

REPUBLIK INDONESIA
DEPARTEMEN TRANSMIGRASI

REPUBLIQUE FRANCAISE
O R S T O M C N R S

avec la collaboration de - In collaboration with
INDECO Duta Utama PPT-LIPI

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FINAL REPORT

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SPONTANEOUS TRANSMIGRATION PROJECT

Special Studies TRANS V Loan 2578 - IND

1991

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first part

OVERVIEW

SPONTANEOUS MIGRATION AND SETTLEMENT IN INDONESIA SOUTH SUMATRA CASE

1. AGRICULTURAL COLONIZATION IN PERSPECTIVE

Spontaneous migration is a natural process encountered the world over during certain historical periods. Every country has experienced this spontaneous movement with more or less intensity during the formation of its national territory. These movements have served to extend agricultural land (agricultural colonization) or build urban structures (rural-urban migration).

The process may occur as a progressive expansion from nucleus settlements under natural demographic pressure, given the specific technology available in a given ecological setting. For example, part of a village might move several kilometers away (usually less than 10) to establish a new settlement in order to be near their fields. In this case, the new village belongs to the same cultural and social network of the mother village and its agricultural technology remains the same. This may be viewed as an endogenous process.

The process may involve outsiders who migrate from their own ethnic territory. Their reasons for emigrating are usually complex. Very often they are responding to demographic pressures in one area and are attracted by the prospect of large tracts of unused land in another. Sometimes migrants are motivated by the possibility of applying a specific technology in a certain ecological niche in a new sparsely-populated area (i.e., the development of irrigated rice schemes, a frequent occurrence in the 19th and early 20th centuries in Southeast Asia).

This study focuses on long-distance spontaneous movements in Indonesia that result in the extension of agricultural land and settlement areas on unused land, originally covered with forest or other vegetation. Among the many patterns of settlement that exist, we will deal here with people who migrated and settled without being aided or directed by the State or any other institution.

THE INDONESIAN CASE

Indonesia is a vast developing archipelago which has not escaped this process of agricultural land extension. Ancient coastal migration led to the genesis of the Malay ethnic group (*Orang Melayu*). East Java developed through spontaneous migration from Central Java and neighboring Madura Island. Some very mobile ethnic groups opened new areas, such as the Minangkabau along the banks of rivers in east Sumatra, the Batak in the valleys surrounding their original highland, the Bugis and the Banjar who were the first to develop the specific tidal-swamp milieu, *pasang surut*, on the Indonesian coasts. All of them participated in the extension of agricultural land and also in the development of the towns, essential to the spatial integration of the country.

Though it is an ancient process it remains a very slow one, considering the strikingly uneven population distribution among the islands of the archipelago. Java has 7% of the national territory and 62% of the population while some large islands have only 3 people per km².

Most likely this movement was impeded by the sea. For many people, the sea is a psychological impediment. The land beyond is unknown (agriculture and climate differ, soil fertility is lower, the people have different customs and social behavior), transportation there is expensive and the trip may be seen as an exile with no hope of returning. Until 1986, sea transportation by passenger ship was poorly developed, irregular and dangerous. Other important factors have been the restrictions on indigenous mobility by the colonial power and the present government's eagerness to organize and control migration.

Significant rural-rural spontaneous migration has occurred since early times between the populated islands of Java, Madura and Bali, even under conditions of strong population pressure on agricultural land. Spontaneous movement from Inner to Outer Indonesia began to attract attention by 1957¹ and it is growing in importance and diversity every year. It was stimulated by the development of land and sea communication, the development of mass media, and economic dynamism in many Outer Indonesian provinces. It was reinforced by the stream of migration and settlement initiated by the government from the beginning of this century, in the form of plantations and agricultural villages.

2. ORGANIZED AGRICULTURAL SETTLEMENT : THE TRANSMIGRATION PROGRAMME

Uneven population distribution in the archipelago and economic difficulties in rural areas of overpopulated Java are the main factors explaining the creation and conception of organized agricultural settlement in Indonesia. This started under the Dutch (*kolonisasi* from 1905 to 1942: some 41,000 families moved, mainly to Southern Sumatra but also to South Kalimantan and South Sulawesi). Following Independence, this programme (*Transmigrasi*) became the most ambitious agricultural colonization programme in the world in terms of people moved (more than 2.5 million people moved since 1950), money spent (US\$ 11,663 per family in 1984), logistical problems faced and, probably, for distance covered.

The Transmigration programme, now under a Ministry of the same name, organizes the movement and settlement beginning with the selection of potential settlers and ending a minimum of five years after the creation of the new settlement. Irrespective of the different categories of Transmigrant (*Umum, Spontan/swakarsa TBB or DBB, PIR* and others, Hardjono, 1976) more a question of budget allocations than migrant type, a transmigrant family registers

¹ Particularly through the research of Kampto Utomo on spontaneous migrants living on the fringes of *Kolonisasi* settlements in Lampung. His thesis was published in 1975.

first with his local Department of Transmigration and then is selected to go to the new village, as determined by the Ministry in Jakarta, where he will receive a house and at least two hectares of land to work. A food allowance, social and agricultural services are provided. Rudimentary access roads are created.

The land on which the settlement is built is turned over as a block to the Ministry of Transmigration (MOT) by the provincial governments. The administration of the settlement is transferred for a minimum of five years to the MOT after which time it returns under the authority of the Ministry of Internal Affairs through the provincial administrative network, as for all villages in Indonesia.

Until the end of the 1970's, it was still possible for the Ministry of Transmigration to find large tracts of land offering the possibility of irrigation, but since the late 1980's even large areas for dry field cultivation have become rare. Only in the tidal swamp areas are there still large tracts of land available. Settlements based on dry field food crop cultivation appear to be economically very difficult for transmigrants unless there is aid for agricultural inputs. Even if the peasant can afford to buy fertilizer, the distribution network is so underdeveloped in most of Outer Indonesia, he often cannot find it on a regular basis or at the proper time (*Sensus Pertanian* 1983).

Plantation programs through the Department of Plantation (*PIR* plantations) or independent of it (Baturmarta, South Sumatra for example) appear to be one agricultural solution for transmigrants, but the lack of large blocks of land remains an important constraint.

Beside these problems, the Government of Indonesia (GOI), due to the international economic situation, has run into economic problems between 1983 and 1990. As a result, the budget for development has been reduced and the State has embarked on a policy of public-sector disengagement.

In this context a study of the growing spontaneous agricultural settlement movement, begun on a small scale and often based on plantation crops, may prove useful.

3. SPONTANEOUS AGRICULTURAL SETTLEMENT

3.1. Definition

A definition of spontaneous migrants and settlers is not an easy one to arrive at, mainly because the MOT uses those expressions for their transmigrant categories *spontan* or *swakarsa*² (Hardjono, 1978). To avoid any confusion we will use only the English words "spontaneous migrant or settlers," or in Indonesian, respectively, "*migran spontan*, *pemukim migran spontan*."

² *Swakarsa*, an Indonesian word of sanskrit origin is quite suitable since it means "a desire which arises in someone without external influence" ("*keinginan sendiri yang timbul tanpa dorongan pihak lain*," according to *Kamus besar Bahasa Indonesia*, 1988).

SPONTANEOUS MIGRANTS AND SETTLERS

A spontaneous rural³ migrant is a person who chooses the destination and time of departure outside of any institutional framework. A spontaneous settler is a person who finds land or a job outside of the villages or land reserved for a Transmigration or any institutionalized program. These are the main traits distinguishing a spontaneous settler from a transmigrant. This leaves a wide range of situations where spontaneous migration will arise.

A migrant often settles in a territory occupied by a different ethnic group from his own. While in our cases studies in South Sumatra we have focused on Inner Migrants (from Inner Indonesia: Javanese, Sundanese, Balinese, Madurese), migrants from Outer Indonesia (mainly Bugis) and from Sumatra also have to be taken into consideration because, unlike the official transmigration model, the spontaneous settlement process is one in which indigenous people play a leading role. Representing other ethnic groups were migrants from other provinces of Sumatra, including Minang and Batak, and migrants from within the province of South Sumatra.

SPONTANEOUS TRANSMIGRANTS

Some spontaneous rural migrants, who choose their own destination and time of departure, do find land within official transmigration settlements. Either they take over the allotment from a returning sponsored transmigrant family or receive undistributed land that in principle was to have been reserved for the descendants of transmigrants. Sometimes they receive a small parcel just enough for a house and garden or for a shop in the market square. Since they live in a village administered by the Transmigration Department, these families may be called *Spontaneous Transmigrants*. Nearly all the transmigration villages have spontaneous families even if the economic situation within certain settlements is poor.

According to the *Inventory Study on Transmigration Sites* (1987), it appears that spontaneous migrants account for nearly 10% of the total transmigrant population. In South Sumatra the figure reaches 11%. In OKU regency, the first settlements at Batumarta (Units I, II and III) which offered each family 5 hectares of land, including 1 ha of rubber plantation, attracted many relatives of the first transmigrants. When the rubber trees started producing, the economic situation improved and many unrelated spontaneous migrants arrived (often after transit through Lampung) seeking jobs as agricultural workers, traders, or in services. As of April 1990 there were at least 3300 spontaneous families in Batumarta with no land.

3.2 Secondary Data

SCARCITY OF SECONDARY DATA

Scarcity of secondary data characterizes research on this topic. To obtain any idea of the spontaneous movement in Indonesia one has to sift through many documents in order to find

³ A rural area may include small towns.

the occasional brief reference to spontaneous migrants and their settlements.

One of the most useful references offering information on spontaneous settlers is the book by U. Sholz on *The natural regions of Sumatra and their agricultural patterns* (1982). Much of the work by Joan Harjono is very useful for obtaining a grasp of the evolution of official transmigration programs and the terminology involved. In her essay entitled *The promotion of unassisted Transmigration in Indonesia* (1978), she discusses the definitions (p. 2-33) and main issues surrounding spontaneous movement to rural areas of Outer Indonesia. The World Bank's 1986 *Transmigration Sector Review* gives useful definitions and discusses the main problems involved with the movement and the government's desire to promote and control it.

Very few individual researchers have focused on spontaneous migrants. Kampto Utomo was the first to study this topic in his 1957 thesis (published in 1975) dealing with settlement on the fringes of a planned settlement in Lampung. Spontaneous Balinese settlers in Central Sulawesi have been studied by G. Davis (social history) and M. Charras (geography and anthropology). Several studies of Buginese coastal settlements in Sumatra and Kalimantan are available, including those on agro-economy by W. Collier and A. Vayda and the geographical and anthropological works by Japanese scholars from the Southeast Asian Study Center in Kyoto. Madurese spontaneous settlement in South Kalimantan was also the topic of a thesis by Soedarmo at UGM, Yogyakarta (1988).

Treating the largest receiving province, *Transmigration and spontaneous migration in Indonesia, Lampung* (1989, ORSTOM/MOT) gives a useful background primarily through spatial analysis and cartography.

Another recent study is the work edited by H. Uhlig, *Spontaneous and planned settlement in Southeast Asia*, (1984). As far as Indonesia is concerned, the book focuses more on organized settlements and little is said about spontaneous movement. Nevertheless, the research on spontaneous settlement in Thailand offers interesting points for comparison with Indonesia.

MOT reports focus mainly on spontaneous migrants in transmigration villages, only one aspect of spontaneous migration and settlement process.

LEARNING FROM THE PRESS

The role of the press in Indonesia is mainly to provide information on significant and often sensational events. The spontaneous migration movement is not yet a fashionable topic in the popular press. In articles on environment, protected forests, and floods and landslides in Outer Indonesia, however, the press sometimes makes reference to the people from Inner Indonesia.

Sometimes interesting and diverse information about spontaneous migrants is contained in biographical sketches. Recent events where people had to be dislodged by force from protected areas focussed attention on the topic.

3.3 Magnitude of the movement : an evaluation

The volume and direction of spontaneous rural movements are nearly impossible to measure at the national or provincial level with any precision and statistical evaluation can be just as uncertain.

Based on 1) figures on the number of native language speakers in rural areas as recorded during the 1980 census, and 2) transmigration settlement data and demographic evolution (from 1950 to 1978), the World Bank (1986: 73, 215-216) was able to give an estimate of 5,300,300 migrants from Inner Indonesia (Javanese, Sundanese, Balinese, Madurese) presently settled in rural areas of Outer Indonesia who did not come with the transmigration program.

Excluding data for North Sumatra (1,642,000) and Lampung (2,812,600) "because of the large migrant communities settled there before World War II," this calculation assumed that a minimum of 800,000 migrants moved from Inner Indonesia on their own account between 1950 and 1978 (Table 1).

Tab. I *Spontaneous interprovincial migration to rural areas, 1975/1980*

PROVINCES	Population 1985 '000	rural inner speakers excess WE '000	New migrants between 71/80	Transmig- ration Implemta 71/79	spontaneous urb-rural urb-rural 71/80	in migration rural 75/80	Importance of rural migration %	Transmig- Implemt 74/79	Spontaneous migrat- in rural are	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Aceh	2,981	145	82,388	10,000	72,388	40,101	80	10,000	30,101	6,020
Sumut	9,444	1,642	17,583	2,774	14,789	35,938	42	2,774	33,164	6,633
Sumbar	3,668	4	43,475	24,838	18,637	68,883	78	24,838	Return	Migration
Riau	2,514	125	139,353	18,840	122,713	43,820	47	15,905	27,915	5,583
Jambi	1,728	153	137,013	72,384	64,649	92,179	87	65,985	26,194	5,239
Sumsel	5,411	158	280,635	100,777	179,858	157,064	73	78,649	78,415	15,683
Bengkulu	936	95	85,236	28,749	56,487	55,785	88	22,518	33,249	6,650
Lampung	5,987	2,813	781,518	85,484	696,054	445,224	90	69,762	375,462	75,092
Kalbar	2,815	110	83,943	22,755	61,188	27,049	72	19,403	7,646	1,529
Kalteng	11,140	18	89,891	10,788	79,103	33,746	70	5,189	28,577	5,715
Kalsel	2,289	27	76,457	37,556	38,901	40,847	68	32,463	8,384	1,677
Kaltim	1,538	3	252,038	27,629	224,409	48,694	45	23,205	25,489	5,098
Sulut	2,375	4	39,520	10,042	29,478	29,561	67	9,204	20,347	4,089
Sulteng	1,539	(4)	133,528	51,729	81,799	64,859	81	41,056	23,803	4,761
Sulsei	6,800	3	40,797	38,719	2,078	28,930	51	31,721	Important	out migration
Sulra	1,083	6	78,748	31,834	46,912	40,798	83	25,772	15,026	3,005
Maluku	1,633	9	82,318	3,094	79,224	32,611	74	2,382	30,229	6,046
Irian Jaya	1,337	(6)	59,485	3,985	55,500	7,404	24	3,500	3,904	781
Timtim										
Indonesia	65,016		2,503,882	579,737	1,924,145	1,293,473	73	484,304	809,199	161,834
<i>by Island</i>										
SUMATRA	32,667	5,133					78		604,500	120,900
KALIMANTAN	17,782	156					59		70,036	14,019
SULAWESI	11,597	9					71		59,178	11,835
EAST	2,970	3					53		34,133	8,827

Sources: Hugo and al., 1989, [p.193, 42] and diverse BPS 1980 and World Bank Report, 1986

Notes: 3) Migrants not born in the province between 1980 and 1971 (BPS)

5) Total of spontaneous migration in rural and urban areas

6-10) migration based on change of residence in the five last years

7) Usual proportion of rural migration, based on non born migrant

10) This number includes all origine migrants, not specifically Inner Indonesian

West Sumatra and South Sulawesi (strong out migration, certain return) are not counted

Adding to the World Bank estimates 1) migration data on place of birth from the 1980 census, 2) 1975-1980 interprovincial residential change, 3) the proportion of migration aimed at rural areas (1980), and 4) transmigration carried out during the periods 1971/1980 and 1975/1980, we can tentatively evaluate spontaneous interprovincial migration directed to rural areas and in this way perceive the latest trends in population movement. This migration does not differentiate, however, between migrants coming from Inner and Outer Indonesia.

From this calculation we can assume that a minimum of 820,000 people changed their province of residence between 1975 and 1980, contributing to rural development in Outer Indonesia either by opening new land, working agricultural land or working in rural centers of activity. Out of this 164,000 *per year*, half of them go to Lampung; South Sumatra is a distant second while Southern Sumatra is the top receiving area with 63% of the spontaneous migrants.

The main participants and forces of attraction in each receiving province are resumed in the following list based on general knowledge of the regions.

Qualitative notes on spontaneous interprovincial migration directed to rural areas⁴

SUMATRA

- | | |
|-----------------|--|
| <i>Aceh</i> | Spontaneous Javanese concentrations exist in the Gayo highlands with coffee smallholder plantations acting as pulling factors. The chain of migration goes through Sumut plantation workers. Batak agricultural settlements are in the highland valleys where communication through Sumut is better. |
| <i>Sumut</i> | Constant migration occurs from Java to the plantation areas (where contract work and jobs in rural centers are available). These are jumping-off places for other Javanese settlements in the northern part of Sumatra, including the province of North Sumatra. |
| <i>Sumbar</i> | There is no significant spontaneous migration from Java directed to rural areas. The flow from Java is mainly composed of returning Minangkabau, plus migration from Riau and Jambi (36,000 between 1971 and 1980) and from Sumut into rural centers for commercial activities (Batak peddlers). |
| <i>Riau</i> | Bugis migration has existed along the coast and on the islands, and there is a beginning of Javanese migration through the transmigration programme and timber exploitation. Agricultural and commercial settlement of migrants from Sumbar has long existed. |
| <i>Jambi</i> | Bugis (numbering 37,500 people between 1961 and 1971) and Banjar have coastal settlements based on both agriculture and commerce. New Javanese settlements are found along the Jambi-Palembang road (linked to transmigration programmes, wood or oil-palm exploitation) and in the Kerinci highlands. |
| <i>Sumsel</i> | Migration from Inner Indonesia continues to be attracted by core settlements (<i>Kolonisasi</i> and early <i>transmigrasi</i>) and land opportunities within a smallholder plantation economy. There is strong movement from overcrowded Lampung, made up of migrants of Inner Indonesian origin and returning Sumsel migrants. Bugis settlements are found in coastal areas (based on rice cultivation, coconut plantations, and trade) and Sumatran migrants (Minang and Batak) are found in rural centers. Migrants come from Bengkulu in search of better education and job opportunities. |
| <i>Bengkulu</i> | Small-scale but long-standing migration spurred by <i>Kolonisasi</i> and growing migration from Inner Indonesia characterize this province which exhibits spatial continuity with Sumsel and Lampung with its smallholder plantations. |
| <i>Lampung</i> | Long the prime destination for Javanese migrants, this province is often a transit area for migration further north. |

⁴ The following is based on secondary and statistical data from *Perpindahan penduduk antar propinsi di Indonesia, hasil sensus penduduk 1980*, No. 04310.8406, BPS, Jakarta, 1984.

KALIMANTAN

- Kalbar* No data available concerning rural spontaneous settlement.
- Kalteng* Bugis and Banjar migrate to tidal-swamp (*pasang surut*) areas. Javanese migration starts following the opening of timber exploitation and Transmigration settlements.
- Kalsel* Traditional migration by Madurese spontaneous migrants on the west slope of Gunung Meratus and by Bugis in the *Pasang Surut* area and on the east coast.
- Kaltim* Strong Bugis migration is present in coastal areas (85,000 between 1971 and 1980) for pepper and coconut planting and commercial activities. Javanese migration began after forest exploitation begun and Transmigration settlements were set up.

SULAWESI

- Sulut* Very little migration exists from Inner Indonesia mainly linked to the transmigration program. Important migration into rural area from North Maluku and Sulteng led by Buton and Bugis people.
- Sulteng* Strong traditional spontaneous migration from Bali (26,500 between 1971 and 1980 mainly from Parigi to the Poso coast). The movement from Java is following the transmigration program. Ancien Bugis settlement are involved in agriculture and trading on the coast.
- Sulsel* Some Inner Indonesian migration is present, essentially linked to the Kolonisasi and transmigration settlements (in Luwu and Mamuju regency).
- Sultra* Recent migration from Inner Indonesia results mainly from the eavy transmigration program; Bugis settle along the coasts and inland.

EASTERN INDONESIA

- Maluku* There are no spontaneous agricultural settlers from Inner Indonesia, but there are predominantly Bugis settlements on the coast. Migration from Java is mainly composed of returning Maluku people.
- Irian Jaya* There are no spontaneous agricultural settlers from Inner Indonesia outside the immediate surroundings of the towns. Migrants from Maluku and NTT (Flores), and Bugis come for urban jobs and trading.

The statistical evaluation of spontaneous migration did not take into account circular migration (defined as "repetitive and cyclical with no declared intention to change residence permanently," Hugo, 1988:169). Circular migration between Java and Sumatra is an important part of the process of migration and settlement. Circular migrants have been going back and forth to Sumatra for years, going back to their place of origin every year for Lebaran (most of the time also for voting) and coming back to Sumatra (sometimes with friends) as soon as they run out of money.

3.4. Institutional point of view

Though the movement is an important one, spontaneous migrants and settlers are not under the management of any institution. Leaving their village of origin with a travel authorization, *surat jalan*, a work permit *surat kerja*, or an authorization to change residence, *surat pindah*, delivered by the head of the village, they will present this document to the village head at the destination with the intention of residing temporarily or permanently.

Once the migrant is considered a resident, the village head will report him as a newcomer, *pendatang*, on a monthly or quarterly list sent to the district (*kecamatan*). Whether he is alone or part of a larger community of migrants, he comes under the jurisdiction of the local

administration (under the Ministry of Internal Affairs) as other indigenous people in the area. This procedure is working well in most rural areas in Outer Indonesia, at least in most areas of Sumatra, Kalimantan and Sulawesi⁵.

The main problem that arises is illegal settlement in forest reserves, the territory of which doesn't belong to any village. Sometimes settlers will be considered inhabitants of the nearest village but the land they work will not be registered in the village statistics. Most of the time they are not registered anywhere and their situation is difficult to view first-hand and evaluate.

MINISTRY OF TRANSMIGRATION

The point of view of the Ministry of Transmigration

The Ministry of Transmigration is not directly concerned with the management of the spontaneous movement. The *Swakarsa* department deals with selected transmigrants brought into receiving areas on special programs. The qualification of transmigrant is more a question of budget allowance. The PUSLITBANG, however, has been interested in the topic of spontaneous migrants arriving in Transmigration villages (Transmigration: 1980c, 1981a, 1982) and of independent spontaneous migrants in Kalimantan (1978).

Attitudes towards spontaneous migrants and settlers are not the same at the Transmigration offices in the sending or receiving areas. From inquiries in Bali and Lombok, it emerges that the Transmigration offices in these sending areas receive people coming to request information and fill in a registration form (*kartu seleksi*) in order to go by themselves to a receiving area. Most of the time these candidates want to join relatives in a transmigration project and have been informed by them that without this document there is no hope of receiving land if any is available. In some settlements, the *kartu seleksi* is required even to stay. In Bali and Lombok it is the *swakarsa* bureau which handles these people, referring to them as *swakarsa murni* or *spontan murni*. The transmigration offices visited had a very understandable and helpful attitude. Using a rapid and inexpensive procedure, they provide information about which routes and the best travel agencies to take to get to the main town of the province. Sometimes, if available, a cash allowance from the provincial budget (APBD) is given. In 1990, 200 spontaneous migrants (*murni*) from Lombok were able to receive Rp 150,000 and 150 Balinese families received Rp 100,000. The main problem for the Transmigration office in the sending area is a lack of guidelines, no budget, and no information available concerning any destination area.

In the receiving area, the attitude of the Transmigration office is clear (based on inquiries in South Sumatra and South Sulawesi). If a spontaneous migrant, called *swakarsa murni*, comes without his registration card (*kartu seleksi* or *P6*), he will be considered an illegal migrant and will not be allowed to stay for long in a transmigration village, take advantage of the social services (school and health center) or obtain land if there is any left. On the contrary, spontaneous migrants who join a village administered by the Transmigration holding a

⁵ Some areas are under special security jurisdiction in which case specific procedures to control movement may be in effect.

registration card from the regional Transmigration sending office will be registered. They are recorded in the Transmigration statistics either as *transmigran swakarsa* or *spontan*. They have access to the usual Transmigration services but no specific budget or follow up is accorded them. Those who arrived with their registration card will be considered as *transmigran pengganti* (classification used in the local data) if they take the place of a returning transmigrant or get a parcel of land. If not, they will be considered as *penumpang*, or guests. The latter have access to the services in the village but usually do not have a share in food or other allowances for residents.

In one of the units, the transmigration head received 14 spontaneous migrants without selection cards. He promised them two hectares of land within the territory under his jurisdiction provided they return to their place of last residence to get their card. All of them spent time and money to travel to East Java and return with their card. They brought back with them two other related families. All 16 families got their parcels along with access to all the transmigrant facilities (Bangsa Negara/OKU).

Some transmigration officers in the villages (KUPT) are reluctant to speak about those migrants who came without proper documents. Most of the time they ignore them especially if they are settled just outside the boundaries of their units. The main explanation for this attitude is the lack of any guidelines on how to deal with them and budget earmarked for them.

The unit head in the case above managed, on his own initiative, to redistribute the shares of food allowance, agricultural input and medical aid among the sponsored and spontaneous migrants (holding proper documents) and arranged for communal work, *gotong royong*, to be done by the first settlers to build housing and simple access paths for the migrants before their arrival. His initiative was ignored.

Transabangdep, a new concept

In the new context where it is becoming more and more difficult to find large empty spaces for transmigrants, the MOT has devised a new resettlement concept based on smaller units placed near indigenous villages. To decentralize the development action, the provincial governments in the sending and receiving areas must share the transit and settlement expenses with the MOT, and the migrant candidates themselves will have to pay a small share (about 5% of the total cost). This is the "TRANSmigrationSwAkarsa PemBANGgunan DEsa Potensial," currently being experimented in South Sumatra and other provinces.

Although these are not genuine spontaneous migrants (the candidates are recruited like other transmigrants), this concept represents the first step towards truly integrated local development and the basic parameters of settlement process are identical to those found among some spontaneous settlers in this study.

OTHER INSTITUTIONS AT THE PROVINCIAL LEVEL

At least in South Sumatra, most of the other institutions at the provincial level, such as the BAPPEDA, recognize the spontaneous movement as a dynamic economic factor but none has a bureau or a department specifically devoted to them. Most often the local administrations (from the village up to the Governor's office) welcome spontaneous settlers because they contribute demographic weight to small villages which otherwise would be considered hamlets and would not receive a part of the development budget. This attitude has been strengthened

by the Undang-Undang 5, 1979 relating to village size (500 families minimum), which may be applied soon as a result of cutbacks in the development budget.

The Ministry of Forestry deals quite often with problems of spontaneous settlers, mainly concerning those who settle in protected forests or in various classified forests, especially if the forest is to be converted (into an estate, forest concession, or Transmigration). They do not deal with them in the same way as they do local people who also settle in such areas, tending to consider the outsiders more as illegal settlers.

The BKLH (*Biro Kependudukan dan Lingkungan Hidup*, Bureau for Population and Environment), in charge of environmental affairs, will intervene in cases where spontaneous migrants or local people are involved in environmental degradation. The BKLH is responsible for their resettlement. Local people are forced to go back to their village of origin where they still have a home. Spontaneous migrants from Inner Indonesia and migrants from outside the area are sent either to estate plantations as workers, or to transmigration schemes (as in the case of settlers from Sapulima, OKU, and Lampung who were sent to Translok schemes). With environmental conservation becoming an increasingly sensitive problem in Indonesia, this Bureau also has a more and more negative perception of migrants.

4. BACKGROUND OF THE STUDY

4.1 Objectives

The principal focus of this study is spontaneous migration directly linked to the extension or opening of land for cultivation and the settling of rural zones. We have concentrated on agricultural migrants in a systematic manner and to a lesser degree have studied those who make their living in sectors related to agriculture, such as the traders in agricultural production, and the small ambulatory traders. The study also came across shopkeepers, craftsmen such as those who make roof tiles or bricks, constructions workers and transport workers, in the rural areas and small towns.

The migrants covered by this study are mainly from ethnic groups of Inner Indonesia (Java, Bali, Madura) whether they are born in their island of origin or born in Sumatra in the villages of organized colonization. On the tidal-swamp coast there are Bugis originally from South Sulawesi who in some cases were born along the migratory route in one of the coastal settlements of Sumatra or Kalimantan. These long-distance migrants are never alone in developing rural zones. In less systematic fashion we have taken into account migrants from other regions of Sumatra (for example, the Minangkabau and Batak found in small rural centers and towns) and local people of South Sumatra province who have settled outside of their original ethnic territory (the Semendo, the Ogan, the Komering and others).

The objectives of this study are first to attempt to reply to a series of simple questions in order to better understand the movement. These questions are:

- where do spontaneous migrants go? - what is the magnitude of spontaneous migration? - who are the migrants? - how do they integrate into the receiving area? - what is their impact?

These simple questions which often have complex answers, will be addressed through a series of thematic studies : migration process, settlement process, land access and registration, farming system and impact on the environment.

MIGRATION PROCESS

This includes the main information taken into consideration for the study of migratory process beginning with the decision to leave the region of origin up until the installation in the region of migration. In detail: demographic data (age and family status), socioeconomic status at the moment of departure from the sending area, the source of information on the receiving area, the financial means available, the aspirations of the migrant, the migration stages, and the means of transportation used. This should enable us to determine whether certain migratory chains (same origin, same route, same destination, and same work) exist.

SETTLEMENT PROCESS

This treats the question of how migrants find work and land. What are the housing conditions and the patterns of settlement? How are their living conditions considering the presence or absence of elementary infrastructures such as health centers, schools and markets? Are there any specific stages or strategies of penetration and integration into the receiving region? How does the social life of these settlements develop?

LAND ACCESS AND REGISTRATION

What are the patterns and the constraints characterizing land access and registration since there is no institutional intervention but instead an integration into the traditional system?

FARMING SYSTEMS

What are the farming systems developed by the migrants in accordance with the local ecology? What technical means do they use for agriculture (inputs) and for marketing? What is the impact on the local economy?

IMPACT ON THE ENVIRONMENT

Beyond settlement process and agricultural development, what is the impact on the environment? In the larger context of regional development (including planned resettlement, estate plantations and forest exploitation), what are the major questions brought up by this

extension of cultivation in authorized zones as well as in protected zones (reserve forests, upper river catchment areas, *DAS*)?

4.2 Methods and Means

This study was carried out in the framework of a cooperation agreement between France (represented by ORSTOM) and the Republic of Indonesia (represented by the Ministry of Transmigration). It was financed in part by France (ORSTOM and the CNRS), and in part by Indonesia with a loan granted by the World Bank for a one-year study.

This must be considered an exploratory study due to:

- the lack of prior research,
- the characteristics of the new settlements, scattered and often remote,
- the lack of time and financial means.

The study was based on three major sources, an annotated bibliography, cartographic support and analysis, and fieldwork.

