfer. Such projects have been implemented in Agusan, Bukidnon and Capiz, the main thrust of which is the development of public lands into well planned agricultural settlement communities to accelerate the rehabilitation and self-sufficiency of the settlers.

Muslim rebels. Muslims who rebelled because of the encroachment of Christians on their traditional lands but are returning to the government fold, as well as non-rebelling Muslims caught in the crossfire of the secessionist war, are being resettled in safer areas in Mindanao. Roughly 10,000 people were evacuated from Jolo to Zamboanga, while 4000 persons were moved to outlying islands around Jolo as a result of war damage to the town.

The conflict has served to highlight the urgency of conditions in the region, thereby prompting the integration of programs and mobilization of resources, that is, the Reconstruction and Development (RAD) program for Muslim Mindanao which consists of rehabilitation, reconstruction and development activities. In 1973, the Presidential Task Force for the Reconstruction and Development of Mindanao was created to implement this program.

Integrated area development and agri-business schemes. The exploitation of undeveloped river basins and the promotion of agri-business by big domestic corporations and multi-nationals have also created the need to resettle farmers into new communities. To cite a few examples, we have the Sab-A Basin Integrated Development Project in Leyte and the Northern and Western Samar Integrated Area Development Project: both are foreign-funded. The former is a package of projects composed of irrigation, ports, roads, flood control and drainage, agricultural production, fisheries development and human resource development while the latter includes roads, irrigation, ports, telecommunications, water supply, power, and agricultural development.

Problems encountered

Since the dissidents came from regions with tenancy problems and with land deficits, news about Mindanao, 'The Land of Promise', spread to others and triggered large-scale spontaneous migration. This in turn led to unanticipated problems with the local inhabitants.
Land grabbing. Mindanao's local inhabitants were mostly Muslims and ethnic (pagan) tribes who tilled Mindanao under different legal systems, mostly communal ownership. The migrants, on the other hand, were Christians who used the legalities of land titling to, unwittingly or otherwise, landgrab from the local inhabitants. As a result, the ethnic tribes were exploited, assimilated, or driven into the jungles. This problem was recognized and its magnitude necessitated the creation of the Presidential Assistant for National Minorities (PANAMIN) to protect the rights of the ethnic people and preserve their cultures. The Muslims, who were greater in number and had a strong socio-cultural system, had different reactions. The majority adjusted to the situation and worked with the new settlers while maintaining their culture. Conflicts were resolved within the context of due processes, with the government sometimes adjusting its laws in its efforts to recognize the Muslims' culture. A minority launched a secessionist movement that grew to such a proportion that it is at present a thorn in the government's side big enough to involve international attention and a big drain on the nation's resources to contain it. However, the movement was caused by other factors as well as land rights.

Land shortages. The land frontier in the Philippines is rapidly being closed. In the early 1970s, estimates of unexploited arable lands ranged from 1 to 4 million hectares (World Bank 1973; ILO 1974). The Bureau of Agricultural Economics estimated at the end of the 1970s that 6 million hectares was still available for settlement, but a high proportion of this was in fact already occupied by squatters - perhaps 70 per cent.

Much depends on the definition of 'arable'. In the Philippines this is more a question of topography than anything else, and especially slope. It also depends on the costs of bringing new lands under cultivation, compared to costs of expanding agricultural production by yield intensification, largely by creating irrigation systems and raising inputs, including high yield seed varieties. It has been argued by Hayami et al. (1976) and others that the latter strategy has recently become a more profitable use of the country's scarce resources than land extension.

Environmental threat. Another factor causing increasing concern is the environment. Part of the land classified as arable is steep and rocky, with even 18° slopes farmed in places. Forestry officials argue that such lands already under crops should be returned to forestry uses to protect the watersheds. In Mindanao the migrants were mostly lowland farmers who grew corn and rice. The corn growers, mostly from central Visayas, were slash and burn farmers. The virgin forests of Mindanao were quickly cleared, thus causing massive soil erosion, silting of rivers, flooding of vast tracts of lowlands and damage to crops and fishponds.
Denudation of forest reserves recently caused the removal of about 100 households to prepared land colonies.

These factors are causing a reorientation of land policy. Much less emphasis is given in the 1978-82 Five Year Development Plan (Republic of the Philippines 1977) to bringing in new land and much more to defensive measures such as contour ploughing and reafforestation. The move is also being made into agro-forestry, with officials recommending the planting of such species as Albizia, a fast growing leguminous tree or shrub useful for firewood and fodder or for sale to pulp and paper mills.

Agrarian conditions. Land shortages have caused a reduction in plot sizes offered to recipients under government programs, either in areas of land reform or in the frontier colonies. It was 8 hectares when the 1963 land reform measures began operating. The maximum has now been reduced to 2 ha, and 1.5 ha per family is normal.

Whereas up to 1950 land titles issued under the homesteading system averaged about 10 ha, by the 1950s they declined to roughly half this. Since then areas granted under patent have been reduced to little more than 2 ha. At the same time, in the older settlement areas, acquisition of full title has allowed free sales of land to take place, and inheritance has fragmented holdings, since all offspring are entitled to equal shares under common law.

Krinks (1974) has argued that the man-land ratio in Mindanao is rapidly approaching the national rural average, so that agrarian conditions in the 'land of promise' are coming to resemble those of the migrant source areas. Concentration and subdivision of plots was taking place in his study area northeast of Davao City, where wealthy farmers, mainly prewar settlers and their heirs, were adding to their holdings while the number of landless grew.

Administrative co-ordination and planning. The resettlement schemes related to dam projects are undertaken by government agencies primarily concerned with engineering works and thus with meagre experience in resettlement. As a result, the projects are facing problems mainly social in nature. The MAR is just starting to upgrade its competence in handling resettlement projects. In addition, it is meeting funding constraints. The sites for its projects are mostly owned by the Bureau of Forest Development, which is resisting MAR's takeover. A greater problem than that of co-ordination between the two agencies is the government's dilemma on which has priority, the goals of ecology or the concern for the landless farmers not covered by Operation Land Transfer.

5Personal communication, Dr Romeo Castaneda, Director, Bureau of Rural Settlement, Ministry of Agrarian Reform (ed.).
The resettlement for Muslims has no reported bottlenecks. It is interesting to note, however, that the former spontaneous migrants to Mindanao are as much affected by the secessionist conflicts. Already some U-turn migration is commencing as not enough is done to take care of the displaced farmers in the war zones. Those resettlement projects under the agri-business ventures of multi-national corporations, together with those under the dam projects, are becoming fertile grounds for anti-government activities and propaganda.

Conclusions

Resettlement schemes in the Philippines have been implemented to meet particular problems as they arose. The time has come for considering such programs as a component of an overall population policy framework adequately linked to the development plans. Rural resettlement projects should be primarily aimed at landless farmers currently squatting on government lands, those on private lands but not covered by land reform, and those affected by major government infrastructure projects. Such projects may need complementary agricultural programs in the areas of upland cultivation cum soil conservation. There is a need, too, for more thought on second generation problems, the aim being to educate the children so that those moving out of the schemes can find reasonable jobs.

Local participation and social infrastructure development will become vital to rural land schemes as a way of lessening the demands on government resources for such projects and of fostering self-reliance and development. Schemes will also be increasingly multi-agency and multi-sectoral in nature. As a result, the need to co-ordinate will be great and the pressure to fill such need by decentralizing planning, investment programming, project development and preparation and budgeting will be stronger.
Chapter 7

Resettlement programs in Thailand

S. Chirapanda

In the past, more than half of the land in the whole of Thailand was classified as forest. Today, it is still regarded within certain government circles as forest. But the hard fact is that only about a quarter of the total land mass or 13 million hectares remains as forest. The rest has been turned largely into farmland. A multiplicity of factors is responsible for this, the main ones being population pressure, landlessness, rural poverty, logging, and commercialization of agriculture. The rate of population growth is declining over time. At present, it is 2.1 per cent per annum and in the Fifth Five-Year National Economic and Social Development Plan (1982-86) the target rate is tentatively set at 1.5 per cent. Nonetheless, the decline in the rate of population growth is a very recent phenomenon, so that new additions to the labour force (most of which is in the rural economy) have been and still are heavy.

The existing 47 million people in any case pose a difficult problem to the government - that of providing employment opportunities. Low labour productivities together with vast labour underutilization in traditional agriculture\(^1\) imply that returns to labour are low. The increase in population and the failure of the government to create adequate employment opportunities in the industrial sector left open limited options, one of which was to venture into the government forest land which was still amply available some twenty years ago. From 1961 to 1974, roughly 10 million hectares of reserve forest were destroyed and later used for shifting or settled agriculture. From 1974 until 1978, satellite photographs indicate that another 6 millions had been devastated by squatters, timber traders, etc. Conservative estimates put the area in denuded reserve forests which is now under permanent agriculture at 4-5 million hectares and the number of squatter families at about one million.

\(^{1}\) 'Traditional' is used in the sense that land is devoted to rice and cultivated in much the same way as in the past with little use of modern inputs.
Logging was for some time a lucrative business; it lured many investors into national forest reserves. Risks, natural or otherwise, were high and in the end it is alleged that most businessmen had to operate illegally so as to survive and make reasonable profits. After trees were felled, ex-forest wage labourers and other farmers started to plant crops wherever possible and within three to five years, the land would be turned over to full-scale farming. In fact, they became illegal squatters. Another development - the commercialization of agriculture - followed from the export upsurge in cane sugar, cassava (tapioca) and maize. The payoffs were so high that they attracted large investors into farming. But privately-owned land attractive to the market was lowland, producing mainly paddy rather than crops. Further, it was not available in most cases in large contiguous blocks which would permit tractorization and economies of scale. The only alternative was the state forest reserves.

Doubtless, population pressure does contribute to landlessness in the rural sector. But landlessness is also a product of many social and economic ills. At present, there are about one million tenant farm households. High tenancy rates coupled with high rents force many farmers to part with their land. The demand for land in the Central Plains of Thailand - the major rice bowl - is so heavy that farmers have to subdivide their land among family members. Inheritance patterns according to Buddhist law mean that land is equally divided among the children on the death of the parents, and there are now more children to share. But there is a limit to which land can be subdivided and still provide a sizeable amount of income. Consequently, farmers become landless over time. Furthermore, lack of non-farm skills among them forestalls other employment opportunities. From all indications, the landless mass - the landless agricultural workers - now constitutes about 10 per cent of all farm households or a half million households.

Poverty is widespread throughout the rural areas, created by a variety of obvious factors such as low farm produce prices, high input prices, lack of efficient marketing facilities, etc. The government in the past generally favoured and almost without exception followed the rice premium policy in which a premium is laid on the rice exported resulting in sizeable revenues for the state budget. Moreover, at times, especially in the case of possible rice shortages, exporters were required to set aside a certain quantity of rice for sale to the government for purposes of domestic (urban) distribution at fixed prices. This is an exemplification of 'urban bias' which favours urban consumers against rural dwellers. Removal of tax disadvantages or of 'urban bias' elements will not unconditionally guarantee higher incomes to farmers, since there are many rigidities in the social and economic system. Still, it suffices to say that part of rural poverty stems from certain government policies.
Land resettlement program types

The first land settlement scheme started in 1935, and since then there have been numerous schemes of varying size. Resettlement was of either forced or voluntary nature. When trishaws were prohibited in Bangkok some thirty years ago, drivers became unemployed and the major government effort to deal with unemployment and displacement was to offer land in Lopburi and Saraburi provinces, some 100 km away from Bangkok, along with direct grants to these trishaw drivers. There were similar special groups which were given legal access to public land for farming purposes. By contrast, idle land was offered to anyone who wished to join the farming community, in which case settlement would be 'voluntary'.

The era of surplus supply, however, passed very quickly. In the past ten years or so, the demand for land was heavy and it was quite normal to find that the number of applicants was too large in comparison with the number of land lots available. Selection based on certain criteria was nominally set up for the purpose of screening these applicants. But the share accepted under these criteria was quite limited because of the lack of idle land. Public land, including reserved forests which form the bulk of it, was mostly taken up by squatters. Resistance to government pressures was so strong that these squatters could not be ignored in the selection process. They were usually given priority and seldom had to move from the land they tilled. Adjustments in the amount of land also took place but, above all, because of the presence of the government agency in charge of settlement, the squatters were recognized in the process as legal farmers who were permitted to utilize state land. Thus settlement in this respect took the new form of a 'corrective' nature.

Resettlement programs have been and still are carried out by at least fourteen different government agencies or organizations (Chirapanda and Tamrongtanyalak 1980). Table 7.1 provides names of major agencies and their programs. All resettlement programs have similar objectives. These are primarily to raise the living standards of the farmers, but also to improve the productivity of the farm sector, conserve national resources of land, water and forests, and on occasion to promote spread effects into rural commerce or processing. The differences in programs often lie in the selection of target groups and in the type of title to land use which is granted. Certain pockets of the population are inevitably more favoured than others, and the degree of infrastructural development each government department or agency can provide in its respective settlement program differs. Criticisms were often raised that co-ordination was difficult and duplication of efforts resulted in waste of scarce resources.

Only four agencies have actually made significant progress in resettlement: they are Department of Public Welfare, Department
Table 7.1
Major government agencies and their land settlement programs

<table>
<thead>
<tr>
<th>Name of agency</th>
<th>Name of settlement program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Public Welfare</td>
<td>Self-help land settlement</td>
</tr>
<tr>
<td>Department of Co-operatives</td>
<td>Land co-operative</td>
</tr>
<tr>
<td>Agricultural Land Reform Office</td>
<td>Land reform project</td>
</tr>
<tr>
<td>Department of Lands</td>
<td>Land allocation program</td>
</tr>
<tr>
<td>War Veterans' Organization</td>
<td>War veterans' land settlement</td>
</tr>
<tr>
<td>Forest Products' Organization</td>
<td>Forest village</td>
</tr>
<tr>
<td>Department of Land Development</td>
<td>Land development project</td>
</tr>
<tr>
<td>Department of Forestry</td>
<td>Forest community development village</td>
</tr>
</tbody>
</table>

of Lands, Department of Co-operatives and Agricultural Land Reform Office. The other programs are limited in scale and more of a pilot nature. Altogether, by the end of fiscal year 1979 (30 September), about 240,000 farmers had been settled, so that given an average family of five, some 1.2 million people had been involved. Recipients had been allotted some 800,000 hectares in settlement areas totalling over 2 million hectares, scattered in 200-odd projects around the whole country. This 800,000 ha takes into account only major resettlement programs, as shown in Table 7.2. However, the total allotted for all programs does not significantly differ from this. Compared with the number of squatters on public lands, particularly in the forest reserves, and the huge areas of land involved in illegal occupancy, the official program is modest. Legalized resettlement in Thailand is still a long way from over.

Impediments to program success

It seems that, from many points of view, resettlement programs have so far failed to serve the needs of the majority of the farming population. They are overburdened in many respects. While some are expensive in terms of investment expenditure, almost all of which is not recovered from the farmers, others are very crude and lack the necessary social and economic infrastructure. Financial constraints are important in some cases but do not apply to all resettlement programs. Problems are often administrative. For example, as government officials cannot be laid off unless they have committed serious criminal offences,

2Specific problems facing the land reform program are discussed in Chirapanda (1979).
Table 7.2
Land allocated among major settlement programs, up to 30 September 1979

<table>
<thead>
<tr>
<th>Name of program</th>
<th>Central</th>
<th>Northern</th>
<th>Northeastern</th>
<th>Southern</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area (ha)</td>
<td>No. of families</td>
<td>Area (ha)</td>
<td>No. of families</td>
<td>Area (ha)</td>
</tr>
<tr>
<td>Land co-ops</td>
<td>151,395</td>
<td>24,847</td>
<td>77,943</td>
<td>19,310</td>
<td>22,530</td>
</tr>
<tr>
<td>Land reform</td>
<td>427</td>
<td>91</td>
<td>4,792</td>
<td>1,321</td>
<td>760</td>
</tr>
<tr>
<td>Land allocation</td>
<td>11,555</td>
<td>7,043</td>
<td>27,399</td>
<td>22,880</td>
<td>45,012</td>
</tr>
<tr>
<td>War veterans</td>
<td>1,114</td>
<td>228</td>
<td>668</td>
<td>167</td>
<td>2,604</td>
</tr>
<tr>
<td>Forest village</td>
<td>n.a.</td>
<td>187</td>
<td>n.a.</td>
<td>1,080</td>
<td>n.a.</td>
</tr>
<tr>
<td>Land development</td>
<td>2,734</td>
<td>1,385</td>
<td>18,838</td>
<td>10,255</td>
<td>1,800</td>
</tr>
<tr>
<td>Forest community development</td>
<td>3,022</td>
<td>1,194</td>
<td>1,440</td>
<td>220</td>
<td>2,891</td>
</tr>
<tr>
<td>Total</td>
<td>293,366</td>
<td>68,256</td>
<td>177,687</td>
<td>72,390</td>
<td>184,486</td>
</tr>
</tbody>
</table>

Area is of land allotted. Total area of the schemes is nearly three times that allotted.

n.a. = not available.