AN ANNOTATED BIBLIOGRAPHY

Preliminary bibliographical research⁶ was designed to provide a solid background for our study and for any future research. The scarcity of direct information about spontaneous migration and settlements in rural areas obliged us to treat a large quantity of documents (more than 800), in order to glean whatever bits of information were available on spontaneous migration. This bibliography (reduced to about 500 titles) is annotated and presented in a technical report (I) for further research.

Among the sources used were books, book articles, journal articles, and congress or seminar communications, presented in a section entitled *Academic works* (see I.C.2) and, in separate sections, *reports*, *press* articles, and legal texts and regulations classed under *law*.

CARTOGRAPHIC SUPPORT AND ANALYSES

The cartographic support and analyse done for this study make up a whole and express certain choices.

- the maps do not aim to make an exhaustive inventory of migratory phenomena and their consequences in the south of Sumatra.
- following the general presentation maps, at the scale of 1:1,000,000, the goal is to demonstrate the changes caused by migratory phenomena through studies using graduated scales, going from the particular to the general and vice versa, from the village to the region, each example studied

⁶ Begun before the official start of this study in order to organize the fieldwork.

at a scale of 1:250,000 being placed into the larger context at the scale of 1:2,000,000 or 1:3,000,000.

- the concern with demonstrating the impact of environment require that we show the differences between river bank, swamp, mountain and plains development patterns. The settlement of new land is illustrated by two plates, one devoted to the Musi River delta and the other to the plains of Belitang and the mountains neighboring Danau Ranau.
- the Project makes use of recent data furnished by SPOT without requiring sophisticated techniques or large computers, both of which are lacking or rare in countries concerned by studies such as the *Spontaneous Transmigration Project*).

We have sought to identify tendencies rather than inventories that could never be finished, and have preferred to offer an approximate representation rather than no representation at all.

FIELDWORK

Based on knowledge of agriculture outside of Indonesia, close reading of existing documents on spontaneous settlement in Indonesia and other developing countries⁷, a preliminary analysis of demographic changes, and phenomena visible on the SPOT remote-sensing imagery, the study could be planned and the fieldwork organized.

The dispersion of spontaneous migrants and the isolation of the settlements from roads and trails (hamlets or even isolated houses) obliged the researchers to be extremely mobile. Such fieldwork conditions also required rapidity so that the studies could be carried out during the dry season (between May and August in the interior) when the roads and trails were practicable⁸. Each of us had to look for information necessary for their own specialization and at the same time make rapid but in-depth inquiries to gather data for the other colleagues who could not go to the same areas. In-depth interviews based on various themes were used during this stage of the study. Open-ended interviews were the only type possible, especially in regions of illegal settlement where subjects were reticent to reply to direct questions.

The choice of field sites was made through a step-by-step process, beginning with local authorities at the regency level (*kabupaten*), then at the district (*kecamatan*) and finally at the village level. In the chosen areas, the migrants themselves could provide information on settlements through which they had passed or where they had friends.

The fieldwork conditions and the inductive method adopted for this study have important implications. Even though a large number of individuals were interviewed (in all about 800 people), they were interviewed on different topics and thus only a qualitative picture can emerge. The impossibility of designing standardized questionnaires limits the quantitative analysis of the results. It would therefore be hazardous to search for statistics of certain phenomena or variables for the region of study and even less so for the spontaneous movement in Indonesia. For

⁷ The state of Balinese pioneers in Central Sulawesi and migrants in Minahasa, North Sumatra and South Kalimantan (Indonesia) was studied along with case studies of migrants in Thailand and Africa for comparative purposes.

⁸ On the tidal swamp coast, the season of research is less important because access is by boat.

example, it is difficult to say how many persons or families come from one region or another simply because in one area we have encountered a group of migrants from East Java; it may be that a few kilometers away there is a larger group of migrants from West Java which we did not visit. The same caution applies to calculations of the total number of spontaneous migrants in the region, or the predominance of one type of settlement over another. The most that we can do is describe the observed phenomena in their particular context, and offer general tendencies or hypotheses which, in future studies, might be subject to verification.

INSTITUTIONAL FRAMEWORK AND THE RESEARCH TEAM

Institutional framework

This project was sponsored within the institutional framework as follows :
French bilateral cooperation, through official research institute (CNRS, Centre National de la Recherche Scientifique ; ORSTOM, Institut Francais de Recherche pour le Developpement en Cooperation), and World Bank Loan to Ministry of Transmigration, for the assistant of Indeco Duta Utama and Intersys Kelola Maju.

The funding of the project was fifty (50) percent by the World Bank, fifty (50) by French Research Institutes. This second part cover the salaries of the team leader (twenty four [24] months, and the co-team leader [seven [7] months] of the project.)

The project was based in the Ministry of Transmigration where ORSTOM has worked for the last ten (10) years under an official agreement. This project began after the regional study made by an ORSTOM team in the province of Lampung (ORSTOM-Departemen Transmigrasi, Transmigration and Spontaneous Migrations, Propinsi Lampung, Sumatera, Jakarta-Paris 1989).

Contributors and Responsibilities

The composition of the research team reflects our emphasis on human sciences (anthropology, geography and economy) for this study. The team is composed of Indonesian and expatriate researchers having knowledge of the Indonesian language and rural context.

Marc PAIN	Professor at the University of Paris X - Nanterre, assigned to ORSTOM (Ministry of Transmigration, Jakarta) Geographer, regional study, cartography Project Team leader
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Drawing

Cartography

Team ORSTOM - Departemen Transmigrasi, Jakarta

second part

AGRICULTURAL COLONIZATION IN THE SOUTH SUMATRA PROVINCE

1. A REGIONAL OVERVIEW OF THE MAINLAND

South Sumatra is the fifth largest province in Indonesia with 104,000 km² and a population of 5.4 million in 1985. All the major natural regions of Sumatra are represented, except the coastal strip on the Indian Ocean. Each zone forms a parallel strip oriented northwest to southeast as the mountain zone with its dissected slopes and a central tectonic depression which forms the Pasema (Lahat) and the Ranau (Banding Agung) fertile highlands in this province. This is followed by a narrow piedmont strip and then by a large hilly peneplain. Though not very fertile, this last area harbors the largest concentration of smallholder rubber plantations in all of Indonesia. In the Palembang hinterlands, between the Musi, Ogan and Komering rivers, the peneplains are flooded due to the constricted river basis for at least nine months out of the year, creating the *lebak*, governed by a special system of rice planting (124,000 ha under cultivation in 1988). Then there is a wide swampy coastal strip which, in many areas, is regularly flooded by the tidal effect on river flow.

The province of South Sumatra also includes two large islands, Bangka and Belitung, which must remain outside of the scope of this study.

1.1 A Constant and moderate flow of in-migrants

Since the 1970's, annual population growth has been higher than 3% (1971-1980: 3.3%, and 1980-1985: 3.2%, same as the average growth rate for the island of Sumatra) which means a steady flow of in-migrants. Population density is still fairly low at 52 people/km², compared to the neighboring province of Lampung which already has 180 people/km² (1985). Lampung is the leading receiving province for rural spontaneous migration (with some 75,000 people estimated per year) while South Sumatra is a distant second for Outer Indonesia (with 15,000 per year).

Like Lampung, South Sumatra also received transmigrants in colonial times (in Belitang, OKU and Tugumulyo, MURAS), a large number through the *pra-pelita* transmigrant program (125 000 people left with little help between 1950 and 1969; this figure is often underestimated in statistics), as well as during all the Five Year Plans to this date (from 1977 to 1988 some 500,000 people moved in)⁹. Musi Banyuasin regency, situated on the coastal plain, is by far the largest transmigrant receiving regency in all of Indonesia. There settlement is based mainly on

⁹ The Transmigration programs in Lampung ended in 1979. Local resettlement, or Translok, was proposed to the descendants of transmigrants and to spontaneous migrants already settled in the province.

tidal-swamp agriculture.

These older sponsored settlements are important for their pulling effect on populations of the same ethnic origin. The distance and the degree of accessibility from the sending area (Java) are also important factors that can explain the attraction of the region. The spatial continuity of the phenomenon in the south of Sumatra from south to north is evident with Lampung, the first region of settlement (now a source of migrants), followed by South Sumatra, Jambi and Bengkulu. Detailed examination reveals however that the migratory processes is not always characterized by a frontal progression¹⁰.

1.2. A Dynamic Regional Economy

The economic situation of the province is far better than its neighbor Lampung probably due to the historical roots of its economic structures, aided by one of the major hydrographic networks of Indonesia, the Musi, enabling the penetration through a vast area of people and goods and providing their outlet. The river link was supplemented in the first half of this century by a road and rail network.

Palembang harbor has long been a strategic gateway at the mouth of the Musi on the Strait of Malacca since the Srivijaya period (Vth Century). The tin and pepper of Bangka Island provoked an early intervention by the Dutch, and Palembang first felt their influence in 1643. In 1812 the Sultanate fell under the authority of the Dutch and from 1837 to 1866 the countryside from Lahat to Baturaja came under their authority.

Petroleum, tin, rubber and coffee has supported the regional economy since the beginning of this century. South Sumatra is the leading smallholder coffee and rubber producing province in Indonesia (Table 2)

South Sumatra is an exporting province and its economy is governed by the ups and downs of the international market. In 1983, South Sumatra was the second ranking Outer Province for the GDP *per capita* (without mining) and the third exporting province after North Sumatra and East Java (excluding the oil and gas producing provinces).

Today, its economic expansion is limited, however, by the strong development of Bandar Lampung through which much of the province's production transits, due to the better road network and the lack of investments made to keep the Palembang harbor free of alluvion. Lampung exports twice as much coffee as it produces and the proportion is even higher for rubber and pepper¹¹.

¹⁰ The flow of spontaneous migration to Lahat (older than the movement to the northern part of Lampung), the Gayo highlands in Aceh or the Kerinci highlands in Jambi—where spontaneous migrants arrived in areas devoid of sponsored settlements and isolated from any dense settlements—may illustrate the role of fertile soil and cash crop opportunities in attracting migrants.

¹¹ This situation is not likely to change with the future opening of the so-called East Sumatra highway, linking the Lampung capital with Palembang, via Menggala, and beyond to meet the Jambi highway already opened. Meanwhile, the decision on a new port for Sumsel has not yet been made. This new road would have the advantages of stimulating better regional integration and opening a zone on the swamp fringe that has been undeveloped until

Tab. 2 *Production and export of rubber, coffee and pepper in Southern Sumatra, 1981-1984 ('000 tons)*

Province		Rubber		Coffee		Pepper	
		1981	1984	1981	1984	1981	1984
South Sumatra	Pr	146	160	75	79	17	17
	Ex	80	144	59	61	0	0
Lampung	Pr	7	6	74	42	19	14
	Ex	20	33	74	84	19	24
Bengkulu	Pr	13	16	25	26	1	0.4
	Ex	0	1	0	2	0	0

Pr: Production, Ex: export

Sources: Azis, 1989: 61. Regional Statistics Offices

The manufacturing sector is dominated by State enterprises and industries derived from petroleum, such as the PUSRI fertilizer factory and the Baturaja cement factory. Private enterprises went through a boom period following the prohibition of log export and the creation of plywood factories. The manufacturing sector is highly concentrated in and around Palembang but export crops and timber production have led to the blossoming of small scale industrial activities nearly everywhere. The 1980's opened a new era with the strong development of estate plantations (33,000 ha in 1984, 76,000 ha in 1988 already planted) which for the moment have not produced to a large degree either because the trees are still immature or because of land speculation¹².

This economic situation, mainly the smallholder tree crop structure (which induces better income distribution among the population), may explain the very good position of the province in Sayogo's calculation of the percentage of people under the poverty line in 1980 (9.4% in urban areas and 1.1% in rural areas, compared to 42.6 and 40.1 respectively in Lampung¹³).

Nevertheless, the level of services is not always satisfactory mainly because the population is distributed over a very large area and services are concentrated in Palembang. While access is thus hampered, even to education, primary and secondary school enrollment is on a par with the Indonesian average.

now.

¹² Huge areas were contracted by private or semi-public enterprises with the local government in the beginning of the 1980's, but no crops are in evidence ten years later (as in the case of Cempaka, OKU, where more than 30,000 ha are frozen for a future sugar cane plantation).

¹³ This calculation is confirmed by I. Aziz who gives 4.24% for 1984 to be compared to 41.42% for Lampung.

Tab. 3 *Main economic and social indicators*

Province	Index GDP 83 per Capita without oil	Asphalt road, 1984		Export \$ million 1985	Health Centre Sub-centres /100000 pop.	Urban Population 1980, %	Cinema Visit per capita
		km/ 000 pop.	km/ 000 km ²				
South Sumatra	164	0.73	37	646	17	27.4	1.2
Lampung	92	0.45	77.8	275	9	12.5	0.9
Bengkulu	91	1.14	49.1	5	38	9.4	0.4
East Java	89	0.4	258.6	717	7	19.6	0.6
Indonesia	100					22.4	
* Export figures don't include oil							

Sources: Hill, 1989: 6, 35, 38; official statistical data (BPS).

In conclusion, we might note that the dynamism of the regional economy offers better opportunities for employment and better salaries than in Java, representing an important factor of attraction (Table 3). During our fieldwork, the salary of an unqualified worker in Palembang was officially Rp 5000 per day but only Javanese migrants accept this rate (in Java they would receive at most Rp 3500 for comparable work)¹⁴. For the locals, this salary (Rp 5000) remains insufficient, and they blame the Javanese for lowering salaries. Agricultural wages during the periods of heavy work (rice harvest in the Transmigration centers and coffee harvest in the highlands) are almost double what they are in Java¹⁵.

1.3. Significant extension of areas under plow

The evolution of agriculture in South Sumatra is characterized by continuing increases in the area of land under production, whether for food crops where the people involved are mainly transmigrants or spontaneous settlers, or for tree crops where migrants come join with local populations for their cultivation.

FOOD CROPS

Rice is cultivated in the province with irrigation, in the old centers of agricultural colonization and in the valleys of Lahat regency, in flooded fields in the swampy depressions, the *lebak*, and in the tidal-swamp coastal area, *pasang surut*. The other forms of rice cultivation are on dry, either as swidden and often on newly-cleared fields (*ladang*) and on rain-fed fields (*tadah hujan*), both systems practiced throughout the province (Table 4).

¹⁴ In addition, the migrant lives more frugally and can save more.

¹⁵ Except on the fringes of Transmigration centers where the abundance of labor can cause salaries to fall to the same level or even lower than they are in Java (Rp 750 per day without meals for an unqualified worker in a plantation being set up near Pematang Panggan).

Tab. 4 *Paddy: Area under cultivation ('000 ha) and production ('000 tons)*

Type of Paddy	1974	1983	1988	Main actors of evolution
Irrigated	41	45	46	extension around kolonisasi area
Lebak	84	155	128	indigenous
Pasang Surut	26	90	119	Transmigration
Pluvial	124	97	100	indigenous and migrants
Ladang	13	51	53	indigenous
Total area	288		446	
Total production	891		1283	

The growth in area cultivated concerns mainly the swampy coastal strip and State investments in Transmigration settlements, the latter not necessarily raising production to a measurable extent since yields per hectare remain low in these ecological zones: 2.0 tons of paddy per ha in Musi Banyuasin in 1981 (Scholz, 1983:184). On the other hand, the intensification of rice culture in the irrigated zones of the first *kolonisasi* centers has given nearly the same excellent results as in Java with more than 4 tons per ha. The cultivated surfaces devoted to *lebak* cultivation grow regularly but the production remains dependent on the length of the dry season. South Sumatra province is at present barely self-sufficient in rice.

Tab. 5 *Other food crops: Area under cultivation ('000 ha)*

	1979	1985	1988
Corn	5	14	30
Cassava	22	25	35
Soja bean	3	9	20

The increase in cultivated area devoted to other food crops is less spectacular, but it exceeds the national average for all crops except cassava (Table 5). The main groups responsible for this growth are the transmigrants and the spontaneous settlers from Inner Indonesia who came to occupy an empty niche in the local agricultural system. Still, the yields remain generally lower than the national average thus illustrating the slight impact of agricultural extension and the low level of fertilizer applications due to the underdevelopment of the distribution network.

TREE CROPS

The total number of smallholder plantations grew sharply, thus confirming the specificity of this region. The increase in area cleared for coffee was particularly large, both from former rubber plantations (rubber forest), and from forests on the highland valleys and slopes. This production trend suggests that old plantations were not rejuvenated or else that there was an overestimation of the total area planted. This distinct increase is explained by the high price of coffee on the international market between 1976 and 1986, but it should slow in the coming years due to global overproduction¹⁶ (Table 6).

¹⁶ Coffee prices in Indonesia have also been linked to rupiah devaluation.

Tab. 6 *Tree crops: Area planted ('000 ha) and production*

S: smallholders, E: estate, Ar: area, Pr: production

Plantation		1974	1985		1988	
		S	S	E	S	E
Rubber	Ar	472	495	8	520	19
	Pr	149	155	13	170	13
Coffee	Ar	78	194		236	
	Pr	40	79		82	
Pepper	Ar	12	23		47	
	Pr	8	17		29	
Coconut	Ar	32	50		51	
	Pr	13	n.a		16	
Oil Palm	Ar			21		41
	Pr			12		42
Sugar-cane	Ar			3		12
	Pr			8		71
Total area		594	762	32	854	72

Sources: Official statistics compiled from the Department of Agriculture, Bappeda, and the Central Bureau for Statistics (BPS)

Rubber, the principal crop of the province, has experienced a slower increase in surface planted and a clear increase in yields. Nevertheless, the modernization of traditional plantations is generally a slow process for the local people (Barlow, 1982).

In all, an additional 778,000 ha have been put under cultivation between the mid-1970's and 1988 for the above crops. This does not include secondary food crops such as vegetables and fruit orchards.

1.4 A Local society experiencing major changes

The societies of South Sumatra have long shown a great degree of adaptability and geographical mobility which can be explained in part by an early opening to the outside world and the market economy, and by agricultural systems which have enabled a diversification of activities and crops.

AGRICULTURAL SYSTEMS

Agricultural systems based on shifting cultivation of food crops rapidly evolved towards extensive rubber plantations from its introduction (1908-1920) and with coffee in the highlands. Traditional unimproved varieties of rubber are planted densely (600 per ha) as soon as the field has been cleared. Rice and other food crops are planted up to the third year along with the rubber in the *ladang*. Then the *ladang* is abandoned and the rubber plants continue to grow amid the forest regrowth. Once the trees have reached maturity, the latex will be tapped when the price is high, otherwise the trees will be neglected for other more profitable activities, such as the extraction of sand from rivers, fishing, hunting, trade, or harvesting of the damar tree

(Barlow, 1982:96).

Following the introduction of rubber, planted on soils traditionally used for *ladang* rice cultivation, the local people begin to practice swamp rice farming in the depressions between hills, the *lebak*, depending on the extent of their drying in the course of the dry season (see Scholz, 1982:153-160).

GEOGRAPHICAL MOBILITY

Geographical mobility is illustrated first in the agricultural domain. The space used by people from South Sumatra does not take into account administrative and ethnic boundaries and has long stimulated migration to Lampung (about 113,000 people born in Sumsel resided in Lampung in 1980) and Bengkulu. This propensity to go farther to open land can in part be explained by the inheritance system. In the interior regions, particularly in the upper Ogan and Komering Rivers, traditional law, despite the influence of Islamic law, gives all land and the house to a single child, the eldest daughter in the case of the Semendo, eldest son in the other cases. This heir might best be considered the guardian of the lineage's wealth as he or she must provide economic support for the lineage members (especially for education and health care) and must receive the entire family for the annual reunion of *lebaran hadji* or for life cycle rituals. While these differences (based on rank and gender) are becoming blurred at the present time, families remain clearly reticent to divide their properties. Those who decide to remain in the village have responsibility to take care of the family properties and more and more today it is the youngest child who stays longest with the parents. Meanwhile, his or her elder brothers and sisters will have gone elsewhere, often far away, to open up new land where they reside permanently.

According to Semendo traditional law (*adat*), in which its matrilineal inheritance practice is still quite strong, newly opened land becomes part of the eldest daughter's inheritance, which partly explains the extreme mobility of this ethnic group and its reputation as the master of isolated land. They open land, plant coffee, wait for the maximum harvest, *panen agung* (after four years). Some then resell their parcels, often to Javanese who they employ, in order to go open land elsewhere.

Today this agricultural mobility has diversified to the towns, due to the impact of improved services (particularly transportation and education), first within the province (27% of the population lives in towns in 1980; Palembang experienced annual growth of 4.6% between 1971 and 1980) and, increasingly, to the active centers of the country, such as Jakarta and Bandung¹⁷.

¹⁷ 132,000 people changed residence during the five years from 1975 to 1980, or 5.8% of the 1980 population. In 1980, 333,000 people born in Sumsel had a residence outside of the province, equivalent to 7.2% of the 1980 population, compared to 5.8% in the preceding decade. This mobility is increasing since in 1930 only 4.9% of the people from Palembang resided outside of their administrative territory. People born in Sumsel and residing in Jakarta are officially less numerous in 1980 (28,000) than in 1971 (34,000) but we should probably rectify this figure by taking into account the migrants residing in the suburbs of Bogor, Tangerang and Bekasi in West Java. We have noted the links which exist between Bandung and Sumsel; often local people declare that their children are in Bandung pursuing their education.

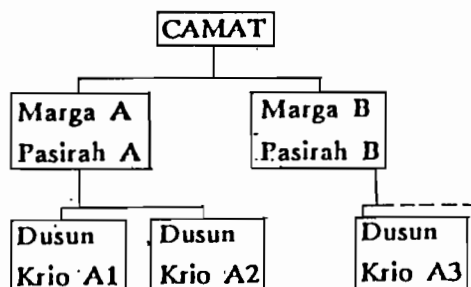
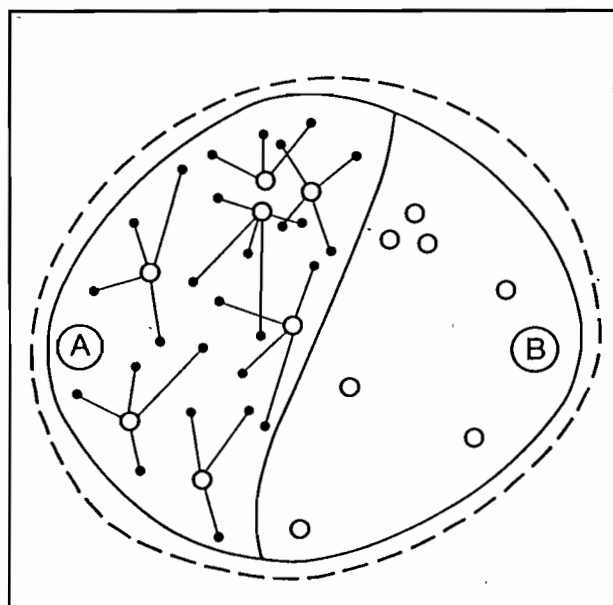
We will only consider here those aspects related to the management of people and land. The resulting social upheavals would require more study. South Sumatra was organized under the *marga* political system (see the technical report on land rights). The *marga* had control over contiguous territories. All of South Sumatra was under their control, except the large towns and protected forests that had already been so declared by the colonial government. Rights to use this land were managed by the *marga* chief, the *pasirah*, while the people living on the land were administered as village units, or *dusun*, by the *krio*. This *dusun*, which did not have its own territory, could have hamlet satellites (often called *talang*) within the same *marga* attached to it with the authorization of the *pasirah*. Situated up to ten kilometers from the main settlement, they were created by families who desired to be closer to their fields or plantations.

By 1982, the *marga* were abolished and the administrative and territorial units under the *kecamatan*, the *dusun*, became the *desa*, as in the rest of Indonesia. By 1990, many of these *desa* still did not know the exact boundaries of their territory and still administered people in large hamlets situated within the territory of other villages (these are non-contiguous villages or enclaves, called *desa*, *dusun* or *kampung kantung*. (Fig. 1)

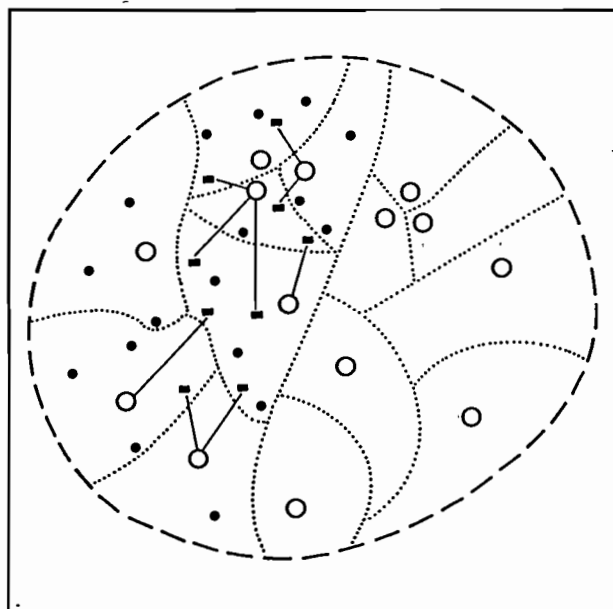
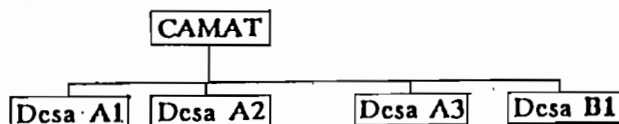
Some of the land, especially that which is not yet exploited, has come under the jurisdiction of the Ministry of Forestry. Without basic cartographic documents available at the district seat, let alone the village office, there is considerable disarray in the management of this space both at the *kecamatan* level¹⁸, and at the village level, where local planters now rarely ask permission from the village head to open new land.

¹⁸ Much land is now set aside for future plantation development. This is related to traditional institutions, elected by the people and responsible to them, losing control over their territory. Where more than two hectares are to be cleared, the authorization must come from the *bupati*.

Fig. 1 TRADITIONAL ORGANIZATION AND NEW ADMINISTRATIVE DIVISION
ORGANISATION TRADITIONNELLE ET NOUVELLE DIVISION ADMINISTRATIVE



1982



Legend:

- Kecamatan, district boundary
- Marga boundary
- Village boundary
- Dusun / Desa, main village
- Hamlet depending from a mother village
- Dusun kantung, hamlet separate from its mother village

2. THE RECEIVING AREAS

South Sumatra province has rural population densities that are still low to average (see the population maps). With a population estimated at 6 million inhabitants in 1988, the province has an average density of 58 inhabitants per km². Maximum rural densities per district do not exceed 200 per km² except in one case, Tugumulyo, a small irrigated *kecamatan* that grew out of the *Kolonisasi* settlements (262 per km²). Districts with over 100 people per km² are only found in the *Kolonisasi* zone where there is irrigated rice farming, and in the Transmigration satellites of Belitang -Buay Madang, Cempaka, and Martapura¹⁹-, as well as in the old settlements of the Pasemah valley (Pagar Alam, Muara Pinang, Pendopo and Jarai) where irrigated rice farming and smallholder coffee planting support the local agricultural economy. This higher density settlement is found in the piedmont area or in the mountain valleys. In the peneplains rural densities did not reach 50 per km² in 1971 (except in the countryside of Palembang) and along the swampy coast they rarely exceeded 30 per km² (refer to average population density (76 people/km²) and its economy places it among the better-off *kabupaten* of South Sumatra. It is the gateway to Lampung province either by the Trans-Sumatra highway or by train (Palembang-Bandar Lampung). The *kabupaten* covers 12,000 km² and is divided into 14 *kecamatan* with 482 villages and three medium-sized towns: Baturaja, the administrative centre of OKU (73,000 inhabitants), Martapura on the Trans-Sumatra highway, and Muaradua in the mountain zone. The local population is composed of five local ethnic groups, the Ogan Ulu, Komering Ulu, Daya, Ranau and Semendo and other outsiders such as the Javanese, Sundanese and Balinese settled mainly in rural areas. In economic centers, one also finds ethnic Padang, Batak, Chinese and even some Indians in Baturaja.

To determine which rural areas are going through the most changes, the annual population growth rates were calculated by extracting the population added by Transmigration from 1971 to 1988. The demographic trends are presented for each major environmental zone and the evaluation that results uses the criteria of 2.3% natural growth per year, not counting emigration towards the towns or outside of the province.

2.1. Mountain and piedmont areas

The mountain areas and the areas of good volcanic soils, are found in the *kabupaten* of OKU, Muara Enim, Lahat (almost all) and a small part of Musi Rawas. From 1961 to 1980, a central section of this zone situated in the area of the Semendo district experienced significant out-migration (*Kecamatan* Tanjung Agung, Pengandonan, Merapi, Pulau Pinang, all having less than 2% growth). This area corresponds more or less with the territory of influence of the

¹⁹ There the Transmigration *pra-pelita* program was important. The high population density around the *kolonisasi* settlements is the same in Tugumulyo but the low-density of the rest of the *kecamatan* masks the phenomenon in statistics. The population growth of *kecamatan* Lakitan has been strong (5.2% without transmigration between 1971 and 1988).

Semendo and Ogan Ulu ethnic groups who have a propensity to go open new land in Lampung and closer by in the Banding Agung and Simpang *kecamatan* on the Kotaway plateau, as well as in the districts bordering on Bengkulu (Table 7).

Between 1961 and 1971, they were joined by Javanese who came to work as laborers on their plantations or to clear land on their own account. It should be remembered that this period was very difficult for Javanese peasants from a political as well as economic point of view. The largest influxes were experienced by the Lahat regencies of Tebbing Tinggi which offered fertile slopes to settle in the south (Bukit Balai and Bukit Besar), and Pagaralam on both slopes of the valleys (towards Bengkulu) and further on, Tanjung Sakti.

A major settlement of migrants is also situated in the regency of Musi Rawas, district Muara Rupit and Bukit Kemuning, due to the important addition of unregistered *pra-pelita* Transmigrants on the fringes of the *kolonisasi* center in Tugumulyo.

In OKU regency, the two above-mentioned districts, Simpang and Banding Agung, which received 150 migrants each per year. Martapura situated in the piedmont area received *pra-pelita* transmigrants and played the role of arrival point for many spontaneous migrants entering the region, a role it plays to the present day.

Between 1971 and 1980, Lahat, already densely populated²⁰, left the bulk of spontaneous migrant reception to the mountainous *kecamatan* of OKU which were to receive more than double the influx of Lahat. The Kotaway Plateau, the Mapas and Semut Mountains in the district of Martapura, the slopes of the Muaradua valleys and most particularly the slopes of Mount Graba to the northwest of the town were to receive many of the new arrivals, while Banding Agung continued to receive its share.

Up until around 1986, high coffee prices encouraged the movement. Spatially, the movement extended to the most isolated districts (Muaradua Kisam and Pulau Beringin) which offered more opportunities for the newcomers without starting capital; the same phenomenon is found in Lahat with the growth of the isolated district of Ulu Musi. Trends in village population growth demonstrate the continuing of in-migration to the most isolated interior hamlets.