Source: Division of Research and Planning, Agricultural Land Reform Office, Ministry of Agriculture and Co-operatives.
termination of any resettlement project can take place only if jobs can be created for them elsewhere within the government machinery. This has not occurred on any noticeable scale, and, as a result, most projects tend to persist. There is also a conceptual difficulty involved in this. If a resettlement project is to be terminated, what should be used to determine the point of termination? The level of income, the length of access and main roads, the amount of irrigation water available, the degree of agricultural intensity regarding land utilization or basic needs are only a partial list of criteria which could be used. In the meantime, they can be criticized and subject to scrutiny.

Of course, the major objective of any resettlement program is to raise living standards and the level of welfare among farmers. But the real question is what is meant by all this? Many government officials argue that, based on the notion that farmers are poor, government assistance should be made available in any way it can. After all, it is for the poor. This argument disregards the distributional aspect. Budgets are always limited, and their allocation should take into consideration the need among different land resettlement programs and also between them and other development programs. In addition, it should be realized that farmers outside resettlement programs are generally worse off and little attention has been paid to the majority of them, apart from piecemeal assistance and occasional crash programs which have not been as effective as intended. Project termination signifies not only that resources can be diverted to other productive uses, perhaps making for more efficient allocation, but also that new resettlement projects can be undertaken with little or no extra-budgetary measures. It should, it is hoped, pave a way for a clear-cut national policy on resettlement and, in general, land redistribution. However, little has been done in any concrete manner along this direction. Up until now, no one can say with a reasonable degree of confidence what precise policy is to be adopted towards the millions of squatters in forest reserves.

An unresolved problem is the question of land rights. Basically there are two types of land under settlement schemes. First there is potentially arable public land, often formerly common land, or sometimes private land which has been acquired by departments. In principle, full title can eventually be acquired by settlers on much of this, subject to various constraints. In practice the administrative process of granting title is cumbersome and very slow, so that most settlers are still in an ambiguous position. Many of the self-help schemes and co-operatives are on such land.

The second type is land within former reserved forest areas, where such title is not given. Instead, settlers receive reserve licences, i.e. the right to cultivate the land. The escape valve that the government has long provided and is still using in dealing with the forest squatters is to grant a long-term lease of land to
them. In all cases where forest reserves are involved, some kind of investment inputs such as access roads, water weirs, ditches and dykes, and land clearing are inevitably provided to the squatters, demonstrating that the government is attempting to ensure economic and social viability among them.

While in some areas some form of assistance may be required, in many others it is not needed and often whatever is provided is entirely different from what the farmers need. Under these circumstances, where the farmers are deemed to be economically and socially viable in the main, emphasis should be laid on land rights rather than on additional investment in various infrastructures. The question of legality with respect to the squatters is usually brushed aside.

It is true that government settlement programs legalize the squatters but land rights within these schemes are still limited. Titles on former public land are usually still pending. Leases on former forest land are supposedly long-term, but it is never specified anywhere how long they are effective. Land is inheritable but transfer of leases other than by inheritance is legally prohibited, unless approved by the government agency in charge of resettlement. In most cases farmers will not be granted full title deeds, that is, ownership still rests with the state. As a result, farmers are insecure and will not be compensated if they decide to leave their farms to search for other jobs. Because of the lack of collateral, they are forced to rely mainly upon government farm credit provided by the state-owned Bank for Agriculture and Agricultural Co-operatives, and this is often insufficient. Worse still, squatters outside the government settlement program remain perpetually illegal farmers.

Land use planning

There is a lack of overall land use planning. It is clear from many points of view that legal 'forest reserves' are excessive and a large proportion of them can never be restored to their original state. They should be degazetted and reclassified as farmland. The process will be time-consuming but a head start would be a 'great leap forward'. Land use planning need not be ultra-scientific. Pragmatism would be preferable. This point should be emphasized, because many scholars from various disciplines and government departments tend to be involved. Thus planning can easily get bogged down in theoretical discussion such as optimality aspects.

Despite the efforts to increase efficiency and reduce duplication, land management and administration in the public land domain are still weak. Government officials inherit problems and along with them self-defeating, short-term solutions from the past. Managerial ability is very often missing in the government
bureaucracy and, as a result, inefficiency persists and problems accumulate. This can be witnessed by the failure to stop squatting or by the presence of independent settler-squatters who number in millions. To some extent, government administrators blame the absence of clear-cut land policy for the persistent land problems. Research in this field is still insufficient, while solid statistics are lacking both in terms of time series and coverage. Therefore, it is not surprising to find that land policy is usually either absent or ambiguous.
Chapter 8

Population resettlement policies in Vietnam
Gavin W. Jones and Stewart E. Fraser

North Vietnam (the former Democratic Republic of Vietnam) has for many decades now been the main area of Indochina suffering from acute pressure of population on the land. In 1936, the Red River Delta proper contained 32.6 per cent of the total population on only 2 per cent of the total land area of Indochina. Whereas the average density of Indochina as a whole was only 31 persons per square km, Gourou (1965:138) estimated that the rural density of the Red River Delta in 1931 was about 430 people per square km. A rural density of this magnitude was the highest to be found in all Southeast Asia - higher than in Java (315 per square km) though parts of Central Java could certainly match it. The rural density of the Red River Delta was comparable to that of Bengal, and to areas of intensive rice cultivation in China and Japan (Gourou 1940:60).

Even the high average density figure did not indicate the degree of pressure of population on the land since the rural densities were not uniform. In parts of the provinces of Nam Dinh and Thai Binh the population density in 1921 already exceeded 1163 people per square km.¹

In the Red River plain, the Vietnamese had an elaborate system of water control, a system of dykes and canals for irrigation and drainage which permitted a heavy concentration of population. Even so, the nutritional density of population (persons per hectare of paddy) for North Vietnam as a whole was much higher than elsewhere in Indochina and although multiple cropping was more widespread in the North, chronic food shortages were a feature of this region in colonial times. The French authorities were obliged to transfer part of South Vietnam's rice surplus to the North each year to make up the deficit. The special problems of nutritional density of population in North Vietnam compared to the rest of Indochina are apparent in Table 8.1.

The problem of 'overpopulation' in the Red River Delta concerned demographers from very early in the colonial period. According to Gourou (1931:86), the desirable ration of rice for

¹This figure was derived from the 1921 Census, see Gourou (1931:87).
sustenance for an Annamite averaged 337 kg of paddy a year. The French economist Kherian estimated that the people in the Red River Delta had only 217 kg per head per year (Kherian 1937:7). The area available and average rice yields meant that the Delta had a net excess of 1,150,000 people, not including those who lived in the urban agglomerations (Gourou 1931:87-8).

Food shortages continued to plague North Vietnam's rulers after the French were finally defeated in 1954 and the Communist regime took complete control. The sudden exodus of 860,000 inhabitants of the Red River Delta to South Vietnam at that time, though it reduced the number of mouths to feed, also disrupted rice production in some areas in the short run. The disastrous land reform program of 1954-56 further disrupted agricultural production, and although the victory of pragmatism over ideology resulted in some later changes in agricultural policy, North Vietnam has never developed the capacity to feed its growing population adequately.\footnote{For a detailed discussion of economic policy to the mid-1960s, see Fall (1967:Chs 8 and 9).}

Given this background, it appears certain that problems of food and population are never far from the thoughts of North Vietnamese leaders. While not questioning the intensity of the nationalist sentiments underlying their determination to reunify the two halves of the nation, the chronic food shortages of North Vietnam are not irrelevant to an understanding of the doggedness.

\footnote{Vietnamese accounts have suggested that a figure of one million would be more accurate when all population movements are taken into account, including the larger numbers who managed to find their way South after the official or legal transfer period had ended. Others moved across the Mekong River into Northern Thailand to constitute what are today perhaps the longest existing Vietnamese 'refugee' camps to be found on Thai territories.}
with which the North fought to gain control of South Vietnam nor, for that matter, do they appear irrelevant to an understanding of Vietnam's present role in Kampuchea.

Because of the more favourable food situation and lower population densities, the problem of land shortage has not been a major concern in the South. The coastal plains of Annam contain pockets of heavy population concentration, but the most notable of these — Thanh Hoa, Vinh and Ha-Thinh — are in the North. In the South the coastal plain is narrower except where it broadens to merge with the deltaic plains over the Mekong. The Mekong Delta was fairly sparsely populated when annexed by the French (who called it Cochin China), because it was still an area of pioneer settlement for the Vietnamese. Although densities varied quite widely, nowhere did they approach the densities of the Red River Delta. This remains the case today, although the differences have narrowed. In general, the distribution of population in the South is more balanced than in the North, because of a rather more even distribution of cultivable land and natural resources within each region.

Map 8.1 shows population density by provinces in 1979, and highlights the heavy concentration of Vietnam's population in the main population nodes: the Red River Delta surrounding Hanoi and Mekong Delta to the south and west of Ho Chi Minh City. In these two deltas, which contain 23 per cent of Vietnam's land area, live 58 per cent of its population (Table 8.2). The difference between the proportion of population and land area contained in the deltas is understated by these figures, because they are based on provincial data and some provinces include both deltaic and upland areas. In the Red River Delta provinces, population densities are in the general range of 280 to 850 persons per square kilometre. In the Mekong Delta they are lower (150-500).

Population density in the areas of Vietnam outside the two major deltas is not low by Southeast Asian standards. In fact, the figure of 87 per sq. km in these areas is about the same as that in Thailand (82) and higher than in Malaysia (37). In the more mountainous regions, however, population densities drop to between 20 to 50 per square km.

Population redistribution policies in the 1960s

During the period 1961-66, after the reorganization of land-ownership and initial collectivizations had entered the cooperative and state farm stage, a mass movement of people to upland areas was initiated by the North Vietnamese government. Some one million people were persuaded to leave the Red River Delta provinces and resettle in sparsely populated upland areas of Bac Thai, Son La, and Lai Chau provinces. Until 1966, when the New Economic Zones (NEZ) of the North became minimally self-
Provinces:
1 Lai Chau
2 Son La
3 Hoang Lien Son
4 Ha Tuyen
5 Cao Lang
6 Bac Thai
7 Quang Ninh
8 Ha Son Binh
9 Ha Bac
10 Vinh Phu
11 Hai Hung
12 Thai Binh
13 Ha Nam Ninh
14 Thanh Hoa
15 Nghe Tinh
16 Binh Tri Thien
17 Quang Nam - Da Nang
18 Ninh Binh
19 Phu Khanh
20 Gia Lao - Kontum
21 Dac Lac
22 Lam Dong
23 Thuan Hai
24 Dong Nai
25 Song Be
26 Tay Ninh
27 Long An
28 Ben Tre
29 Tien Giang
30 Hau Giang
31 Cuu Long
32 Dong Thap
33 Kien Giang
34 An Giang
35 Minh Hai

Map 8.1 Socialist Republic of Vietnam: population density, 1979
Table 8.2
Population and area of major regions of Vietnam

<table>
<thead>
<tr>
<th>Region</th>
<th>Land area (sq. km)</th>
<th>Population 1979 ('000)</th>
<th>Population density sq. km</th>
<th>% of Vietnam area population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red River Delta</td>
<td>37,397</td>
<td>17,509</td>
<td>468</td>
<td>11.4</td>
</tr>
<tr>
<td>Mekong River Delta</td>
<td>37,125</td>
<td>13,118</td>
<td>353</td>
<td>11.3</td>
</tr>
<tr>
<td>Rest of Vietnam</td>
<td>254,884</td>
<td>22,115</td>
<td>87</td>
<td>77.4</td>
</tr>
<tr>
<td>Total Vietnam</td>
<td>329,406</td>
<td>52,742</td>
<td>160</td>
<td>100.0</td>
</tr>
</tbody>
</table>

a Taken to include the provinces of Thu Do Ha Noi, Vinh Phu, Ha Bac, Ha Son Binh, Hai Hung, Thai Binh, Ha Nam Ninh and Thanh Hoa.
b Taken to include the provinces of T.P. Ho Chi Minh, Long An, Dong Thap, An Giang, Ben Tre, Cuu Long, Kien Giang, Minh Hai, Hau Giang, and Tien Giang.

sufficient, the new settlers required substantial annual rice subsidies. The movement of one million persons was intended as a two point tactic both to reduce population pressure in the delta areas and to populate upland areas previously uncultivated or worked under shifting agriculture regimes. Many NEZ were planned as a two-way movement of both delta people and highlanders into intermediate upland areas. Mutual benefits would result: the delta Vietnamese would bring with them their skills in rice production, and in addition were to form co-operatives with ethnic minorities to produce coffee, tea, ground nuts, and fibre plants for weaving.

There were difficulties in resettling, created partly by poor planning and partly by natural calamities. Thus poor harvests attended efforts during the first few years of the movement to new economic zones. There was also some hostility on the part of various ethnic minorities, who had not been fully prepared for the intrusion on a mass scale of delta Vietnamese peasants.4

4The upland areas of North Vietnam were inhabited by nearly 2 million ethnic minority people in 1960 (census figures) and to these numbers were now added nearly one million new lowland settlers. It is estimated that by 1966 the ratio of ethnic minority peoples to Vinh Viet or majority people had changed from 2:0.5 in 1954 to 2:1.5. The ethnic minority groups had historically been sensitive to interference from either Chinese or Vietnamese authorities, and then more recently from French colonial
Criticisms often focused on inadequate planning and ill-prepared movements of large numbers of people to an uncertain future.

There are many imperfections in the way which we in this province receive and share the new manpower. No concrete production plans for those co-operatives having incorporated lowland compatriots have been established regarding acreage expanding and deep ploughing for high yields. This resulted last year [1963] in many such co-operatives having a lower average income than the year before. A number of lowland households had insufficient income because they were large families, had not enough labourers, or because they had not been feeling secure enough to join in production more actively (translated from Trien-Van Tinh, *Nhan Dan*, 13 April 1964).

The Five Year Plan (1961-65) contained the blueprints for the first major movement of population in the Democratic Republic of Vietnam. One delta province, Thai Binh - listed as the most populous in the North - was prepared under the first Five Year Plan to mobilize 150,000 people to go to upland or highland areas. In the period 1961-63 nearly 70,000 people left their delta homes. Ngo Duy Dong, making a speech in April 1964 during the Second National Assembly, made the startling claim: 'As for our province [Thai Binh], its population growth has been reduced from 3.6% to 0.5% due to the emigration of tens of thousands of people during the past few years' (reported in *Nhan Dan*, 13 April 1964). The policy for the overcrowded delta provinces appears to have been the same as that adopted for Thai Binh - to move numbers equivalent to the entire estimated natural increase of the population.

The campaign to move people was sharply accelerated in 1965 and 1966 owing in part to the threat of US bombings, when over 500,000 people were evacuated from major cities and minor urban concentrations. Many of the evacuees were persuaded, where possible, to undertake a permanent move and use the bombing situation to make a complete break and settle in the northwest provinces. '110,000 of Thai Binh's inhabitants had gone to the mountain regions to build new economic areas, and tens of thousands of others have joined the army or gone to work on

*(continued)*

officialdom. Oftentimes the new Vietnamese settlers showed a disrespect for the ethnic minorities with whom they were to cooperate, considering themselves culturally and agriculturally superior. The government in Hanoi was generally sensitive to these complaints and at times made endeavours to control the behaviour of the transplanted delta people, who in turn were facing a difficult time in a new environment.
construction sites ... Only 10 per cent failed to overcome the difficulties and had to return to their native villages' (*Vietnam Courier*, No. 27, August 1974:14).