When the fall in coffee prices began to be felt, certain indigenous groups began to neglect their coffee trees once they had been harvested for their maximum yields (*panen agung*), and return to their places of origin (this can be seen in the growth of districts with Semendo population). This back and forth movement makes any calculation difficult. In 1989, a sizeable increase of in-migration is felt with the arrival of people expelled from the protected land in Lampung. In 1989 and 1990, certain territories in OKU declared reserves or protected land were emptied of their illegal planters, including Mount Mapas and Semut in Martapura, Sapulima

²⁰ The Pasemah valley offers, in addition to coffee plantations on the slopes, rice fields irrigated since ancestral times. Though the Javanese can find work here, they know that they will never be able to buy the fields, a fact that is responsible for frustrations which feed migration to the peneplain where land is less fertile but available.

KECAMATAN	Trans settled 71/88	Annual Growth					main physical milieu	Density	
		without transmigration			with			people/km2	
		61/71	71/80	80/88	71/88	71/88		1971	1988
OKU									
1 P.Beringin		1.8	2.6	4.2	3.3	3.3	M	9	18
2 Banding Agung		2.8	4.7	1.6	3.2	3.2	M	17	29
3 Muaradua		2.1	5.0	1.8	3.5	3.5	M	28	50
4 Muaradua Kisam		2.3	3.5	2.4	3.0	3.0	M	18	30
5 Simpang		3.1	7.2	3.0	5.2	5.2	M	28	67
6 Martapura	1,665	5.6	6.1	2.7	4.5	4.6	M, Pi	57	123
7 Baturaja Barat		2.3	2.7		3.2	3.6	K, Pi	364	189
8 Baturaja Timur*	4,414						K, Pi		466
9 Sosoh Buay Rayab*	*						Pi		21
10 Pengandonan		0.8	0.2	1.5	0.8	0.8	M	43	49
	6079								
MUARA ENIM									
1 Semendo		-0.8	1.6	3.5	2.5	2.5	M	26	39
2 Tanjung Agung		0.4	1.6	3.8	2.7	2.7	M, Pi	55	86
LAHAT									
1 Tanjung Sakti		2.9	2.7	2.6	2.7	2.7	M	38	60
2 Pagar Alam	500	2.9	4.1	1.8	3.0	3.0	M	107	178
3 Muara Pinang		1.8	3.1	1.8	2.5	2.5	M	78	118
4 Pendopo		1.4	2.5	2.7	2.6	2.6	M	101	156
5 Ulu Musi		2.7	3.5	3.3	3.4	3.4	M	40	70
6 Tebing Tinggi		4.1	2.6	2.5	2.5	2.5	M, Pi, Pe	47	72
7 Jarai		0.7	3.8	1.7	2.8	2.8	M	75	121
8 Kota Agung		2.0	3.5	2.2	2.8	2.8	M	47	75
9 P. Pinang		-0.2	2.4	1.8	2.1	2.1	M	44	63
10 Merapi		1.1	1.2	2.8	2.0	2.0	M	36	50
11 Lahat		1.4	3.3	4.1	3.7	3.7	K, M	64	118
MUSI RAWAS									
8 Rawas Ulu		1.2	2.8	2.3	2.6	2.6	M	8	12
9 Muara Rupit		3.1	2.1	3.0	2.5	2.5	Pi, Pe	6	9
11 Bukit Kemuning Ulu	2,500	6.3	7.5	2.2	4.7	5.0	M, Pi	11	25
SOUTH SUMATRA									
Mountain, Piemont	15,158	2.2	3.7	2.6	3.2	3.2		38	65

M: mountain. Pi: piemont. Pe: beneplains. K: town

M: mountain, Pi: piemont, Pe: penepains, K: town

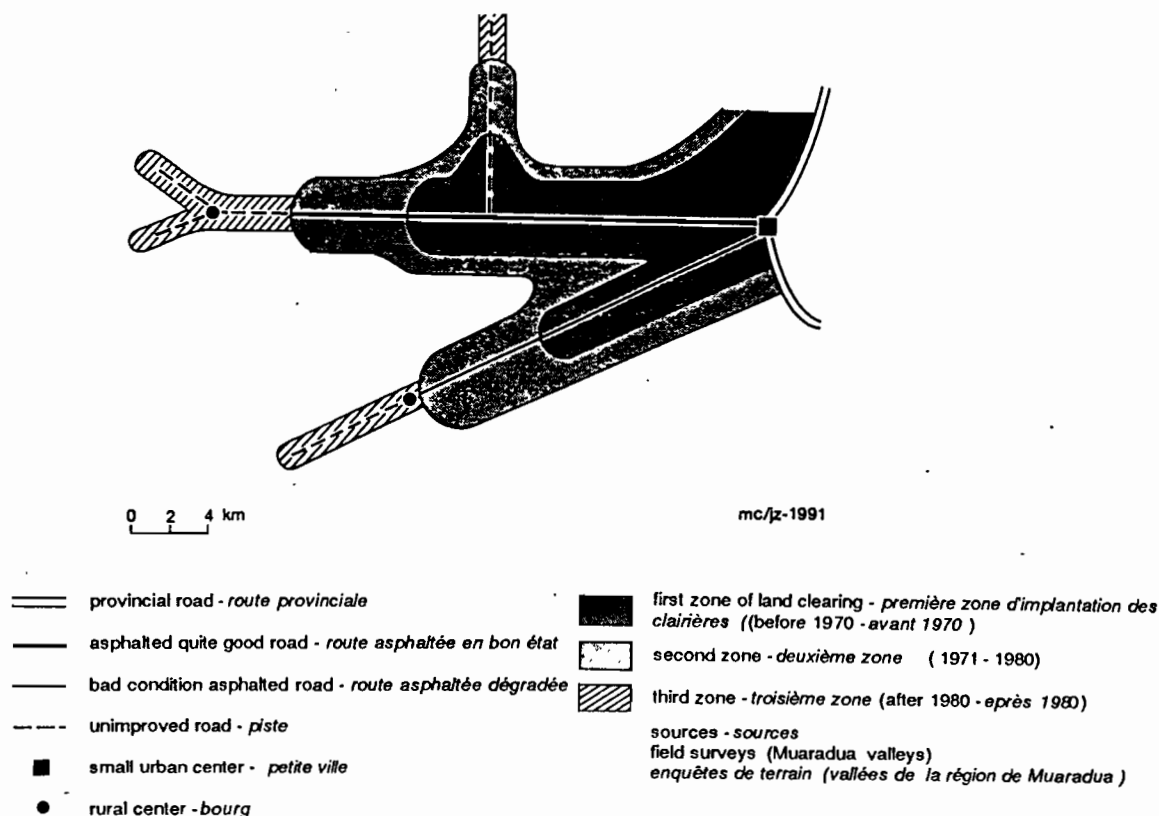
Tab.7 Mountain and piedmont areas: population changes over time

located in the two districts of Simpang (250 families) and Muaradua (about 500 families). Some people left the areas reserved for military training camps, between the roads from Simpang to Martapura and to Baturaja and recently extended along the right bank of the Komering²¹. In the district of Pagar Alam, Lahat regency, 229 families have already been moved out (including 50 Javanese landowning families) and two thousand more will be soon (between Pagaralam and Tebbing Tinggi).

²¹ The others remained as sharecroppers in partnership with the military personnel.

Fig. 2

STAGES OF CLEARINGS IN COFFEE PLANTATIONS AREA IN RELATION TO ROAD SYSTEM -
RYTHME D'IMPLANTATION DES NOUVELLES PLANTATIONS DE CAFE PAR RAPPORT AU RESEAU
DE COMMUNICATION



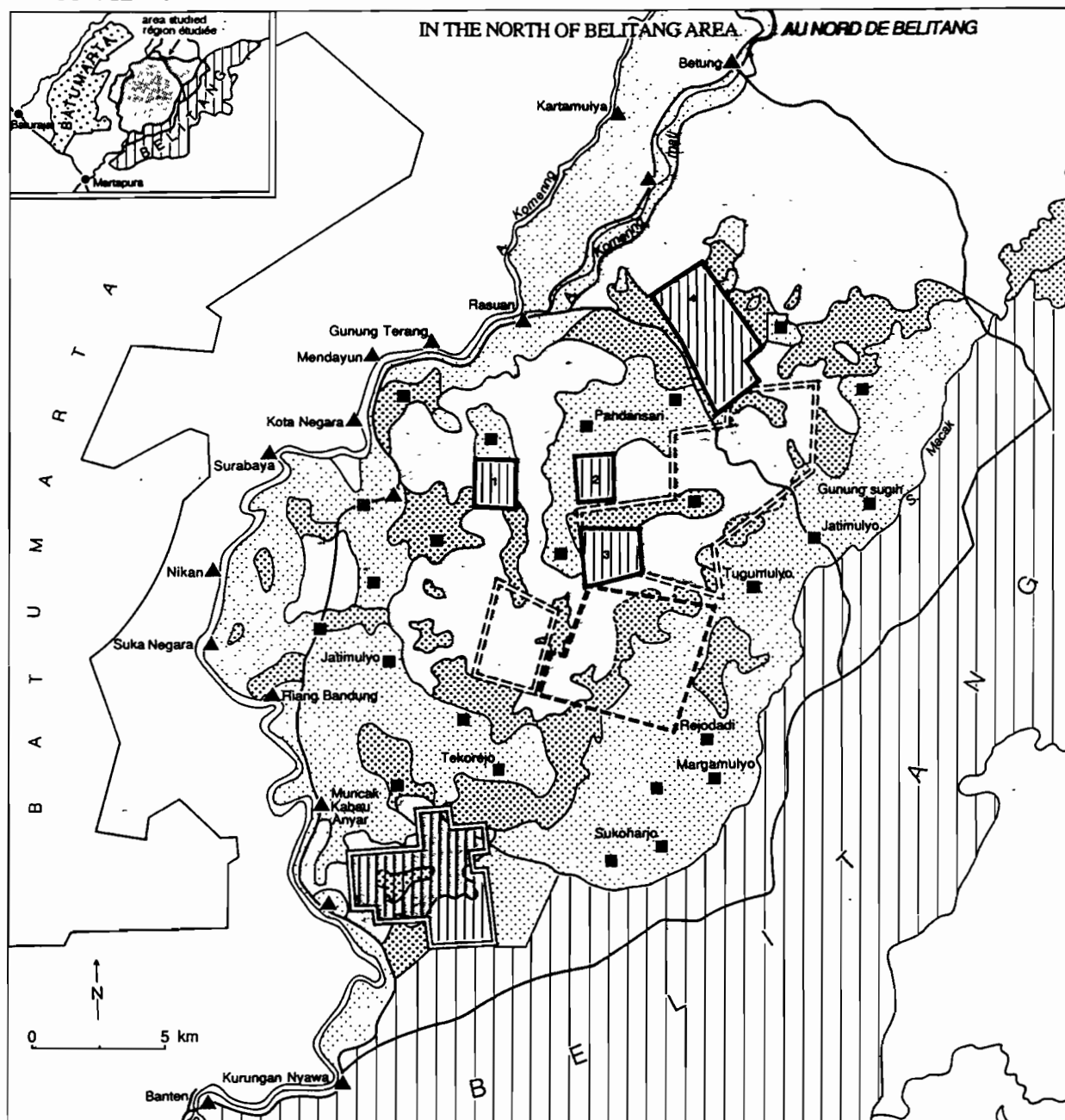
In all, this mountainous region, which has practically no State-organized settlement, has received a surplus of about 150,000 people (of all origins) in 17 years, and as such is the strongest rural region of attraction in the whole province.

2.2. The strong attraction of the peneplain-piedmont areas

In these zones, the strong attraction is directly linked to the presence of *kolonisasi* villages which also have irrigated rice cultivation. The arrival of migrants from Inner Indonesia has continued since their creation up to the present day in the areas of Tugumulyo, Muras (Muara Lakitan, Kelingi and Kemuning) and Belitang, OKU (Belitang, Buay Madang, Cempaka and in the regency of OKI, Mesuji and the south of Kayu Agung²²) (Fig. 3 & 4).

²² The sub-district of Kayu Agung has its territory cut in two pieces. The southern part called Lempuing, a *perwakilan kecamatan*, has received the most spontaneous migrants since the 1970's. This dichotomy makes an evaluation of population flux difficult, all the more so because the northern part is almost entirely urban. The area experienced strong development in the 1970's due to intense forest exploitation, but as a result of the almost total disappearance of this resource, the area now is experiencing out-migration.

Fig 3 COMPLEXITY OF SETTLEMENT ON THE PERIPHERY OF THE COLONIAL-ERA BELITANG PROGRAM
COMPLEXITE DU PEUPLEMENT EN PERIPHERIE DU PROGRAMME COLONIAL DE BELITANG



past settlement - peuplement ancien :

- ▲ ethnic Sumatran village existing at the beginning of the century - *village autochtone, en place au début du siècle*
- ▨ organized settlement during the colonial period ("kolonisatie", Belitang program)
peuplement organisé à l'époque coloniale ("kolonisatie", programme Belitang)

recent settlement trends - progression récente du peuplement :

spontaneous land-clearing (ethnic Sumatra and immigrant) - *défrichements spontanés (autochtones et immigrants) :*

- ▨ area occupied in 1969 - *espace occupé en 1969*
- ▨ area occupied in 1987 - *espace occupé en 1987*
- villages and hamlets of recent immigrants since the opening of the Belitang program
villages et hameaux d'immigrants récents, installés depuis l'ouverture du programme Belitang

official settlement programs - *programmes officiels de peuplement :*

- Swakarsa Transmigration - *Transmigration swakarsa :*
- ▨ project completed (1983-1988) - *projet réalisé (1983-1988) :* 1 Tanjung Tiga 2 Pandansari II 3 Bangsa Negara 4 Jati San
- ▨ area reserved for Transmigration - *emplacement réservé à la Transmigration*
- Armed Forces (Angkatan Darat) - *Forces Armées (Angkatan Darat) :*
- ▨ clearing completed (1990) - *défrichement réalisé (1990)*
- ▨ reserved area - *emplacement réservé*
- ▨ residual forests in 1987 - *forêts résiduelles en 1987*

sources - *sources*
topographic maps JANTOP - *cartes topographiques JANTOP :*
Gumawang, Betung, Kurangan Nyawa 1969
SPOT imagery - *photos satellite SPOT :* 279/358, 27/11/1987
field surveys - *enquêtes de terrain* 1990

mp/jz-1991

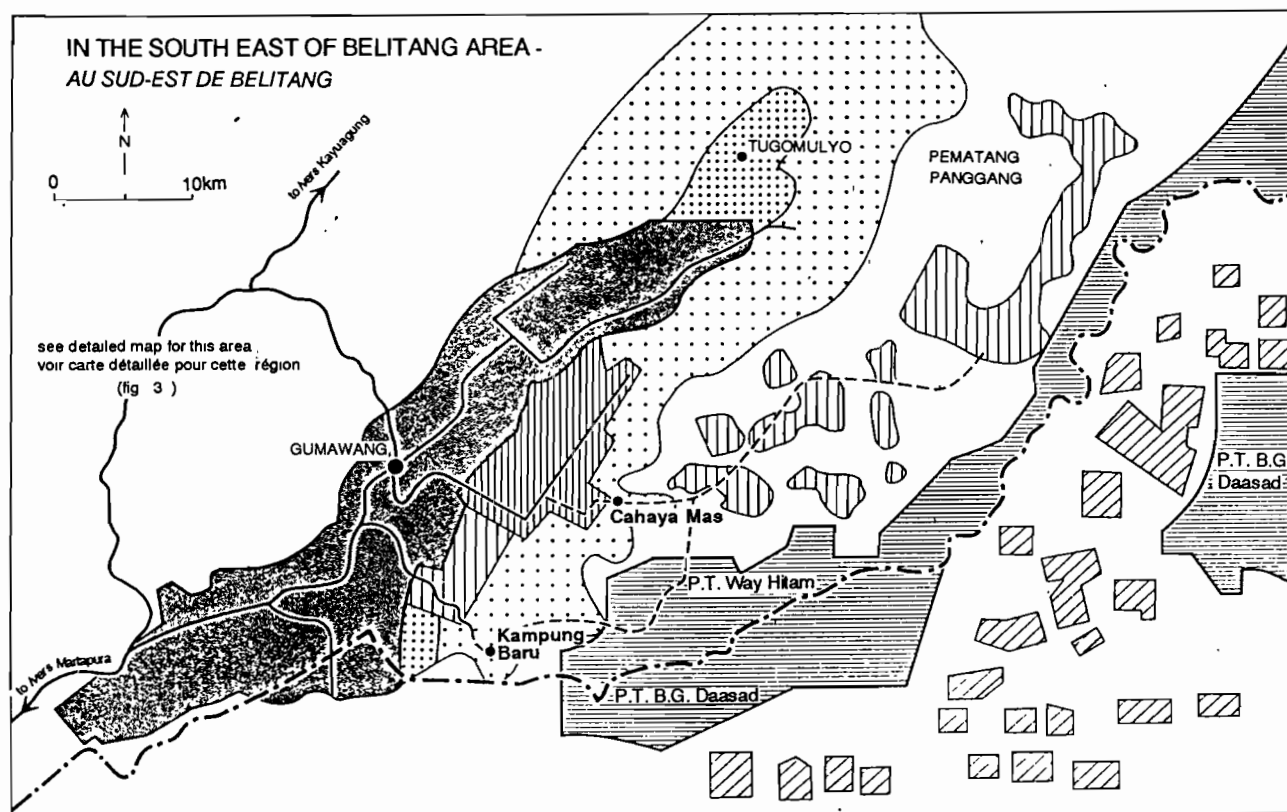
It was around these *kolonisasi* villages that the 125,000 *pra-pelita* transmigrants were settled often in unprepared sites. Towards the end of the 1960's, they organized with the descendants of the *kolonisasi* settlements and their relatives come to join them, the creation of villages on the borders of agricultural areas. The *kecamatan* of Peninjauan populated by Ogan Ulu experienced strong out-migration which covered up slight immigration (long existing through the recruitment of workers for the railroad and for crop cultivation). This immigration is increasing recently, providing an example of the progression of this phenomenon through time and space.

In all, the surplus over and above that brought by planned settlements into these regions between 1971 and 1988 would be about 70,000 persons (Table 8).

Tab. 8 *On the fringes of Kolonisasi settlements: Population changes over time*

KECAMATAN	transmig settled 71/88	Annual Growth					main physical milieu	Density people/km2	
		without	Transmigre			with		1971	1988
		61/71	71/80	80/88	71/88	71/88			
OKI									
Peninjauan	17028	0.9	0.7	0.6	0.7	3.4	PI.PE	15	28
Buay Madang	27322	6.3	2.5	0.8	1.7	2.7	PI.PE	97	153
Belitang	7788	4.4	4.0	1.8	2.9	3.3	PI.PE	94	163
Cempaka	12345	4.4	0.5	1.7	1.2	2.0	PE	89	125
MURAS									
Tugu Mulyo	0	3.4	3.4	1.1	2.1	2.2	PI.PE	38	282
Muara Beliti	1516			0.4	*	*	PE		30
Muara Lakitan	16928	1.5	5.2	5.0	5.1	7.4	PE	3	11
Muara Kelingi	7743	2.4	3.0	8.1	5.5	6.2	PE	12	35
Bukit Kemuning Ulu	2500	6.3	6.9	2.2	4.7	5.0	M.PI.PE	11	25
OKI									
Mesuji	29923	5.4	14.1	3.3	8.9	12.3	PE.PS	3	19
Kayu Agung	16344	2.6	5.9	3.3	5.0	6.0	TW.PE	23	62
Total									
	139437	3.9	2.8	1.9	2.4	3.2		27	48
M: mountain, Pi: piemont, Pe: peneplain, TW: town, PS: pasang surut.									

Fig 4 COMPLEXITY OF SETTLEMENT ON THE PERIPHERY OF THE COLONIAL-ERA BELITANG PROGRAM
COMPLEXITE DU PEUPLEMENT EN PERIPHERIE DU PROGRAMME COLONIAL DE BELITANG



mp / jz 1990

program from the colonial period based on irrigated rice cultivation
programme de l'époque coloniale fondé sur la riziculture irriguée

extension from the initial program - extensions à partir du programme initial (1950/60 - 1970) :

transmigration settlement: Nusa villages, valley rice fields, dry cultivation on inter-river uplands
transmigration: villages Nusa; rizières de fond de vallée, cultures en sec sur les interfluvies

spontaneous settlement - peuplement spontané

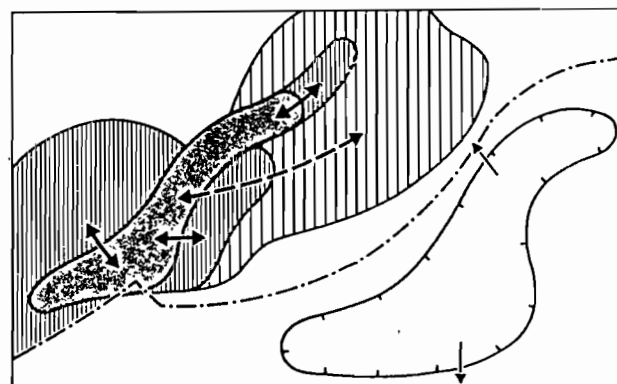
recent extensions based on dry land cultivation (1975 - 1990) extensions récentes basées sur cultures en sec (1975 - 1990) :

sponsored settlement - peuplement organisé

local transmigration settlement (province of Lampung) - programme transmigration locale (province de Lampung)

spontaneous settlement - peuplement spontané • Kampung Baru, Cahaya Mas, studied villages - villages étudiés

forest concession - concession forestière



area with a mature spatial organization and good connection to regional economy - espace organisé, parfaitement intégré à l'économie régionale

area with spatial organization in process, directly connected to central nucleus (Belitang) - espace en cours d'organisation, directement rattaché au noyau central (Belitang)

area not yet structured and isolated, badly connected to central nucleus - espace isolé et peu structuré, mal raccordé au noyau central

unstructured and landlocked area - espace enclavé et non structuré

sources sources

topographic maps JANTOP - cartes topographiques JANTOP (1969)

SPOT satellite imagery - images SPOT 1986/1987

field surveys - enquêtes de terrain 1990

2.3. The Central Plains Depressions

The *kecamatan* situated in the peneplains have densities of between 30 and 60 people per km², with the exception of the countryside around Palembang, where in the *lebak* areas densities can reach 136 people per km². This zone populated by *melayu* people (Komeri, Ogan and Musi Ilir), offers little unclaimed land and spontaneous migrants are almost completely absent outside the small towns (Table 9)

Tab. 9 The central plains: Population changes over time

KECAMATAN	transmig settled 71/88	Annual Growth					main physical milieu	Density		
		without	Transmigration			with		people/km2	1971	1988
		61/71	71/80	80/88	71/88	71/88				
OKU										
Peninjauan	17,028	0.9	0.7	0.6	0.7	3.4	PI. PE	16	28	
M. ENIM										
Muara Enim	5,000	1.0	0.8	1.9	1.3	2.0	PE	66	93	
Gunung Megang	5,000	0.2	1.8	1.4	1.6	2.2	PE	19	27	
Talang Ubi		1.0	2.0	2.9	2.4	2.4	PE	39	59	
Rambang Dangku*	5,000				*		PE	0	43	
Rambang Lubai*	5,000				*		PE	0	39	
Gelumbang		2.2	2.5	1.4	2.0	2.0	PE	43	60	
LAHAT										
Kikim	8,515	1.5	1.7	5.9	3.7	4.6	PE	23	49	
MURAS										
Muara Beliti	1,516			0.4	*	*	PE		30	
Muara Lakitan	16,928	1.5	5.2	5.0	5.1	7.4	PE	3	11	
Muara Kelingi	7,743	2.4	3.0	8.1	5.5	6.2	PE	12	35	
Rawas Ilir	15,217	1.8	2.5	5.2	3.7	5.4	PE	12	28	
Jaya Loka	5,520	*	6.2	3.1	4.7	7.0	PE	14	45	
OKI										
Tanjung Batu		1.1	1.0	2.2	1.6	1.6	PE	81	106	
Tanjung Raya		1.3	1.2	1.9	1.5	1.5	PE	303	393	
Sirah P. Padang		1.3	2.0	1.5	1.7	1.7	PE	144	193	
Inderalaya		1.3	-0.2	1.9	0.7	0.7	PE	85	97	
Pemulutan		1.1	1.0	1.8	1.4	1.4	PE	227	287	
MUBA										
Sekayu	18,400	2.0	2.1	1.3	1.8	2.7	PE	39	61	
Babat Toman	13,800	3.1	1.6	6.2	3.8	4.4	PE	18	37	
Sungai Lilin	27,500	-1.5	4.6	8.3	6.3	8.9	PE	15	64	
Bayung Lincir	24,000	5.8	5.3	0.7	3.1	8.6	PE, PS	1	6	
Total	176,166	1.6	2.5	3.8	3.1	3.9		20	38	

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2.314110

Pe: penelain, TW: town, PS: pasang surut

Elsewhere, the local populations are most often settled along the river banks cultivating land in a band two to three km wide on each side of the river (dry field rice, rice cultivated in flooded depressions, rubber forest, fruit trees on the banks near the settlements). These traditional villages are thus relatively isolated from the circulation, since river transport has decreased markedly (there is only one boat per month on the Lematang).

Roads have become the line of attraction for new settlement of a more heterogeneous nature. Many of these roads, however, are not in good condition; many are impassable during the long rainy season. The Transmigration settlements appear as massive blocks in the large regions between the rivers. Through the addition of population through Transmigration, this agro-ecological zone has stable population growth with some out-migration (less than 2.3% annual growth) towards the towns or other regions of the province.

The Muara Enim regency, situated in the center of the province and having had no massive Transmigration programs, is representative of the evolution of this zone; it has had stable demographic evolution without much spontaneous influx, and has even experienced a degree of rural exodus. Spontaneous migrants penetrate into this area in very small numbers.

Yet, on the fringes of this space-- *kecamatan* Rawas Ilir, Babat Toman, Sekayu, Sungai Lilin and Bayung Lincir--we can detect a movement of in-migration rooted in the Transmigration settlements, the roads (the Palembang to Jambi road) and the rural centers or activity centers where they find people of the same ethnic group (military bases, large plantations). This in-migration would represent around 20,000 people over a 17-year period in the rural zones, all ethnic groups included.

2.4. The large swampy coastal area

Up until 1971, population densities in the wide swampy coastal strip were quite low (less than 15 persons per km²). They increased considerably in 1988 with the great input of population by the Transmigration program (more than 300,000 in the MUBA regency and 80,000 in OKI, Table 10).

This agro-ecological zone, special because it is swampy and in some parts is flooded daily by the tides, was not an area of permanent residence for locals except in grouped fishing or trading villages such as the picturesque village of Sung Sang, perched on stilts. This swampy region was a place for fishing (with the right to fish redistributed by sector each year by auction, *lelang lebung*). Rice cultivation was practiced by people residing on the fringes of this zone on dry land. Rice could be harvested once a year, if not less. The large huts on stilts can be seen sprinkled on the banks, occupied only during the season.

The Bugis people from Sulawesi were the first to come (in 1964) and systematically exploit this environment, associating rice cultivation and coconut plantations, and live there throughout the year on land opened with the authorization of local officials on both sides of the drainage canal, *parit*, which they themselves dug.

Tab. 10 Coastal area: Population changes over time

KECAMATAN	Population 1988	TRANSMIGRATION Settlement					Annual Growth				main physical milieu	Density people/km2		
		61/71	71/80	80'	71/88	61/77	without trans		with					
							71/80	80/88	71/88	71/88				
OKI														
4	Mesuji	73,041			29,923	29,923	5.4	14.1	3.3	8.9	12.3	Pe, PS	3	19
10	Pemulutan	59,097				0	1.1	1.0	1.8	1.4	1.4	PS, K	227	287
11	Tulung Selapan	55,087				0	3.3	3.3	4.1	3.7	3.7	PS	4	8
12	Pampangan	76,079			40,655	40,655	2.6	2.8	-0.1	1.5	6.1	PS, pe	5	15
MUSI BANYUASIN														
4	Bayung Lincir	40,738			24,000	24,000	5.8	5.3	0.7	3.1	8.6	Pe, PS	1	6
5	Banyuasin I	155,231		7,740	34,668	42,408	0.6	8.0	4.2	6.4	8.4	PS	14	54
6	Talang Kelapa	105,546		17,369	2,320	19,689	3.1	2.4	4.4	3.9	5.2	Pe, PS, K	35	83
7	Banyuasin II	169,457	724	26,477	31,475	57,952	4.4	10.3	4.4	8.2	10.9	Pe, PS, K	6	37
8	Banyuasin III	187,346			66,593	66,593	2.8	3.9	1.9	3.0	5.7	Pe, PS	24	60
SOUTH SUMATRA														
Coastal area		921,622	724	51,586	229,634	281,220	2.8	5.0	3.2	4.3	6.6		9	28

Pe: Peneplains, PS: Pasang Surut/ swampy coastal area, K: Town

Since the Transmigration program opened its villages on a new canal (*kanal PU*) and brought in settlers, economic activity and infrastructures (schools, health centers and markets), some local people have decided to settle in a permanent manner, creating small hamlets comprised of a few houses located on the banks now shaded by coconut trees and other fruit trees. Many new Bugis settlements have been found on the canal.

Spontaneous in-migration in the agricultural sector is difficult to evaluate for several reasons: 1) the strong increase in the number of young transmigrant couples (over the last fifteen years, more than 3% per year), 2) the indigenous settlement movement, and 3) the influence of the city of Palembang and its suburban area where industrial and commercial activities are concentrated. Among the in-migrants, the Bugis are the most numerous in the swampy areas. Spontaneous Javanese settle the higher lands and work in truck farming or as industrial or plantation workers (at Sembawa for example), or else in one of the many informal sector jobs.

CONCLUDING REMARKS

Since the 1960's, one notes that the areas which have attracted the most migrants are those which satisfy several basic conditions by being located, notably:

- Where there are people of the same ethnic group,
- Where there is unclaimed land,
- Where there is work

The rural settlements which, up until 1990, attracted the most spontaneous settlers were those located in valleys and piedmonts, followed by the older planned settlements. In the first

case, the migrants settled where the soil was most fertile (Lahat), before shifting towards areas where land was available. In the second case, the settlement movement was first made on the fringes of the oldest *Kolonisasi* settlements, and presently the movement is beginning around the oldest Transmigration settlements. Regions with high concentrations of locals offered no room for spontaneous settlers. The swampy coastal regions are of no interest except to the Bugis who have the ability to exploit them. Finally, the areas controlled by the local people and based on rubber cultivation seem more difficult for people from Inner Indonesia to penetrate.

3. AREAS UNDER STUDY

Our field studies could not cover the whole of this vast province for reasons of time and funding. We therefore chose a zone which could represent the various environments relevant for our study, notably, a zone of older planned *kolonisasi* settlements, a mountainous region and a zone of piedmont and peneplain. We chose the Baturaja-Belitang-Lake Ranau triangle, a sub-region of its own right which offered the following advantages: 1) major urban and rural centers, 2) continuity with the province of Lampung, 3) coverage by cartographic documents, especially the high-quality remote-sensing imagery and, 4) location almost entirely in one regency, OKU (Ogan Komering Ulu),²³ which facilitated administrative formalities.