In North Vietnam as a whole, in more than a decade of resettlement, over one million people had been moved. Lessons learned in this period underlay the following planning outline for the rest of the 1970s, reported in the *Vietnam Courier* (ibid.:15).

The locations for building new economic areas should be clearly delimited and a plan should be drawn for the distribution of land to the provinces which are to send their inhabitants to the mountain regions.

Priority should be given, in this movement for land reclamation, to persuading the people in those regions with a high population density: scattered hamlets and places along river banks which must be evacuated in order to widen the river basin.

In the organization field, the transfer of people should be made in groups; part of a production brigade or of a cooperative, or a whole cooperative, hamlet or village. In the new settlements, according to concrete conditions the transferred people may organize themselves into new cooperatives, merge with local cooperatives or work for State farms or the forestry service.

Measures should be taken to bring a rational solution to such vital problems as: food supply, settlement of accounts in terms of paddy and purchase of property left behind, investment of capital for production development in the new settlements, and the interests of cadres who leave their villages to build up new economic areas.

The last but not least important question is to make arrangements so that those who go to build new economic areas can start working soon after they have settled in the new places. This will make it possible for the settlers to start planting crops in good time. Development of production in the new economic areas is based on the three great potentialities of the highlands and midlands: forestry, industrial crops and animal husbandry.

**Population redistribution policy since unification**

Barely a year after this report was written, the sudden defeat of the South presented a wider vision for continuing the historic movement of peoples from the north to the south rather
than merely moving them from the Red River Delta to northern upland areas.\textsuperscript{5}

At the time of unification of Vietnam in 1975, the government inherited a very difficult situation in the South, with swollen urban populations (estimated by some American analysts to constitute 60 per cent of the total population of the South and more conservatively by South Vietnamese authorities to constitute 43 per cent) and substantial rural areas left uncultivated because of the earlier exodus of populations to the cities for security reasons. Allied to this were the problems of integrating large numbers of civil servants, police, soldiers and sympathizers of the former regime into a very different system of government and of economic management. The Communist regime estimated that there were 1.3 million soldiers and police living in the South at the time of liberation, who together with their families made up one out of every four South Vietnamese.\textsuperscript{6} In addition to these specifically Southern difficulties, there was the continuing burden of overpopulation in North Vietnam.

The population resettlement policies adopted by the new regime attempted to deal in various ways and to various degrees with all of these problems. However, in the early days of the new regime, it appears that the main emphasis was on moving people from the swollen South Vietnamese cities back to the countryside, either to their native villages or to New Economic Zones; and on 're-educating' those whose sympathy with, or at least tolerance of, the new regime was suspect. It is difficult to tell how successful the efforts at 'rustication' were. For example, it is estimated that in the 18 months from May 1975 to December 1976 between 700,000 and 1 million people left the Saigon-Cholon area, but it is not clear how much of this movement was due to government policies and how much was a spontaneous return to the rural areas by those who had crowded into the cities in the last traumatic months of the former regime.

The Second Five Year Plan (1976-80) focused, in its first phase, on four main streams of resettlement and redeployment of population:

(i) Reduction of rural population in the densely populated Red River Delta, and Northern plain provinces.  
(ii) Reduction of the urban population in southern cities and movement to rural sections of southern provinces.

\textsuperscript{5}In the French colonial period, many people from the Red River Delta migrated to the South and Central highlands to work in plantation agriculture.  
(iii) Relocation of population within provinces and districts, consolidation of villages.

(iv) Redeployment of the armed forces to build, develop and maintain the new economic zones.

The planners envisioned an admixture of plains, upland and mountain people in New Economic Zones, in all three areas of Vietnam - North, Central and South. Map 8.2 shows the main movements planned.

During this 1976-80 planning period, official figures indicate that 1.5 million people were moved in Vietnam as a whole, as against a target figure of 4 million. Of those moved, about 40 per cent moved from North to South. This implies that fewer than one million were moved from towns in the South into the countryside.

Undoubtedly the establishment of many new economic zones immediately adjacent to the frontier between Vietnam and Kampuchea during the period 1976-78 provoked tensions on the part of Kampuchean military, a response which instigated a campaign of border warfare intended to destabilize these frontier settlements. Vietnam obviously aimed to secure its western boundaries with Kampuchea by intense settlement and to finalize informal claims to land in clearly disputed areas. The ethnic and social mix chosen, however, was not necessarily best suited to this purpose. The new settlements established between 1976 and 1978 in the border areas included (i) former urban residents of Ho Chi Minh City, (ii) rural peasants from the northern Red River Delta, (iii) refugees from Kampuchea including both Khmer and Vietnamese who had formerly lived in Kampuchea including Phnom Penh, (iv) recent Khmer refugees from the Pol Pot regime who were given sanctuary within Vietnam by the SRVN. Some of these refugees may have to be considered as transients and it is likely that some of the NEZ villages which they set up between 1977 and 1979 have been dismantled and that the occupants have now returned to Kampuchea.7

Vietnam also opened up extensive NEZ eastwards throughout Tay Ninh, Song Be, Dong Thap, Long An and An Giang provinces. Thus, the NEZ were to act as a buffer zone in considerable depth to take up land which had been mostly unoccupied, abandoned, or used under long fallow regimes during much of the past decade.

7During the initial border clashes during 1977-79 some 300,000 Kampuchean refugees, mainly Khmer but also including some Hoa (Chinese) and Viet were given sanctuary within Vietnam. While many of these refugees, especially the Khmer, in all likelihood have returned to settle the Eastern provinces of Kampuchea, there is the possibility that Viets have also been resettled during 1979-80 across the border from Vietnam in what is now Kampuchean territory.
Map 8.2 Vietnam: planned population movements, 1976-80
<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Direction/Location</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-S Hanoi</td>
<td>Lam Dong</td>
<td>(South-Central Highlands)</td>
<td>100,000</td>
</tr>
<tr>
<td>(2418 per km²)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(100,000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N-S Thai Binh</td>
<td>Kien Giang</td>
<td>(Southern Coastal adjacent)</td>
<td>100,000</td>
</tr>
<tr>
<td>(1054 per km²)</td>
<td>Song Be</td>
<td>(South-adj. Kampuchia)</td>
<td>120,000</td>
</tr>
<tr>
<td>(270,000)</td>
<td>Gia Lai Cong Tum</td>
<td>(S.W. Central-adj. Laos)</td>
<td>10,000</td>
</tr>
<tr>
<td>N-S Hai Hung</td>
<td>Long An</td>
<td>(S.W. adj. Kampuchia)</td>
<td>150,000</td>
</tr>
<tr>
<td>(764 per km²)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(150,000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N-S Ha Nam Ninh</td>
<td>Minh Hai</td>
<td>(South Extreme)</td>
<td>100,000</td>
</tr>
<tr>
<td>(731 per km²)</td>
<td>Dong Nai</td>
<td>(South Central-adj. HCM)</td>
<td>24,000</td>
</tr>
<tr>
<td>(190,000)</td>
<td>Bac Lac</td>
<td>(South Central Highland)</td>
<td>10,000</td>
</tr>
<tr>
<td>N-S Binh Tri Thien</td>
<td>Dac Lac</td>
<td>(South Central Highland)</td>
<td>69,000</td>
</tr>
<tr>
<td>(92 per km²)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(90,000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N-S Ha Son Binh</td>
<td>Lam Dong</td>
<td>(South Central Highland)</td>
<td>19,500</td>
</tr>
<tr>
<td>(298 per km²)</td>
<td>Tay Ninh</td>
<td>(W.S. Central adj. Kampuchia)</td>
<td>5,000</td>
</tr>
<tr>
<td>(60,000 total)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and 24,500 to S.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N-N Hai Phong</td>
<td>Quang Ninh</td>
<td>(North-adj. China)</td>
<td>15,000</td>
</tr>
<tr>
<td>(786 per km²)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N-N Ha Nam Ninh</td>
<td>Hoang Lien Son</td>
<td>(North-adj. China)</td>
<td>35,000</td>
</tr>
<tr>
<td>(731 per km²)</td>
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<tr>
<td>(190,000 total)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>35,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N-N Ha Son Binh</td>
<td>Son La</td>
<td>(West-adj. Laos)</td>
<td>35,500</td>
</tr>
<tr>
<td>(298 per km²)</td>
<td>Vinh Phu</td>
<td>(North Central)</td>
<td></td>
</tr>
<tr>
<td>(60,000 total)</td>
<td>Ha Tuyen</td>
<td>(North-adj. China)</td>
<td></td>
</tr>
<tr>
<td>and 35,500 to N.</td>
<td>Bac Thai</td>
<td>(North)</td>
<td></td>
</tr>
<tr>
<td>N-N Thai Binh</td>
<td>Bac Thai</td>
<td>(North-adj. China)</td>
<td>10,000</td>
</tr>
<tr>
<td>(1054 per km²)</td>
<td>Lai Chau</td>
<td>(North)</td>
<td></td>
</tr>
<tr>
<td>(270,000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and 10,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-S Ho Chi Minh City</td>
<td>Dong Nai</td>
<td>(Adj. Central South)</td>
<td>170,000</td>
</tr>
<tr>
<td>(1876 per km²)</td>
<td>Song Be</td>
<td>(N.W. adj. Kampuchia)</td>
<td>100,000</td>
</tr>
<tr>
<td>(370,000)</td>
<td>Tay Ninh</td>
<td>(N.W. adj. Kampuchia)</td>
<td>100,000</td>
</tr>
<tr>
<td>S-S Nghe Binh</td>
<td>Gia Lai Cong Tum</td>
<td>(West-adj. Laos)</td>
<td>40,000</td>
</tr>
<tr>
<td>(122 per km²)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(60,000)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-S Quang Nam-Đa Nang</td>
<td>Dac Lac</td>
<td>(South Central Highland)</td>
<td>45,000</td>
</tr>
<tr>
<td>(124 per km²)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N.B. These figures represent basic or minimal migrations; the directions of
the movements are of even greater importance for future planning; a
total of 4 to 5 million people were to be relocated during the 5-year
period after 'reunification' in 1976 including 1.5 million from the
H.C.M. City region.
The movement of people to the Central Highlands presents a somewhat different picture when contrasted to the soldier-civilian settlements on the Kampuchean border and the expansion and collectivization of settlements in the Southern Mekong River Delta. The Central Highlands contain the largest diverse group of ethnic minorities to be found in the former southern provinces. Security in some of these areas has continued to be a minor problem. The Central Highlands is presently the scene for an experiment in bringing together three socially and economically diverse groups: former urban residents of Ho Chi Minh City, Da Nang, Nhatrang, Hue; previous residents of Northern cities such as Hanoi, Haiphone and Vinh; and Red River Delta agricultural workers. These three groups, in themselves heterogeneous, are to be combined with local minority race peoples, many of whom are traditionally shifting agriculturalists, in establishing NEZ and developing state farms.

The Vietnamese regime set the rather dramatic target of moving 2 million people out of Ho Chi Minh City (the former Saigon). The target appears to have been based on an overestimate of Ho Chi Minh City population in the first place. An estimate of 4 million was often used, even though the 1976 census in the South counted fewer than 2.5 million people living in the city. It appears that the city's population had shrunk considerably since the ending of the war in 1975, through spontaneous movement back to rural areas. But at the same time, it is probable that the 1976 census count was a considerable underestimate. In any event the target of moving 2 million people did not result in the same kind of callous and brutal policies adopted towards the population of Phnom Penh in neighbouring Kampuchea. If the census figures for the two years are to be trusted, the population of Ho Chi Minh City in fact declined only 1.5 per cent between 1976 and 1979, and this was the result not only of repatriation of people to the rural areas but also of the movement overseas of the 'boat people'.

The scale of population movement associated with re-education camps has tended to be exaggerated in Western news reports. Soldiers of lower rank and lower-ranking civil servants were simply given short-term political courses, lasting from a few days to a few weeks, depending on the locality. It is not clear how many of the rest were sent to re-education camps, but it was officially stated that in 1976 the total number of detainees in re-education camps represented less than 5 per cent of the personnel.

In Vietnam as a whole, the proportion of population in urban areas fell slightly during the same period. The urban proportion of the population reached 20.6 per cent in 1976, but it had declined to 19.1 per cent by 1979. This was due to a sharp drop in urbanization in the South from 30 to 25.6 per cent in the period. The South, however, remained far more urbanized than the North, where only 13.2 per cent of the population lives in the towns (up from 9.6 per cent in 1960).
of the former regime, implying a number of about 65,000. In addition, there were also in the camps in North Vietnam 'a small number of other counter-revolutionary elements detained under Resolution No.49 in the early seventies'. The camps appear to be mainly located in rural areas and work in farming and land reclamation is normally required of detainees. Resolution 49 stipulates that re-education will last three years, but detention may be prolonged for a further and even subsequent 3-year periods, or on the other hand detainees making sufficient progress with their 're-education' may be released before a 3-year term has expired.

Goals for population redistribution 1981-85

By the time the Third Five Year Plan of 1981-85 was being prepared, Vietnamese officials had had time to take stock of the degree of success of population redistribution policies adopted in the early days of unification. It is therefore interesting to consider the long-term goals for population redistribution as stated by officials of the State Planning Committee in mid-1981. These officials noted that at present the distribution of Vietnam's 54 million population is as follows:

North - 28 million, with 2 million hectares of cultivated land;

South - 26 million, with over 3 million hectares of cultivated land.

In the year 2000, the State Planning Commission estimates that without redistribution 75 million people would be distributed as follows:

North - 38 million, with 3 million hectares of cultivated land;

South - 37 million, with 7 million hectares of cultivated land.

This would mean that even with a 50 per cent increase in cultivated area in the North, per capita land in use there would be little higher than at present, and that the South would draw even further ahead, owing to its greater land resources.

9 Another official source appeared to imply that there were only 20,000 detainees in re-education camps in 1979. ("Those Who Leave (The "problem of Vietnamese refugees"), published by Vietnam Courier, Hanoi, 1979:18.)


11 Personal communication.
To achieve a better balance between population and resources, the government plans to move 10 million people from North to South by the year 2000, thus avoiding the need to move food from the South to the North. One is inclined to view this target in the same light as some of the more unrealistic targets set over the years by the Indonesian transmigration program. If achieved, it would imply that numbers equal to the entire natural increase of population of North Vietnam during the next two decades would be shifted to the South.\(^{12}\)

The major destination areas will be the Mekong Delta, the plateau areas and the eastern rubber-growing areas, where there is suitable land available for reclamation. Government planners note that, allied with population redistribution, irrigation must be spread much more widely in the Mekong Delta and family planning practised so that the local population will not increase too rapidly.

In the period 1981-85 a target figure for population resettlement of some 3 to 4 million is proposed, but the figure is still under discussion. It is intended to discourage the movement of people from the North to Ho Chi Minh City, and the aim will be to hold the size of cities in the South constant.

Finally, some resettlement is planned within the mountainous areas in cases where the practice of shifting cultivation by the nationalities resident in these areas is causing environmental degradation. In such cases resettlement is planned from upland to valley areas.

The main target provinces appear to be the more sparsely-settled parts of the Mekong Delta - in particular, Song Be, Kien Giang, Minh Hai, and Long An. The redistribution of population is the responsibility of the Ministry of Agriculture, operating in close co-operation with other ministries which have the responsibility for provision of infrastructure in their field of operation. For example, the responsibility for the sanitary-medical network lies with the Director of Health Services in each province. The United Nations Fund for Population Activities has assisted in the provision of health and family planning facilities in Song Be province and is being requested to do so as well in Kien Giang, Minh Hai, and Long An. The targets set for the Third Plan period envisage the redistribution of 1,600,000 people to these four provinces, and the clearing of 1.5 million hectares of land in these provinces to produce 2 million tons of food grain.

\(^{12}\)Officials in Hanoi stated that the objectives of population redistribution in Vietnam are to make the country self-reliant in the area of food production, and to reduce on-going urbanization.
It is not clear what selection procedures are adopted for potential settlers in the NEZ, and whether a degree of coercion is applied to those released from re-education camps or the urban unemployed to move to these settlements.