3.1. Baturaja-Belitang-Lake Ranau in OKU Regency

GENERAL OVERVIEW

The regency of OKU has an average population density (76 people/km²) and its economy places it among the better-off *kabupaten* of South Sumatra. It is the gateway to Lampung province either by the Trans-Sumatra highway or by train (Palembang-Bandar Lampung). The *kabupaten* covers 12,000 km² and is divided into 14 *kecamatan* with 482 villages and three medium-sized towns: Baturaja, the administrative centre of OKU (73,000 inhabitants), Martapura on the Trans-Sumatra highway, and Muaradua in the mountain zone. The local population is composed of five local ethnic groups, the Ogan Ulu, Komering Ulu, Daya, Ranau and Semendo and other outsiders such as the Javanese, Sundanese and Balinese settled mainly in rural areas. In economic centers, one also finds ethnic Padang, Batak, Chinese and even some Indians in Baturaja.

OKU is composed of three agricultural sub-regions:

²³ In searching for recent spontaneous settlements, we crossed into the district of OKI, just beyond the border of the Belitang sub-district.

- The coffee area is concentrated in the valleys and on the slopes of the mountain area with Muaradua as the main town situated at the center of the valley systems. This area produces one third of the province's coffee. The area must import much of its food, particularly the rice which is planted mainly in *ladang* or swidden fields, aside from a few irrigated or flooded fields.
- The rice and food crop area around Belitang district. This region is considered to be the rice bowl of the province: 456,000 tons produced in 1989/1990, or 7 tons per ha in two harvests. No urban concentration has developed and Gumawang retains a rural character despite its large daily market, the many hospitals and public and private schools, the public services dealing with agriculture, and the residences of public servants. The town of Martapura only plays the role of a stopping point along the Trans-Sumatra highway.
- Finally, the rest of the piedmont and the peneplains is the domain of fruit orchards surrounding indigenous settlements and rubber, cultivated in traditional and extensive fashion by the locals and, since 1986, in intensive fashion in the Transmigration settlement of Batumarta. Baturaja, situated at the junction of the roads to Lampung and Palembang (212 km) is the active administrative and economic center to which is now added, with the beginning of rubber production, the new economic core of Batumarta.

Baturaja, situated on the Ogan river (navigable until the 1950's), was a city having many merchants from Palembang. They have since gone to other more lucrative areas (to trade in timber on the coast, for example). The Dutch were present early in the three urban centers (Baturaja was the seat of the *assistant resident* from the end of the 19th century) and in several coffee and tea plantations around Lake Ranau (1918). In the towns, they helped set up major Chinese communities which have held on to their dominant role in economic network to this day. In the plantations as in the construction of communication infrastructures (roads and railways), the Dutch brought manpower from Java (probably Sundanese for the most part).

The big landowners of the region followed this example and went to fetch laborers in West Java both for agriculture and for making roof tiles. Some of these first sponsored migrants remained in Sumatra and formed the core of the first spontaneous settlers.

OKU regency received a sizeable and regular flow of transmigrants from 1937 to the present (146,000) who settled in the piedmont and peneplains area (Table 11). The first arrivals in Belitang benefitted from an irrigation network, the second wave arrived impoverished, and from 1976 to 1982, the transmigrants settling at Batumarta received 3 or 5 ha of land, including 1 ha planted with rubber (one of the best packages transmigrants have ever been offered). Since 1986, some of these modern smallholdings have entered into production.

The population is not spread out in a balanced fashion; major concentrations are found in the irrigated rice and food crop cultivation areas. The overall annual growth rate excluding Transmigration remains average (2.6%) since there has been a constant movement from the rice and food crop sub-region towards neighboring districts in OKI from the end of the 1960's. This area has also lost population to the coffee plantation areas around Muaradua, a rural region which, in absolute figures, has had the strongest growth in the province (Table 12).

KECAMATAN	Project NAME	YEAR	Initial Population
CEMPAKA	Karang Menjangan	1983	1,756
	Maju Rahayu	63/73	180
	Taman Agung	1967	685
	Sri Bantolo	66/73	895
	Sumber Rahayu	66/73	1,282
	Margo Mulyo	66/73	1,789
	Purwosari	66/73	523
	Karang Menih	66/73	488
	Sri Budaya	66/73	707
	Suko Harjo	66/73	1,224
	Way Hitam	1974	7,590
BUAY MADANG	Bangsa Negara	1963	397
	Rasuan/ti Nangi	1963	79
	Mendayun/Jatirejo	63/72	362
	Rasuan	1974	2,925
	Kota Negara	1974	2,407
	Batumarta V	1980	1,835
	B. VII	1980	1,962
	B. VIII	1980	1,718
	B. IX	1980	1,455
	B. XIV	1984	1,116
	B. XV	1984	1,255
	B. XVI	1985	1,651
	Bangsa Negara	1985	2,385
	Jatisari	1987	1,711
	Pandan Sari	1988	750
	Tanjung Tiga	1988	966
BATURAJA Timur	Batumarta I	1978	1,978
	B. II	1978	2,436
PENINJAUAN	B. III	1978	2,370
	B. IV	1979	1,622
	B. VI	1980	2,341
	B. X	1980	1,450
	B. XI	1981	3,388
	B. XII	1983	2,176
	B. XIII	1983	2,245
	Lubuk Batang	1983	1,436
MARTAPURA	Bunga Mayang	1983	1,665
BELITANG	Kolonisasi	37/40	15,141
	Way Hitam IV	1983	7,788
OKU	No location	51/69	61,211
TOTAL	OKU	37/88	147,320

Tab. 11 Planned settlements in OKU

By periode

Periode		Population
Dutch	Kolonisasi	15,141
Prapelite	51/69	67,379
Pelite I	69/74	12,356
Pelite II	74/79	11,553
Pelite III	79/84	28,539
Pelite IV	84/88	12,352
37/88	Total	147,320

Officially there remains 472,000 ha of forest covering 36% of the regency's surface, a small amount if one considers the regency's topography²⁴. However, forest exploitation still contributes Rp 40 million annually to local revenue. Furthermore, two private companies have been newly appointed to manage *Hutan Tanaman Industri* covering an area of 16,000 ha situated in Martapura and Pengandonan and the local governments have started resettlement programs for those living in forests or areas to be protected.

Tab. 12 OKU: Population changes over time

KECAMATAN/district	Populatio 1988	Transmigrant Settlement (hh)				Annual growth					Surface km2	Density people/km2	
		61/71	71/80	80'	71/88	without transn igratio		with		1971		1988	
						61/71	71/80	80/88	71/88				71/88
1 P.Beringin	27,471					1.8	2.6	4.2	3.3	3.3	1,735	9	16
2 Banding Agung	62,836					2.8	4.7	1.6	3.2	3.2	2,152	17	29
3 Muaradua	77,208					2.1	5.0	1.8	3.5	3.5	1,554	28	50
4 Muaradua Kisam	23,778					2.3	3.5	2.4	3.0	3.0	802	18	30
5 Simpang	63,278					3.1	7.2	3.0	5.2	5.2	951	28	67
6 Martapura	73,835	***		1,665	1,665	5.6	6.1	2.7	4.5	4.6	600	57	123
7 Baturaja Barat	25,125					2.3	2.7	3.7	3.2	3.6	133	364	189
8 Baturaja Timur*	54,468		4,414		4,414				*	*	117	0	466
9 Sosoh Buay Rayab*	7,943				*				*	*	375	0	21
10 Pengandonan	41,011				0	0.8	0.2	1.5	0.8	0.8	832	43	49
11 Peninjauan	46,949		3,992	13,036	17,028	0.9	0.7	0.6	0.7	3.4	1,808	15	26
12 Buay Madang	178,082	838	10,518	16,804	27,322	6.3	2.5	0.8	1.7	2.7	1,163	97	153
13 Belitang	130,584	***		7,788	7,788	4.4	4.0	1.8	2.9	3.3	800	94	163
14 Cempaka	100,657	4,755	12,345		12,345	4.4	0.5	1.7	1.2	2.0	808	89	125
OKU	913,225	67,000	31,269	39,293	70,562	2.3	3.2	1.9	2.6	3.1	*****	45	76

***: Transmigrants pra-pelita, no number by kecamatan but by regency
*: split for Baturaja into three kecamatan

Since 1983, large surfaces have been given over to private companies for the establishing of large plantations, one of which has already planted oil palm to the north of Baturaja and another sugarcane in Cempaka district. To these can be added the land long reserved by the army between Baturaja, Martapura and Simpang which has recently been extended on the southeast bank of the Komering towards Lampung.

The industrial sector of the regency is active though it is dominated by small enterprises specializing in the transformation of agricultural production for the local market. The State cement works, located to the north of Baturaja, is a sort of enclave and it has not induced major industrial activity.

²⁴ From our cartographic analysis: in the strip composed of the three SPOT photos, an area of about 9,250 km² (9% of the province of South Sumatra), primary forest which represented less than 50% of the land surface at the end of the 1960's was reduced further to only 16.5% of the land surface in 1986. This corresponds to a loss of two thirds of its area. (cf. Forest in South Sumatra)

These features are responsible for the dual structure of the regency's market. The scattering of small industries and agricultural production creates many opportunities for small traders. Also, the large volume of export commodities makes it possible for wholesalers to emerge. Since 1989, Baturaja has been connected to the automatic digital telecommunication system. The highway provides the opportunity for the regency's production to reach a larger market, for example the fresh fruits (*rambutan, duku, durian* and banana) which are sold from Jakarta to Bandung. Food crops are sent to the provincial market while export crops are more and more directed to Bandar Lampung instead of Palembang.

THE CASES STUDIES

In the coffee region

All of this area is organized around the town of Muaradua situated at the confluence of two rivers, and where the roads from the valleys, the plateaus and Lake Ranau meet. Asphalt roads connect Banding Agung, Pulau Beringin, Blambangan and Kotaway with Muaradua, but at the time of our study these roads were in poor condition. Leading out of the area, Muaradua has two roads which separate at Simpang, one going to Baturaja and beyond to Palembang, and the other going to Martapura and beyond to Lampung.

The small town of Muaradua lives off of coffee production, being the first center for collection and processing before the coffee is exported. The destination depends on the dealers (most of whom are of Chinese descent) and the current prices offered in the two regional capitals, Palembang and Bandar Lampung.

For the spontaneous settlers who are involved mainly in coffee cultivation, the studies were carried out in a systematic fashion in the settlements of the Simpang *kecamatan* on the Kotaway Plateau, on the territory of the village of Gunung Cahaya in Muaradua district, and a few kilometers from the Trans-Sumatran Highway, to the north of Baturaja, on the slopes of Mount Nanti and in the Pengandonan district, Sukorejo *dusun* attached to Pedataran village. This last site no longer belongs to the economic space of Muaradua but rather to that of Baturaja. Less systematic studies were carried out in villages located in Muaradua Kisam, Pulau Beringin and Banding Agung districts.

In this sub-region, several settlements devoted to food crop cultivation were studied in a systematic fashion, the *dusun (kantung)* of Sabutan, Bumi Agung village (Muaradua district), Serekat Jaya, a large hamlet of Srimenanti villages in Simpang district and a few small groups of houses along the road between Martapura and Simpang.

In the region of food crop and rubber cultivation

Outside of the coffee area, in-depth studies on spontaneous settlers who cultivate food crops were undertaken in two rather newly-created villages located on the border of the OKU *kabupaten* near Belitang, in the regency of OKI, district Mesuji. They are Cahaya Mas founded

in 1980 by about forty families (today 500 families live there) and **Kampung Baru** founded in 1984 (today nearly 1400 families). These two new villages were in fact extensions of the *pra-pelita* Transmigration centers of Nusa Tenggara, Nusa Bakti and Nusa Bali in the Belitang district, and they can be considered as representative of a massive conquest of land in a zone that was very sparsely occupied by indigenous people. More cursory visits were made to the spontaneous settlements situated in between the Pematang Panggan planned settlements, along the road to Tugumulyo (a village created at the end of the 1960's), and to Muara Burnai village in Kayu Agung district (*perwakilan* Lempuing), OKI. The latter area seems to be the northern limit of this "massive conquest" up to the limit of what might be referred to as the "Palembang countryside," around the town of Kayu Agung where there is a relatively high density of indigenous people.

Rapid visits were also made to the *dusun* created by migrant groups with the authorization of local villages. Two examples are Mendayun, in the Buay Madang district, OKU created in 1977, and Mendala (Peninjauan district) between the Ogan and the Batumarta Transmigration center, where a creation is underway, with 30 homes already constructed and 60 lots distributed as of July 1990.

Finally, visits were made to the small hamlets (often composed of less than 10 houses) set up in areas left unclaimed by the local people or the Transmigration villages, to the west of Belitang or along the roads throughout the region of study.

3.2. Coastal Swamp Development

MIGRANTS TO THE SWAMPY LANDS

Although the statistics are not available, a trip by speedboat along the rivers and canals in the coastal swamps of Indonesia clearly indicates that spontaneous migration has been in progress for most of this century. In the oldest settlements the coconut trees along the rivers indicate there has been habitation for more than fifty years.

The first settlers in the swampy lands were the fishermen and their families who have traditionally lived along the banks of the rivers near the sea, fishing and opening limited amounts of land for agriculture. Most of these people were Malay (Melayu) in Sumatera and possibly Banjarese in Southern Kalimantan. These people kept mostly to the river banks, dug very short canals to drain their fields, and relied on fishing, rice and coconuts for their livelihood. They tended to be in very small groups, spread along the rivers and did not encourage others to follow them nor to open new areas. They were governed by their margas which helped in the management of the natural resources.

The next wave of spontaneous migrants to the swampy lands of Sumatera were the Buginese from South Sulawesi who are pioneering, aggressive, and expansive. They have migrated throughout Sumatera and Malaya, opening up the coastal areas for their rice and coconut

farming systems. They have traditionally been a sea faring group who fought the Portuguese and then the Dutch for centuries. Their traditions encourage them to migrate and only return to Sulawesi when they have prospered. Their family traditions encourage them to invite their relatives and friends to join them in their pioneering settlements in the swampy lands. These Buginese spontaneous migrants were much different than the Melayu fishermen/farmers. They very aggressively attacked the opening of the swamp forests, digging canals for several kilometers, having systems of land clearing that rapidly opened the forest, and little regard for preservation of the existing natural resources.

On a much more massive and organized scale, the Government has been carrying out the transmigration program in swampy lands as well as in the non-irrigated, dry land areas. From 1950 to 1984 the Government sponsored 2,320,000 who were settled in both the dry land and the swampy sites.²⁵ This covered the 1950 to 1969 period, and the Repelita I, II and III periods from 1969 to 1984. In Repelita IV there were 178,900 families sponsored by the Government from 1984 to mid 1987²⁶. Although there are many estimates of the number of spontaneous migrants to these areas for settlement, there is no definite number of how many have actually opened up these new lands in Sumatera, Kalimantan and Irian Jaya. But an indication of the magnitude is 281,000 spontaneous migrant families in Repelita IV to mid June 1987.²⁷

In one further source of information, the 1980 Census states that the individuals moved as sponsored migrants from 1950 to 1978 was 262,400 in South Sumatera Province and was projected to reach 430,000 by natural increase by 1980. In addition they estimated that the number of inner island speakers (Javanese, Madurese, Sundanese, Balinese) who appeared to be spontaneous migrants was 155,600 persons in 1980²⁸. However, this does not include the spontaneous migrants from Sulawesi, both directly or indirectly through Riau and Jambi which could add a substantially greater number of spontaneous migrants. The problem is that they have opened up many canals and small streams for drainage, often move to other areas for various lengths of time and are thus hard to count the exact numbers.

AGROECOSYSTEMS

In a report on the amount of land in different types of terrain and soils, by islands there was an estimated 43.5 million hectares (excluding Irian Jaya) of swampy land, mainly organic soils and alluvials, though only 10.5 million hectares were considered to have an agricultural

²⁵ Official Summary of Repelita III Transmigration Program, Ministry of Transmigration, 1985.

²⁶ Information from the Ministry of Transmigration

²⁷ Ministry of Transmigration

²⁸ 1980 Indonesian Census and Ministry of Transmigration records.

potential.²⁹ The total estimated amount was 159 million hectares of area and that with an agricultural potential was 59.3 million ha though only 17.5 million were being cultivated. In Sumatera there was an estimated 1.8 million hectares of swampy land with an agricultural potential.

These swampy lands are considered marginal because of the fragile soils, location and difficulties in converting them to agricultural uses. As two scientist have pointed out "Summarizing we can say that no other soil type combines so many unused possibilities with so many unsolved difficulties."³⁰ They listed a number of problems with the peat that made these soils, even after reclamation, only marginal for agriculture.

In a very clear discussion of the problems of these soils in the swampy coastal lands, Jansen stated that "in addition to be fragile and having low productivity, marginal farmland in the tropics have greatly fluctuating productivity. He felt that this is caused by:

1. the year-round warmth which greatly favors plant diseases and pests;
2. the instability of the tropical ecosystem;
3. tropical pests that develop resistance to pesticides faster than in the temperate zones; and
4. the soils are very low in fertility.³¹

These four problems above are probably the most severe in the peat swamps of Indonesia.

Although these coastal peat swamps have an agricultural potential, it has been clearly demonstrated that by Soewardi, et.al., that these swampy lands also have valuable timber.³² Since a substantial share of the best production forests are in these swampy lands, this must be considered before opening these swamps for agriculture. The areas of mangrove, coastal, and swamp forest is estimated in 1974 to be 17.7 million hectares, most of it in Kalimantan and Sumatera. A breakdown by types shows that there is 1.0 million hectares of beach forest, 1.0 million hectares of mangrove forest, 13.0 million hectares of swamp forest, and 1.5 million

²⁹ Indonesian Agricultural Sector Survey, Annex 1, IBRD, Washington D.C., 1974, p. 20.

³⁰ M. Soeprtohardjo and P.M. Driessen, "The Lowland peats of Indonesia: A Challenge for the Future", in *Peat and Podzolic Soils and their Potential for Agriculture in Indonesia*, Soil Research Institute, Bogor, 1976, p.15

³¹ David H. Jansen, "Tropical Agroecosystems", in *Food Politics, Economics, Nutrition and Research*, edited by Philip H. Abelson, American Association for the Advancement of Science, 1975, p.103 to 106.

³² Bedjo Soewardi, P.R. Burbridge, and M.S. Sukandar Djokosudardjo, "Improving the Choice of Resource Systems for Transmigration", *Prisma*, May 1980.

hectares of peat-swamp forest.³³ These number have declined steadily with the opening of more and more forest land every year.

Although the transmigration program was primarily designed to settle people on 2 hectares of land for rice production, yet rice cultivation encounters many difficulties. The yields are low, weeds are a major problem, rats and wild pigs infest the fields, the soils are infertile, and usually only one crop of rice can be grown each year.³⁴ These problems explain why it takes up to ten years for the transmigration projects to become reasonable successful.

THE GOVERNMENT ASSISTED SWAMP DEVELOPMENT SCHEMES

The first government assisted swampy land development occurred in Southern Kalimantan with the construction of the first canal (anjir) in 1880-1890 linking the Barito River with the Kapuas River near Banjarmasin. Although it was for transport, this 30 kilometer canal opened up a major area for agriculture. The Banjarese were able to dig drainage canals from the swamps to the canal which made it possible to open several kilometers of land on each side of the canal for rice, coconuts and rubber. During the next fifty years the Government dug five canals linking the Kahayan, the Kapuas, and the Barito rivers.

At the present time these canals are used extensively for transport of people, goods, rubber and timber. Along almost the entire length of each canal, the swamp forest has been opened for agriculture. Almost all without any Government assistance.

Not until 1937-1939 did the Government actually sponsor the transfer of people from Java to the swampy lands of Kalimantan.³⁵ Beginning in 1937 the Colonial Government assisted 300 Javanese families to migrate to Purwosari on the Tamban Canal (Anjir Tamban).

After World War II, although there was a considerable amount of discussion and planning, it was not until 1953 that the Government again sponsored transmigrants to these swampy lands in Kalimantan, and this was a very unsuccessful polder based scheme. Before Repelita I (1969) the major Government project was at Marabahan in South Kalimantan.

SPONTANEOUS MIGRATION TO THE COASTAL SWAMPS

Yet, during at least the last fifty years, there have been substantial numbers of spontaneous migrants in these swampy lands in South Kalimantan, Central Kalimantan, and Riau.

In Repelita I (1969-1973) the Government planned to open 500,000 hectares of swampy land

³³ Faculty of Forestry, *Forestry for Industrial and Rural Development in Indonesia*,

³⁴ William L. Collier, *Social and Economic Aspects of Tidal Swamp Land Development in Indonesia*, Development Studies Center, Australian National University, Occasional Paper No. 15, Canberra, 1979, 68 pp.

³⁵ Joan Hardjono, *Transmigration in Indonesia*, Oxford University Press, Kuala Lumpur, 1977, p. 19.

In Repelita I (1969-1973) the Government planned to open 500,000 hectares of swampy land for transmigration projects, but actually was only able to open 17,533 hectares in Sumatera and 15,559 hectares in Kalimantan.³⁶ This was the period when the Cinta Manis Project was established in South Sumatera. It was on such poor soils that the farmers could only get limited amounts of cassava and thus they turned to employment in Palembang, which fortunately was not far from this site. However, at about this time, the quite successful Upang Delta Scheme was initiated. Both of these sites are shown on Map.1, Vol. 2.

At the beginning of Repelita II in 1974, the plan was to open 1,000,000 hectares of coastal swamp land in Sumatera and Kalimantan in this five year period. However, this was later reduced to 250,000 ha. By June 1979 the Government had opened 220,000 ha for transmigration projects³⁷.

MIGRATION AND TRANSMIGRATION IN THE SWAMPY LANDS OF SOUTH SUMATERA

It was during this period OF Repelita II and III that the Telang Delta, Saleh Delta, Sugihan Delta, Pulau Rimau, and Karang Agung Schemes were initiated and are shown on Map 1. It is obvious from this map that the transmigration projects are spread throughout the Musi River Delta in South Sumatera which is a substantial proportion of the entire coastal zone in this province. The number of transmigrants in these sites in 1990 were³⁸:

Karang Agung Ulu	2,669 families
Pulau Rimau I & II	8,804 families
Pulau Rimau III	352 families
Telang I	5,966 families
Telang II	2,660 families
Air Saleh	6,053 families
Air Sugihan Kanan	13,048 families
Air Sugihan Kiri	8,838 families
Cinta Manis	2,312 families
Delta Upang	2,762 families

Besides these locations of the project sites on Map 1 Vol. 2, it also clearly shows that there has been massive opening of the swamp forest in South Sumatera, including sites like Cinta Manis that are essentially abandoned for food cultivation. Since this map is based on Spot Imagery of 1986, it does not show the further development of the Karang Agung Scheme which

³⁶ William L. Collier, "Fifty Years of Spontaneous and Government Sponsored Migration in the Swampy Lands of Kalimantan: Past Results and Future Prospects", *Prisma: The Indonesian Indicator*, May 1980, p. 37.

³⁷ Badan Pelaksana Proyek Pembukaan Persawahan Pasang Surut, *Program Reasistensi pembukaan Lahan P4S Pelita II Pelaksanaan Sampai Dengan Bulan September*, Department of Public Works, Jakarta, 1978, Appendix A.

³⁸ Kanwil Transmigrasi Sumatera Selatan 1990

Although the Government assisted thousands of families from Java to migrate to South Sumatera, yet an equally large number settled in these swampy lands of South Sumatera without Government assistance, other than approving some of the larger locations. Most of these spontaneous migrants were Buginese from South Sulawesi, though some had lived in Riau before traveling on to South Sumatera.

In map No. 2 there is an indication of how this occurred. In some locations the spontaneous Buginese had already opened up an area by digging their drainage canals. The transmigration program dug the major canals which sometimes crossed the Buginese canals. Either the Buginese farmers moved to a different location or they were able to continue cultivating their fields with the new system. Usually, the Buginese farmer was cultivating coconuts and the drainage system was primarily for rice cultivation, thus not sufficiently draining the area for coconuts.

In other locations, the Buginese arrived after the site was constructed and they settled around the fringes of the site and sometimes they were able to get a land allocation from the Transmigration program. Though, this allocation occurred after a substantial number of the original transmigrants had decided to abandon their holdings.

Although the spontaneous Buginese migration seems to be more dominant, yet there has been substantial migrations of other groups to these swampy lands. Perhaps, the next largest group are the spontaneous Javanese settlers who have come here in the following manner:

1. New families (grown children) of the Javanese Transmigrants;
2. People who have come to these swampy lands directly from Java at the invitation of their relatives or friends. They would normally join their relative in a transmigration site and try to get some land either in the site or in a nearby area. Often, they would be assigned land within a site that had been abandoned by the original transmigrant;
3. Javanese who have come to Sumatera to work on the plantations or other major projects and have decided to stay;
4. Javanese from Lampung who are migrating to these areas from the older settlement areas in this southern province;
5. Javanese who were transmigrants but were not satisfied with the conditions in the project and thus moved to a better location.

Besides the Javanese, there are people from other areas of Sumatera who are settling in these swampy areas, and are a type of spontaneous migrant.

Viewing Map 2 clearly demonstrates the differences between the Government assisted transmigrants and the spontaneous migrants. The small town of Muara Telang is in the center of a major spontaneous settlement area. These areas are shown by the many wavy lines (small

canals/parit) radiating out from the river. These canals are dug entirely by the settlers, they are only a few kilometers long, and the farming system is one of coconuts and rice. In contrast, the Government assisted migrants are in Telang I and Telang II where the canals have a very precise rectangular appearance. They primarily have a farming system of one crop of rice per year with a few coconut trees.

In order to get more information on spontaneous migration in these swampy lands, seven villages (6 in Sungsang Kecamatan and 1 in Talang Kelapa Kecamatan) were surveyed to determine the numbers and motivation of the spontaneous migrants. These villages and the numbers of spontaneous families were the following:

Desa Sungsang I	289 Buginese families	1963-1970
	142 Malay families	1966-1989
	1 Sundanese family	1980
	10 Javanese families	1980-1989
Desa Terusan Dalam	22 Buginese families	1970
	15 Javanese families	1976
Desa Telang Lubuk	674 Malay families	1955-1990
Desa Telang Sari	105 Javanese families	1980-1985
	7 Buginese families	1979-1987
	4 Malay families	1986-1987
Desa Mulia Sari	200 Javanese families	1984-1989
	4 Buginese families	1983
	14 Malay families	1983-1984
Desa Sri Menanti	116 Malay families	1961

This shows that most of these spontaneous migrants arrived before the transmigration projects, and that they come from Sumatera (Malay), South Sulawesi (Buginese), and Java (Sundanese and Javanese). The ones from Sumatera are from the coastal areas in other provinces. The ones from Sulawesi usually came from Riau or Jambi and then to this area. The ones from Java came directly to these swampy lands.

In a later section in this report there will be information on the institutions that assisted these migrants to move to this area and be successful farmers.

3.3. Other Areas

For the sake of efficiency, we concentrated our field study on OKU Kabupaten though cursory examination of other districts and areas has been done in order to compare situations and processes and to enlarge our findings.

We found exactly the same process of massive settlement by extension of former *kolonisasi* centers and irrigated rice cultivation in the village of Megang Sakti (Lakitan district, *perwakilan Megang Sakti*, Musi Rawas regency), created by spontaneous migrants as an extension of Tugumulyo. We did not find any spontaneous settlement based on rubber cultivation³⁹.

Lahat and the Pasemah valleys have also been visited as coffee regions. There, significant in-migration is older than it is around Muaradua but the high population density and the control of the territory by the local people restricts access to land. Migrants have sometimes been able to acquire land for coffee plantations but under no circumstances can they acquire some of the abundant rice fields. This situation along with low coffee prices, seem to be resulting in a movement of older migrants out of the area to the less fertile but more accessible land of the peneplains.

Around Palembang, many spontaneous migrants are settled here and there, wherever land is available to purchase, rent or use without rental fee (*num pang*)⁴⁰ and are mainly involved in cultivating vegetables for Palembang market.

³⁹ However, we have heard mention of a spontaneous settlement in Bayung Lincir begun as a PIR estate plantation under the sponsorship of a man who found the land and provided credits and know-how to the settlers so they could create their own rubber plantations.

⁴⁰ Absentee owners sometimes allow their land to be used free of charge until another use can be found for it. Most often they are awaiting the moment to sell to another individual or to an industrial or other project (rarely do they give it to another *num pang*).

third part

SPONTANEOUS MIGRATION PROCESS

1. ADMINISTRATIVE FORMALITIES INVOLVED IN SPONTANEOUS MIGRATION

In South Sumatra, no strict rule is applied in the receiving of emigrants, unless they go to a village under the Transmigration administration. Each village head has his or her own procedure. Some apply a strict procedure and will not record them as residents until they present a certificate of change of residence *surat pindah*⁴¹. Most of them will accept the migrant who arrives simply with the *surat jalan* usually carried by travellers, and after a certain period (three to six months) will record them as residents if they wish to become such and have not committed any offenses. Depending on the situation, at times influenced by humanitarian considerations, migrants are sometimes registered after a certain period has elapsed, even without any letter. The worker's permit (*surat buruh kerja*), theoretically valid only three months, is commonly used as a travel and even residential document; migrants rarely if ever return to have them extended.

The village head will notify the migrant's arrival to the district officer in a monthly list in which departures and arrivals are summarized⁴². The actual registration by name is only done once the migrant applies for an identity card, at election time or before the census.

From departure to arrival, personal mobility is only slightly constrained by administrative formalities.

2. MAIN TYPES OF SPONTANEOUS MIGRANTS

The migratory route taken and the original economic situation of the spontaneous migrants differ depending on whether they are going to join family in a Transmigration center, are taken under wing by a sponsor, or are among those who leave alone only armed with contacts. The diversity of situations encountered and the conditions of this study only permit us to give general indications of the frequency of each situation.

⁴¹ This document should be delivered by the head of the village of origin only if the person in question has shown good behavior, has no debts and has not committed any common law crimes or political misdeeds in the past.

⁴² These lists were gathered for the study in some sub-districts including all of those in OKU, but they were not used as data due to their poor reliability (months were often omitted, or counted twice).

2.1 Migrant origins and sending areas

Involved in the migration process to inland South Sumatra are mainly people from the islands of Java, Bali, Madura and Lampung. The ethnic groups concerned are for the majority Javanese and Sundanese (either from Java or Lampung), and to a lesser degree, Balinese and Madurese. The short time available for this study and the few villages studied in detail prevent us from giving the exact proportions for the entire province.

Although concentrated more in the coastal zone, the Buginese from South Sulawesi have been spontaneously migrating to South Sumatera since the early 1950's. Their non-formal institutions greatly assist this migration. They do not like to work as farm laborers in the fields of their neighbors in Sulawesi; they feel it is very embarrassing. They also do not like to rent land of others in their own village. The problem is that the younger children of a small landowner in South Sulawesi must migrate to other areas to make a living. The local culture strongly encourages them to leave and only return if they are wealthy. Thus, the Buginese move spontaneously to the swamp lands of South Sumatera. Actually, quite a few of these Buginese migrated first to Jambi or Riau, and then to South Sumatera.