Recently in one of the daily newspapers, *Hanoi Moi* (New Hanoi), the Hanoi municipality published in extensive detail regulations on the 'Rights of People in Hanoi Who Leave to Build the New Economic Zones'.\(^{13}\) The regulations include sections on allowances provided before departure, liquidation of property, allowances after arrival in the NEZ and grain distribution policy. For example under the provision before departure each 'primary' worker was to be provided with 50 dong, equivalent to one month's minimal pay for a basic worker, to buy 'essentials for daily life'. A per diem allowance of 1 dong is allowed while en route to the new locality and a family would be provided with funds up to 150 dongs to 'buy production tools' as an encouragement to 'overcome difficulties concerning life upon leaving'. The Hanoi municipality was directly responsible for household moving expense and each family was allowed to bring with them up to 500 kilograms of 'household effects - grain and food'. The liquidation of property was to be viewed in the spirit 'of unity and mutual assistance ... with those staying behind making a share to help those who leave to make a start in their new homeland'. However, if individual purchasers were not forthcoming, the collective was empowered to buy personal belongings and houses, and if it did not have the resources, collectives were empowered to borrow from the state bank to provide equitable funds for reimbursing the departing settlers.

The detailed provisions for settlers going from Hanoi to Lam Dong and elsewhere were as follows: (i) a house for each family based on the size allocation of up to 7.2 square metres per family member; (ii) land (between 0.7 and 1.0 ha) for building accommodation, orchards, livestock shelters for the first three years of resettlement; (iii) exemption from communal labour and building service, i.e. corvée; (iv) deferment of military service unless a general or emergency mobilization order is issued (*Hanoi Moi*, 18 January 1979:passim).

On 23 March 1980 the government issued more detailed regulations using the Hanoi regulations as an initial model. These were to apply throughout Vietnam to any individual family or group of workers-peasants contemplating resettlement. The issue of the comprehensive regulations was intended to standardize or at least to establish a minimal base set of allowances for the million and a half or more people who were expected to relocate throughout Vietnam during the year. The regulations included instructions

on the efficient employment of manpower and the proper training and orientation of workers before deployment to a new economic zone. It also made provision for surplus government workers who were to be transferred to similar work 'in the same production sector' in which they were previously employed. The schedule included hardship allowances for mountainous regions, border areas or offshore islands which amounted to 150 dong to purchase 'necessary personal effects', but only to 100 dong if reassigned to midlands or lowlands. The explicit details of the instructions merit quoting if for no other reason than to appreciate the kind of provisions the government felt necessary for a reassigned worker to ensure that the transfers were conducted in good order. They apply to workers—civil servants—tenants assigned for a period of a year or more to a state farm:

Upon departure, they will be provided with a mosquito net, a mat, a blanket and a jacket — a wadded [quilted] blanket and a wadded jacket, if they are leaving for the Northern mountainous regions, and a woolen blanket and a waistcoat if for other ones. Workers in brackish water areas will be supplied with a set of underwear every year. The cost of these items will be deducted from the resettlement allowance on the basis of the official supply price; no fabric coupons will be required. In addition they will also receive from the units they are assigned to a pair of trousers, a shirt, a pair of shoes or slippers, 1.5m of raincoat fabric and a hat.14

Four days later the Council of Ministers by Decree 95-CP issued a further set of regulations, somewhat similar to the ones mentioned above, but in greater detail and applicable to a wider range of NEZ activities and a more extensive range of potential resettlers. It has been entitled 'Development Policies for New Economic Zones'.15

It provided, under similar headings, a list of benefits, allowances and provisions for those undertaking resettlement, but in considerable detail. For example, a perusal of the personal clothing and equipment to be purchased from the allowance similar to the items noted above for government workers and civil servants reveals the following regarding 'labouring people and their families transferred to NEZ':

Before departure for NEZ they will be authorized to buy all


their rationed commodities ... The following and other items can be bought at state controlled prices without loss of ration stamps: quilted blankets and jackets ... mosquito nets, rush mats, women's sanitary napkins, raincoats and 4m of fabric for each labourer to make work clothes. Old people and children can buy additional winter clothing without losing their ration stamps depending on the local supply capacity such as scarves, stockings, and underwear (Council of Ministers Decree 95-CP).

In making a comparison between the two sets of regulations, it is apparent that there are considerable differentials between the provisions for the movement of a rural peasant to a collective or a co-operative, and those made for a state worker. However, the importance of the two sets of regulations lies in the fact that a clearly stated policy on movement regulations had been laid down by the central government, one which was at last applicable throughout Vietnam and covered most major groups of potential movers.

The Investment Policy in enlarging agricultural, forestry areas and developing NEZ was also determined by the government in its Decree 95-CP of March 1980. It provides extensive guidelines for investment on the part of both the state and the individual collective and requires planning and integration with other sectoral interests before funds are committed. The previous problems of inadequate planning, insufficient consultation between ministries and departments and conflicts between provinces sending and receiving settlers had led to a squandering of funds and inefficient development. Criticism has been levelled at the methods previously employed for developing NEZ where ill-planned ventures and inadequate supervision had discouraged many settlers, causing them, if they were able, to return disheartened to their original districts and home villages. In setting up a NEZ the state through its centralized budget has agreed to bear the full expenses for all 'projects designed to support production and life in an entire NEZ: projects whose fixed assets do not require a depreciation fund such as dykes, dams, bridges, protective dykes, sluices, roads, land reclamation, rice fields, building and the first transformation of the soil; administrative service, research, or experimental projects; and public welfare projects of production units' (Decree 95-CP).

16To clarify the status of these different workers, agricultural production units in Vietnam can be grouped in a hierarchy of four types: at the lowest level is the individual plot; then the co-operative (which has long existed in various forms in the South); then the collective, which is usually a grouping of co-operatives; and at the highest level is the state farm, located mainly in the North, whose workers are state employees.
The production-collective or co-operative in the new economic zone, however, would be responsible for the following items of expenditure which would be underwritten initially by investment capital provided by the state. These loan funds would have to be repaid on agreed terms, commencing at a time when the production-collective or co-operative started to earn a surplus from its agricultural activities.

Projects to break virgin land and build rice fields and transform the soil of these rice fields for the first time, projects to build and transform grassland and projects to break virgin land for afforestation and to care for and improve natural forests; public welfare projects such as nurseries, kindergartens, some classrooms, general education schools ... Establishments of ethnic minority compatriots, who have given up their nomadic life and settled in certain places to engage in agricultural cultivation will be given additional subsidies by the state to grow long-term crops and trees yielding special products ... Co-operatives and production collectives must strive to pay for the property [houses] of persons going to build NEZ in case of insufficient funds ... The state bank will give long-term [housing] loans to co-operatives and production collectives at a low rate (ibid.).

In addition to the regulations concerning personal allowances and resettlement provisions, the Council of Ministers Decree (Co-operative Investment Policies) required both the Ministries of Agriculture and Forestry, as well as provincial governments, to establish their own regulations and programs to recruit and train cadres or specialists in the running and maintenance of NEZ.

The Council of Ministers meeting in Ho Chi Minh City in August 1979 revealed considerable dissatisfaction with the progress of the resettlement program, and led the government to rethink its investment policies and rethink its plan implementation. The immediate administrative results may be seen in the subsequent (March 1980) decrees revamping settlement conditions, creating incentive schemes and requiring that much more careful planning, execution and follow-up procedures be implemented.

In order to encourage or stimulate production, the new 1980 regulations included a system of incentives designed to return to both the collective and its individual members the immediate profits of the first two or three years of labour. These are designed to stimulate voluntary movement to the NEZ and to ameliorate the difficulties of settling in. Dissatisfaction with life in many NEZ, excessive hardships and mismanagement were undoubtedly reducing the pool of people willing to move to these areas. The new
regulations noted that the 'Ministries of Agriculture and Forestry, together with the State Planning Commission, the Ministry of Finance and the State Bank must provide necessary guidance for shifting the investment system from the old to new policies to ensure continuous progress for construction, production and livelihood organization in the NEZs' (ibid.).

In 1980, the Ministry of Agriculture conducted a conference reviewing plan implementation for the 1976-79 plan and considering the programs of the current 1980 plan. The Ministry's General Department for Opening Virgin Lands and Building New Economic Zones reported that during the 4-year period 1976-79 some 527,649 hectares of virgin land had been opened and 83 per cent or 436,480 ha put to agricultural production. A statistical summary of stated achievements would include the information found in Table 8.3.

Table 8.3
Review of 1976-79 plan and 1980 targets

<table>
<thead>
<tr>
<th></th>
<th>Virgin land opened</th>
<th>Put into agricultural production</th>
<th>Of this amount - completed ricefields</th>
<th>Resettled population</th>
<th>Included labourers</th>
<th>Established: State farms</th>
<th>Co-operatives</th>
<th>Production teams for collectives</th>
<th>Targets for 1980</th>
<th>Virgin land to be opened</th>
<th>Resettled population, i.e. labourers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Virgin land opened</td>
<td>527,649 ha</td>
<td>436,480, i.e. 82%</td>
<td>183,645, i.e. 34.8%</td>
<td>1,170,580</td>
<td>619,162</td>
<td>150</td>
<td>280</td>
<td>365</td>
<td>150,000 ha</td>
<td>51,000</td>
</tr>
</tbody>
</table>

Criticisms of these four activities voiced at the conference noted that:

the motivation drive to open virgin land and build new economic zones continues to display certain weaknesses: the quality of work is not good enough and a large part of the already opened virgin land has not yet been turned into rice

fields. Some localities have even allowed improved virgin land to revert to its former condition (source as note 17).

The tasks, which the Department for Opening Virgin Lands and Building NEZ had set itself for 1980, included specific improvements in eight particular areas, all of which had exhibited severe shortcomings in plan implementation during the plan period 1976-79. The tasks, both in these areas and others, were to improve the organization of cadres; carry out technical planning and designing; perfect and complete rice field construction; and overcome problems associated with people's livelihood (ibid.).

As a more general summary of official policy of provision of incentives to people (especially from the North) under the population redistribution scheme, officials of the Ministry of Agriculture cited the following list to members of a UNFPA mission on 23 June 1981:

- cash payment for houses and gardens;
- transportation costs;
- free transportation of 800 kg of baggage per family;
- 40 square metres of land for a family house;
- 1 hectare of land free per family for its own free production;
- 6 months' salary;
- clothing for two years;
- one well per two families;
- schools;
- one clinic for one commune;
- simple drugs for each family.

It is not clear to what extent this represents the ideal and to what extent the reality.

Conclusion

This brief survey of population resettlement policies and programs in Vietnam suggests that the issues faced do not differ greatly from those in the ASEAN countries, despite differences in political persuasion. Problems of perceived population imbalance and the desire to hold down the proportion of the population living in cities have led the government to devote public funds to a systematic resettlement of population in underdeveloped areas, entitled 'New Economic Zones'. The scale of the program envisaged and the difficult financial and logistic constraints on attaining the targets places the Vietnamese resettlement program in the
same category as Indonesia's transmigration program, rather than in the category of the Malaysian or Thai resettlement programs. The tendency to overestimate the land available for resettlement and the capacity of the government planning apparatus to achieve resettlement targets, and to underestimate settlers' difficulties both economically and socially, are characteristics shared by the official land settlement programs of most other Southeast Asian governments in recent decades.
Part C
Discussion
My comments this afternoon are really in the nature of questions and queries. I do not have all the answers, but I hope that in thrashing out some of the ideas we can look for some feasible solutions. My focus is on how we could evaluate at the aggregate level - the macro and sectoral level - policies, programs and projects for land settlement.

The first thing that strikes me in literature on land settlement or land development schemes is that we have not made ourselves clear to the reader when we say some particular programs are successful. Are we talking of a set of policies related to land development in general, or are we talking of a program of land settlement in particular, or are we talking of projects within land settlement schemes as special cases? We have a responsibility to the reader to explain exactly what it is that we are trying to evaluate. This is the first task, because we need to strike some sort of consistency between the policy, the program and the project - within this set of factors. Of course later on we have to evaluate the policies as a whole at the inter-sectoral level - agricultural policies, industrial policies and the like - so I think we have to explain all these things to the reader before we can say a particular policy, or set of programs, or a series of projects are successful. It often happens that a particular project, say in the Felda scheme, is not very successful for various reasons, say at the level of administration, but it does not mean that the whole program is not successful. Again, if the program is relatively successful it does not mean the policy is very successful. We have to clarify all this.

We have also to clarify for the readers our criteria of success: are we talking about income? Land schemes are supposed to have as an important objective the raising of the standard of living of the people, besides PQLI (physical quality of life indices) and so on. What exactly is the important ranking in all these criteria? Income for instance, employment generation and labour absorption of land schemes or land ownership, which is meant to satisfy the emotive need for land amongst the landless people. How do we rank each of these? Because there can be conflicts.
After all they are using a piece of land to satisfy the triple objectives of giving income, giving jobs, and giving the security and status of land to the landless people - how do we rank them? There are possible conflicts in all these, and later I will explain some of them. Some of the land schemes also explicitly mention the population redistribution objective. This can be an end in itself or the means to an end, and again I am not clear which is which.

Besides all these, one of the most critical areas of evaluation which is completely neglected is the question of the time frame. You cannot say something is successful or not successful unless you have a terminal point; you must specify from what year to what year or what period to what period a policy, a program or a project is successful. To the administrators everything is successful because success is a function of time, so if it is not successful this year it is because there is not enough time to work out the problems. Academics or consultants must be more specific about a terminal point when evaluating whether a particular policy is successful or not.

I come back to the question of weights again because here it is very, very important. A piece of land, in the case of the Felda scheme, is about 4 hectares of rubber land, plus about 0.8 hectares for the orchard to grow fruits and about 0.1 hectares for the housing lot. In the case of oil palm it is about 5.5 hectares, 1.5 more because we feel that more is required for oil. Now this same piece of land is meant to serve the triple functions of giving jobs to people, realizing a certain minimum income and satisfying the emotive need of landlessness. But the question is we do not know how to rank each of these, particularly when we look at the problem over the life cycle of the family. When the settlers are invited to join the land scheme, their selection is based on the institutional criteria which are being implemented. In the case of the Felda scheme, we have a set of criteria that settlers should be young, should own no land or less than 1 hectare, should be married perhaps with two children, so they are at a very young stage of the demographic life cycle, the life cycle of the household. A 4-hectare plot has been decided on because it is estimated to fit roughly the labour requirement of 1.5 persons (the husband plus half the wife's time). If the planting density is about, say, 220-250 trees per hectare, 1.5 persons using alternate daily tapping systems could cope. But when the household size increases because of a change in the life cycle, then the role of the piece of land which is constant in size fails because the piece of land cannot absorb the growing labour supply of the household. Again, depending on the technology, the type of crop and the prevailing price level, the same piece of land may not be able to satisfy the minimum household income required by the people of the household. At the same time - and this is the paradoxical part of the problem - because we do not want to allow subdivision and sale within land schemes and hence the fragmentation that is
one cause of rural poverty, we have criteria which restrict either the development of the kulak system as one form of agrarian capitalism or fragmentation of land amongst the siblings and descendants. The consequence of this is that the land plot must remain constant in size, even though the household size has increased. At the same time, within the scheme itself there is no possibility of acquisition from other people. But again it would be rather unjust if Felda were to develop another land scheme nearby just to satisfy the requirements of the second generation, because you have a long queue of landless people in the rural areas wanting allotments. In any case we cannot cater to the second generation alone. So this is one of the causes of outmigration of the second generation, besides other factors which have given land schemes quite a sterile character.

So we have to be quite consistent about our ranking, our choice of criteria, especially when we say there should be some sort of consistency - internal and external consistency - between sectors.

The other question that we have to ask is about the costs of this type of land development. Very often we are only confined to the financial cost but both the accounting price and the opportunity cost of developing this type of land scheme are often forgotten. Moreover there are social costs. What about the local population which feels threatened? They incur costs; how do we incorporate these into the evaluation of land policy and development programs? Finally, what about the costs and sacrifices which are imposed on the sending areas? Because of the selectivity criteria that we use, only the able young people are moving out from villages, leaving the dependants and the older people. How does this affect the villages in the sending areas in terms of labour supply, loss of income, lower output, productivity, etc? Can some sort of technique like cost-benefit analysis take care of this? Perhaps it cannot but we are not sure. Nevertheless, these are real costs and we cannot ignore them. There has to be a shadow price with the proper weights given to them, but I am not sure what the appropriate weights are.

In our discussions we have also brought out the problem of scale. There are two issues here. One is the concept of scale from the viewpoint of the size of the program itself. Here I am not sure whether we are talking about size in terms of population size, or in terms of capital injection, or the physical size of the project itself. For instance in Malaysia the schemes vary from about 1000 to 3000 hectares depending mainly on whether they are oil palm or rubber. The appropriateness of the scale depends on whether we are talking about a cash crop land settlement scheme or the more recent kind of settlement program - an integrated rural development program involving the development of townships, tourist complexes and the like, with off-farm employment opportunities. If the latter, the concept of scale will change and it
becomes rather elusive. Here maybe one is talking in terms of a hierarchical system -metropolitan towns, intermediate towns, then the land scheme itself - and this is the direction Malaysia is moving in.

There is also another fundamental question which has not been brought out and that is the question of the size of the plot of land. This is very important because of the triple role which it plays. What is the optimum size of holding? The planners cannot answer this question easily. Apart from produce prices, it depends on the crop, the planting density, the tapping system in the case of rubber, the harvesting system, the topography, the character of the soil and so on. But unless we have some idea it is very difficult to distribute land equitably. We must know roughly the total amount of land which is available for redistribution in a country, and the size of the plot of land makes a lot of difference to this redistribution question. Besides, the size of a plot affects the minimum income which is available to a family, as well as the labour absorptive capacity of the land. In the case of Malaysia we have chosen 4 or 5 hectares. At one time we lowered it to about 3 hectares, because there was quite a serious base of unemployment in the rural areas. But we cannot keep on changing the size of the plots of land, because if we do it becomes a source of dissatisfaction amongst the settlers, and it creates problems of inequality amongst the settlers themselves. As it is, because of the different ages of the land schemes and the different crops we also have the problem of inequality. Oil palm producers have a higher income than do the rubber producers. Some of the land schemes which were developed earlier are now in the ageing process (15 or 20 years old) and facing declining yields. In another 6 or 10 years they will have to be replanted, so the income may also start declining. With a larger household, the average product definitely becomes lower.

There is another aspect of the second generation problem our land schemes have not yet been able to resolve. This is another paradoxical issue between modernization and family continuity. On the one hand we are trying to modernize the rural people, and on the other hand we expect them to remain in the rural areas. Yet it is hardly fair to expect better educated youths in the land schemes to remain and to continue what their forefathers have been doing. In fact, Felda has tended to contribute in many ways to this problem - first by breaking up the kinship system by bringing nuclear families into its schemes, and then through various factors restricting alternative earning opportunities, including the lack of industries or agro-based industries within the schemes or in nearby towns (most of the schemes are in the jungle area). The result is that youths (most of them are Malays), better educated and responding very favourably to the New Economic Policy, are migrating out of the land schemes. I think this is also contributing to the breakdown of kinship ties and the extended family system. In fact from some of our survey data, we have
discovered that the original settlers are not very bothered about whether their children want to stay on or not. To us this is a very liberal attitude, but it will create problems for the planners. At the same time, they do not worry whether or not their sons or daughters want to remain as farmers. This is a very encouraging sign from the point of view of population mobility, but from the point of view of continuing the household cycle and continuing the farming practices for which the Felda schemes train people, we are going to have a problem. I predict that what will happen if nobody from the family wants to continue cultivating the land in the Felda schemes is that the land will have to be given to another settler from outside. It cannot be sold to another settler within the scheme because this would create agrarian capitalism within the scheme and the Felda officials would not want this to happen.

One of the indicators of modernization is declining family fertility, but we have discovered in surveys of land schemes that there is not much change. In fact in many of the land schemes the fertility rate is very high and the average household size is around 5.6 or 5.7. This is a disappointing finding, but perhaps the government is not pushing the issue very hard, because this is an issue of arithmetic in the politics of development. However, it does lead to some problems in land scheme planning. Modernization is one of the objectives of land settlement schemes - in Kejora and other Felda projects. However, bringing people together in physical aggregates does not represent modernization. It will not lead to social change unless you inject more than this into the system.

What I find disappointing about land schemes in general and Felda schemes in particular is that one very important role of smallholders - the entrepreneurial role - is being taken over by the government. In the past, a smallholder did the tapping, the processing, even the marketing of the rubber. But the marketing function of the smallholders is now being assumed by the Felda authority, and this is not consistent with the aim of promoting entrepreneurship and independence among the rural Malay people. Our land schemes can also be criticized for adopting a rather rigid production function - the ratios between land, labour and capital. It would seem that the production functions which affect the land-labour relationship need to be looked into again. Kejora has developed another system, trying to divorce the relationship between ownership of land and the incentive to produce. This is a very sensitive issue and from our studies in Kejora and other land settlement schemes we have discovered that the settlers in Kejora are quite envious of Felda settlers because they always feel that they have the land. In the Kejora approach they cannot pinpoint it and say 'this is my plot of land'. However, when we ask them whether they would like to leave they say 'no'. The conclusion is that they are willing to go on but
they would also prefer to own the land because this provides the security part of their emotional needs.

The other thing to consider is how the economic structure of land settlement schemes could be diversified. As I have mentioned, the Felda land schemes are rather sterile in that they are cash crop economies, essentially no better than some of the former enclaves carved out of the jungle. They are very export oriented and there is very little food production. They become very dependent on the export economy. For employment, the people have to depend totally on the land scheme, which offers no other employment opportunities. If they are not close to smaller urban centres, another source of income and employment is gone. Where they are close to small towns, additional work may be available in the afternoons. The Kejora scheme has gone into integrated rural development and introduced dairy farming, cultivation of orchids and so on. In some other places such as Trengganu Tengah they have also tried to establish some small towns as part of the project, to supply some of the services needed, and to create some casual employment. It is not an easy task, but in the planning of land schemes in Malaysia we have completely neglected this part of land development - the cottage industries and agro-based industries.

Now another way to solve some of the demographic crises of land schemes which not everyone will agree with is to encourage outmigration of the second generation. Actually, there is no need to encourage them: they just move spontaneously as a response to the problems. Yet another way is to influence the fertility behaviour of the settlers. In the case of Malaysia this has a political dimension.

My general conclusion is this. The Felda model and some of the other models in Malaysia are not really appropriate for other countries - it is only suitable for land rich economies - and if you are land rich you do not have much of a problem. If you are land poor you have a lot of problems, and I think our Felda model is inappropriate. There are limits to the amount of land we can give to the landless and in time to come we too will have to tackle this problem. Although some people might disagree, I feel that we have created a very privileged group of people in the rural areas while there are still many people who are landless, whatever way we may define that. People in these schemes become very dependent on the government in various ways. The process becomes politicized very fast. If the price of rubber or oil palm falls, you can easily ask for a minimum income by holding a demonstration or by some other means. This is a big headache to some governments but the fact is that we have created a class of privileged people and we have to live with this for some time to come. On the other hand, we also have a lot of poor rural peasants who are cultivating the same crops on more uneconomic holdings.
If the price of rubber falls, they are not in the position to ask for a minimum income. What might be more desirable is some kind of stabilization scheme for these kind of people, whereby they could contribute to a fund in good times for the purpose of stabilizing income and prices.

Colin MacAndrews

It is difficult to address the issue 'how to improve the effectiveness of land development projects' because there are many answers. In my own paper I asked myself two questions. First, how could you make more efficient any particular land settlement policy, given that every country is different and there are so many political factors, which in turn shape funding, staffing, and the priority given to the policy. The second question I asked myself, thinking particularly of Malaysia, is how efficient you want a land settlement policy to be. My own experience in Malaysia and Indonesia indicates that it is not an advantage to have very efficient land development policies. It takes too long for people to adjust, or settlements to grow - it is a matter of 10 to 20 years. So forced growth à la Felda - and I am a great admirer of Felda - has its problems. You cannot change people so rapidly, therefore I think the Indonesian model where people are thrown out into the outer islands and left to survive, and do survive, is a very good example of the resilience of people in those conditions, and their ability eventually to build up their own community. It raises a very real question in my mind as I move from Malaysia to Indonesia in my research work of what you really want to do in land settlement. Do you need an integrated land settlement unless you have certain political and economic objectives? What are you investing in?

Keeping in mind the questions we have discussed, I came across three main problems in looking at land settlements, particularly in Malaysia and Indonesia and also other Southeast Asian countries. The first set of problems arises from the lack in most countries of a consistent, well thought out, long-term land settlement policy. Present policies may meet certain short-term objectives - people have to be moved, as in Indonesia. There are natural disasters as in Indonesia, there are political motivations - for example the Chinese New Village relocation in Malaya in the early 1950s, the recent idea in Indonesia that land settlements should be opened up on the borders as strategic outposts. But there are very few land settlement policies that look at land settlement in any time frame - say 10 or 20 years - and look ahead to problems of second generation settlers, look ahead to problems in adjustment, look ahead to integrating those settlements with regional plans. Even the Malaysian Felda, whose recent schemes have been remarkably well planned in many ways, has problems in the second generation, and in handing over its schemes
now. For 20 years it has shown how to set up and manage projects and then in years 20 to 25 it has encountered major problems in trying to hand over schemes to the settlers. Management cannot just walk away. What do you do?

The second group of problems could be put under organization, inadequate short-term planning, inadequate provision of inputs or services at all stages of settlement. In Indonesian programs we found cases where food subsidies or rations had never arrived, we found housing not built, land not cleared, inadequate staffing, staff who were not land settlement people but government bureaucrats posted there thinking only in terms of administrative orders they must carry out. They were not really interested in the settlers, who were seen merely as people down there who come in and report to you and who must be successful and you provide certain services to them. They had no specific interest in them. Perhaps I am being particularly hard just to bring out the point. There has been a lack of care in the choice of settlers themselves. I was interested to see in Thailand that they are settling beggars from Bangkok, the sort whose settlement failed in the Indonesian case. Generally people who do not have a background in agriculture do not survive or adapt very well.

The problem of inadequate management in the settlements is one applying in most countries, except Felda in Malaysia, but it would probably apply to a number of other land settlements at the State level in Malaysia - fringe alienation schemes, state land schemes apart from Kelantan and so on.

The third problem is failures of pre-project planning, which arise partly through failure to provide adequate and dependable sources of funds. The lack of timely funds is one reason why there is very inadequate planning in the pre-settlement stage, very few site surveys, inadequate land planning, and no design of the whole complementary set of inputs.

How would we improve land settlement programs and make them more effective? One important need is to provide for a clear articulation of policy, both short and long term. In looking at two or three countries, one can see various mechanisms by which policy is articulated, although sometimes not very clearly. For example, when the World Bank comes in to give a loan, it sets various conditions and requires all kinds of restructuring, especially on the accounting side, and this does bring about changes in settlement policy and some forward thinking. This happened in Indonesia, and also in the Jengka Triangle in Malaysia.

Another stimulus to thinking lies in the need to draw up statements for Five Year Plans. Most countries have a section in the Five Year Plan on land settlement and on its general aims. This statement may be very general, just one paragraph or one page,
but it does set it in the general priorities of the whole plan for the next five years in each country.

Again, there are in Malaysia and Indonesia small units, usually research units, in Felda or in Transmigrasi. Unfortunately in both cases these have failed to develop into policy units. In the case of Malaysia, the Trolak Training Centre was envisaged in 1975 as a research and training centre but it is seen now mainly as a training centre and has very little impact on policy. The fact that it is away from Felda headquarters in Kuala Lumpur is a disadvantage; but even if it were located in K.L., one could ask 'how does a policy think tank feed into decision-making in a land settlement policy or program which is action oriented, which has to meet priorities, which cannot stop and think (and which does not like social scientists)?' I often wonder why social scientists are so unpopular. Looking at the Indonesian structure, every time you want to bring in a social scientist as a consultant there is reaction against it, perhaps because you cannot fit a social scientist into a slot as you can a technical person. He or she does not fit into methods or ways of thinking. He discovers all sorts of things and is a disturbing force, in fact a little dangerous.

I think it is very important that a land settlement authority, given that it has political backing and funding, has some sort of policy thinking unit that looks at the present policy, thinks 5 or 10 years ahead, and conducts evaluation and that this unit is somehow built into the mechanism so that it has some effect. Rather than let it just evolve by itself like most think tanks, which draw up reports which are never read, somehow it must be so integrated as to have some input. In Sri Lanka there is such a unit which reports to the Ministry and does apparently have some effect on policy. In Felda I think it does not - although it could. In Transmigrasi there is a unit doing research but only research. A unit is being set up at the moment in management, to monitor transmigration schemes. It may or may not work, but that is the sort of thing that is required.

In terms of organization we find two chief models. You have the Felda model which is a semi-government model, and which I think in many ways is an ideal one. This enables you to recruit a different kind of staff - people you can pick yourself using a slightly different pay scale, people who are more motivated and interested in the settlement process. In my own time working with Felda, I was struck by the dedication and interest of Felda staff in what they were doing. A group might come home on a Sunday night from the field and they would be in the office at 7.30 or 8.00 o'clock the next morning. This always struck me as very unusual in a country where it is normal to be in much later in the morning after a tiring trip up country. In Indonesia, in my own Ministry (Home Affairs) they do not always get in at all the
next day after a trip to the outer islands. Such a semi-independent model has definite advantages. In particular, it enables you to get around the inability of government departments to work together in developing countries. But it has to have the funding and the authority. I remember in the Philippines talking to the Department of Agrarian Reform, which is a government department admittedly, and they pointed out to me that they got less per diem than other civil servants in the Philippines when they went out to the field because they were seen as being less important. So it is essential for a semi-government authority to have the funding, status and authority to do its work.

The other model which we find in most countries is to work inside the government. Given that there is political will behind the land settlement policy, that there is a need (as there is in Indonesia now) to move people and to be seen to move people and that the funding is there, then I think that a government organization can work. Its problems are those of having government bureaucrats who are posted in and out of it, fighting other government departments and usually having a lower status. Allied to that is the need for more comprehensive planning, the examination of settlement sites before they are opened up, the examination of local land rights, and the need to take into account local peoples' interests. However, I do not fully agree with Patrick Guinness because the more you offer people the more they want. Therefore if you are a bureaucrat or someone who wants to open up a settlement, you may often prefer not to take the local people into account because they are going to offer you so many problems - demanding land rights, access roads, different location of schools - and the demands will escalate. I think these are the kinds of reasons government officials in Indonesia seem to stay away from local problems. If I were in their chair I would too. I would not want to know about land rights or about other things I could do. Perhaps I could buy them off, give them an access road, but I would know that the more demands I generate from them, the more difficult it will be for me to open up that scheme. Therefore I think it is necessary to find a meeting ground where you can clarify land rights, where you can work out how you can fit together these two very different groups who are going to have to live together in the area, particularly where they are closely pushed together, as in Indonesia in some cases.

Training is another essential - training for your staff and training for the settlers. This is very often overlooked. You find training provided in Malaysia in Felda, but not to any extent in most other countries. This is training not only for top level management, who need it in most cases, but right down to the field level. Felda is very good at its training - settler training, training in community development, and extension work. Then I think you have to make sure that there are adequate, well-planned services, delivered on time. Felda in its early days (until 1975)
was as bad as most land settlement institutions. But in every land scheme one finds that the pioneers miss a season, they cannot plant because the seeds did not come, the facilities are not there, the access road has not been built. There are so many disaster stories common to land settlement in most countries and the answer is that you have got to put in inputs when they are meant to be put in, not just in infrastructure, but in clearing the land, providing the materials to build a house, providing access to a market, providing some form of credit.

At the beginning I raised the question, how efficient land policy has to be to be effective? I think you can be like Felda and you can build in, for a variety of background reasons, all kinds of input into a land settlement, but the question remains how much you change people over time. If you aim to build up a self-reliant community, are you not going to smother that with all your inputs and build up that paternalism which you find in Felda Malaysia? Felda does not want to give away its schemes and the settlers are scared to lose Felda in most cases. Nobody can work out who owes what to whom. It is a very complicated situation. You find a similar situation in African land schemes. One African study showed that it is a very dangerous problem. If the government helps too much, you have the problem of not building up the self-supporting community. In Indonesia I have had the experience of looking at, in some cases, horrifying land settlement projects which had been neglected and abandoned. Settlers have gone there – they thought they were going to one island but they were taken to another; when they got there the land had not been opened, nor the houses built, yet they survived. There is an immense resilience of the individual, specifically in Indonesia but I imagine in most societies – a capacity to survive and support himself. In land settlement projects this should be taken into account and the government inputs somehow measured to see that they are not over-extended and over-provided.