Another aspect of the Buginese institutions, is the support the newcomers receive from the original settlers. They will work with them, open new lands and receive a share while receiving enough support to survive. They also have institutions that make it easier to clear these jungle areas cooperatively. It appears that the other groups (Javanese, etc.) do not have as strong of institutions to support these pioneer migrations.

2.2 Independent spontaneous migrants

Among the ethnic groups of Inner Indonesia, the independents are migrants who leave by their own choice without having been recruited and accompanied by a sponsor who ensures their employment. For the time being this type of migrant would seem to be type most commonly found in South Sumatra. They are young at the time of their first migration and are not completely impoverished; they or their family usually have a house, and sometimes small parcels of land which they leave behind for the family. Their moral capital is greater; they have gathered information, and have made their calculations and plans. Pioneers, they have been able to master a certain fear of the unknown.

2.3. Spontaneous Transmigrants

These are the people who go to join family or relatives already settled by Transmigration. They have the same family and economic profile as Transmigrants (family head between 30 and 45 years of age with children, and rather poor). Their reception is planned for; they migrate

with their family and go directly to the village of destination without bringing along much money. They are not signed up as candidates for Transmigration because they do want to be put in the same village with their family and former neighbors in the sending area. Often this arrival was already planned before the departure of the transmigrant. Often this is a first migration and there is rarely a permanent return to the village of origin for lack of means, and especially because, in general, the decision to go settle elsewhere permanently was already taken.

When a village founded by the Transmigration is no longer under the Ministry's administration, and especially if it has economic success, it will attract independent spontaneous migrants. This is the case of the first four units of Batumarta where the rubber plantations are beginning to come into production and, of course, the old centers of Belitang.

2.4. Sponsored spontaneous migrants

In this category we place those migrants who are recruited in their place of origin by a person (a *sponsor*) who takes care of providing land or work in the destination area. This sponsor could be a local from the area of migration or a older migrant who has settled there. With this guarantee of survival at the departure, many poor migrants leave without their family if they are to be employed (at least the first time), or with their family if they are to receive land. Once their work contract ends some of them become independent spontaneous migrants.

3. MAIN CHARACTERISTICS OF THE MIGRATION PROCESS AMONG INNER INDONESIANS

3.1 Stages of migration

For many spontaneous migrants, the migratory process can be divided into two periods, before and after taking the decision to settle. The decision to settle means making a commitment to stay for many years, though most migrants hope to return to their place of origin, at least to retire.

The first stage of migration is undertaken for the most part by young men, in some cases adolescents, searching for agricultural employment (harvesting coffee in the highlands or harvesting rice in fields cultivated by other migrants in the villages we studied), or urban employment (as laborers, traders or pedicab drivers).

Young men without families usually undertake circular migration with a relatively long cycle, often returning to the village of origin annually if they are located in Java or Lampung (less frequently for those from Bali or Madura). Questioned at this juncture in their life, they claim to want to return to Java to settle down, get married and work.

It is impossible to determine the percentage of those who simply went to Sumatra in their youth and eventually settled down in their place of origin. Among those who decided to live and work for some time in Sumatra--most of our respondents--their first to leave is often the man by himself, but he soon returns to bring along his family (wife and sometimes children).

3.2. Migration Decision-Making

The economic factor (*faktor ekonomi*) is the reason most often invoked to explain a migration decision; they hope to amass capital, an impossible undertaking in their village of origin, in order either to secure the immediate future of their children by offering them education beyond the primary school level, or to provide them with an inheritance.

SOCIAL AND ECONOMIC PUSH FACTORS

The vast majority of migrants in the sample are of peasant background. Generally, those who leave are not landless peasants or the most impoverished, but rather those from the level just above them. They are the small landowners with less than 0.5 ha, including the house and garden, not enough to secure the future needs of their descendants.

Their educational level is low: among 42 people under 31 years of age questioned at random, 14% never attended school while 43% did not complete an entire primary cycle.

Most migrants work as agricultural workers (*buruh tani*), in a permanent or intermittent manner with very low agricultural wages, a precarious but common situation.

Those who decide to migrate are not single children but rather are from families having more than three children; often it is the eldest one who will migrate. That helps the parent's situation in the place of origin. Most of the time the migration is encouraged by the family either in the hope of financial return, or as a way of relieving the economic burden posed by a large family.

Migration is sometimes a way of reimbursing a debt or escaping a family or social problem in the community of origin but such motives were rarely encountered in the sample villages. Most of them have a desire to learn new things elsewhere.

PULL FACTORS: CHOICE OF DESTINATION

Economic prospects

All spontaneous migrants are aware that the level of wages is higher in Outer Indonesia⁴³. The great majority receive information about the planned destination through returning migrants from the same village, family members, relatives, or people met in the towns or markets of the receiving area.

For those who seek agricultural work, the question always remains in the back of their

⁴³ Higher wages are a general rule outside of Java except in certain overpopulated areas, in Lampung for instance.

mind: "what is the possibility of access to free or reasonably-priced land?" The opportunity to readily obtain well-paid work during the harvest periods in coffee plantations and rice-producing areas attracts a large influx of migrants.

Background information on the destination area

The general background information available about the planned destination is limited, but migrants depart with at least a contact address. Very few clearly stated that they arrived alone and had no address⁴⁴; it is likely that most, if not all, had an address before their departure. Having an address (*punya alamat*), however, does not mean that the migrant automatically transits at the home of his predecessor in the destination village, since other opportunities and information may be obtained along the road.

One key to migration success, recognized by migrants themselves, lies in disposing of information at the right time. A main activity and concern of migrants, before the departure and during the migration period, is the search for information on the possibilities for employment and access to land, along with indications of the agricultural, climatic, demographic and social conditions in the receiving regions.

Expected help in destination area

Those with migration experience have a very important influence on others from their community of origin, both voluntary and involuntary. Most of the already settled spontaneous migrants are reluctant to attract new migrants fearing that they will be responsible for them in case of failure. This attitude contrasts with the sponsored transmigrants who often feel secure enough (psychologically rather than economically) to invite relatives to join the new transmigration village.

In any case, like sponsored transmigrants, spontaneous settlers are expected to provide at least free housing while the arriving migrant begins to look for his first job, even if they are living in a precarious manner. Meals are offered without compensation for several days to several weeks or more, depending on the case. Basically, the most important service is putting the new migrant in contact with potential employers, landowners, local formal and informal leaders—contacts which will increase his chances of gaining access to steady employment, or even better, to land. New migrants who arrive without capital borrow from those who arrived before them, seek day wages to get started, and then longer-term sharecropping, annual or piecework engagements.

⁴⁴ Their information comes mainly from the mass media.

Role of sponsors

It is mainly the large landowners, either ancient migrants or local Sumatrans, who will search for manpower for the development and maintenance of their own and sometimes neighbor's lands.

Local and regional authorities often play an important role in stimulating spontaneous immigration by searching for inhabitants to populate an existing village through the creation of a new satellite, *dusun*, settlement. For this, new residents are sought in Lampung or in Java.

In the case of a new settlement, often the first residents or founders (who have been in the area for a certain amount of time) will return to Java to look for followers in their own villages of origin. They also go to regions of potential emigration (areas having recently experienced natural catastrophes or ruined harvests or areas where land access is virtually impossible). Once the new settlement is known, migrants can be expected to continue to arrive spontaneously.

Why migrants do not enter a Transmigration programme

With few exceptions, migrants choose spontaneous movement over transmigration because it allows one to choose the destination and moment of departure. Once in the receiving area, the migrant can shop around for a suitable settlement, change settlements, or return to his place of origin without the constraints imposed by the Transmigration program. The greatest fear is that they will have to stay in an inhospitable or unproductive region.

Choosing the right moment to leave is particularly important for those who are awaiting the profits from a harvest or from the sale of property; it is also important for those who resign themselves to migration following a series of crop failures. The moment of departure is critical when the wife is expecting, when children are too young to travel, when someone is sick, or when the departure is to be synchronized between family members or neighbors. Transmigration candidates very often have to wait up to a year before being able to leave for an assigned settlement. Often the departure is delayed a month or more during which time the migrant family must live on savings, employment contracts having been severed and property sold.

No restrictions as to age or marital status exist for spontaneous migration and administrative formalities are reduced to a minimum. In effect, spontaneous migration offers not only the freedom to choose one's moment of departure, it also offers freedom of choice throughout the migratory period, whether it leads to a return to the sending area or not.

3.3. Spontaneous migrants characteristics

Through examining the correlations between migrants, their trajectories and their goals, we can hope to identify certain types of spontaneous migration. While it seems clear that migrants share a common goal--the search for capital that will guarantee long-term security for their family--this goal is not enough to explain the diversity of migrant trajectories. Furthermore, the relationship between migration stage and migrant types is a loose one; various combinations

between these two variables are found. Under these conditions, the multifarious and changing nature of spontaneous migrations can best be analyzed through the identification of, on the one hand, migrant types and on the other, the types of migration trajectories.

MARITAL AND FAMILY STATUS

A background of family migration

Two thirds of spontaneous migrant families interviewed have been through a family migration experience, whether it be through Transmigration or spontaneous. They often were born or followed their parents in Transmigration or spontaneous migration to Sumatra, and began their own migration elsewhere in Sumatra while still a bachelor or once married. Some of the parents have been in Sumatra (sponsored transmigrants, plantation workers or spontaneous migrants) and have returned to Java since. Where they were not children of migrants, they very often had a migrant relative (uncle, aunt, grandparents or step-parents, for example), whom they could stay with at first.

Bachelor migration

The migration of young unmarried males (*bujang*) is one important aspect of spontaneous migration process. It can be temporary, circular, repeated, and sometimes permanent. More than half of the male migrants interviewed were unmarried when they first left their village of origin and three fourths were under 30 years of age and half of these were under 20 (all of the latter were unmarried).

Young bachelor migrants are often called on to occupy a special role in rural spontaneous migration, that of agricultural workers hired on a yearly (*tahunan*) or sometimes monthly (*bulanan*) basis. But they also take advantages of other opportunities such as working day by day (*harian*), or a piecework contract (*borongan*). Sharecropping arrangement (*paroan*) are also possible but they are generally the first step towards a more settled life.

These unmarried males almost always leave with just enough money for the trip to Sumatra (*ongkos jalan pas*). They are sometimes helped by their parents or relatives and even occasionally by the village head.

The first migration may be undertaken at a young age, before 15, if an older brother or neighbor is leading or if they have a sure address. Often they are called for the coffee picking season by relatives and some remain year-round to maintain the plantations belonging to locals or migrant settlers.

Young bachelors usually leave in a group of two, three or four, led by one who has been to the region before. These small groups often split up at one stage or another depending on the fortunes of each. Some continue to work in Sumatra; others are unhappy (*tidak kerasan*) in the new environment and return with their first earnings.

Those who work on coffee plantations live in small groups in rudimentary shelters in the middle of the plantation and feel very isolated. Bachelors seem to have more difficulties in their migration than married men. They readily admit that they miss their place of origin, that they

have a long migration road behind them, and that they have suffered a lot. Clearly, broken contracts (landowners appear to be less scrupulous with young workers), overwork, sickness (especially malaria attacks), isolation and poverty can make the migration experience a trying one.

Those who are determined not to return home pursue their goal with willpower and endurance. Some are able to work steadily one piecework job after another and make out better financially and psychologically as they retain their liberty of movement and decision-making unlike those who work a yearly contract for one boss. Numerous are the *bujang* who circulate for years between coffee and rubber plantations and food crop areas before deciding to return to Java or look for land in Sumatra. Some try their luck in the factories or the informal sector in small towns, in Palembang or in Jakarta. Unable to save and build capital, they often decide to go back to areas offering better opportunities.

Many do not venture to speak of their plans for the future: "it's too far away." Most hope to be able to make their home near their family in the place of origin with the capital they raise. If, however, there is a possibility of obtaining land or a good sharecropping arrangement in Sumatra, they will return home for short trips, or even to marry, before returning to the receiving area to settle down. A few end up marrying the daughter of a local landowner, thus gaining access to the coveted land.

The dominant impression is one of a group which strives to improve an initially unfavorable economic condition so that as adults they can escape the poverty of their parents, and if possible allow younger siblings to benefit from their success.

The migration of families

Though the migration of young single men is a dominant phenomenon for the first stage of the migration, both in the food crop and in the coffee areas, more than three quarters of the long-term migrant interviewed are composed of a couple with or without children. Family migration is obviously more difficult to manage. Most often, the wife and children arrive after the family head, who had already prospected and prepared for the move in the receiving area.

In this way, a family changes its configuration and geographical dispersion as a result of child growth and family evolution, and depending on the settlement environment.

Migration of household heads

Some married men do not bring their family for various reasons. Sometimes, the wife simply does not want to follow him due to the isolation of the settl case in coffee areas) or because the goal of the migration is only to increase the family budget back home. The husband will return home regularly. Still others, once they have acquired a piece of land, will take a second wife who can help them and will start a new family; part of the earnings thus obtained is generally redistributed to the first family. This last situation is more frequent in the coffee plantation area.

Migration of young couples

The migration of young couples is found in all regions of spontaneous migration, often as a follow-up stage to a preliminary migration by the man alone. The difficulties of educating children in the coffee areas are not yet felt at this stage. Sometimes, when the living conditions are really bad (cold and humid climate, malaria and deficient nutrition) but the family has no opportunity to move elsewhere, the young mother will leave the area with the young children to go to a more hospitable place. She will come back to help the husband at harvests, on a seasonal basis, leaving the children with family in the village of origin. This happens frequently for those who have relations living in Belitang or in a transmigration village.

Migration of parents without some or all their children

The problems of education and health in the receiving areas result in many parents migrating without some or all of their children. The school-age children are left with their grandparents, uncles or aunts wherever they may be, in Java, Lampung or Belitang, in Transmigration villages, or in developed settlements having all the welfare infrastructures. Between once a month (for children left elsewhere in the region) and once a year (for those left in Java), the parents shuttle between their children and their place of residence. This allows them to leave to look for land or to work in regions offering higher earnings but inadequate infrastructures and environment for "normal" family life, as defined by the migrants (lack of schools, roads, health centers, and presence of endemic malaria, for example). Sometimes one child will follow the parents.

This family configuration is frequently adopted by parents who leave their children in an original settlement (on land acquired through transmigration or ancient spontaneous migration) and leave to seek other land or employment in more remote areas to increase the earnings of the entire family.

Migration of complete nuclear families

The migration of the complete nuclear family happens when the migrants are sure to settle down for good in the new area. This behavior is more frequently encountered in well-developed settlements in food crop or coffee areas rather than in remote hamlets based on higher-risk coffee-growing. Usually these families sell all their belongings in the place of origin.

The role of women

As can be seen by the large proportion of couples and migrant families, migration is not a strictly masculine experience, though women experience it in different ways than do men. Though this question necessitates more study, it is clear that women play as fundamental a role as men do. While the husband almost always determines the migration destination, the wife determines the migration viability and duration.

It is not uncommon to note differences of opinion on the migration experience. The husband appears more optimistic as to the results obtained; the wife expresses more criticism of her new environment (and the problems of water, nutrition, shopping, children's education and health usually under her responsibility) and more often desires to return to a previous home, in the village of origin or an earlier and more developed migration area.

ROUTES AND MIGRATION STEPS

Life histories of spontaneous migrants reveal great mobility, especially among independent migrants. *Sponsored* spontaneous migrants, taken under wing from the sending area, seem to have less mobility. Some, bound to an unprofitable job contract, may not have the information necessary to break it and go elsewhere to look for a better situation. Spontaneous transmigrants have almost no mobility.

Direct spontaneous trajectories, directly from the place of origin to the site when the migrant was interviewed, do not account for the majority; they constitute one third of the trajectories studied if departures from Sumatra are taken into account (such as a departure from a Transmigration site or from a place of birth in Sumatra), and only one sixth of the routes taken from Java or Bali to Sumatra. But it is nearly always the case for those joining transmigration villages, probably because such settlements are enclaves.

For the spontaneous migrants interviewed in OKU regency (and just over the border in OKI regency) many of the routes passed through Lampung and Belitang while few of them have been to or have received information about areas further north. The short surveys done in Lahat and Musi Rawas regencies seems to indicate that spontaneous migrants revolve around a specific region where information about opportunities for land and employment circulates better; Lampung and OKU seem to be such regions.

Most spontaneous migrants over 30 have experience in different regions. Migrants coming from Lampung (without having passed through the Transmigration or Translocation zones) look for more fertile or less expensive land, or flee cultivated areas that have been declared protected and off-limits.

In reality, migration trajectories are more diverse and complex than the types presented above, and are often combined during a migrant's lifetime. Furthermore, the distinction between lifetime, or open-ended migration, and circular migration is even less clear since many spontaneous migrants begin their migration with a circular or temporary voyage before settling down for a long-term stay. Rarely can one be sure if this settling-down will be permanent, meaning no eventual return to the village of origin to live. Much of course depends on whether the individual migrant or the family (and its ever-changing form) is the focus of analysis. For example some of the children sent for school in Java will never settle in Sumatra.

It is also difficult to distinguish between migrants choosing the food crop regions or the coffee plantations, because these two destinations are frequently associated during a migration history.

ADAPTIVE STRATEGIES OF MIGRATION

Several behavior patterns can be identified that, more often than not, insure a degree of success in migration. A forced return or other major problems can thereby be avoided, especially for families for whom migration carries additional risks. One might even speak of techniques for successful spontaneous migration:

- constantly inform oneself of the opportunities for employment and access to land by taking advantage of all close and distant contacts;
- send an active member of the family (father or son) on a scouting mission to the place of potential migration;
- accept to separate members of the family depending on the situation and needs for periods of from a few months to several years;
- retain, to the extent possible, land and housing (even if rudimentary) in addition to that possessed at the most recent migration site.

Unproductive land in a Transmigration settlement, for example, which one has to leave in order to be able to meet the needs of the family, might still be worthwhile keeping for a family member who could take in a child in case of need. The same goes for holdings in Java or Bali; one never knows if the migration will run into trouble or if it will be necessary to send a child there for more adequate schooling.

Dispersion rather than concentration is the rule. This goes for the members of a family and for the places of residence and land. This perhaps suggests that spontaneous migration is only a partial success, since migrating families cannot assure the support of all members at one place. A migrant cannot risk calling his family until he has reached a certain degree of economic stability, usually including access to land judged sufficient for his children. In the frequent case where the family is incomplete, the geographical spread of its members is striking.

Various migration patterns are found among spontaneous migrants, and often combined during a single life history and it appears that it is not so much a certain mentality that orients people towards spontaneous migration, but rather the conjunction of specific and evolving living conditions and opportunities to be seized at a given moment.

3.4. Other spontaneous migrant groups involved in agriculture

There is not a great deal of difference between ethnic groups from Inner Indonesia in terms of their migration process. In South Sumatra, however, the migration of young Balinese seems to be less frequently encountered than it was in Central Sulawesi, which experienced mass spontaneous movement. These adolescents usually work on a Balinese farm, rarely with Javanese cultivators, and never on a local farm.

THE SEMENDO CASE

In the mountain zone of OKU, the Semendo group is active in opening new land for plantations, and gives an interesting example of the importance of social and cultural factors for an understanding of migration dynamics. In one of the chosen spontaneous settlements, the Semendo come from a village founded in the beginning of 1900 in the district of Muaradua Kisam by migrants from Pulau Panggung (Semendo district). Population pressure on land seems to be the main factor causing out-migration, along with the problem of access of rice field, *sawah*, which provides resident status, and the inheritance rule which does not offer opportunities for male ownership. Most of the Semendo interviewed do not plan to live in the new settlement indefinitely; they have plans either to return to the second village of origin and buy one of the expensive rice fields, go somewhere else to open new land or, the preferred choice, live in the town of Muaradua, "in the middle" between their village of origin and the present place of residence and production.

BUGIS MIGRATION

The history of Bugis migration is well documented (Lineton, 1975; Amiroelah, 1976, and others). The major characteristic of the migration process is that it is organized by the Bugis themselves. It begins with the search for land, then involves travel and finally settlement. Once a potential settlement area has been located and tested by a pioneer group, they send letters and travel to areas already fully settled by Buginese (from Riau, Jambi and Kalimantan), or to their place of origin in Sulawesi looking for newcomers to help them open the area. For most of these Buginese, their main goal is to accumulate enough money to eventually retire in their original village in South Sulawesi. They will visit this village on a regular basis, will invest in a house or land, and bring back with them more migrants for their settlement in Sumatra.

fourth part

SPONTANEOUS SETTLEMENT PROCESS

We have limited our study in this domain to village populations and have excluded for the most part migrants settling in central towns located within rural zones. While not wishing to separate two categories that are in fact linked, the principal objective of this exploratory study remains the understanding of the processes of agricultural colonization.

Migrants coming directly from Java for the first time are never alone in the process of extending cultivation area; they participate in a dynamic process of spatial conquest initiated by populations already in the area for some time.

When opening new land devoted to food crop production, they find themselves alongside landless descendants of Kolonisation or transmigration centers or migrants who have long remained in areas where their ethnic groups are concentrated (Belitang, Tugumulyo, and Lampung). The spatial pattern associated with this settlement is a progressive ringlike occupation around the first population core (see maps I.B.1) in the form of new village clusters which most of the time copy the village layout, home and farmland distribution patterns of the Transmigration centers. These new settlements are set up as spatial extensions of the older settlements in what becomes a coherent whole.

In the regions of cash crop cultivation, coffee in our study, the movement of land conquest has been carried out by indigenous ethnic groups and their neighbors with the participation of old and new migrants. This is a much more spread out occupation pattern with the formation of clearings and small hamlets which will not become villages unless there is increased concentration, still unusual for the area (Kotaway). The only criterion for occupation is the availability of cultivatable land.

In these latter regions, the enclaves where food crop cultivation is possible, village planning organized on the Transmigration model reappears once the area is sufficient for more than twenty families.

For all the receiving areas, spontaneous migrants coming directly from Java or Bali allow a certain lapse of time before actively seeking land to work by themselves, only very rarely doing so in less than two years, often within five years, and in many cases beyond that. Despite the diversity of situations encountered, this period of observing and learning about the environment seems absolutely necessary to understand the possibilities of agriculture and the human milieu. This is also a period that is essential for putting together the capital necessary for the land purchase.

1. IN FOOD CROPS AND COFFEE AREAS

1.1. An overview of the settlement sites

SETTLEMENT BASED ON FOOD CROP PRODUCTION

For spontaneous settlers who devote themselves to food crop cultivation, in-depth studies were carried out in two new villages on the border of the OKU *kabupaten*, near Belitang, in the OKI *kecamatan*, the villages of Cahaya Mas founded in 1980 by about forty families (today 500 families) and Kampung Baru founded in 1984 (today nearly 1400 families). These two creations were made in the prolongation of the *pra-pelita* Transmigration centers of Nusa Tenggara, Nusa Bakti and Nusa Bali (*kecamatan* Belitang) and can be considered as representative of a massive conquest of a zone that was little occupied by local people. Tracing the roots of this phenomenon, visits were made to the settlements situated along the road from Tugumulyo (a creation from the end of the 1960's) to Muara Burnai (*kecamatan* Kayu Agung, *kabupaten* OKI). These latter seem to be the northern limit of this phenomenon of massive settlement and beyond the indigenous population is relatively dense in what can be referred to as the Palembang hinterland.

Visits were made to *dusun* created by a groups of migrants with the authorization of local villages, in Mendayun (Buay Madang *kecamatan*, created in 1977), and in Mendala (Peninjauan *kecamatan*, located between the east bank of the Ogan and the Transmigration center of Batumarta), where a settlement creation is underway (30 houses built and 60 lots distributed as of July 1990).

Situated in the coffee zone but devoted mainly to food crop production, the *dusun* of Sabutan (Bumi Agung village, *kecamatan* Muaradua) was systematically studied, focusing on some 100 families grouped into two farmer's groups (*kelompok tani*). Located on flat terrain on the road from Muaradua (about 12 km away) to Banding Agung, this settlement was set up on land originally planned to be irrigated but the project was abandoned and the 2 ha parcels were redistributed to veterans or government officials. The parcels have been subsequently sold one by one, mostly to spontaneous migrants from Inner Indonesia since 1976. Because of the way in which it was created, this settlement is very dispersed (each house is located on its parcel) and has no center, and it was formed without the intervention of local people. Situated along an important line of communication and within a controlled space, this settlement has been able to develop intensive food crop agriculture, including vegetables.

The *dusun* of Serekat Jaya (Srimenanti village, *kecamatan* Simpang) is, in the coffee zone, another case of neighborhood formation requested by locals who propose, in this case, land for food crops including area that can be developed into rice fields.

Finally, visits were carried out to small hamlets of less than 10 homes located in spaces left vacant by local peoples or Transmigration villages either to the west of Belitang or along the roads throughout the study region.

SETTLEMENT DEVOTED TO COFFEE PRODUCTION

For the spontaneous settlers involved mainly with coffee cultivation, studies were carried out in a systematic fashion in the settlements of the Simpang district (*kecamatan*) for the Kotaway plateau, in the villages of Bumi Cahaya in the Muaradua district and in the *dusun* of Sukorejo, Pedataran village for the Pengandonan district. Less systematic studies were carried out in the villages of the Muaradua Kisam, Pulau Beringin and Banding Agung *kecamatan*.

The plateau of Kotaway provides an example of a massive conquest by migrants (coming from other regions of the province, from Java or with people of Java from Lampung) of an area uncontrolled by the local population. This case is not unique although here it reaches a certain magnitude, and one finds this phenomena mainly in isolated regions which apparently escape official control during their formative stages (for example, the settlements on the slopes of Mt. Nanti, Sapulima, and the north of Banding Agung district).

This plateau, situated to the south of Kotaway village, stretches to the west up to the Lampung border, and south towards *kecamatan* Banding Agung on the slopes of Gunung Raya (1643 m). This important ignimbrite plateau is situated at about 250 m of altitude offering large flat spaces dissected by numerous deeply-embanked rivers (which flow into the Komerang downriver from Muaradua) forming deep canyons which make communication difficult. At present, the asphalt road ends about one kilometer before the village of Kotaway and the plateau is serviced by thin and very steep tracks and trails (>200 m), carefully maintained by the communities through tolls paid by the trail motorcycles that crisscross the region. The planters began moving in little by little in the 1960's, progressing from the north, Kotaway, or from the south, the slope of Gunung Raya, where private coffee and tea plantations have been set up since the beginning of the century, and where settlement movement is oldest. The first occupants were the Komerang Ulu who now only represent about 0.5% of the population⁴⁵. The land conquest was made at the end of the 1950's with the Semendo and the Ogan Ulu closely followed by people originally from Java (no doubt Sundanese, first of all). The colonization movement speeded up in the 1970's once a forest concession (which had opened the trails) pulled out. Since 1982, there is no more land to settle outside of the protected zones which themselves have suffered major encroachment. In 1989, this plateau included about 2675 families⁴⁶ and 13,000 ha of plantations within the authorized areas, and some 1500 families settled in protected areas situated on the slopes of Gunung Raya⁴⁷ and to the east of the Saka River (area used is unknown). In the *perwakilan*, the population is said to be composed of 40% Javanese, 25% Sundanese, 1.5% Balinese, 30% Semendo-Kisam, 3.5% Ogan and 0.5% Komerang. Habitat is dispersed; the houses are sometimes grouped into small hamlets (often composed of less than ten houses) along the access trails, excepting several major concentrations such as

⁴⁵ Figures estimated at the *perwakilan* level.

⁴⁶ Including Kotaway.

⁴⁷ Some groups are settled on the east bank of the Saka, an area which is said by some to be off-limits but which does not appear to be prohibited based on forestry maps.

Curup, Tanjung Durian, the Semendo homes near Danau Jaya and other settlements.

Bumi Cahaya, situated at the western extension of the Kotaway plateau, can be considered an example of migrant insertion into a space controlled by the local people, the most frequently encountered situation in the region, as we noted in our studies of other *kecamatan*. Located on the road from Muaradua to Danau Ranau (opened by the Dutch in 1920 using Sundanese workers, neglected and then recently improved) the village harbored a continuous and controlled flow of migrants since 1930 with heavy influx in the 1950's. The southern part of the village (accounting for 40% of its territory) is also in protected forest (determined by the Dutch forestry services) but here the boundaries are relatively respected since the terrain is extremely dissected and access is very difficult. Out of the 482 families, 210 families are local or mixed (Sundanese men married to local women before 1950) and are grouped in the mother village (*desa induk*). The others (local and migrant families) are dispersed throughout the village territory; some homes are grouped together, but rarely more than ten at a time, either along the road or near their fields. About 35% of the families are completely foreign to the region. Outside of the protected forest, there remains land (secondary forest) to be cleared but it is very difficult to reach, using steep tracks through the hills, and it is owned by locals. At the present time, about 50 village families, including 10 Javanese and Balinese, are in the process of opening up an area near a lake.

The neighborhood (*dusun*) of Sukorejo is another example of settlement in an area controlled by the local population (from the village of Pedataran, Pengandonan). Ethnic segregation in a spatial sense and control over landownership is stricter, exception made for cases of intermarriage.

1.2. Stages of development

OBSERVATION AND CAPITAL FORMATION STAGE

We have noted that the migration trajectory is long for spontaneous settlers; before settling down on what they consider to be their "own" land (even if they do not have land ownership papers), or land still being sharecropped, migrants will try to find work in agriculture or in a related sector in order to save up to buy their own land.

The coffee harvesting season offers the possibility to build capital relatively quickly, either working as a picker or a transporter (on foot or on motorcycle). In the course of this work, they will also be able to obtain information as to employment opportunities for the rest of the year or concerning available land.

Aside from daily work or work paid by the job (for example, the opening of a new forest or *alang-alang* parcel, weeding or pruning), newcomers can find a yearly contract or a contract stretching over several months for the upkeep of a plantation. Such contracts are negotiated either in the receiving area or in advance in the sending area. The standard agreement provides a fixed salary ranging from Rp 100 to 500,000 with food and housing provided along with some clothing, tobacco and medicine paid for by the owner. Those who employ workers at the higher

rate usually forbid them from working for extra daily wages outside of the plantation, but those offering low pay usually allow outside work. Most of the time the worker receives his salary at the end of the harvest, minus the total amount of credits received from the owner during the year. Some are able to save, but not all, and some even have to begin another year to pay off the debts incurred.

During this period of building capital, migrants are found to have much geographical mobility between the coffee and foodcrop areas and even the urban areas (Palembang, Prabumulih, Baturaja). This corresponds to professional mobility found in food crop agriculture, in plantations, in industries of transformation (brickmaking, woodworking, charcoal making, oil extraction, food processing, for example) or in services (motorcycle transportation, for example).

Much variation exists in work arrangements in South Sumatra, but most migrants agree that rates of pay and working conditions represent an improvement over what they were used to in Java. Many young migrants come to Sumatra to work in a coffee plantation on a yearly contract previously arranged in Java. Hiring by the job is about as common as hiring by the day, whether in the lowland and food crop or highland coffee areas. Even considering the lack of continuous work in the slack season, most notable in the coffee-producing regions, migrants feel they can earn more or at least save more by working in Sumatra. Many remain in the region but others will return to Java in the hope of being able to settle down there.