R.M. Sundrum

We have been discussing the problems of land settlement. But the Agenda originally said only 'resettlement', and somehow the word 'land' got added to it. I want to go a little further and see where this fits into the broader scheme of things. If I take a jump back about 100 years, they did not have this problem and governments were busy doing something else, so people had to fend for themselves. Then we notice one surprising thing – that when you leave people alone, and when you give them a lot of time to adjust, there is a kind of adjustment of population to the resources of the country, given the technology available. It is not for nothing that certain places are highly populated. Java's high population in those days was a function of its fertility and its ability to support a lot of people. Then, thanks to the
doctors and other people, something went out of the normal time phasing. Population started growing much more rapidly everywhere. That is why we now have to look at the problems we are worrying about - the fast and unprecedented population growth that upset the former balance between population and resources.

So what is the answer? We economists are now going around arguing that development is the solution to the population problem so I would like to put our concerns here in that context. Let us look at it as the development solution to the population problem, a title which I have stolen from Pan Yotopoulos, who wrote a book on it. I find that one of the dichotomies which came up in a number of the papers here and the discussion then disappears completely. Is the Indonesian transmigration program a population-pressure-relieving program or is it a regional development one? To me they are the same thing because they are opposite sides of the same coin. Once I have reached that far, I admit one thing - that development is not completely under our control. Our governments are not able to do what we want them to do. Therefore in addition to pursuing general development activity you may have to redistribute the population - or to put it even more mildly it would be a good thing if some population got redistributed in the process because you cannot match development to the pressure of the population which has been built up.

So I now face the question from where I started this part of the argument - a certain amount of resettlement is necessary, or, to use a more cautious phrase, redistribution of population. Immediately I say that I make a big distinction (more sharply than I have heard it stated so far) between official, assisted, directed movement of people and spontaneous migration. Mayling Oey has given us a quotation from Keyfitz, the great demographer, who suggested that the success of an official program can be measured by the extent to which it stimulates a spontaneous flow. I think this is a guiding principle - we cannot possibly assist officially the movement of all the people we want to move. We must think of the role of spontaneous migration. Therefore I want to take Keyfitz's formula very seriously and look at the programs we are thinking about from that point of view. How far do they support and induce spontaneous migration?

I can think of a lot of spontaneous migrations that have taken place. I come from Burma, where the wicked British came in the mid-nineteenth century and took over part of the country and cleared it out for the rice trade. Within the space of half a lifetime, half the population of Burma moved from north Burma to south Burma to carry out the reclamation of the delta. When incentives were right, people just packed up and started moving down. There is a nice phrase used by Professor Bernardelli when he said 'As a result of this, Burma emerged at breakneck speed to become the world's greatest exporter of rice'. This was a
fantastic piece of spontaneous migration. At the same time, there was an enormous migration of Indians from India to Burma. The story is told that an average of a thousand Indians would enter the city of Rangoon each day. So you can see this almost perfect market, this spontaneous movement of people, and it is with these sorts of memories that I look at what is happening now.

While we are worrying about weaknesses in the Indonesian migration processes, I have been looking at the statistics on it. I think the 1971 census of Indonesia gives us a very interesting piece of information—that while the government was scratching its head and we were busy criticizing the government, saying they were not doing enough to move people out of Java, there was going on very quietly this spontaneous migration of about the same magnitude in the opposite direction, all heading for Jakarta. There was no official assistance of any type given to these people. It is clear that a substantial amount of spontaneous migration does take place, given a certain amount of inducement to do so. Therefore, I think we should look at some of the things we are talking about from that point of view. Can we set the inducements right for bringing about a sufficient amount of spontaneous migration in desired directions?

The first question I ask is—why is it that in almost every discussion of transmigration, the word 'land' gets mixed up in it? Where in this flow of argument does 'land' come in? Why is it that we assume straight away that when people move they move to land, to agriculture? Why are we taking the present agricultural concentration of the workforce and fossilizing it—why not some other thing? With this in mind, Professor Arndt and I wrote a paper entitled 'Transmigration: land settlement or regional development?' This was a comment on a book by Mrs Hardjono who is unfortunately not here. It seems to us that she pressed the case for land settlement. As against this, our case is that in order to make spontaneous migration more attractive and larger in volume, we have to make the receiving area more attractive. The best way to do this is not necessarily by taking the poorest farmers, the almost destitute people or the most undesirable people, but by taking those people who can do the best job in the receiving area. If the object of the official part of the program is only to induce a spontaneous movement, the consequence of our line of argument is that we should choose the people who are most able to contribute to that process, that is those people best able to implement the government's development efforts. Maybe some of the most skilled people in Java have to go out to the receiving areas in order to promote the spontaneous movement of other people.

Once we have reached this point, we get different answers to many of the questions that were raised, for example, the question of numbers. How many people should move from Java to Sumatra? The latest plan is for 2½ million people to be moved in five years, and we all say this cannot be managed. But frankly I think that is a very reasonable target providing it refers to spontaneous plus official migration. It is only when you think of 2½ million people being moved by completely assisted programs that we become a little sceptical. Then there is the question - what sort of people? The answer is people who will encourage other people to move. Thus, it requires skills, and it also requires maybe people who come for wages, not for the inducement of being able to cultivate their own land. Maybe it should only be public servants who are to be moved, if they can contribute to the development of the receiving area. I think that should be the prime concern.

Costs. Frankly, I did not realize until today that the average cost of moving a family in Indonesia was down to $1200 or something of that order. I only read the World Bank report on the subject and was horrified. Indonesia cannot afford what the Malaysians are doing - $5000 per family. So I thought that the cost was too high. I do not mind spending $10,000 per family on assisted persons if that family can then induce another twenty families to come in on their own, because the average cost goes way down so, and cost reduction is also part of this program we are thinking about.

One of the points that came up a lot in our discussion, and I think quite justifiably, concerns conflict with the locals. If there is only one piece of land and two people want to claim it then there will be conflict. But if the man who is coming in is going to develop the land or increase its productivity, whether it is for the locals or for the migrants, I think there is room here for reducing the conflict, and scope for better integration.

One of the big arguments we had was about the co-ordination of all the effort. If it is development that we are after, this is an ancient battle. Development is a many-splendoured thing, it requires many ministries to handle it - it is difficult to do anything without co-ordination in the name of development. The problems we are talking about when we say 'look, eleven ministries are involved in a simple thing like land settlement' look horrible. But I think when the object of the official transmigration program is merely to promote spontaneous migration and we look at the matter as developing the country, the co-ordination has to be done lower down than the ministries at the central government level.
First, in regard to what Paul Chan was saying about optimum farm size: a couple of years ago in our office we had a lot of trouble trying to determine what the optimum farm size should be. The actual average varies from one place to another: in some places the average is 3 or 4 hectares, in some other areas about 6 hectares. But then in northern provinces such as Chiengmai, the average land holding was around 1 hectare or less. I knew that if we attempted to use theoretical models — mathematical models, input/output models, linear programming models to determine optimum farm size — it would take years because of lack of data and uncertainty about the quality of the statistical data available. I actually tried to devise a model but soon decided that this was not the way to do it. What I did was just to wait until the right moment and then give a small paper to my boss saying 'There is an urgent need for us to determine the farm size. We don't have much time. Either you have to make your own decisions now or we have to wait until next year. But by that time we will not meet our target.' The response was 'Let's go ahead. What do you suggest?' So I put up a few criteria for determining farm size. The first was the average size of holding, second, the model size farm in the area (the size of holding that most people tend to have), third, the soil fertility and the question of land use — what sort of crops are going to be grown in that particular type of soil and so forth. Lastly was the consideration of the potential number of population that are going to be allocated land. These criteria were very quickly accepted, and we are using them at the moment. They are not ideal, but in planning you do not have much time — time is not on your side, usually. And that is the way we arrived at our decision.

Next came the question of spontaneous migrants (in Thailand usually referred to as squatters). In Thailand, these people have a piece of land somewhere in the forest, so it is not a question of new settlers going into new land. These spontaneous migrants have been there all the time — some for as long as 50 years but without title. The size of their land holding varies from one family to another. Over the 3 or 4 years that we have had a resettlement program in our office, we have fixed a size of land for each family. For example in a particular area using these criteria we set the farm size at 3.5 hectares and that is what we allocated to each settler. Of course, some of the migrants have more and some have less, so the question arises of paying the larger landholders and getting the money back from the smaller landholders — those who have less than 3.5 hectares. People keep asking us 'What are you doing on your forest land? You are paying money for the land you own?'

We have a lot of problems and the work is very slow. Right now we are shifting our policy from fixing a single optimum farm
size in any area to fixing a range. We are not saying that we would like everyone to have 3.5 or 4 hectares, but we have set a range, from say 2 hectares to 5 hectares, so that if farmers have land below 2 hectares or more than 5 hectares we have to do something about it. As for those spontaneous migrants or squatters who have land between 2 and 5 hectares, we just leave them there without touching their land holding. This is the kind of compromise I am proposing at the moment.

My second point is on the project phase-out. This was mentioned in my paper, but not elaborated there. I would like to propose that as far as Thailand is concerned, since we have more than 200 project areas all over the country, and most of them have been with us for many years (some for even 25 or 30 years), it is about time for us to phase them out. We need to move all the staffing and the housing and buildings to service them elsewhere. So far we have achieved very little in comparison with the potential work to be done. Once we have a project going, we tend just to stick with it, and there is no end to this. In our office, we are restricting ourselves. In any area where we have a resettlement project going on, we are not going to be there for more than 10 years. After 10 years if we have not achieved much we are getting out of the place. If we have had some success we are still going to get out of the place, and move elsewhere. There are likely to be some issues about how to terminate the project, what sort of criteria to use in order to say that this project has been going on for some time, that the farmers are quite well off, and we had better close our project.

My last point I think is quite relevant also to countries like the Philippines: the question of land titles in the public land domain. In most of the public land which we provide to the farmers we are not giving farmers title. Full land ownership is still vested with the government. Farmers themselves are actually tenants of the state. This rather conservative idea has been held by the government bureaucracy for some time. Most of the government officials think that since the land belongs to the government it should remain with the government. But I think you cannot escape the fact that government itself is unable to cope with the problems of looking after its own land, when there is so much land to be taken care of. Why do we not just provide these farmers with full land title and then forget about them as far as land rights are concerned? I think failure to do so is the reason why, in most cases, resettlement projects in Thailand keep on going. Farmers themselves cannot be free of the government. They have to stay within the project; the land itself still belongs to the government. How can we help other spontaneous migrants if we simply have to continue with all the old projects? At the moment the question of land titles is crucial, but nobody cares very much about the policy change I am suggesting. I would prefer to help these farmers to be the full owners of their land, but what I am saying is not really the official policy line. However, I think time is on my side.
Comments

Question: How in practice do you get the national policies reinterpreted and get them operative at the grass roots, below the provincial government and district government level?

Colin MacAndrews: In one specific country like Indonesia? In Indonesia it is very simple - it operates through a system of presidential decisions or letters of instruction from the minister who formulates the policy and which is then sent out to all governors. This acts as the policy instrument for that particular policy right down to the district level. To take an example, the recent presidential instruction that the Ministry of Home Affairs reinforce the role of the provincial planning body in all the provinces in Indonesia was a 25-page document which set out very precisely their duties and how every department should co-ordinate with that particular body. That was distributed to all governors and then right down through the system to the sub-district level, and that was the piece of paper to be acted on. That piece of paper in the Indonesian system is almost too powerful - if once something is put into an instruction and the originator then wants to alter it, another instruction has to be put out.

Question: In relation to the national policies connected with migration, is the same kind of planning system operative?

Colin MacAndrews: I am pretty certain it is. There is a Transmigration Co-ordinating Board instruction which lays out precisely the role of the Co-ordinating Board in transmigration, the goals of transmigration, how it is to be organized at the national, provincial, sub-provincial level, down to project level. It is a document of about 20 pages, I think. It is an effective way in a large and differentiated country to make people aware of policy and to get the large bureaucratic system aware of what has been laid down. Everybody goes by that piece of paper. This has its advantages and disadvantages.

Rey Crystal: When you talk of the need to clarify short and long-term policies, do you mean policies of the settlement project itself or policies in relation to other developmental objectives?

Colin MacAndrews: I was thinking only of the settlement program because my experience shows that very few settlement organizations do any form of planning. They are action-oriented to meet specific demands or to open up specific projects.

Rey Crystal: That is why I raised the issue whether we should relate it to other development objectives.

Colin MacAndrews: I think if you have such a planning unit, if you can make it effective inside the structure, transmigration
would relate with Bappenas (the National Planning Agency) and Home Affairs (because that would decide where the project would be opened up), and leave it to the other ministries to decide where it would be appropriate to open up such a transmigration scheme. As it is, I think it is pretty ad hoc. I am not too sure who makes the decisions. The first priority of a planning unit would be to look at the settlement policy itself.

Dan Etherington: I would like to ask Paul Chan - in Malaysia has there been any thought given to reallocation of rubber holdings in order to allow for some flexibility on the size of holdings? You have mentioned the second generation problems, people moving out and the problem of rural capitalism (individuals who can acquire a good deal of land). But has thought been given to the reallocation of land in terms of family size and some need criteria? It seems to me in a rubber/palm oil type economy such reallocation should be a relatively simple problem.

Paul Chan: It is not so simple. We think we can resolve all these questions by a few technical functions, but when you plan at the practical level everything becomes politicized and it is very sensitive.

Dan Etherington: I was thinking for example of the Rubber Research Institute - the Risda [Rubber Industry Smallholders Development Authority] program - where they do reallocate in order to allow for greater expansion of size.

Paul Chan: Yes, I have heard of this experiment. They are doing it in Johore. I think that what they are trying to do is to buy up a few estates, reallocate them and pass them on to selected people. Essentially I think they are working on the same principle as Kejora - settlers do not own the land but they are given wages and share the dividend, bonus, etc. Perhaps they have a feeling of belonging to the company. But in the case of existing land schemes I doubt if they can do much with this approach. Perhaps Risda can continue to experiment with it in the future. We must remember that land scheme development, at least for Malaysia, has historically been a political expedient. The government has so far avoided agrarian reforms, and we have not wanted to encroach on plantation interests, so the easiest way out is to cut down the jungles and develop the land for the people. For some people, it appears to be the most expedient way politically speaking, but of course, as we have discovered, in time to come there will be a lot of limitations.

Dan Etherington: The RRI [Rubber Research Institute] does have a scheme which allows for the reallocation of trees to exploit. In other words, your tapping area can be reallocated over time to get gradually bigger and bigger as the opportunity cost of labour gets higher because of urbanization and industrialization. That degree
of flexibility seems to make a lot of sense.

Bahruddin Hashim: We do not know the results yet but if they are favourable, we will implement it. In Kejora we have one such scheme undertaken by the RRI but we are cautious about the results.

Paul Chan: There is another dimension to this problem and that is the problem of fragmentation, involving thousands of people. We have to go through the whole legal problem. It is quite a massive issue, I think.

H.W. Arndt: I would like to follow up what Dr Sundrum said. I think our starting point in that article referred to [BIES, XIII,3] is that the case of Indonesia is fundamentally different from that of the other countries we are talking about. In the other countries, as has been said, it is a case of land being available and it is simply a problem of settling some of the landless people and people who are not adequately provided with land. In Indonesia the problem is one of the extraordinary population and resource imbalance of a country with a population approaching 150 million now, Java with almost 90 million people on an area rather less in size than Peninsular Malaysia. In relation to the dimensions of that problem the concept of land settlement, which is appropriate enough in the case of Felda in Malaysia, is inadequate. One cannot but feel that the target of the Third Five Year Plan to move 2.5 million people within the context of land settlement is utterly unrealistic. There does not seem to be the slightest prospect that anything like 2.5 million people will be moved in the next 4 years under the traditional concept of transmigration, of taking farm families from Java and helping them to become farm families again, growing their rice and perhaps cash crops somewhere on the outer islands. We have now got 50-odd years of experience and it just does not work.

That does not mean that the sort of approach that Dr Sundrum and I have put forward will work. It encounters enormous difficulties too. But it does seem at least possible that effective regional development of the outer islands and some degree of correction of the population imbalance could be feasible if the emphasis were on providing wage employment opportunities in the outer islands for spontaneous (voluntary) migrants. It is very important in relation to what Dr Suthiporn just said to realize that we are not thinking of squatters. Squatters are people who occupy a piece of land to farm illegally. We are thinking of attracting to the outer islands hundreds of thousands of people (young men, in the first instance) who would go out there because better wage opportunities than in Java are offered. Where will the jobs come from? That is a big question, but in the first instance they have to come from public employment, on public works, to create the infrastructure, in transport and other areas, without which regional development of the outer islands - Sumatra, Kalimantan, Sulawesi - is impossible anyhow.
The whole notion that you can get regional development by means of land settlement, which has dominated official Indonesian thinking for the last 10 years, is unrealistic. Land settlement is very useful for the people who are given the opportunity of growing some crops in somewhat better conditions than at home in Java. It is a form of social relief for poor people, but it cannot contribute significantly to regional development in the outer islands. The need there is to create infrastructure and, hand in hand with that, to begin measures to attract more industrial development for which there are already growth points in Sumatra's petrochemical industry and in the forestry-based industries of Kalimantan.

The evidence that Dr Sundrum brought together [in BIES article cited] of Indonesia's own experience of spontaneous migration from Java to the outer islands is extremely encouraging. He showed that in the last 10 years there has been a lot of spontaneous inward migration to Java, but there have been periods in Indonesia's history when there was massive spontaneous outward migration from Java to the outer islands. When the plantations were being developed in the Medan area of North Sumatra many decades ago there was some assisted migration but also a lot of spontaneous migration because wage employment opportunities became available in these plantations. Again, in the 1960s in Kalimantan, owing to the forestry boom, tens of thousands of young people moved to Kalimantan because waves ruling there were about ten times what they were in Java.

A few months ago, I put this problem to Drs Kartomo who said 'Yes, I entirely agree that spontaneous migration is very important, but it is not the concern of the Department of Transmigration. Spontaneous migration belongs to the Department of Home Affairs.' I was dismayed. It seemed to me that on this crucial question these two parts of the government apparatus were not getting together at all. I was therefore cheered and encouraged when, if I understood him correctly, Drs Kartomo said this morning that official thinking is moving in these directions.

Kartomo Wirosuhardjo: When I was here a few months ago I discussed the concept of spontaneous transmigration on which I worked as chairman of a committee in the Department of Manpower and Transmigration. A government regulation is being prepared to incorporate this spontaneous migration into the law. I do not know whether I was understood correctly when I was here: actually the thinking is exactly the same as that of Dr Sundrum and Professor Arndt. It is a concept of spontaneous migration in developing the outer islands. In fact now, for example, the Minister of Agriculture is defining a project in which sugar factories will be located outside Java. The experience was that only Javanese can work in sugar plantations because of the hard work. Then Minister Habibie had plans for kasgohal the idea of setting up units based on nuclear estates in which cassava and sweet potatoes will be produced by transmigrants and processed into alcohol.
The point is this — the people who run transmigration now are not really transmigration people, they are just bureaucrats. But then — actually what kinds of people should run such a project? Perhaps Dr MacAndrews could enlighten me on what kinds of people could run it properly. There is currently some resistance on the part of the Department of Transmigration to this concept of spontaneous migration. The law of 1971 says that eventually all transmigration should be spontaneous. General transmigration will be abandoned and a move made to spontaneous migration. That is now the policy, but there is a strong resistance on the part of the bureaucracy because they do not know where they will be if it becomes spontaneous migration.

In the past the emphasis was on food production but now as well as food, it is on export production, nuclear estates, mining production and business and so on, so it is much more than just land development.

Lorraine Corner: I agree that spontaneous migration should be much more fully discussed. In the Malaysian context this is known as squatting. The formal land settlement authority could learn from the experience of the squatters. The following questions arise: What is it that persuades the squatters to move compared with their neighbours who stay? What are their connections with the destination area which facilitate the move, that assist the creation of a new community and the migrants' integration into it? Can these circumstances be artificially duplicated in an officially sponsored program?

Spontaneous so-called squatter settlement has a very long history in Malaysia, right back to the feudal period, and has always been the most common method of land settlement. Nowadays this kind of settlement poses an embarrassing contrast with the highly capital-intensive government schemes and a challenge to government control in terms of environmental planning, regional economic planning and even law and order. So such settlements in recent years in Malaysia have been officially harassed. Apart from the general threat posed to government control and planning, they also threaten the conventional orthodoxy of land settlement policy. For example, on settler participation in establishment of schemes, according to Felda it is uneconomic — it is cheaper to hire contractors to do land clearance using capital intensive methods and contract labour. Early Felda experiments with settler participation failed, and Felda interprets this as meaning that participation per se does not or cannot work, rather than that the particular organizational method and institutional structures used to introduce settler participation were failures. Yet squatters have to do all the improvements and clearing without assistance.

I understand that there are some second thoughts and a squatter settlement scheme will be incorporated in the Fourth
Malaysia Plan. This rethinking may also result from second thoughts about the potential of Felda-type schemes in achieving a significant impact on the overall rural poverty problem. These schemes create a small class of very affluent peasants - the sort who have been called kulaks in other contexts - and widen the gulf between these and the rest of the rural poor. Because of its extremely capital-intensive nature, a Felda-type program can only reach a very limited proportion of the rural poor. Second thoughts might also arise from the social problems arising in Felda schemes - for example, excessive reliance on government to solve every little problem, lack of the much-needed qualities of self-reliance, independence, entrepreneurship, initiative and so on. We need to pay more attention to the social implications and perhaps also the socio-psychological implications as well as the more obvious economic implications of these kinds of settlement programs.

Perhaps it is possible to incorporate more elements of spontaneous self-motivation into official schemes. But politically it might be too late in Malaysia, because the demonstration effect of Felda might be too strong for general acceptance of do-it-yourself settlement within the government sector. Perhaps there is a lesson here for other countries.

Gavin Jones: A point of clarification. The term squatter in the Malaysian context refers to land settlements similar to those referred to by Dr Suthiporn when he talks of squatting on forest reserves in Thailand.

Patrick Guinness: My paper also describes the spontaneous migrants whom we surveyed in Indonesia. There were hundreds of families who had moved spontaneously from Java to settle around about a thousand army veteran families who were established in South Kalimantan. These hundreds of families who had drifted either from Java or had moved from failed transmigration settlements had in fact become very successful settlers. The reasons were firstly that in many cases they had people to whom they could move - either friends, acquaintances or relatives who were already established. These were able to give the movers jobs or employment for a period when they were still working out what to do, where to live, and how the system worked. The second thing was that because they were landless when they arrived, they had to negotiate with the local villagers for land, and many of them began their years of settlement there by working full-time for local villagers. So their relations with the local villagers became very good. Third, they experimented much more widely with crops because they were not required to plant a particular crop or given particular seeds. They did their own experimentation. In fact what happened was that many began to grow bananas, and bananas turned out to be an extremely successful crop, completely replacing bananas which to that stage had been imported to Kalimantan from Java (flown over from Surabaya). This is just an example of this sort of
development; here we have people who are moving of their own will, doing their own experimentation, and establishing very good relations, not only with previous settlers but also with local villagers.

Rey Crystal: A case was made that spontaneous settlers could be very effective in inducing others to move from other areas. However, if you are talking about squatter settlements, there are two things you have to remember. One, you might not want others to follow, to add to the squatting on public lands. Second, you need them to demonstrate not only that they are successful in the area, but that they are successful in terms of changing to another kind of farm technology which fits better the needs of ecological balance - because normally squatters are slash and burn farmers in forested areas. In these new settlements there has to be some sort of technological change and I propose an agro-forestry type of technology. If we are successful in this type of settlement where they spontaneously, with minimal help and assistance from government, go into an agro-forestry type of technology, then we are in a better position to show others that they too can make a living with this type of technology. If we succeed here we solve one type of problem which I think is very important and which has not been given enough emphasis here - that is, the capacity of government agencies in developing countries to go into large-scale settlement schemes. If a spontaneous method can be found, it is better because it would not overload our government institutions too much.

Peter McDonald: It is probably important not to exaggerate the potential for spontaneous migration. Professor Arndt mentioned petro-chemical establishments in Sumatra. My impression in Sumatra is that there is a considerable spontaneous movement from densely populated areas into these kinds of places of young Tapanuli youths or Minang youths. They get there much faster than the Javanese would and they are quite acceptable workers. Such projects do not employ very many people anyway. It seems that the evidence that is coming forward about successful spontaneous movement indicates that spontaneous movement has been going on for a long time and there has been mechanism for this. My study in Yogyakarta indicated that in respect of movement between Yogyakarta and Lampung in the 1960s, more people moved spontaneously than were moved by the program. So I doubt whether the removal of the present rather minor obstacles to spontaneous migration would lead to a dramatic increase in migration from Java to the outer islands.

R.M. Sundrum: The only point I was making was: 'we have got the funds to use for official migration, can we use them to increase spontaneous migration?' For example, when Drs Kartomo was here last time he gave us a very interesting statistic. He said that when the ferry service was improved between the two closest ports between Java and Sumatra, the improvement of transport
infrastructure meant a daily movement of 10,000 people from Java to Sumatra combined with a return movement of 9000 a day - a net departure of 1000 per day. These are the sort of things we ought to explore and put into perspective and compare with what seems to be the enormous resources that are going into land settlement - just to compare the cost-benefit aspects.

Gavin Jones: Not only do we need to be comparing the cost of official programs with other approaches, but as Paul Chan said earlier we need to look at the opportunity cost of alternative kinds of mainly in situ agricultural development. Whereas we are talking of settlement of new land, the vast bulk of agriculturalists whose welfare needs to be improved are not going to shift but will just stay put. There seems to have been a lot of emphasis through Felda in Malaysia and other schemes in other countries on moving people, but you sometimes wonder whether the same funds could be more effectively invested in intensification of various kinds and improvement of the situation in existing areas. Paul Chan or Baharuddin might like to say something about the West Johore scheme, which I gather is directed precisely to that - to the upgrading of conditions in a long-established and densely populated rural area, without a significant outmigration component.

Baharuddin Hashim: West Johore is an example of in situ development for the densely populated part of Johore. Actually, it is not carried out especially by an authority but by a special unit within the Agricultural Department. It is too early yet to judge the success or failure of the project.

Paul Chan: In that area you have about 350,000 hectares. It is a very important area for various reasons, including the fact that some of the ministers' constituencies are located there. According to the Third Malaysia Plan, that area is designated as a poverty area and an area of outmigration to Singapore, to Kejora, and to the Klang Valley. Historically, because of various agricultural practices, there has been soil erosion in the interior part of West Johore and the sea is also attacking the coastal areas so there is salination of the soil and other problems. The government has a very good program to redevelop the whole place and the World Bank is financing it. I am not sure whether it is US$50 or US$100 million up to the year 2000. The whole focus is on the physical infrastructure - on drainage, irrigation and engineering, and there is no mention of other types of reforms. So although Phase 1 I think is completed, the officials of the West Johore Development Authority which is in charge of the whole exercise are wondering why people are still leaving that place. One of the objectives is improvement in welfare to retain people in those places and if possible to stimulate return migration back to West Johore. Yet the population growth rate has been only about 0.8 per cent per annum, and people are still moving to other places. So the officials kept asking people in the University what was
wrong and we just argued for some agrarian reforms without thinking very much what this entailed. Nevertheless, it seems that if we just focus on physical development as experienced in that part of the world, it will be insufficient to retain people.

Andrew Gunawan: Drs Kartomo, how far will this idea of spontaneous migration be acceptable to bureaucrats? As I understand it, the bureaucrats have been banking on this multi-million dollar World Bank aid. I believe the Bank has agreed to this already. How far will it be possible to sell the idea of spontaneous movement?

Kartomo Wirosuhardjo: This is an internal business actually. We are preparing a government regulation based on an inter-departmental decision. The bureaucracy wants to have spontaneous migration, but supported by the government in terms of housing or whatever. Another alternative would be to have a program of transmigration paid for by the government but selecting, as Dr Sundrum suggested, not the weakest people but the strongest people so that they can generate chain migration. Actually the point is that the bureaucrats want to maintain control of funds. We thought that through selecting good people who will attract other people to migrate spontaneously, the job of the transmigration bureaucracy will be to look for land and opportunities and then inform people so that they know where to go - essentially the job of a traffic policeman. But we have to find some way in between.

George N. Appell: I do not want to divert discussion from the important topic of spontaneous migration. But let me mention some aspects which are related to it. Patrick Guinness made the point that local rights, even in spontaneous migration, but particularly in land settlement projects, have to be recognized and honoured. However, someone else argued that you will never know fully the local land rights situation, and it is going to cost too much to find it out. Moreover, local landholders and owners of trees always tend to escalate their demands for compensation.

There are three points that need to be made here. First, in all modern countries when governments take over property by right of eminent domain, individuals do escalate their demands for compensation as they usually perceive the value of their property being taken to be higher than what the government is willing to compensate. The negotiations for an acceptable compensation are part of the necessary process involved, and they should not be shied away from.

Second, if people's property rights are taken without compensation, this can create the kind of reaction which a Danish jurist has called 'practical jurisprudence'. That is, the aggrieved individuals take action into their own hands, and this can sometimes have greater costs than compensating them for the loss of their property. For example, there were recent reports of violent
clashes in a resettlement project in West Kalimantan, in which Dayaks killed many settlers. This could surely have been prevented had a study been made of the rights of the local inhabitants and the repercussions on them of the proposed land scheme. A study such as this might cost A$20,000 or perhaps even less.

One of the arguments has been, why bother? It is a waste of money. The point I want to make is that it is going to be cheaper in the long run, unless you want social destabilization. If you look at the history of the region, some of the major conflicts that have arisen are over the violation of property rights. Surely anthropologists can be found who could spell out very quickly what the rights are that are going to be violated, what land rights, what tree rights, etc? It is not a hard problem. And I am surprised that not more people are aware of this, for there has already been much published on this subject. In fact, the general outlines of the property rights of the Dayak peoples of Kalimantan are well established in the literature, and it would not take very much effort to fill in the details on the ground.

My third point is that it is a violation of the Universal Declaration of Human Rights if an effort is not made to compensate people for the loss of their property rights and means of livelihood. It is furthermore immoral to take property away from one group of fairly poor people to give to another without compensation. In the long run this erodes the sense of justice in a society in which it is important for it to operate.

Another point that needs to be addressed is how you evaluate the success of a project. A lot of work has been done at business schools in evaluating the success of a new manufacturing plant or a new organization in a wider context. In other words, we know how to evaluate the functioning of a small-scale society in other than purely financial terms. Such an evaluation relates to the health of the people, their productivity, their lack of antisocial behaviour. It should be easy to monitor resettlement projects to ascertain how well the population is doing, and the failure to do so represents a disregard of the needs and aspirations of the migrants themselves. I have come up with the terrible thought that in the year 2000 people will look back at some resettlement projects and consider them in the same light that we consider some of the concentration camps of World War II. To respond to Dr MacAndrews' statement that people cope better than we imagine, not everyone does cope. We only see those who are successful. We do not see, on the ground, those who do not cope, because they are underground or have quit. And it concerns me that the cost of adaptation for migrants to a new situation is not fully considered, for we now know that adding an adaptation load will increase disease, behavioural disorders and psychological impairment in a population at risk.
Peter Gardiner: Returning to the question of spontaneous migration, we talked about squatters and we talked about the government building houses for spontaneous migrants. Does spontaneous mean uncontrolled migration or does it allow for some kind of controls? If it is uncontrolled, are you not simply going to create new pockets of maldistribution?

Gavin Jones: My interpretation is that in most countries it means uncontrolled migration. But there is a problem in that in Indonesia the term transmigran spontan is used for a different kind of semi-official transmigrant, and this is the source of some confusion. But I think that when it is being talked of in relation to Thailand and Malaysia it means uncontrolled migration.