ESTABLISHING FOOD CROP SETTLEMENTS : A MASS PROCESS

Migrants who wish to take up food crop agriculture can either settle vacant land in an already developed settlement, but the parcels are expensive, or participate in the creation of a new settlement. The very nature of agriculture (as food production) and the ecological conditions (an untamed environment with many predators) rule out isolated cluster and imply large-scale settlement creation, meaning a village of more than 250 families, or a new neighborhood or hamlet of less than 250 families located on the territory of a village.

The initiative to create a settlement is usually taken by a few families, usually less than ten, who can be referred to as pioneers. They are the ones who will prospect to find a large block of land and enter into contact with the authorities (at the village or *kecamatan* level, or at the Department of Transmigration). Once the area to be developed has been determined and the administrative formalities ironed out, these families will go look for potential settlers in the region and sometimes directly in the sending areas of Java and Bali. This is a difficult stage because many families do not want to take any risks. Therefore, several families will begin the settlement project, organize the future layout and build the first houses together. Once the community reaches about thirty members, increasing numbers of candidates present themselves, reassured about the enterprise and its prospects. This second category can be referred to as "followers". The pioneers often remain the leaders of these communities.

COFFEE SETTLEMENT: AN INDIVIDUAL DECISION

A migrant who decides to devote himself mainly to coffee growing can open an isolated parcel as long as predators, such as wild pig, do not do too much damage to the young coffee

plants.

At the outset, the migrant without capital does not really have the choice to choose the location of the parcel that he works for himself or that he takes care of on a sharecropping arrangement. The plantations he has to take care of are usually isolated from the main lines of communication and the activity centers. This means increased costs for the transport of production which usually limits the amount of area that can be cultivated (up to one hectare at the most). It forces him to accept social isolation that is difficult to bear in the long run. Friends, school for the children, medical aid and the market are too far away. Life will usually become more bearable if two or three families can be grouped together. Most seek to accumulate enough capital to buy a parcel closer to the centers of activity unless the space they are occupying becomes much more densely populated.

With increased density, neighborhood social life develops, there are enough children to create a school or at least several children can travel to one together, the volume of production becomes sizeable enough to generate a market, or at least stimulates the construction of trails by *gotong royong* to enable transport by vehicles rather than on peoples' backs.

We have noted the great mobility of settlers who begin with a sharecropping arrangement, then open a parcel of their own not far away, purchasing the permission for its use from the village authorities or from a private owner. The parcel might be covered with forest or shrub or be already planted with coffee. Sometimes this plantation will be sold several years later and another one bought regardless of its size or soil fertility provided it brings them closer to an activity center.

The ideal solution for all is to be located on a road. Few spontaneous migrants will have retained some old isolated plantations requiring minimum care or accumulated separate parcels as the indigenous do. More often a rather well-situated parcel is progressively expanded or the cultivator moves closer to the activity centers even if this means working a smaller parcel.

LEGAL ACCESS TO LAND

Broadly speaking, migrants who enter spontaneous settlements in food crop areas buy their land, either from the village administration at a fixed price (which is considered like the former compensation fee, or *pancung alas*) or from residents based on market value. Migrants in the coffee-growing highlands open secondary forest either on village land with the permission of the village administration (and paying the fees) or, increasingly, purchase uncultivated land or established plantations from former owners.

The first type of migrants can expect to obtain some sort of legal title for their land, usually the *SKT*, *surat keterangan tanah*, while the second type rarely get it. The *SKT* is delivered by the *camat* through the village head for parcels not exceeding two ha per individual. A governor's decree has suspended the deliverance of these certificates since 1984. We have noted, however, that they are still being delivered; the question of this document's validity is

therefore posed⁴⁸.

For coffee plantations, the legal situation of the land is more complex and is closely based on existing traditions. It must be noted that very few locals ask for ownership certificates (as in the plains areas). Former rights of usage have been transformed in everyone's mind into rights of property respected by all. For each family this represents very large surfaces since all land already opened by ancestors and planted with trees can be considered their own property. Only productive land is taxed, the others can be considered family reserve land. A certificate is drawn up by the *kades* only if there is a request for credit from the bank or if the land is appropriated by the government or a private enterprise and there is a request for compensation.

Usually, a land transaction between two locals is made without paper but the whole community is aware of the deal. Most often, the same is the case for transactions between a local and a migrant; the agreement is based on an oral "good-faith" agreement. Sometimes the transaction is written on plain paper with stamps (*meterai*) attached and signed by the two parties and a witness. By appending the signatures of the parties involved on legal paper, rights over the land automatically shift to the new holder, though this *segel* has the lowest legal status. Sometimes the transfer of ownership is neither declared on a piece of paper nor acknowledged by the *Kades*.

It seems to be the case that in the coffee regions where spontaneous settlement is an individual matter, spread out over time, village leaders do not want to overload themselves with individual administrative tasks. In the food crop areas, they have a different manner of taking care of many certificates at the same time. Indigenous people may be somewhat reticent to sell ancestral lands; in these cases, a sharecropping arrangement is usually made (Pengandonan).

The system of land-sharing was commonly used during the first few years of pioneer movement in the study areas, when land had to be cleared and coffee planted. The worker would clear land and plant coffee in exchange for rice and ownership of one half the land opened (*paroan tanah*) after the first significant harvest. Only some arrangements of this type have ended up with the user receiving a certificate of *adat* land use.

In all, there are many spontaneous settlers who are considered plantation owners by themselves and by the host community, but who have no document whatsoever to prove it. While we have not noticed any conflicts yet in areas where agriculture is allowed between indigenous and migrant farmers, the situation of these new settlers remains precarious, especially in the face of large development projects (extension of military camps or agro-industrial estates). In the compensation calculations, whether or not property is of *adat* origin may well be determinant.

Sharecropping arrangements are also based on oral "good-faith" agreements. We found very few problems in this field.

⁴⁸ The same goes for many spontaneous settlements, especially between the Mesuji *kecamatan* and Kayu Agung (*perwakilan Lempuing*), where administrative boundaries are not set. The validity of certificates delivered by one of these *kecamatan* can be declared invalid despite the fact that they were entirely paid for.

PHYSICAL DEVELOPMENT

Housing

Spontaneous settlers construct their house themselves unless they occupy the home of an indigenous family with whom they have a work or sharecropping contract. We have seen two main types of construction, houses built on the ground and houses built on stilts.

Generally, spontaneous settlers coming from Inner Indonesia prefer to build their house on the ground, but if they are isolated on their parcel and in an environment that is not domesticated they will usually copy the style of local secondary houses built on stilts. This type of construction protects them from wild animals, mainly wild pig, which roam at the foot of the houses at night

Once the environment is domesticated, or if there is massive settlement with neighbors close by, spontaneous migrants from Inner Indonesia build simple rectangular houses on the ground. All houses are built with local raw materials (wood, bark for the walls, *alang-alang* for the roof) or fabricated materials (roof tiles).

Once the settlement is created, house construction is usually done in collective fashion beginning with the preparation of materials (beams and planks). The houses are built one after the other on the basis of a fixed size; one who desires a larger house will have to pay extra in one way or another.

Village layout

Dispersed coffee settlement

Coffee planters rarely live in grouped settlements. Most often they live on the parcel they cultivate. When density increases, the homes are grouped together in small scattered hamlets, to at least have one's neighbor at calling distance. Where access roads already exist, the houses are found along the roads on both sides facing each other.

When density increases either due to administrative and commercial activities (as in the case of Curup on the Kotaway plateau) or to a type of land ownership (as in the case of Sukorejo where most families do not have access to land and are hired as workers or sharecroppers), the settlement is organized as a roadside village. The houses are built in a tight line along the road with practically no garden.

Spontaneous settlers coming from other regions of the province, the Semendo or the Ogan Ulu, for example, most often set up a first grouped hamlet where the houses are aligned facing each other along a wide and well cleared road, which is a public space. Other houses are spread out in a radius of about 3 km.

Food crop settlement: a copy of the Transmigration layout

When a village or a *dusun* is created, such settlements almost always copy the layout of the various types of settlements built by the Transmigration Department.

The most common type is the grouped and squared-off village with each house located on a 0.25 ha garden along the lanes (as in the case of Mendala and Medayun in OKU and Megang Sakti in Musi Rawas). In the second type, the houses are lined up on the road on some or all of the land bought by each family (as a general rule consisting of 2 ha each). If the cultivated land is attached to the house plot, the homes will be far apart and the settlement will stretch over several kilometers.

Often there is a mixture of these two types (as in the cases of Cahaya Mas and Kampung Baru) where part is characterized by grouped habitat and part is reserved for future public buildings (schools, markets, religious buildings). Only one settlement, the *dusun* of Sabutan, is not organized around a one center because the settlement of this area was done little by little on lots destined for agriculture and sold individually. At the beginning, each house was built on its own land (one or two ha), often on stilts. Situated several hundred meters from a major road (Muaradua-Danau Ranau) the strategic center is found along this road with its older settlements occupied primarily by indigenous people.

The roadside village also exists with houses on their 0.25 ha gardens (as in the case of Sarekat Jaya) depending on the topography of the site. Where there is progressive implantation along an important road, however, the parcels are bought or occupied one by one and are not all the same size; generally the gardens in these settlements are relatively small. In older spontaneous settlements (Buay Madang), density has increased inside the gardens and the atmosphere reminds one of Javanese villages with houses in the shadow of large fruit trees.

MAIN INFRASTRUCTURAL DEVELOPMENT

Spontaneous migrants often remark that in settling near a general transmigration scheme or near an indigenous village, they can benefit from more complete infrastructures and facilities. The creation of villages or neighborhoods is almost always made as an extension of already developed areas⁴⁹. In many cases (Mesuji, part of Kotaway in OKU and Megang Sakti in Musi Rawas) spontaneous settlement immediately follows the closing down of a forest concession by using the network of trails already opened.

Roads and access

In the creation of organized settlements based on food crop cultivation, spontaneous settlers themselves have had to undertake much, if not all, of the work involved in creating and maintaining access roads to homes, fields and to the main highways. All this work is done on a communal basis, *gotong royong*, whereby at least one person in each family must contribute labor. The work starts just after the house building and lasts for several years. Streets have been laid out to provide access to and mark off blocks of house and field plots. The main streets are wide enough to accommodate large trucks. Main roads are wider with gutters built on each

⁴⁹ We have visited, however, a completely isolated settlement founded in the 1950's by a group of agricultural laborers (50 families) working for local villagers who asked for their own land. The land given to them was located seven kilometers away on the other side of the river from the indigenous village, in the middle of nowhere.

side but their maintenance is difficult due to the long rainy season.

In the coffee cultivation region, problems of access are very serious due to the relief and settlement dispersion. There cannot be any community work until sufficient settlement concentration exists to open trails of at least 0.5 m to 1 m in width. Otherwise families which use the same path will improve it in order to facilitate walking (adding steps, ramps or small bridges, for example). When the trail network is very extensive, the terrain is very broken, and the local economy is healthy (as in the Kotaway plateau), the difficult passages (steep corridors and bridges) are maintained by groups which collect tolls along the way. In the coffee regions, the horse was replaced by trail motorcycles, and sometimes four-wheel drive vehicles, but many isolated planters must carry their production out on their backs. When the plantation exceeds 1 ha in size and the price of coffee is high, the planter calls on laborers from the outside and thus encourages the migratory movement.

School

Once the houses are built on organized settlements, one of the first concerns of the spontaneous settlers is to build a community building that can serve as a school. They begin teaching with a volunteer member of the new community. He or she in most cases has no more than a primary school level, but can at least teach the children from 7 to 9 years of age to read and write. Later they will hire teachers to instruct all ages.

This can only be done where there is a sufficient concentration of families. Children of coffee planters must walk to the nearest school if it is located less than 7 km away and if several children can walk together. When the density is high enough in a radius of about 5 km, a school can be created on a main road (as in the case of Talang Bendi on the road between Muaradua and Danau Ranau).

Fees are much higher than for comparable government-run primary schools. Yearly fees range from Rp 20,000 to 35,000 per pupil, and are known to reach up to Rp 100,000 in the isolated coffee-producing areas. Concern about the expense and also the quality of private education has caused many spontaneous migrants in South Sumatra, particularly those in isolated highland areas, to leave their school age children with family in Java or Lampung. Secondary school students, though few, are sent to Java or put up (*kos*) in larger towns near their parents in more developed settlements in the region (like Belitang or Lampung). Such solutions are also expensive.

While the schooling of most spontaneous migrants does not exceed the primary (*SD*) level, they harbor strong hopes that their children will be able to go farther than they did.

The creation of a government school usually happens several years after the establishment of a private school but the number of government-salaried teachers (*guru Negeri*) provided is often insufficient for the ever-expanding population and additional non-government teachers (*guru honor*) must be paid for by the parents.

Health

Migrant health and health care accessibility pose major problems in all the sites visited. Migrants complain of more serious health problems in Sumatra than in Java while lamenting that treatment is more difficult and expensive to come by. Serious health problems usually lead to financial ruin, since migrants usually do not possess assets other than their land or their manpower.

The number one medical problem is without a doubt malaria (*malaria*, *demam*, *panas-dingin*), and cholera (*muntaber*) which few migrants can avoid if they stay in South Sumatra any length of time. In the hilly coffee areas, a source of fairly clean water is never more than a few hundred meters away. Wells are sometimes dug at the lower elevations. As for the lowland sites in Mesuji, many areas have wells for every couple of households. In the first months of settlement, a few wells are dug, usually near humid depressions in order to reach water easier, but the risks of pollution are greater. Later, wells must be dug 7 to 9 meters deep (in the Mesuji example) and reinforced with bricks (1-2000) to keep the sides from caving in. Cost of a well ranges from Rp 75,000 to 150,000, all costs included. Up until recently, wells were very unpopular among Javanese who feared that local Sumatrans could poison them. With ethnic relations improved, people have been starting to build and use wells once again.

Many women complain that birth control pills and follow-up are difficult if not impossible to come by in their area.

Proper nutrition is beyond the reach of most families in coffee-producing areas, due to the isolation of settlements, the high cost of transportation and predators which destroy crops other than coffee. In food crop areas, in terms of variety, the settlers can grow in their fields or find in the markets many of the same vegetables and products they had in Java. Spontaneous settlers in South Sumatra on the average probably have not experienced significant dietary improvement since their coming, despite an overall improvement in economic welfare in comparison to Java.

Each kecamatan has a government-run health clinic (*Puskesmas*), with a doctor on call and mini laboratory, and several smaller offices (*Pembantu Puskesmas*), staffed with a nurse. Most of the settlements are located between five and eleven kilometers from the closest small clinic. One settlement, Kampung Baru, has had a *Pembantu Puskesmas* since 1989, only four years following the first settlement of the area due to the rapid population growth. Other large settlements receive a medical worker (*menteri kesehatan*) on a regular basis except in the highland and isolated villages.

Hospitals are found only in the district seats (Baturaja, Kayu Agung, etc.) and in some major towns like Gumawang. Spontaneous migrants often mention that they returned to their place of origin when a member of the family came down with a serious illness.

1.3. Agricultural economy

AGRICULTURAL PATTERNS

Land clearing

In each type of spontaneous settlement, land clearing is done by the settlers themselves, without the aid of machines commonly used now to open land for official transmigration settlements. Whether the land to be cleared is covered with primary or secondary forest or *Imperata*, simple hand tools are often the only means spontaneous migrants have at their disposal.

In many cases settlers are opening secondary or degraded forest (a few settlements were opened from primary forest), or reopening overgrown plantations. Large trees remaining from patches of primary forest must sometimes be removed.

Tree-clearing must be done during the dry season. When it is possible the planters take turns opening up each other's land (*gotong royong, giliran*). They use the slash and burn method they have learned and have found very efficient. After clearing, trees and bushes must be left to dry for at least two weeks, preferably longer, before they can be burned. About twenty people are required for a one hectare parcel to prevent fire from spreading. Then the debris is gathered together and reburned. Ashes are left for fertilizing. This tidying up and second burning requires about 16-20 person-days.

If there is rain, the work is delayed. Once completed, it is necessary to wait for rain before planting upland rice (*padi*), the crop which is usually chosen to provide subsistence, while the coffee trees are plant around it three months later⁵⁰. If in July and August the trees are felled and in September or October the debris is burned, the planting can be done in October or November following sufficient rain.

The Javanese and other migrants are known for accepting the job of clearing *Imperata* and for their ability to put the cleared land under cultivation. The *Imperata* must be hoed up and then, if possible, plowed or turned under. Opening one hectare for planting takes 60-80 person-days (or costs about Rp 100,000) in the plains (Balinese area of Kampung Baru) and 150 person-days in the mountain area, because *Imperata* is often mixed with small trees and the roots have to be cleared. In Sabutan, 155 person-days are necessary to open secondary forest area with *Imperata*: 25 person-days for cutting down the trees and undergrowth, five for burning the debris (others provide mutual help without cost) following a week or two drying period, 75 for a first hoeing and 50 for a second hoeing. If there is no *Imperata*, less than 60 person-days are sufficient for the clearing. In all areas, much variance in the estimates of the amount of

⁵⁰ Upland rice was the only crop currently seen in freshly opened fields, but it was noted that other crops can be planted in its place, including various beans, maize, chili peppers and vegetables. These crops can be left in association with the coffee trees until the latter begin to shade them (a maximum of 17 months), but recent practice is to plant only one six-month rice crop and then leave the coffee to grow alone.

work required also depends on the thoroughness desired; often the complete clearing of the roots and stumps will take at least three years.

Agricultural systems

In the region studied, we have come across two agricultural systems, one based on food crops and the other based on small coffee plantations. The mixture of these two systems remains rare. Wet-rice (*sawah*) cultivation is practiced only marginally, on humid depressions (Mendayun), through the creation of irrigation systems (Gunung Cahaya and Serekat Jaya) and on spaces developed by spontaneous settlers on their own land. It is almost impossible for spontaneous migrants to acquire *sawah* from indigenous people as the latter are very attached to such land. Yet migrants often work sharecropping arrangement, frequently sharing the first harvest (1/2 or 1/3), and sometimes keeping the entire second harvest.

In the plains and valleys

Most non-coffee growing spontaneous settlements must depend primarily on dry field cultivation systems, similar to the Javanese *tegalan* agriculture. Like transmigrant, they adapt it for the new environment where they face the same problems of rapid fall in fertility. The production of surplus food crops is one of the specific contribution made by migrants from Inner Indonesia in this region.

In low fertility zone (around Belitang for example), the system is based on a rotation of food crop and mixed cropping (*tumpang sari*), rotation of land with a fallow period. The crop rotation generally includes dry land rice followed by either maize, peanuts soybeans, chili peppers or one of a number of vegetable such as long green beans which can be, in the best of cases, planted twice (using different crops) before replanting rice. The cassava which occupies the land for at least nine month does not enter into this system but is always present on part of a parcel in order to insure subsistence during the off-season. The mixed cropping system (*tumpang sari*) include upland rice and maize, or maize and peanuts, chili pepper and soybeans. Mungbeans do not seem to grow very well in the study area.

Home-garden (*pekarangan*) are usually planted intensively with food crops at least for the first few years because the parcels can be more easily protected from predators. Together with trees they provide important supplemental food and income for family budgets. The trees include banana, coconut, durian, duku, rambutan and others.

The main problem is the rapid fall in yield which cannot be compensated by the necessary input of fertilizer because they are not yet regularly available, due to the underdevelopment of distribution circuit, the difficulty of access which increases their price and the fact that no credit program has been set up to aid the farmers. The problem is hardly one of lack of farmer know-how. Fertilizer applications are low for all crops and the only solution for the moment is to try leaving the land fallow for two or three years before putting it back into cultivation; this fallow, however, can encourage the development of pest, especially rats. In the unfertile plains, there is no major attempt at planting perennial crops, such as rubber, though some farmers

speak of this as the only viable alternative to the present situation.

In the fertile valleys, following the example of the Sabutan settlement which is also served by a major asphalted road, intensive food crop agriculture as developed without fallow periods and with regular fertilizer use. Only two out of 97 spontaneous migrants in Sabutan have planted coffee.

The coffee planters

Following the clearing using slash and burn technic, the land will be hoed only if their is *Impereta*, otherwise rice will be planted using a stick. Coffee can be planted using cuttings or by transplanting seedlings grown in a nursery for two or three months. Planting distance of 2 X 2 m give a high density plantation with some 2 000 trees per ha. While the rice is growing the field must be closely watched over.

After this first harvest which is stocked for family consumption, spontaneous settlers try very hard to plant food crops with the hope that some of them can avoid predation. Once the coffee trees begin to shade out other plants, food crops only occupy marginal areas around the house and are hardly sufficient for family consumption. Some, copying the local methods build strong and high fences around small plots to protect vegetables and young coffee plants. One crop which resists best is chili pepper, planted extensively on available parcels for two or three years and sold at the weekly market. From a technical point of view, coffee planting is rapidly mastered by the Inner Indonesian migrants, despite the fact that only a few had prior experience. The innovations they introduce are mainly the intensive weeding and pruning. Their parcels is usually more uniform while the local people will mixed many other trees (teak, fruit trees and even rubber). The only mixed cultivation encountered is coffee with pepper in the Kotaway plateau.

In the mountainous regions were the problems of animal pest is still a major one, the cultivation of food crops, including rice, is insufficient for local consumption.

Animal husbandry

In the food crop areas, owning cattle can be very important in order to plant early, harvest early and get crops to market before prices fall. If a farmer is obliged to wait his turn to borrow a plowing team, he may miss a chance to plant early, just after the rains.

The International Fund for Agricultural Development (IFAD) has been providing cattle to farmers in Kampung Baru and Cahaya Mas since 1989. Cahaya Mas is said to have received 150 cows and 15 bulls offered as part of the IFAD program for having reached their tax quota every year since 1985. This program has had a very positive effect on agricultural development in the area.

In other spontaneous migrants areas, animal husbandry is only marginal activities. Everywhere there are a few household which raise poultry but goats where only found to play a significant role in one settlement located on the Kotaway plateau.

Marketing of crop production

In the eyes of spontaneous migrants, a settlement truly comes of age when it can open its first government-subsidized market. Most migrants are only marginally involved in marketing, if at all. Lack of capital and knowledge of the local network are the primary factor limiting their marketing activity.

In the coffee area, often the producer have no direct contact with the first buyer; transactions are done by persons possessing the means of transport: coolies, trail motorcycle drivers who bring productions either to the road on collecting point, either to the market or to the huller factories. They are expected to conduct bargain for the sake of the producer. This system has its advantages and disadvantages from the grower's point of view. They do not have to deal with the time-consuming and uncertain business of liquidating their crops, but they relinquish the possibility of earning through bargaining a closer approximation to the current value of their goods. Transport is always available, but the price is high and it reduces profit margins by as much as 20%.

In food crop settlements, independent trucking firms send their vehicles directly to the fields to load and sometimes also harvest the crops. In this area, the level of information circulation is better mainly because some of the buyers are from the same ethnic groups and because spontaneous settlers go more often to the market to sell in little quantities.

Lack of capital further limits the marketing options open to settlers. Most farmers must sell at harvest, when prices generally fall, because they do not have any reserves to fall back on and could not finance the construction of storage facilities. Prices of peanuts, for example, fluctuate a great deal, from (in 1989-90) Rp 250-400/kg at harvest (April) to 800 (July) reaching 1000-1200 by August. A number of those with capital in Cahaya Mas buy peanuts when the prices are lowest, often through the sale of cattle, then sell in August when prices are high and buy back cattle in time for plowing. In the wet season, prices also can fall when roads are cut for days. Road conditions also influence the price of fertilizers, discouraging their use.

Some forms of cooperation have already been set up in spontaneous settlements. In several settlements, land has been set aside and cultivated collectively by *gotong royong* to provide income for farmer's groups and villages. Other farmer's groups have negotiated with official transmigrant settlements or other villages near them to gain access to their KUD facilities for the purchase of fertilizers and other agricultural inputs.

On/Off farm employment

Off-farm activities include trading, transport of people and goods and numerous informal occupations. On the whole, off-farm opportunities are limited in spontaneous settlements due to their remoteness and the weakness of economic linkages.

In the lowland food crop new villages, most settlers own and farm their own land. Work in the fields is often undertaken with household labor and additional help from neighbors who contribute their labor in expectancy of an eventual return when their field needs to be worked:

rotating labor system. In Sabutan, those who own land often rotate labor in this way, or hire labor from among the landless. The most intensive use of paid labor is found in the coffee areas during a three-month period (July to September) when the crop must be picked and carry away. It is perhaps not too farfetched to suppose that the majority of spontaneous migrants in South Sumatra live in the coffee area or have at least once in their life done agricultural work or picking there.

In the coffee-producing areas, the first few years of settlement saw extensive use of the rotating labor system (*giliran* or *gotong royong*), as few new settlers had enough capital to pay laborers. Settlers would get together to open land, and plant, but once the coffee trees began to come into production, paid labor became increasingly important. Medium and large-sized coffee plantations depend on a pool of agricultural workers who are available to do weeding, picking and maintaining fields. Plantation sizes grew through various work arrangements and social demarcation began to be discernable, with on the one hand large plantation owners and on the other workers hired to maintain and expand their holdings. Many of these workers, particularly those who came in the early years, were able to build up plantations of their own, joining a growing "middle class" of small to medium-sized plantation owners.

Consideration of the opportunities open to spontaneous migrants suggests that an inverse relationship exists between employment security and returns to labor. One who has contacts, is enterprising and is lucky enough to find well-paying flat-rate jobs and work by the day to fill in some of the free time, can usually make out better than a person who is hired by the year.

Day Labor

Wages labor in South Sumatra is attractive to migrants because, compared to Java and other sending areas (including Lampung), rates are competitive, meals are practically always included and in many areas there is plenty of opportunity to work.

Wage rates per day are always at least as high as for comparative work in Java, and often pay Rp 500-1000 more. In some places, higher salaries are offered for particularly heavy work, such as hoeing to open new land or clear undergrowth (Rp 3500 for clearing *Imperata* from fields or Rp 3000 for cutting down large trees). Though patronage influences working conditions, demand for labor in many areas of South Sumatra provide opportunities for migrants to gain work without prior connections.

Working steadily is most difficult for newcomers who do not yet have enough contacts, and older migrants. Many migrants therefore seek to enter into sharecropping or yearly contracts with plantation owners. Depending on the rates and conditions offered, these arrangements can provide a more secure and even higher paid form of employment than working for daily wages. Some young workers are brought to Sumatra by a patron (*tuan tanah*) to serve as his dayworkers. Rather than pay them a yearly wage (*tahunan* usually 500 000), he will give them work (paid at the regular rate, minimum 100 000) as often as he can and let them look for work elsewhere on the days they are not needed on his farm.

Usually daily work is used as a supplement for piece work or to fill in free time while one is engaged in a sharecropping or yearly contract (provided the contract allows). During the picking season, for example, workers can usually earn more than the daily wage rate if they are

paid by the amount of coffee picked.

Piecework

Hiring by the job is about as common as hiring by the day, whether in the lowland and food crop or highland coffee areas. As long as the price is right, workers and bosses profess a preference for this system because they each feel they can come out ahead: workers can earn more than the going day-wage rate and are assured of having several days of work; patrons can avoid cost overruns and usually do not need to provide meals for the workers.

The work is often done in groups and may involved opening a new piece of land (either in the forest or *Imparata*), picking coffee, prepare dried cassava and so on.

Sharecropping

Sharecropping arrangements are rare in the pioneer spontaneous settlements involved in food crop agriculture simply because most of the residents own their own land and/or can find tracts of land to rent at reasonable prices from local village authorities. Up until recently in many areas it was possible to obtain land without paying a great deal of money up front; people who were sharecroppers in Java or Bali could obtain land of their own. It remains to be seen if sharecropping can ever develop to any extent in the spontaneous villages, as the returns from the land are low. In addition, socio-economic disparity is still relatively limited in these new settlements where land holdings are theoretically equal.

Spontaneous migrants are, however, engaged in sharecropping arrangements (*paroan* or *maro hasil*) in older, established villages in the irrigated *sawah* areas of Belitang and other zones where agricultural productivity is high. Migrant sharecroppers are also found in mixed migrant-local villages where land is expensive or where access is difficult. Yield is normally divided half for the owner, half for the worker once the cost of inputs (seeds, fertilizer, insecticide) have been deducted. We did find also very good arrangement for the workers with sharecropping for the first plantation but full benefit for the second. Some of the spontaneous settlers work a land with little fees, let to his good-will, but will have to leave the land as soon as the owner (usually an urbanized person) will decide (they are *numpang*).

Where rice is grown the harvest provides the occasion for many people to join in and receive a share of the crop in payment. The harvest share ranges from "5:1" to "8:1". The rate and working conditions for rice harvests in Sumatra are considered better than in Java, where in many cases one cannot join in the harvest if they have not participated in other jobs without pay.

In hill areas when *padi* is grown on fields being prepared for coffee, the smaller shares are enough to encourage many workers to take part, some of whom are landless.

Sharecropping arrangements in coffee plantations are found in all areas, but are most common between local owners and migrant caretakers. An arrangement may be made for the opening, planting and maintenance of a new plantation or simply for the maintenance of an existing plantation.

For the opening of a new plantation, the worker opens forest or overgrown land and plants coffee and rice, perhaps adding vegetables or peppers. The landlord provides him with rice to eat until these food crops can be harvested. Thereafter, no support is given, but the worker can keep or sell whatever he grows during the first year or two. When the coffee trees come into production in the third year, and from then on, the coffee yield is shared equally between the worker and the landlord, as long as the worker maintains the plantation. This type of contract is sometimes referred to as "sharing secondary forest" or *paroan belukar*.

Often a *paroan* contract is made once the plantation has been established (*paroan kebun sudah jadi*). If the coffee trees are just beginning to produce (2-3 years after planting) when the worker is brought in, he will probably only receive a one-third share of the yield in the first few years. This takes into account the fact that the new worker did not put in the effort to clear the land, plant the coffee and weed the plantation from the beginning. Furthermore, the young trees will have their greatest yields in the first two or three years.

Once the coffee trees have produced two or three times, and the yield begins to decline, the sharecropper will be given a 50/50 share. Responsibility for absorbing the cost of possible fertilizer or insecticide applications depends on the contract agreed upon by the two sides. Sharecroppers are usually provided a place to stay close to the plantation, but are rarely given any food or extras, except in the above case where a new plantation is being established.

Sharing land

One with land and capital (*tuan tanah*) could hire others to open land, plant *padi* and coffee and take care of the trees for the first year or until they come into production (2-3 years). The landlord would pay for food and costs involved during that period after which the land would be divided half for the owner and half for the person(s) who did the work. The first owner will increase the area open for himself in one go and the workers will have a piece for himself and an additional plantation to look after, in a sharecropping arrangement just next to him.

The system of land-sharing (*paroan bagi tanah*) was commonly used during the first few years of pioneer settlement but declines now with the growing density of population.