Peter Gardiner: On that basis then I would simply ask if these migrants themselves are selected in relation to where they are going. Does this not produce pockets of population maldistribution?

Kartomo Wirosuhardjo: We have to make a distinction between transmigration and migration. In Indonesia, people tend to think that what we term migration means transmigration. Transmigration is a special kind of migration - a government-sponsored migration. Then what they call general transmigrants are those supported fully by the government, whereas 'spontaneous transmigrants' are not just people who move by themselves but rather those who move within the framework of the law and are provided land by the government but nothing more. Migrants from Java to the outer islands who just come to buy land there are not termed transmigrants. The spontaneous migrants [in Kalimantan and Sulawesi] who were mentioned by Patrick were what the transmigration authorities term trans migrasi liar. They are not transmigrants as normally understood in Indonesia. They are 'uncontrolled migrants'.

Paul Chan: The emphasis of an earlier speaker is on whether migration is a useful equilibrating mechanism in adjusting the factors of production to the resources and whether or not it is prevented from serving this purpose by inadequacies in the flow of information, imperfect knowledge, etc. Does this create more imbalances than the program can solve?

New speaker: I understand that in the official [Indonesian] thinking, the government-planned migration is for opening up new areas and they would expect these spontaneous migrants to move to established projects. In other words the planners do not want spontaneous migrants turning up in the new area and looking for land, they want them to go to the established areas. The second point I want to make is that when Professor Arndt was talking about the 2.5 million people moving, and the impossibility of financing that, I understood that the government's plans for the 2.5 million included the expectation of a lot of spontaneous people.
Kartomo Wirosuhardjo: Yes, that is correct. The 2.5 million figure includes spontaneous movement. That is spelled out in the official plan.

Peter McDonald: Repelita III says quite a lot about spontaneous migration; it says a lot about improving inter-island transport facilities; it says a lot about removing administrative obstacles, etc.

Mayling Oey: But if you look at designs of new projects, there is no space for such people.

Kartomo Wirosuhardjo: No, they use the term tripartite. One part is for general transmigration, 10 per cent is for local people, and then there are the spontaneous migrants who will come on their own. Because otherwise the project would be enormously expensive.

Mayling Oey: No, I think the other part was for the second generation.

Kartomo: No, at least according to the official documents the other part is for the spontaneous migrants.

Gavin Jones: This casts a rather different light on it than the assumption that the whole 2.5 million are to be officially moved under directly sponsored schemes.

R.M. Sundrum: When you say that half a million families are to be moved at $4000 per family it is just $2 billion - that's nothing.

Kartomo: $2 billion is a lot of money!

Rey Crystal: Is it true that in those schemes the locals usually do not have land titles?

Kartomo: The land is held according to customary law. Usually what happens is that when land is designated as a transmigration project, it should be released by the government, by the Province, but once the migrants start cultivating the land, the local people will claim 'this is my tree', 'that is my tree'; this is the problem.

Rey Crystal: So, do you give them compensation for this, or try to arrange titles for what they claim is their area of cultivation?

Kartomo: No, what happens is they will then be paid for these trees because actually they have no control of the land, they have control of the trees. The prices of the trees keep increasing.
Rey Crystal: So it is virtually expropriation of the land?

Kartomo: Yes, you can call it expropriation but while the customary (adat) law prevails, if it is against the higher interest of the country because the land is controlled by the government, then they should yield. But in fact this is not that easy.

R.M. Sundrum: That is what is called expropriation! Governments always appeal to higher law to justify it.

Another speaker: I would like to come back to land settlement in Malaysia to question the point about Felcra [Federal Land Consolidation and Rehabilitation Authority] and integrated rural development. They had three pilot projects still in their very early stages, but in fact the integrated model that was devised was in the form of having three different crops - perennial crops, fruit crops and cash field crops. Since the existing villagers [with subecononomic plots were intended as beneficiaries], the problem in the beginning was to get the villagers' participation in the form of ownership transfer and to get a scheme organized where a sort of share system could be introduced. The [planners] had set their sights on the Samgel Undong project in Korea which has similar [neighbourhood] elements. So this is the kind of thing [that the smaller state authorities have] been planning to improvize because the economic planning unit estimated that about 700 kampunges could benefit from this kind of model.

Colin MacAndrews: Can I just comment on Drs Kartoma's discussion of spontaneous migration because I think it affects the whole concept of having spontaneous zones and making this into a policy option. About 6 or 7 years ago I was studying the legal restraints between states in India on internal migration - immense walls against people moving between states - educational allocations, land, and hostility between people moving from outside into Andra Pradesh and other states. I think the same restriction more or less applies to most Third World countries, Malaysia being quite unusual. But the Indonesian case is very interesting because you have a problem with the 'spontaneous migrant' who is half in and half out of the bureaucratic system and who therefore drives the bureaucracy completely mad trying to work out what to do with him, because he is going to be given land, and therefore is not completely spontaneous. Second, I also strongly suspect that in the Indonesian system spontaneous movement is not really wanted by officialdom. It takes place and it is very important, but once it is investigated and recognized it becomes policy. It is out of control, not in the economic sense but in the sense of order. It is very difficult to recognize people who you cannot find, and who are going to move for whatever reason to the outer islands or are going to come back in. This problem affects other countries as well as Indonesia. A lot of countries might run into problems in seeing spontaneous movement as a national policy.
Rey Crystal: I think one good example is the secessionist movement in the southern Philippines — Mindanao. That has proved to be the main defect of the spontaneous migration that has taken place — Christians moving into Moslem areas, land grabbing of traditional lands. Now we have this rebel movement.

R.M. Sundrum: Can somebody tell me, is not this exactly what happened in Lampung in the 1930s? There was a tremendous private movement, at this time. It was not only to plantations. I think the government did some irrigation works and then there was a mass movement into just one small province of Sumatra. The private movement was much bigger than the movement under the official colonization program.

Mayling Oey: Later this became part of the whole program when the officials saw that there were so many who came under the Bawon system.

Susanna Price: One thing that has not been mentioned so far is the environmental impact of planned and spontaneous movements. I am thinking particularly of places where people move to areas far less fertile, and this was not adequately catered for in the whole planning process. The environmental consequences are likely to become increasingly serious in the future in places like Kalimantan where their type of cultivation, while extremely effective in some ways, has environmental disadvantages.

Gavin Jones: Dr Sediono’s paper to some extent covered this in dealing with the tidal schemes and things like that. He was making the point there that from research to date it is not yet known how fertile these areas are going to be over the long term and yet people are being resettled into those kinds of areas.

Gavin Jones, summing up: Generally in Southeast Asia, population pressure was one of the most important factors causing migration and, in the end, resettlement programs. In the case of Indonesia, the population density in Java was extremely high and the government had to launch a series of transmigration projects which aimed to move people from Java to the outer islands. In the present National Five Year Plan, the target for resettling farmers and landless labourers is set at 500,000 families or roughly 2.5 million people. In Malaysia, resettlement is carried out by development authorities, which are semi-government organizations. The major such authority is the Federal Land Development Authority or Felda which usually deals with allocation of farm land to small or landless farmers. Land is used for rubber or oil palm production. Another example is the Development Authority for South East Johore or Kejora. For Kejora schemes, emphasis is laid on both rural and urban aspects of regional development. Establishment of new towns provides job opportunities for the settlers, which in turn increase their income earnings.
In the Philippines, resettlement of farmers is conducted by the Ministry of Agrarian Reform. The Operation Land Transfer Program is reaching the limit and the Ministry is diverting its own resources to resettlement programs. Spontaneous migrants, who are more numerous than those officially sponsored, are often successful but create problems, both in their impact on local populations and on the environment. The Thai government also embarked on its own settlement programs as early as 1935. There are at least fourteen government departments involved, though only four seem to make a significant impact on resettlement problems.

Population pressure, it was reported, raised a number of issues. It was felt that despite efforts by the governments, achievements in resettling farmers have not been on a sufficient scale, in comparison with the potential number of the population which would have to be resettled on new land to produce farm sizes adequate for economic viability. Landlessness still prevails, as in the case of the Philippines and Thailand, and will be on the increase as a result of population growth.

On the other hand, it was pointed out that in some land settlement schemes such as Felda, land could not be subdivided among family members, and allowance was not made for the 'second generation' by setting aside additional land. Given the successes of the Felda schemes in raising family incomes, it was rather unfortunate that more people could not be accommodated within any specific area.

Another issue which was raised at the seminar was the costs of resettling a family. While the costs were about A$1200 per family in Indonesian transmigration projects, the Malaysian Felda schemes had to spend, on the average, A$5000 per family. Schemes recently planned for Indonesia were to cost about $4000 per settler family. It was pointed out that the overall financial burden for some countries, particularly Indonesia, could be excessive.

It was further emphasized that spontaneous migration continued to play a crucial role in many Southeast Asian countries. To the extent that government-assisted land resettlement schemes could not achieve much in relieving population pressure, spontaneous migration should be instead encouraged by providing sufficient incentives. In fact, the success of government land resettlement schemes could to some extent be measured by the extent to which they stimulated spontaneous movement. It was added that spontaneous migration at times did not create the social problems that occur in many government resettlement programs, such as conflicts between migrants and local residents. This was so because spontaneous migrants might have contacts or links with local villagers before migrating, or, once they have arrived, might work out acceptable relationships with the local population free from the pressures of government officials. In fact, spontaneous migration is gaining
government recognition. For example, it was explained that the present Indonesian National Five Year Plan (1979-84) took into account the extent of spontaneous migration as a part of its resettlement target of 500,000 families, though the government would still be responsible for the provision of land to the spontaneous migrants.

The argument was made that emphasis should be given to regional development, improving the infrastructure, stimulating the creation of job opportunities in agro-based industries, construction, etc. in hitherto lightly-populated areas to make them attractive destinations, along with efforts to open new land for farming. Only in this way can the required numbers of people be induced to move, and a broadly-based development take place in the destination areas.

It was also noted that there are opportunity costs of land resettlement programs - the funds could be used for in-situ development in established agricultural areas, creation of industrial estates and so on. These alternative uses must be continually weighed against the value of investing in land settlement schemes which in the most successful country - Malaysia - only resettle 15 per cent of the increase in the rural population each year, and in other countries substantially less.

It was proposed that in order to improve the effectiveness of land settlement projects, the existing government machinery may need to be reorganized. For Thailand, there were talks about merging different government agencies together into a single entity or under a single co-ordinating body. In the case of the Philippines, emphasis should be placed on increased co-ordination among implementing agencies at all levels, including in the field. Authority and control should be decentralized to the local level as far as possible.

Evaluation of existing land settlement projects provides an insight into successes and failures of resettlement, from which the experience can be passed on to new schemes. This is particularly important since so little planning is usually done in advance for resettlement projects. It was felt that detailed planning and careful preparation would be needed so as to ensure successes for resettlement projects. In addition, it appeared that there was need for training of officials from the top management level downward, including farmers themselves. Felda has training programs of this kind which may be practical models for use elsewhere.
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Participants and contributors

AUSTRALIA

Professor H.W. Arndt,
Economics Department,
Research School of Pacific Studies,
Australian National University.

Mr E. Brouwer,
Australian Development Assistance Bureau,
Canberra.

Mrs Muriel van der Byl,
Aboriginal Education Foundation,
Adelaide.

Professor J.C. Caldwell,
Department of Demography,
Research School of Social Sciences,
Australian National University.

Dr D.P. Chaudhri,
Development Studies Centre,
Research School of Pacific Studies,
Australian National University.

Dr John Connell,
Department of Geography,
University of Sydney.

Mrs Lorraine Corner,
Department of Economics,
Macquarie University.

Dr Richard Curtain,
Department of Sociology,
The Faculties,
Australian National University.

Dr Dean Forbes,
Department of Human Geography,
Research School of Pacific Studies,
Australian National University.

Dr Stewart Fraser,
School of Education,
La Trobe University.

Professor Fay Gale,
Department of Geography,
University of Adelaide.

Mr Peter Gardiner,
Department of Demography,
Research School of Social Sciences,
Australian National University.

Dr P. Holzknecht,
Australian Development Assistance Bureau,
Canberra.

Dr Graeme Hugo,
Department of Geography,
Flinders University of South Australia.

Dr T.H. Hull,
Department of Demography,
Research School of Social Sciences,
Australian National University.

Dr V.J. Hull,
Department of Demography,
Research School of Social Sciences,
Australian National University.

Dr Gavin W. Jones,
Development Studies Centre,
Australian National University.

Dr Ian Manning,
Institute of Applied Economic and Social Research,
University of Melbourne.

Mr B. McCombie,
Australian Development Assistance Bureau,
Canberra.

Dr P.F. McDonald,
Department of Demography,
Research School of Social Sciences,
Australian National University.

Dr Hazel Moir,
Bureau of Industry Economics,
Department of Commerce and Industry,
Canberra.

Mr John Moriarty,
Department of Aboriginal Affairs,
Melbourne.

Mr Ovio Nou-Taboro,
M.A. (Demography) Programme,
Development Studies Centre,
Australian National University.

Ms Mayling Oey,
Department of Demography,
Research School of Social Sciences,
Australian National University.

Ms S. Price,
Australian Development Assistance Bureau,
Canberra.

Ms Yawalaksana Rachapattayakom,
Department of Demography,
Research School of Social Sciences,
Australian National University.
Mrs M. Rayner,
Australian Development Assistance Bureau,
Canberra.

Mrs H.V. Richter,
Development Studies Centre,
Australian National University.

Dr R.M. Sundrum,
Department of Economics,
Research School of Pacific Studies,
Australian National University.

Mrs Jyoti Amratlal,
United Nations Fund for Population Activities,
Suva.

Dr Rajesh Chandra,
Department of Geography,
University of the South Pacific,
Suva.

Ms Jyoti Amratlal,
United Nations Fund for Population Activities,
Suva.

INDONESIA

Mr Sarawudh Kongsiri,
Director, Bureau of Social and Cultural Affairs,
ASEAN Secretariat,
Jakarta.

Dr Colin MacAndrews,
Pacific Architects and Engineers, Inc.,
Jakarta.

Dr Ida Bagus Mantra,
Population Studies Centre,
Gadjah Mada University,
Yogyakarta.

MALAYSIA

Mr Baharuddin Hashim,
Kejora,
Johor Bahru.

Mr Ko Groenewegen,
South Pacific Commission,
Noumea.

NEW CALEDONIA

Mr John Samy,
Prime Minister's Department,
Suva.

Mr Kalio Tavola,
Ministry of Agriculture, Fisheries and Forests,
Suva.

NEW ZEALAND

Sir Colin Allan,
Glen Rowan,
17 Sale Street,
Howick, Auckland.

Dr Richard D. Bedford,
Department of Geography,
University of Canterbury,
Christchurch.

Professor R. Gerard Ward,
Department of Human Geography,
Research School of Pacific Studies,
Australian National University.

Ms Diah Widarti,
M.A. (Demography) Programme,
Development Studies Centre,
Australian National University.

Dr Elspeth Young,
Development Studies Centre,
Australian National University.

Mr Mr Paul Chan,
Faculty of Economics and Administration,
University of Malaya,
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Dr Cluny Macpherson,
Department of Sociology,
University of Auckland,
Auckland.
PAPUA NEW GUINEA
Mr Patrick Gaiyer,
Secretary,
Department of Urban Development,
Boroko.

PHILIPPINES
Mr Rey Crystal,
Regional Director,
National Economic and Development Authority Regional Office,
Cebu City.

SOLOMON ISLANDS
Mr Wilson Ifumasoa,
Permanent Secretary,
Ministry of Home Affairs,
Honiara.

THAILAND
Dr Suthiporn Chirapanda,
Division of Research Planning,
Agricultural Land Reform Office,
Ministry of Agriculture and Co-operatives,
Bangkok.

Dr Badrud Hanna,
Division of Population and Social Affairs,
Economic and Social Commission for Asia and the Pacific,
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TONGA
Dr Epeli Hau'ofa,
The Palace Office,
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UNITED STATES
Dr George N. Appell,
Borneo Research Council,
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Dr Murray Chapman,
East West Population Institute,
East West Center,
Honolulu.

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