Off farm employment in rural settlement

Off-farm activities include trading, transport of people and goods and numerous informal occupations. On the whole, off-farm opportunities are limited in spontaneous settlements due to their remoteness and the weakness of economic linkages.

The purchase and sale of agricultural products is practiced by migrants arriving with capital or who have been able to amass earnings from several years of work in the region while building close contacts with those in the villages and in the marketplace.

Petty traders and those who open a small shop or food stall are in several villages. The returns from their business is usually too small to be anything but a complement to farming, which in any case is not abandoned. As a community develops, more sophisticated shops or *warung* may be opened by outsiders who have capital but not necessarily land.

Transport is a key activity in a region of spontaneous settlement but only a very few spontaneous migrants have been able to purchase these vehicles. In the main towns, one does come across migrants hired as drivers or manual helpers of trucks and vans transporting people or goods. Spontaneous migrants, however, account for some 60% of the motorcycle transport drivers in the Simpang coffee area. They are well-represented in other coffee-producing areas dependent on trail motorcycles (*ojek*) to bring the coffee yield down the hill and re-supply the isolated *talang*. Most drivers (*tukang ojek*) are young men, migrant or local, who undertake this strenuous and dangerous occupation for a limited time, lured by the high profits to be made. These profits may be as high as Rp 50,000 or more (average is Rp 30,000) per day during the 3-month height of the picking season. Some *tukang ojek* own coffee plantations of their own, though most do not own their own motorcycle, but instead share profits 50/50 with an owner. Some circulate from one coffee area to another, taking advantage of the slight shift in coffee season between areas, the season running later in higher elevations. In the off-season, work for *ojek* is greatly reduced. Migrants do agricultural labor in the coffee plantations or return to Java for up to six months at this time.

Special non-agricultural talents can be of great advantage to a rural migrant as a complement to his crops, if they can provide him with cash for daily needs. There are a wide variety of sideline occupations encountered in spontaneous settlements even off the beaten track: carpenter, sawer, radio-cassette repairman, bicycle or motorcycle repairman, tailor, barber, photographer, midwife, traditional healer, musician, singer, dancer, to name a few. Generally, those who exercise an activity parallel to agriculture do better in the short and long term.

On the other hand, it must also be noted that migrants often give up hopes of exercising an activity practiced in their former homes and usually lack of capital is the reason and migrants cannot absorb the risk of failure should the venture fail to bear fruit. Sometimes the area settled does not yet correspond to the type of business one is qualified for. For these reasons, the majority of migrants in new settled rural areas have remained involved strictly in agricultural pursuits.

Household economy

Residents of spontaneous settlements have very few valuable possessions besides their homes, farmland and perhaps farm animals. Consumption items and home furnishings are for the most part lacking. This is perhaps understandable for most of the settlements were less than ten years old.

Generally, a high degree of relative equality exists in new spontaneous settlements. As settlements develop, income disparity increases, more so in the highland coffee regions than in planned spontaneous settlements designed on the government transmigration model.

Household budgets of poor migrant families in the coffee areas are characterized by the large part devoted to satisfying day-to-day consumption needs. This group includes those who share small or unproductive plantations, and are unable to do regular wage employment. If they own land, it is often a small, old or overgrown plantation.

Better-off workers usually share high-yielding plantations and often combine sharecropping with day or piecework employment. Landowners in this category usually own young plantations

of sufficient size to provide steady work for all family members and perhaps additional paid laborers. Rich planters own large plantations cared for by a number of live-in workers paid yearly.

In the food crop areas of Cahaya Mas and Kampung Baru, increased earnings are also a function of the access one has to other sources of income. In the organized spontaneous villages, the first few years for a new family are often difficult.

To sum up, as far as migrant incomes, working conditions and overall welfare are concerned, much depends on the deals workers and owners can strike with each other. The most successful of them came earlier, in the late 1970's or early 1980's. It also seems that physical condition and the amount of capital at one's disposal are more adequate determinants of successful adaptation than, say, higher educational level. Those with more contacts and sources of information are in a better position to react to changing markets and opportunities.

1.4. Social and Cultural Life

DEVELOPMENT OF THE SOCIAL LIFE

Outside of some community-wide agricultural work, opportunities for socialization occur mainly in the markets, and during artistic, sportive and religious activities.

At least during the first few years in the new area, the spontaneous migrant's social network is limited to those who brought them to the settlement or hire them, immediate neighbors, and the neighborhood leader. Few have any network alliances or contacts in Sumatra outside the village or even the neighborhood, except family or acquaintances who provided information or assistance between the village of origin and the final place of migration. Though these contacts are precious for the migratory process itself, they do not constitute the core of the migrant's social network.

The social network that is actively maintained, if in an irregular fashion, is that linking the migrant and the family in the village of origin. Since the exchange of letters is exceedingly rare, this network can only be maintained by visits. Migrants sometimes return to their village of origin once the main harvest of the year is in. They usually have a number of reasons for returning: to give earnings to their family, assure school fees and housing costs for remaining children, help family in the sending area bring in their own harvest, check up on the work in any fields they own (or rent or sharecrop out), or invest earnings acquired in the receiving area by purchasing a house, land, cattle, or other asset. Trips home at Lebaran (when bus fares rise) are rare, and are made by those who have substantial and regular income year-round.

In general, a migrant's social network is limited. They tend to recreate the sorts of social activities that exist in their places of origin.

Social and cultural or not directly productive activities develop only in settlements having a sufficient number of long-standing residents and a secure status as far as land-tenure is concerned. The main feature is that if social life does develop quite rapidly in food crop based settlement, in the coffee area, isolation is the main problem for the process of

socialization and it is very difficult to endure for the family unit.

Once Javanese, Madurese and Balinese have gotten beyond the first difficult months of settlement creation, have built their homes and perhaps have a few harvests under their belt, they tend to recreate the sorts of social activities that exist in their places of origin. Revolving-credit associations (*arisan*), sports competition and traditional music or performing arts from the area of origin, are examples of social institutions that are found in most established settlements.

Isolated Balinese families seem to maintain a large regional network of social relations based on all the significant communities built up in Lampung and South Sumatra transmigration settlements. Every one interviewed mentioned a transmigration settlement as the place to perform their important rituals and the place of their main temples.

When they exist, mainly in the largest and concentrated settlements, performing art activities are always referred to with delight, for they are a pleasant part of migrant life. The communities of Sabutan, Cahaya Mas and Kampung Baru devote a portion of their budget to forming the groups and purchasing or fabricating the necessary instruments and costumes. Up to two or three evenings a week are spent learning and rehearsing. These efforts are all the more remarkable in the poor material context of a hard-working migrant settlement.

Compared to Java, Kampung Baru is as active from an artistic point of view. As one migrant put it, "if you're landless in Java, entertainment is for the others" ("*kalau tak punya tanah di sana, ramainya orang lain*"). There are many artistic activities, including gamelan and various theater forms. During the performances, the residents note "everyone mixes, once they are here everyone is invited, local people and Javanese, all of them" ("*sama-sama campur, kalau sudah ada di sini, diundang semua, orang asli, orang Jawa, semua*").

Unfortunately, in many spontaneous villages devoted exclusively to coffee farming, one of the main leisure activities is playing the Departemen Sosial nomor lottery. Although the weekly gatherings around the radio to hear the results do in fact bring people together for social interaction, the lottery has an unhealthy impact on the local economy.

A settlement with as little as ten families rarely lacks a prayer-house (*langgar*) for Islamic worship. Larger communities aspire to build a mosque. Moslems, Christians and Hindus coexist in many settlements.

RELATION WITH LOCAL COMMUNITIES

Interaction and exchange between various ethnic groups takes place in defined spheres: when seeking employment and land and when selling agricultural production or at markets, for example.

Interaction among coffee smallholder

The migratory process in these regions is spread out and must operate through prior contact with the local people. Before settling either on their land or in a sharecropping arrangement, most migrants have worked either with locals or with former settlers who already have extensive experience and contacts with the locals. The level of interrelationship between spontaneous migrants and the indigenous people in the receiving area differs widely depending on the mode

of installation.

When a young adolescent works at the home of a local, and is relatively isolated from any major migrant community, it is very likely that the assimilation by the receiving community will be complete. This situation has long existed as many young men were brought by locals to construction projects or were sought directly in Java to be used as laborers since the beginning of the century. Some of them have remained in the area following the end of their contract and often have married a local girl.

With the constant growth of the migrant community in the study region, young men employed by locals are less and less isolated from members of their community of origin. No doubt long-term study of particular migrants would show that intermarriages between locals and migrants are less frequent in relationship to the number of migrants. Nevertheless, compared to the transmigration villages, mixed marriages are much more frequent.

It should be noted that intermarriages between migrants of different origins (Javanese, Sundanese, Madurese, Balinese) also seems more frequent than with locals. This situation only reveals affinities and that, for the time being, the group from Inner Indonesia forms a social group which identifies itself as nonlocal.

When a complete family arrives, it almost always lives on the periphery of the village and is joined by all new migrant family and individual migrants. This almost automatic spatial segregation between outsiders and locals corresponds to the social distance that the two communities retain. When there is grouping outside of the village it can be mixed during a first stage but often the hamlet acquires uniformity with the departure of the locals who in any case have a high mobility level and have their main home in the mother village.

In a general sense, however, the first settlers (before the community becomes large in size as on the Kotaway plateau), have frequent and essential relations with the locals, for seeking work and land, for setting up a business or handicrafts, for practicing the same religion, for taking care of administrative affairs and for the schooling of children. This rapidly leads to joint participation in leisure activities which do not depend on a specific culture (sports, preparation for national holidays, *arisan*). It is among these first settlers that one finds the most pioneers with knowledge of the local language and thus better able to actively participate in local economic networks.

If one compares this situation to that found in *kolonisasi* and Transmigration villages, local integration can be considered clearly superior and can therefore explain in part the better economic results migrants have.

In food crop settlements

Here it is necessary to distinguish between two types of settlement: those which are destined to form an autonomous village and those which are the result of growth from a local village and will form a *dusun*. In the two cases, it must be noted that the recruitment of settlers is made, in the many cases studied and for the most part, among migrants that have already settled in a precarious manner in or around the former cores of Javanese settlement. Likewise, there are in these two cases high concentrations of outsiders and spatial segregation which allows

a certain withdrawal of the community, and a physical distance between these two communities which corresponds to actual social distancing.

In the first type of settlement, the interrelations between locals and migrants are reduced to the minimum, meaning the relations of the village chief with the local authorities and traders (for the collection of production or the furnishing of basic supplies to these migrant communities). The school milieu is ethnically homogeneous and the interaction process will be very slow. The situation is comparable to that found in Transmigration villages, though somewhat better due to the action of the leader who, in the beginning, has a better knowledge of the receiving area.

Often several local families (young couples) are found in these settlements who have come on their own accord, usually settling strategic locations (main line of communication, road crossing, marketplace) to set up commercial activities. Although these isolated families retain their fundamental social links with their original social environment never too far away, they are or will be an essential factor for the second generation in the process of interpenetration of the two communities, a process that despite all remains very slow.

In the case of the formation of a local village neighborhood, the migrant community finds itself in the minority. Interrelations between the two communities are most frequent in the marketplace, when looking for work in agriculture or outside of agriculture, when searching for land and, especially, in the schools. Usually a special relationship existed between the leader who negotiated the settlement with the head of the village and his council. Often the official leader of the neighborhood (*kadus*) remains, at least at the beginning, a local and the new neighborhood is formed around several pre-existing local families. These preliminary conditions encourage a more rapid interaction and integration process.

On the whole, migrants see their lifestyle as somewhat or even clearly better than it was in the sending area. However, many say they feel less "at home" in the new area, either because they do not yet have their own land, agricultural yields are insufficient, they feel isolated from their family and friends, or feel a sense of isolation because they are cut off from social activities and services. Therefore, they clearly state that they are staying there because economic conditions force them to. Usually, once they possess sufficient land, with legal title, to enable satisfaction of household needs, migrants express a desire to settle in Sumatra rather than move back to their place of origin. In areas where legal title is not available, farmers generally plan to return to Java when and if their area is closed to settlement, or if they amass enough capital to make a living in the sending area.

2. COASTAL AREA SETTLEMENT PROCESS

Beginning in the early 1900's, spontaneous migrants have opened up a vast expanse of the swamp forests of Indonesia. Since 1976 this author has been studying the process of migration

to these swampy lands⁵¹. In order to understand what has occurred in recent years he has been involved in this present study in the same locations as in the late 1970's.

Four very different groups have been very active in the development of these swampy areas. These are:

- Javanese Transmigrants supported by the Government;
- Buginese Spontaneous Migrants;
- Javanese and Balinese Spontaneous Migrants; and
- Local (Melayu) Residents.

Each of these groups has its own farming systems and non-formal institutions that have provided support in developing these lands.

2.1. Melayu on the river banks

In general what has occurred is the local Melayu residents who live on the river banks have opened up strips of land along the rivers for planting rice and coconuts. Usually, this land proved to be the best for agriculture since it was near the river and often on ridges without peat soils. Although it is not definite when this began, judging by the age of the coconut trees, they obviously opened up these river banks seventy to eighty years ago. They dug canals for a short distance from the river, cultivated rice and planted coconut trees on the edges of their rice fields.

Eventually, this land near the river was primarily small holder coconut holdings with rice fields behind the coconuts. However, these local residents were few in number, did not encourage additional numbers of people to come here, were regulated in their use of these swampy lands by the rules laid down by the traditional Marga, and greatly preferred living along the banks of the rivers, not penetrating into the swamp forest for their agricultural activities.

2.2. Buginese pioneers behind the river banks

With major areas not being exploited by the few Melayu along the rivers, the next group to enter this area were the Buginese. They came directly from South Sulawesi or from similar swampy areas in Riau Province. These hardy pioneers were famous for migrating to lands throughout the archipelago, into areas of peninsular Malaysia, and beyond.

⁵¹ William L. Collier, "Swamps Are For People", Paper presented at the Seminar on Transmigration in the Swampy Lands of Indonesia, 1978.

William L. Collier, "Fifty Years of Spontaneous and Government Sponsored Migration in the Swampy Lands of Kalimantan: Past Results and Future Prospects", Prisma: The Indonesian Indicator, No. 18, 1981, pp. 32 - 55.

Although it is not proven, the Buginese appear to have learned how to efficiently open up and cultivate these tidal swamps from the Banjarese in South and Central Kalimantan. There are few tidal swamps in South Sulawesi and the Buginese definitely have been active in areas near the Banjarese.

The Buginese have brought with them non-formal institutions that makes it possible for them to not only open up an area but to bring in many additional family members and friends. Throughout the tidal swamps of Riau, Jambi and South Sumatera, the local Melayu have gone from being the dominate group in the early 1900's to now being perhaps only ten percent of the population in these areas where the Buginese having settled.

Their system is to have a few pioneers travel along the rivers of Sumatera in search for areas suitable for their rice and coconut farming systems. They can identify an area by the dominate type of vegetation. Based on these indicator plants they know if an area can only support rice, or coconuts, or rice and coconuts, or non cultivatable.

Once they find found an area, they got permission from the Pesirah who is the head of the local Marga to open up a rather large area of swamp forest. As occurred in a settlement in the Northeastern part of Saleh Delta, they opened an area of several hectares, proved that they could grow crops by cultivating the land for several years, then sent letters and traveled to areas already fully settled with Buginese, looking for Buginese to help them open the area. When newcomers arrive, they live with the already established families, work on their farms as laborers learning the necessary techniques, then opening new areas for their own farms. Since they must dig canals of one to four kilometers in length, they must closely collaborate in these efforts.

The Buginese, using institutions that have already disappeared in their home land, were able in this village to open several thousand hectares of land in a period of seven years. Now, there is a major market in this village and it is a center of activity in this part of the Delta. The original Buginese pioneer benefited from this activity by each new settler giving him a small portion of the opened land on each plot. For most of these Buginese, their main goal is to accumulate enough money to eventually retire in their original village in South Sulawesi. They will visit this village on a regular basis, bringing back with them more settlers for their settlement in Sumatera.

Their farming system is one where they have small drainage canals that allow them to first cultivate rice for a few years, planting coconuts trees on built up ridges or mounds in the rice fields, cultivating the rice until the coconuts grow to a size where it is no longer possible to grow rice because of the shading, then opening up a new field for rice and eventually coconuts. They will try to end up with ten to twenty hectares of coconuts which are much easier to cultivate than rice, especially as they grow older.

In this way using their institutions and farming systems, the Buginese were able in the past to open up thousands (probably several million hectares) of swampy forest in these coastal wetlands of Sumatera and Kalimantan. However, because of the difficulty in digging bigger canals, they were limited to an area that was from three to four kilometers from the river.

2.3. Javanese Transmigrants in the middle of the deltas

Although this study is not about the Government assisted transmigrants, they are a major part of what has occurred in the swampy lands during the last fifty years. Beginning in 1937 the Dutch colonial government, initiated swamp land settlement in Purwosari, South Kalimantan. This government dug major transport canals across the delta and primary canals into the swamp forest from the main canals. Then, they assisted migrants from Java to dig the secondary canals, open the land and build their houses.

In the early 1960's the Government initiated the Transmigration program which moved thousands of Javanese, Balinese and Madurese to the coastal swamp lands of Sumatera and Kalimantan. Since these areas in South Sumatera had already been initially opened by the local Melayu people and the Buginese, most of the Government's projects were located in the middle of the deltas which required major canals crossing the canals and interconnecting the rivers on each side of the deltas. Primary and secondary canals were then put in that made it possible for the Government to place many settlements with thousands of transmigrants, primarily from Java, Bali and Madura. However, these sites in the middle of the deltas had the most marginal soils, with deep peats and potential acid sulfate soils underlying the peat. The Government was the last one to enter the swamp opening activity and thus had to use the least desirable locations.

This Transmigration program opened up the Upang Delta (mid-1970'), Telang Delta (early 1980's), Saleh Delta (early and mid 1980), Sugihan Delta (mid-1980s), Pulau Rimau (mid-1980s) and the Karang Agung area (mid-1980's). These areas cover almost the complete coastal area stretching from the Sugihan Delta to almost the boundary with Jambi Province. This is an area of thousands of hectares located primarily in the centers of the delta with the Buginese on the fringes of the projects and the local Melayu along the river banks.

When first settled, these projects were in areas with varying depths of peat soils and only partially opened lands. The Javanese were not trained in the farming systems for these swampy areas. In addition the projects were supposedly designed to have to crops of rice per year, being irrigated in the dry season by the tidal fluctuation in the rivers. However, it was soon apparent that the Javanese system of rice cultivation was not appropriate, that only one crop of year was possible, and that the tidal irrigation did not work in the dry season. In all of these transmigration projects it is probably fair to state that one-fourth of the transmigrants either returned to Java or moved to the cities in Sumatera.

As time past the remaining transmigrants learned from the Buginese and Melayu people how to cultivate rice in these peat swamps. They also learned that coconut production had reasonable prospects in the long run. The transmigrants also worked as laborers on the fields of the Buginese for income and in addition they learned some of the techniques for survival in these swampy coastal lands.

To replace the migrants that left the projects, the Government allowed spontaneous migrants from Java, some from South Sulawesi and the local Melayu to take the land of those who left the projects. In Desa Sumber Jaya on Canal Number 3 in the Telang Project, they said that even if a person had a land certificate they could not sell it for ten years. If they abandoned land with a certificate for a period of three months, then the land reverts back to the village. This lurah said that he then sells the land to somebody and gives them the land certificate, but it would still have the other persons name on the certificate.

When this author first visited the farmers on Canal (Saluran) 3 perhaps ten to twelve years ago, they could not get a crop from their rice because the peat was 2 meters deep. He visited this site from when they first arrived to about five years after their arrival, and they said that they never had a rice crop. Now, after a period of 12 years this village has reasonable rice yields of from 1.5 to 2.0 tons per ha from rainfed rice and no fertilizer. They are very rapidly shifting their efforts to coconut production.

Based on this experience, it takes at least ten years for agriculture in these transmigration projects to stabilize and a large number of spontaneous migrants are given the opportunity to acquire land within the projects.

2.4. Javanese and Balinese spontaneous migrants

As mentioned above many Javanese and some Balinese spontaneous migrants have moved into these transmigration projects, replacing the original settlers. However, there institutions are not suited for the type of migration shown by the Buginese. It may be that the Buginese with their culture of migrating out of South Sulawesi have institutions, though now dormant in that province, which provides a means for large scale movement of peoples into these frontier areas.

The Javanese living in a much different environment and having a culture that restrains migration do not have the institutions for mass migration. However, with the Government having opened up these tidal swamps for settlement, it provides an opportunity for some spontaneous migration into these schemes. Once they arrive the Javanese and Balinese would be given land to cultivate and a house. Rather than depending on other settlers as would the Buginese, they depend more on the Government to provide the basic infrastructure.

However, there is an indication that this may be changing based on a village of spontaneous Javanese migrants near Muara Telang. They have opened up an area near the transmigration project.

Also, there are Balinese from Baturaja, South Sumatera who were transmigrants to these areas, or their parents were Transmigrants, who are moving spontaneous to these swampy lands, purchasing land from the transmigrants and cultivating coconuts. It may be that the children of the transmigrants have acquired sufficient capital to move to these new areas where some land may still be available.

2.5 Present situation

The general feeling ten years ago was that once the Javanese transmigrants exhausted the peat layer in their fields they would open up the potential acid sulfate soils and have major problems. Fortunately, this has not occurred in these deltas and it appears that some of the transmigrants and spontaneous migrants from Java are achieving reasonable yields in the wet season. They also have reasonable coconut holdings.

As an example of this, Balinese, Buginese, and Javanese are buying land in Desa Sumber Jaya village for planting coconuts. Four or five years ago they could purchase a two hectare plot for Rp 150,000 to Rp 200,000 but now the price ranges from 1,000,000 to Rp 5,000,000 for a 2 ha plot of land in this village where twelve years ago most people thought the land was useless. The transmigrants are also shifting to coconuts.

In Desa Telang Karya, the price of land is also rather high. A two ha plot with house and housegarden sells for Rp 3,000,000.

These farmers in Desa Sumber Jaya want holdings of 8 to 10 ha of coconuts. They plant over time and thus only need laborers when they harvest which is every two months.

Sumber Jaya proves that it takes ten years for a site on very marginal soils to stabilize, be productive and provide the farmers with a reasonable living. I must admit that I expected this site to be abandoned before arriving. However, it appears to be rather prosperous.

In Desa Telang Karya there has been assistance from the Agency for Agricultural Research and Development under the Swamps II project. It appears they have a 64 ha block of the farmers' sawah for trials of improved technology. These farmers said that they are getting 4 ton per ha from IR 42 with applications of fertilizer. They also have three paddy tractors, one provided by AARD and the other two bought by the farmers.

In Telang Jaya they said in the long dry season of 1982 the peat burned and now it is not so deep. Thus, they were then able to plant IR varieties and use fertilizer.

In Sumber Jaya they stated that one family can cultivate 2 ha of rice without the use of herbicides and can cultivate up to 6 ha of rice with herbicides. They felt it is possible to handle

8 to 10 ha but would require laborers. They said no problem in Telang Delta to find sufficient laborers.

In Telang Karya they felt that with the use of IR 42, fertilizer, and yields of 4 ton per ha, they still have sufficient labor for 2 ha and larger operations. The IR varieties are harvested at a different time than the local varieties. Thus, there are sufficient laborers from outside. Also, in at least one-fourth of their fields (200 ha of 1000 ha) they are able to plant rice two times per year because of the short growing season of the IR varieties. They plant in the 11th month and the 4th month and harvest in the 3rd month and the 6th month. The first crop they get 4 ton per ha and in the second crop it is less.

2.6 The Future

The farming systems in these coastal wetlands appear to have stabilized over a ten year period and are capable of producing reasonable yields of rice in the wet season. This will continue with more and more of the Transmigrants and spontaneous migrants having farming systems based on rice cultivation and coconut production.

The problem of the potential acid sulphate soils has not developed as was predicted and the Javanese farmers appear to be able to switch to more intensive rice systems using methods similar to what they had on Java. Though, this takes a period of ten to fifteen years before the soils are capable of supporting these more intensive systems.

The amount of land available for spontaneous migration in South Sumatera is almost gone in the areas where cultivation is possible. The deeper peats and the areas far from major rivers should be left in tropical swamp forests. This article is not about the environmental impact of opening these forests for settlement, yet the impact has been severe and major stretches of primary forest lost.

Spontaneous migration has been a major promoter of regional development in these swampy lands but with the closing of this frontier because of a lack of land, this type of migration will not be a viable proposition in the future. Much more attention will be required for intensification of the existing farming systems rather than the past expansion of the extensive systems of the spontaneous migrants and the transmigrants.

fifth part

MAIN IMPLICATIONS OF THE SPONTANEOUS MOVEMENT

1. A STRONG SUPPORT FOR REGIONAL DEVELOPMENT

The contribution of spontaneous migrants to regional development is obvious even if it is difficult to measure with precision at this stage of the study.

1.1. Agricultural land extension

As we have seen in the analysis of cartographic documents, the limits of agricultural cultivation have been considerably extended in the OKU *kabupaten*. This extension of cultivatable land concerns essentially the areas where spontaneous settlers are found. Data on coffee production, though not very reliable, indicate an increase of 67% in surfaces under production between 1983 and 1989⁵², or a gain of 25,000 ha.

1.2. Diversification of agricultural production

For food crops, the growth in cultivated area must also take into account the Transmigration settlements, but in the field it appears that in a general sense spontaneous settlers cultivate the land they have acquired in a more intensive manner than the transmigrants. These two categories of agriculturalists have introduced important diversity of production, especially with *palawija*. They are not cultivated for surplus by the locals.

Between 1979 and 1983, according to local statistics, 10,500 ha were added to cultivation, as follows: maize, +3,500; cassava, +2,000; soybeans, +2,000; and peanuts, +3000 ha. This does not take into account the extension of the two districts of *kabupaten OKI*, and vegetables, for which statistics are either unavailable or unreliable.

The increase in paddy production reaches 40%: it is due largely to intensification of production (twice annual harvests and improved seeds), mainly in the irrigated perimeters (using

⁵² The figures show, however, a certain stabilization since 1985, while those concerning production indicate on the contrary a fall in yields in the districts touched by the disappearance of *dadap* shade trees: Banding Agung, Muaradua and Simpang.

technical irrigation) of Belitang, but also in smaller perimeters (based on simple village irrigation) which spontaneous settlers often exploit using sharecropping arrangements⁵³.

1.3. Diversification and intensification of activities

The impact of spontaneous settlers on diversification of non agricultural activities is felt in two ways. Firstly, by working the land of locals, spontaneous settlers allow the landowners to do other activities. Secondly, certain spontaneous migrants supply the manpower necessary for such activities and for creating new ones.

In Baturaja, the porters working in the market and for coffee dealers, and the pedicab drivers are mainly spontaneous migrants (for the most part young Sundanese men). The entire region is dotted with roof tile⁵⁴ and brick-making operations run by Sundanese and Javanese who come to support the modern construction sector which draws its workers, and even its small entrepreneurs, from Java. In the markets, one finds Javanese specialties, including rattan and bamboo handicrafts, *tahu* and *tempe* soybean cakes made locally with locally-grown soybeans.

The culinary specialties of Java and Madura, *noodle-bakso*, *gado-gado*, *sate* and medicinal herbal preparations (*jamu*), developed first to satisfy the limited ethnic clientele (people from Inner Indonesia), are now consumed by all groups. These activities which have developed mainly in small towns have maintained major migratory chains; the spontaneous migrant who succeeds in developing a small enterprise will call for manpower in his village of origin. These workers, in turn, will want to set up their own enterprise in the same sector of activity and in the same region.

This blossoming of activities is also encouraged by the migration of other ethnic groups such as the Minangkabau who usually enter the tailoring or restaurant business. In the region since 1927, in Baturaja and Martapura, they are increasingly settling in small rural centers (the market of Batumarta, along the coffee routes and of course in the small towns through which the Trans-Sumatra Highway passes). The Batak of North Sumatra bring their specialization in service station garages, gasoline sale and tire repair for which they are well-known all along the Trans-Sumatra Highway. They do not seem to have yet penetrated the other distribution circuits for manufactured products or agricultural production, as is the case in the northern part of Sumatra.

⁵³ Comparison of data from 1983, 1985 and 1987 in the publications of the BPS Jakarta: *Agricultural Census and Agricultural survey; Land area by utilization in Outer Java*.

⁵⁴ Local preference for baked earthen roof tiles dates from the 1940's and they even went to Sunda to look for the manufacturers. The long rainy season means that production is limited to a few months out of the year.

1.4. Accelerated development of infrastructure and services

The development of infrastructure and services takes place within the framework of the national effort for all regions of the country. It is therefore difficult to analyze its evolution, all the more so because the older data are unavailable. However, this development has unmistakably been quickened by the increase in population densities which give the region priority for new projects. The population of the OKU *kabupaten* went from 31 to 76 people/km² between 1961 and 1988 with the aid not only of Transmigration but also as we have seen of spontaneous settlers. In 1988, the OKU district is one of the developed of the province, leaving aside Palembang and the Musi Banyuasin district which benefits from development in the provincial capital.

1.5 An expanding and diversifying market system

The marketing network at the regional level has long been dominated by traders of Chinese origin for the distribution of manufactured products, the collection of production for export out of the region in relations with the provincial capital. The only sector that seems to bypass them, at this level, is the collection of fruit production which is carried out directly from the producers (or their local representatives) in the fields by Jakarta and Bandung trucker-dealers. In the other direction, there are young ambulatory traders from Jakarta and especially Bandung who come as far as the most isolated villages of the coffee region to sell clothes produced in their region of origin.

The marketing network at the local level is diversified and complex, but it is for the most part in the hands of local people for large surplus quantities. The participation of spontaneous settlers is better in the collection of farm production in the main collection center of Gumawang for the region of Belitang. This is explained by the confidence and the understanding which develops easier between people of the same origin. Conversely, it is more difficult for them to penetrate wider circuits due to their more limited knowledge in comparison with the indigenous traders. Some have tried to bypass the Gumawang level to send production directly to Bandar Lampung or Palembang, but they were unable to compete due to the lack of sure contacts (for truck rental, hire of a trustworthy driver, or for rapid discharge of their commodities in the large central markets).

Vegetables from Sabutan are most often brought to Muaradua by women farmers to be sold to wholesalers of local origin, regular buyers (who sell in restaurants or transform, into soybean cakes, for example) or even directly in the market (a more profitable but time-consuming option). Generally, if the market is not too far away, Javanese and Balinese women regularly sell their production directly in small quantities.

As far as coffee is concerned, the marketing network is dominated at the summit by traders of Chinese origin, though they use collectors who go collect the production directly in the fields, on the nearest roads, in the weekly markets, or seek contracts with other traders or coffee hullers in the villages. The participation of people from the region or the province is stronger than that of settlers from Inner Indonesia who are usually simple producers.

Several examples of successful partnership between collectors at secondary centers (Baturaja and Muaradua) and producers can be noted. The trader puts up the capital for a huller, often a small truck, and sometimes in the case of coffee plantation offers high-yielding seeds. The planter runs the coffee huller, collects and transports the production and, to maintain or enlarge his holdings, uses manpower from Java.

In the *pasang-surut* region, the collection of agricultural production and the distribution of manufactured products is taken care of by those who have the means of transport (boats) and are often people of Chinese origin. Preliminary studies with Bugis spontaneous settlers, some of which are farmers and traders, seems to demonstrate the establishment of autonomous circuits to bypass the traditional local network.

A credit system is set up by a Bugis trader up until harvest, which will be purchased at a slightly higher price by the Palembang merchants and paid on the basis of past loans. Manufactured products are bought in the markets or grouped purchases are made directly in Palembang. The collection of coconuts is also done by Bugis. There is thus a parallel marketing circuit that only links up with the regional economy in the final phase of transactions in Palembang.

2. THE ENVIRONMENT ISSUES/QUESTIONS

The landscapes observed were intensely cultivated by indigenous peasants and spontaneous migrants. In certain cases, the risks of overexploitation and overpopulation are critical. The environmental hazards merit analysis and careful evaluation with special consideration of the direct relationship between certain essential characteristic of the milieu, soil and slope, its exploitation and its degradation, which is manifest in certain situations but much less evident in others.

2.1. Volcanic landscapes

This is a complex landscape, covering a large area (40% of the study area), which includes recent volcanic cones, "plateaus" and older volcanic cones. These are two very different landform which are often related. The old or new volcanic edifices are characterized by steep slopes ranging from 15/20% at the foot of the volcanoes, to 20-60/70 on the slopes. Approaching the summits, slopes are always greater than 30/40%. On the plateaus, on the other hand, the overall slope is much less, from a few percent to 15/25%. The connection between the rim of the plateaus and the valleys is made by rectilinear or slightly convex and concave slopes that are rather irregular and have steep or very steep slopes. While plateau soils are sometimes similar to those found on young volcanic cones, the soils of old volcanic cones are quite different from those of younger volcanic cones, despite the similarity in form.

Volcanic landscapes reveal the existence of long occupation, but presents the colonization of these areas with their steep relief has been intensifying. The current population density varies between 50 and 100 per km² (near Danau Ranau). It could still increase, as has been observed in Lampung. This sharp population increase was of course accompanied by major deforestation. Legitimate fears have been raised concerning the desirability of cultivating these hills. All the same, these fears can be largely tempered by taking into account the nature of the soils.

Deforestation is mainly caused by indigenous people and spontaneous migrants. Familial land use predominates in this region. The main crop is coffee. In many cases, however, coffee is not planted in pure stands but is accompanied by fruit trees (mainly durian) and, of course, shade trees which contribute to protecting the soil surface. In addition to coffee, clove, cinnamon, and banana trees and many food crops (dry rice, vegetables, high altitude irrigated rice) are also cultivated.

It should be noted that in these volcanic landscapes field observations have shown that the dominant form of erosion is landslide. Gully erosion is rare, found mainly on land made bare by landslide.

- On old volcanic landform very steep slopes are cleared and cultivated. Depending on the type of soil, the history of cultivation on the site, and the techniques used, consequences can be quite different.

On a steep slope (50-60%), under an old coffee plantation, quite varied, associating coffee, shade trees, durian and some other fruit trees may show an important landslide. The degree of soil cover is high but does not exceed 60%, based on estimates it is possible to make. The soils are dystropepts and ultisols. The humic layer is thin. Besides the landslide, clear gully erosion may have developed. The risks of erosion are high, despite a rather dense vegetational cover.

In other case, recent limited land clearing in a zone of secondary forest on a very steep slope (70-90%) on inceptisols (eutropepts, humitropepts) associated with rocky outcrops with a thick humic layer, the erosion may be very slight. This is due to certain very simple cultural practices for the protection of the soil surface, at least during the rainy season. Following the first rice crop, the stalks were used to cover the soil. Below the young coffee plants, several rocks are placed in a semicircle in order to artificially create a flatter area where vegetable debris and transported particles can accumulate, thus preventing root exposure at the base of the plants.

In another case where soil and slope were identical to the above, but where the humic layer had completely disappeared, either because it was thin to start with due to a short fallow period, or because it was carried away by runoff on subvertical slopes, the marks of erosion are significant with ravines and exposure of coffee trees entering into production

- On the very steep slopes which provide the transition from volcanic plateaus to the valleys that run through them, landslides are quite frequent. They occur almost exclusively at the slope

break. Because of this, their impact is limited but should not be discounted. These plateaus are generally covered by inceptisols (dystropepts, dystrandepts, humitropepts), soils having good agricultural potential and being hardly susceptible to erosion, except at the slope break. Susceptibility to erosion declines as the humic layer increases in thickness and the andic characteristics are more marked. These inceptisols are associated with oxisols and ultisols, having much less resistance to erosion (little or no humic layer, wide textural differentiation, slight water retention capacity).

- Landscapes of young volcanoes:

The slopes of volcanic edifices (Gunung Raya, 1643 m; G. Pesagi, 2232 m; G. Sigugut, 1779 m; G. Nanti, 1618 m; G. Seminung, 1881 m) are intensively cultivated. They are characterized by steep and even very steep slopes (30-70%), and soils with very marked andic characteristics, the dystrandepts (andosols). Observations reveal the almost total absence of erosion on these slopes, even when they are almost completely cleared and planted. Smallholder coffee and food crop plantation are the main forms of agriculture present. A correlation between the nature of the soil and the absence of erosion is necessary. These andisols which possess very thick organic layers (one meter or more), good permeability and strong water retention capacity seem practically immune to erosion despite the very steep slopes and the absence of any antierosive practices, aside from the use of tree trunks cut down during the clearing stage. It is frequently noticed that food crops are planted with the slope. This practice is a way of fighting against diseases which appear during the rainy season when the soils are drenched with water. Planting with the slope facilitates surface drainage and evacuates the surplus water rapidly. It is interesting to note that this practice does not cause any gully erosion. This procedure also prevents rapid saturation of humic and lower layers thus avoiding heavy percolation that could lead to massive landslide.

2.2. In hill landscapes around Muaradua

In the general presentation of morphopedological landscapes, in order to follow the geological division of space, hills strictly derived from recent volcanic matter have been differentiated from hills formed from varied nonvolcanic geological matter. A more precise pedological analysis illuminates the similarities of the soils present in these two landscapes which also have similar landform. They will therefore be presented together.

In the majority of cases, the cases of hills having height differences of less than 300 m are distributed at random between the links of a dendritic hydrographic network. In a few rare places, however, one can observe a tendency towards the alignment of these hilly landform. In all cases, the value of the slopes is never inferior to 15%. Field observations have shown that they are generally situated around 30%. The forms are of a very clear convex type at the summit of the inter-river uplands while many slopes have a more rectilinear landform.

Hilly landscapes have been occupied for quite sometime, either in intermittent or continuous fashion along the axis lines of penetration. We are witness to major spatial colonization, and

population density, which is not yet excessive, ranges between 50 and 100 people per km². Deforestation is a major problem. It affects mainly the zones that have already been transformed to secondary forest.

Family-type land use predominates. The main crop is now coffee (before rubber was significantly associated). In addition, there are of course food crops (rice, either dry or valley type) and fruit trees (banana, durian and others). Truck farming is also practiced (with beans, peppers, and other crops). The soils, as noted, have rather interesting chemical and morphological characteristics, with however the limiting factor of slope. Cultivation without taking the necessary precautions can have important consequences for erosion. There are dangers of gully erosion when the humic layers of a ultisol have disappeared in old coffee plantations (perhaps following too-frequent or too-deep weeding). This happens despite soil cover that is still significant. As the soil loses fertility, the density of coffee trees decreases and this provokes increased erosion. Inceptisols are not free from serious erosion risk after clearing and planting following two processes, landslide and gully erosion.

2.3. In Plains Landscapes

The landscapes grouped under this classification, found in the region of Baturaja, Belitang and Muara Enim. Under this name are grouped the plains on acid tuffs (ignimbrite), and the plains on sedimentary matter and their alluvial valleys. Only the first two types will be studied. These landscapes are characterized by a generally flat landform, with moderate slope of a few percent. These plains, however, are more or less deeply dissected by the hydrographic network. Thus convex and plane-convex landform appear with slopes ranging from 8 to 15/20%, values which are notably higher than those of the principal geomorphological structure. The existence of such secondary landform can often give the impression, during a field survey, that one is no longer in a plain.

According to the criteria used by the LREP, plains are distinguished first of all by the nature of the underlying geological matter. In fact, this distinction is not represented in a marked fashion at the soil or landscape level. The second criterion concerns the importance of the secondary landform. In this way, it permits distinction between various types of landscapes:

- * plains with regular or slightly undulating slopes.
- * undulating plains with slopes varying between 3 and 8%.
- * undulating plains presenting a hilly landform with slopes of between 8 and 15/20%.

These landscapes, relatively extensive in the sector studied, are generally near wide valleys. Along the valleys which were the first lines of settlement, these landscapes have been occupied since ancient times. In these valleys, subject to regular flooding, other types of soils and others modes of land use exist which have not been studied here. This is a sector which is still sparsely populated (less than 30 to 50 people per km²). Population density tends to increase near the transmigration centers and along the principle lines of communication (Muara Enim-

Prabumulih, Prabumulih-Baturaja, etc.).

Land use can be broken down into two categories. The first is the family type, sometimes including plantations covering rather vast areas, the second is the large industrial plantation type. At the village level, we remark in addition to food crops, plantations of fruit trees, pineapple and traditional rubber jungle. The family plantations, whatever their size, generally are located along the river and the roads. Aside from these, vast areas are cleared to plant mainly large rubber and oil palm plantations. Outside of the cultivated zones there exist large expanses covered with *Imperata* which are regions that were formerly cultivated, usually following forest massive exploitation. The salvage of this land, chemically very poor, is a major problem. Nevertheless, certain agro-industrial plantations are doing just that.

Despite the slight slopes, field observations confirmed the reality of erosion risk in such landscapes, whatever the type of cultivation, be it familial or industrial. It is due to a great extent to the thinness of the humic layer which disappears very rapidly following planting, especially if the burning of vegetational debris is a common practice. The disappearance of humic layers accelerates the appearance of rill or gully erosion, all the more marked if soil cover is limited and discontinuous. All the same, even with relatively dense soil cover, this rill erosion sets in as soon as the first traces of topsoil loss appear. In the zones of slope breaks, one also observes a few landslides. These forms of erosion are particularly marked in pedological covers of the oxisols type and especially ultisols type in which the textural differences are sometimes quite pronounced.

It is actually at the level of textural differences that the process of erosion preferentially begins. The marks of erosion are perhaps less visible on inceptisols which possess thicker and chemically richer humic levels. However, they are also very sensitive to erosion if the cultivation techniques used do not attempt to conserve as much as possible the organic layer of soil. In zones with marked slopes, following recent clearing, under somewhat dense village food and tree crop plantations which reproduce relatively continuous vegetational cover, the erosion that occurs is mainly sheet erosion. It provokes the uncovering of roots and dead vegetational debris present at the surface of the soil and the appearance of irregular soil roughness. Traces of particle transport (zones of departure and deposit) are also very clearly observable. On these slopes one can also observe several small landslides.

sixth part

RECOMMENDATIONS

1. MIGRANT ASSESSMENTS AND EXPECTATIONS

1.1. Economic life is better in South Sumatra

In general, migrants see their current lifestyle as somewhat or even clearly better than it was in the sending area. This is linked to the economic situation and better employment opportunities in South Sumatra province, where the carrying capacity of the land has not yet been outstripped. In Lampung, where an even greater flow of spontaneous has long existed, overpopulation is taxing the ability of present agricultural technology (still based on extensive dry land agriculture with minimum inputs) to cope. Press articles detail the desperate situation in which some migrants find themselves, ending up as beggars or taken in by a humanitarian organization (*yayasan*).

1.2. Feeling less "at home"

Migrants usually do not yet feel "at home" in the new area for various reasons. They still may not have their own land, or the yields may be insufficient, for starters. Furthermore, they feel cut off from their relatives and sometimes their children, or are far from social activities and infrastructures. Often they express a sense of isolation.

They clearly state that they are staying because economic conditions force them to.

1.3. With better economic conditions, many aspire to settle for good

Usually, once they possess land of their own that is sufficient to enable satisfaction of household needs, migrants express a desire to settle in the area. The most successful often say that they are happy to live for good in South Sumatra and do not want to move back to their place of origin. There are some exceptions. For example, two successful owners of large coffee holdings sold all their land and returned to Java following a drastic decline in yields due to the death of shade trees (*dadap*). Such behavior remains the exception since most spontaneous settlers in this particular area moved to another area in South Sumatra or neighboring Bengkulu.

1.4. Return rate

The rate of return is very difficult to assess; most migrants express the desire to return to their place of origin (which might be Lampung) to retire but it is difficult to know how many will in fact be able to do so. Through research in a few sending areas (East Java and Bali) it appears that the return rate is low for those who obtain land in the migration area. In Bali, the return is usually due to the spouse's death or serious illness. Some successful Balinese merchants are able to base their life and business in two residences. In Bali, their children go to high school or university and they invest in the tourism sector (transportation or shops, for example); in the migration area, they sharecrop out their land and peddle Balinese goods (including clothes or ritual and artistic artifacts). As for the Buginese, they all express the wish to return for retirement in their island of origin.

The return rate seems to be higher for some of those in illegal settlements. Living in a precarious situation, their goal is to make as much money as quickly as possible in order to invest in land or a business in the place of origin.

2. SUPPORT AND PROMOTION OF SPONTANEOUS MIGRATION

The first step that must be taken in order to promote this movement is the recognition of spontaneous migrants and settlers as important agents of rural development in the Outer Islands. Leaving aside for the moment those--a minority--who settle in illegal areas, spontaneous settlers are not squatters; they go through local authorities who are interested in their contribution to the development of their village community.

This recognition must first be given by the MOT in acceptance of the fact that most new Transmigration settlements draw spontaneous migrants who, sooner or later, build an economic center that stimulates regional development and provide outlets for Transmigration enclaves. We have noted that in the absence of directives, the KUPIT are reticent to recognize spontaneous migrants who settle on the periphery of their units.

Directives should be given to the KUPIT to support all efforts to create new settlements on the periphery of transmigration villages:

- 1) make contact with the indigenous villages in the area to locate small receiving zones,
- 2) show leniency with regard to administrative documents while at the same time remain vigilant against possible land speculators,
- 3) encourage families arriving by their own means and the landless (*penumpang*) to participate in the movement,
- 4) provide access to the services available in their settlement (KUD, schools, health facilities) and help extend roads and services beyond the settlement boundaries.

2.1. No intervention necessary before migrant departure

We are familiar with the reasons given by spontaneous migrants for not going through a Transmigration program, essentially, to be free to choose their destination and the moment of their departure, as well as be able to choose their settlement strategy once in the new area. We have also noted that the selection is made in a natural fashion depending on the individual family's past and their economic situation, sometimes depending on the long migration route sometimes begun before marriage.

Any intervention in this process would interfere with the movement of dynamic migrants. If the State must intervene, this should take place mainly in the receiving areas, once the migrant has decided to settle, to aid in land acquisition and in improving migrant daily life and to correct the negative aspects of the movement (especially environmental degradation).

2.2. Control by village heads in the sending area

FOR INDIVIDUAL DEPARTURES

The system of travel, residential change and worker's documents seems to insure adequate control. It should be noted that in the South Sumatra receiving areas, no village heads have complained of an influx of "undesirables" and all tend to wait a certain period to judge the new person before processing a residential change.

FOR DEPARTURES ORGANIZED BY A SPONSOR

Additional precautions should be taken in the case of a departure organized by a sponsor. Though in our study area, we have not encountered major problems, the press often mentions irregularities concerning labor contractors. The village head in the sending areas must be able to design a "contract" with the sponsor stipulating the conditions offered to future migrants in order to be able to verify the conditions and inform the candidates of them.

3. SUPPORT AND PROMOTION OF SPONTANEOUS SETTLEMENT

Action taken at the settlement level should be aimed at insuring land access and, by extension, settlement permanence. All such endeavors are certain to have positive implications on the local people due to the spontaneous settlement process, one that is characterized by dispersion and an opening onto the surrounding area.

3.1. Guarantee access to land

Land access is an essential element in the process of settlement and development of rural zones in the Outer Islands. Land right security will lead the new settlers to invest their time and effort both in improving their land and insuring environmental protection. The land law that is instituted should be one that combines traditional law with the new laws the State intends to introduce.

SIMPLIFICATION AND GRATUITOUSNESS OF ADMINISTRATIVE PROCEDURES

Given a situation where the government department responsible for drawing up the cadastre (BPN) does not have the personnel nor the means to take care of distributing property deeds, there is a need to create a single document specifically designed to prove and guarantee rights over land that migrants have put to use. It would contain all the essential location information enabling a future PRONAS⁵⁵ action if the local people ask for it.

To do this in South Sumatra, it would be necessary to reestablish the authority of the *camat* and the village head to issue the documents by giving them (free of charge) the maps necessary for a better understanding of their village space and training in the techniques of controlling it. The surest way would be to request assistance from the former *pasirah* who, though they no longer have any function, are the only ones who know their territory. During a transition period for the transfer of knowledge, the documents could be issued by a local council formed by the *camat*, the former *pasirah* and the head of the village concerned.

In each region of Outer Indonesia, in-depth research should be done on the local systems of land use and ownership law in order to preserve the positive aspects of these customs and introduce new procedures gradually. More research is needed on setting up "Land Information System" in rural areas adapted on the system used by the city of Semarang (LIS with Agraria, Ipeda and Tata Kota).

LOCATE AND ORGANIZE RECEIVING ZONES

To support, and to a certain extent, orient the process of spontaneous settlement, it will be necessary to guarantee land access in zones determined by the local authorities, both at the indigenous village level to ensure that the desire to receive migrants exists, and at the *kecamatan* level to decide which zones in priority should receive further development.

The fact that a number of receiving zones are determined in the mountain regions can at the same time insure a degree of environmental protection. As we have seen in the coffee regions, families in general suffer from isolation and their strategy is to move closer to activity centers once they have sufficient capital in order to live a "normal" family and social life.

⁵⁵ It should be noted that most local people in areas where land is still abundant do not see the usefulness of property deeds. In our study, we find different behavior among the migrants who seek assurances of their rights, local people in densely-populated regions (around Belitang and Lahat) who are beginning to become concerned, and local people in sparsely-populated areas who care little at all about obtaining such documents.

Implementation

This action could be modeled on the TRANSABANGDEP concept, but it should give priority of access to migrants who are already in the region. Not only have they already paid their trip to Sumatra from their own pocket, and are prepared to invest in their settlement, but they also have a certain knowledge of the surroundings and are better able to judge the viability of the project. In time, a certain number of settlers could be brought with the aid of the Transmigration (the most needy from the sending areas) which would also bring in services (school and teachers, health center and nurses).

The *kecamatan* and the receiving villages should be assisted by planners (from the *Bina Desa*) and logistics experts (from the MOT) in the following:

- 1) locating and analyzing basic cartographic documents (available at the BKN for each *kecamatan*),
- 2) determining the long-term carrying capacity of the village. It would be preferable if the local people could be allowed to continue their agricultural practices which require large area. Similarly, it would be necessary to ensure that the children of the new settlers will be able to obtain land in the same village in order to allow the family to put down roots in the area (2 ha minimum per family for the first and 4 ha for the second stage of family development).
- 3) drawing up a land use plan based not on rigid models inappropriate for the diversity of the cases encountered, but instead on the following fundamental principles:
 - a) forest reserves should be maintained within each village territory, especially along waterways and on steep slopes,
 - b) reserve areas should be cultivated collectively to provide revenue for village development expenditures, giving priority to perennial plantations (fruit trees, rubber, teak) on degraded zones (such as those covered with *alang-alang*),
 - c) residential areas should be planned respecting a certain distance between communities of different origins while at the same time linking them through common places of interaction such as markets, schools, health centers, and places of worship.

This sort of project should protect itself against all forms of land speculation by applying traditional law and by not delivering deeds until the future owner has himself cultivated the land for three years in the case of village land⁵⁶.

The sites to study should not be chosen simply with regard to the wishes of the indigenous villagers; the choice must also be guided by existing infrastructures in order to extend them. There must be an effort at progressive spatial development rather than isolated and limited development that creates enclaves and increases risk and expense.

⁵⁶ This law should also apply to all plantation or other resettlement projects in order to prevent land from being taken out of production for too long (Cempaka and Buay Madang provide two examples among many) just at a time when a dynamic land development program is underway.

An information network

The success of Buginese settlers underlines the importance of an information network. It is necessary to publicize information on the receiving zones and the possibilities offered, and to do so first in the receiving area itself, to inform those who are looking for land locally, and only afterwards in the sending areas.

A regularly updated data base should, in addition to providing the information contained in the TRANSABANGDEP program notices, make mention of the migrant groups already in the area (giving their ethnic origin), current agricultural crops and possibilities for agricultural development, small industries existing in the *kecamatan* (brickmaking, crop transformation, for example), temporary reception facilities, and conditions for access.

In the receiving regions, BAPPEDA would seem to be the agency most capable of creating this data base. The data would then be available to the MOT (and in each of the region's UPT), the BKLH in the receiving area (in charge of resettlement) and also to all the *kecamatan* of the receiving province in order to enable the orientation of spontaneous migrants seeking land. The MOT would take care of distributing information in the sending areas.

One person could be appointed by the MOT in the receiving *kecamatan* not only to help the *camat* but also to inform and advise migrants and furnish them with approved aid.

3.2. Action needed to promote permanent and intensive agriculture

If the government intends to support spontaneous settlement, it will be necessary to provide the means for the practice of intensive agriculture based on the migrants' own know-how and the environmental conditions (both human and natural) in the receiving area.

AID FOR AGRICULTURAL INPUTS

The principal problem posed by agriculture in the underpopulated regions of the Outer Islands is the loss of fertility on forest soils. Swidden agriculture is a technologically appropriate response to this problem.

As population increases sharply, this system becomes less viable. The reduction of the *ladang* fallow period by local cultivators does not have much effect on the environment if traditional techniques of opening land are used (slash and burn method of land preparation and use of the planting stick). Nevertheless, the fact that their territory of action is reduced pushes them to use land that before was off-limits for cultivation, such as slopes. This reduction in territory available for rotation happens when there is forced resettlement or when too much land is given away or sold.

This system becomes destructive with the arrival of migrants having other techniques for working the land, mainly their way of hoeing the ground over which by destroying the roots hinders regrowth on former forest land. They will be forced to abandon the land in any case due to declining yields.

Spontaneous settlements based on food crops apply the same practices as in Java and in the Transmigration centers. They always run into the same problems as the transmigrants do, namely the fall in yields and the destruction of small harvests by predators (usually wild pigs). Some sites are abandoned after the third year and the land left fallow is often invaded by *alang-alang* (*Imperata Cylindrica*).

A first and indispensable preventive action to take would be to make fertilizer widely available from the second year through an efficient distribution and credit system such as the BIMAS Program. In the future, the best solution would be to give crop wholesale dealers, those with the most interest at stake aside from the producers themselves, the responsibility of developing a distribution network handling not only fertilizer but also pesticides and seeds.

Assured in this way of better harvests, the settlers from Inner Indonesia would be inclined to devote more time and energy to building more solid fences to protect against predators, as do the local people.

AID FOR TREE CROP DEVELOPMENT

The agricultural systems of the local people have rapidly evolved towards commercial tree cropping based on rubber, coffee or rattan (in Kalimantan). The migrant coming from Inner Indonesia is less well-prepared for this type of cultivation, not only because he prefers to plant rice or another food crop to start out with, but also because he usually lacks the necessary know-how.

The experience gained from Transmigration projects throughout Indonesia has shown that economic take-off in new villages based solely on dry land food crops (outside of projects irrigated for rice cultivation) is very slow if at all possible. The difficulties encountered are similar in spontaneous settlements based on food crops. The opposite is the case, however, in the Transmigration settlements where cash crops have been introduced, such as Batumarta with its rubber. The success of spontaneous migrants in following the local model in coffee cultivation also shows their capacity for adaptation.

A special effort could be made to introduce commercial tree crops early, in the second year, in order to diversify production and farm revenue. In the case of spontaneous settlements of the peneplains of South Sumatra, rubber planting would seem particularly appropriate. It would be necessary to associate workers from the large plantations of the region who are coming to the end of their contracts (that at Sembawa, for example, in South Sumatra) to whom land could be granted in the new settlements to create a demonstration plot and tree nursery for selected plants.

The proliferation of such experiments would likely make an impact on the local people; the availability of inexpensive selected plants is the first step towards the improvement of their smallholder plantations.

Coffee planting in and of itself does not pose any problem. The use of fertilizers still depends on their availability at the right time and above all on the means of transportation. Nevertheless, additional study of the effects of weeding (practiced intensively by Javanese planters and workers) on soil erosion and possible solutions (for example, planting protective strip of

grass or ground cover as barriers) should be undertaken.

Information concerning new techniques should circulate at the weekly *kalangan* markets where at least one member of the family goes regularly.

OTHER ACTION CONCERNING AGRICULTURAL PRODUCTION

In the settlements based on food crops, the cattle breeding programs already offered to transmigrants and to certain spontaneous settlements (Cahaya Mas and Kampung Baru, OKI) should be enlarged and speeded up. It is useful to introduce this program in the second year of settlement.

Special attention should be paid to small-scale irrigation projects. Migrants coming from Inner Indonesia have special know-how in the area of irrigated rice cultivation and are highly motivated for this; it is not uncommon to find humid depressions or river bank developed for rice cultivation. Small areas could be irrigated in almost all the settlements in the plains. If migrants have the possibility of owning their own rice fields, they will not hesitate to invest their energy to create them (as in the cases of Serekat Jaya and Srimenanti, in Simpang district and Mendayun in Buay Madang sub-district). Nevertheless, aid in the form of cement, ducts and other materials would be needed and mobile teams from Public Works could advise them on the work to be done (diverting water from rivers, draining swampy areas, etc.), thereby accelerating the transformation process.

3.3. Provision of infrastructure and services

Though spontaneous migrants have so far been primarily responsible for the development of their settlement, aid for further development and consolidation is needed. Together with drops in yields, lack of adequate infrastructure and welfare services is noted as a prime reason for abandoning the settlement or for family dispersion or leaving children in the sending areas. This may be considered a waste in terms of resettlement efficiency.

ACCESSIBILITY IS A KEY FACTOR

As is the case for Transmigration settlements, accessibility by roads that are passable in all seasons is an essential key to the development of agricultural settlements. On them depends the arrival of inputs for modern agriculture and the sale of agricultural commodities outside the village. Accessibility is central to the development of intense activity, economic or otherwise (expressed in the term *ramai*), which in turn attracts other activities (such as small industries) and people from other professional categories (traders, teachers and nurses, for example).

In the settlements based on food crops, the spontaneous settlers have already invested their energy and capital not only in the construction of their own house but also in the layout and construction of the main roads or trails within their settlement and those linking it to main external roads. The latter are most often in very poor condition and difficult to pass during the long rainy season (note the case of Belitang, Buay Madang and Mesuji, along with Tugumulyo

in Musi Rawas) despite the fact that population densities and production volume are high. Repair and maintenance of these main roads is an urgent responsibility of the local government services concerned.

Faced with the immense problem posed by the development of a road network in South Sumatra province (as in most of the provinces of Outer Indonesia), and given the willingness shown by spontaneous settlers, research is urgently needed on alternative techniques that the migrants concerned could apply on secondary roads leading to their settlement, with the help of small machinery, material and training furnished by the government (small mechanical shovel, steamroller, gravel or other appropriate aid on the terrain).

Settlement dispersion and environmental conservation in the coffee areas calls for special treatment and a degree of prudence concerning development of the road network. Research on the correlation between road accessibility and the radius of smallholder development can help determine the type of buffer zone necessary for preventing encroachment on protected areas. The region of Muaradua (with *kecamatan* Muaradua, Muaradua Kisam, Pulau Beringin and Banding Agung) would provide a good representative sample area since the high level of coffee plantation development is continuing in space and time.

The development of the road network should be carried out not through the construction of penetration roads, but through adding valley and plateau roads. They would permit a more systematic exploitation of these spaces, and end the isolation of many spontaneous settlers.

SCHOOLS

In the opinion of spontaneous settlers, school, at least the primary level, is an absolute necessity for their children. Once a settlement has become sufficiently concentrated, spontaneous settlers themselves organize the first classes in order that their children might at least learn to read and write.

While spontaneous settlers are generally willing at the beginning at least to take care of building construction, a response should be more rapidly forthcoming for the nomination of teachers, perhaps even arranged in concert with the sending area. The teacher's house could be built by the receiving community, land could be reserved for him or her, even partially cultivated in a collective manner. An attractive salary (paid by the sending province) could encourage the departure of teachers from the sending areas.

This would avoid placing the burden on educational development efforts in the receiving provinces considering that schools in indigenous villages also have pressing personnel needs.

HEALTH SERVICES

Health services are not always mentioned as a priority by spontaneous settlers but the fact remains that sickness leading to hospitalization, however short, often causes a momentary return to the sending area, and the death of one of the parents also often causes a return, in this case definite, of the rest of the family. In this domain, prevention is the best medicine.

In grouped villages, the arrival of a nurse could be arranged from the sending area, as for teachers. The level of health aid should be the same as for Transmigration villages, and might

even be organized by the MOT.

For regions having small dispersed settlements, health services should be present in each weekly market, or *kalangan*, so that people can receive treatment regularly. This regularity is indispensable for the many women (spontaneous and local settlers) who wish to follow family planning; gratuitousness is vital in this area, where national development is at stake.

Development must be implemented more rapidly in the domains of education and health. If the responsibility for development is to be shared among departments, the MOT should be given charge of education and health, and road development should be left under the responsibility of provincial authorities in the receiving area.

OTHER ACTIONS OF A SPECIAL OR LIMITED NATURE

While action to improve land access, agricultural development and settlement accessibility are of top priority, other special actions, depending on the particular conditions in each settlement might be necessary at various stages of settlement development. These might range from solving a problem of water to building a bridge or a market.

These special actions could be financed by NGOs or humanitarian organizations (*yayasan*) from in the sending areas. The Transmigration official in the *kecamatan* could take care of putting together and transmitting such applications.

4. ORGANIZATION PRINCIPLES FOR SUPPORTING THE SPONTANEOUS MOVEMENT

The following recommendations are merely offered as examples which must be studied individually with the institutions concerned.

4.1. Institutional Organization

In the event migration or settlement aid is made available, several institutions could be implicated, as in the experimental TRANSABANGDEP program. All institutions could, in parallel fashion, work to aid spontaneous settlers at each of the following levels:

- the sending province, which has every interest in supporting out-migration,
- the receiving province, which has an interest in encouraging the arrival of migrants to promote regional development,
- Transmigration, taking advantage of its experience in migration and settlement organization and its existing structures in the sending and receiving areas,
- finally, the migrants who, in the case of spontaneous migrants have already made an

investment for their transport and future settlement

The role of humanitarian organizations, *yayasan*, should be limited to special actions during the migration or settlement phase.

4.2. Financial Aid

If a certain amount of money is available to support the spontaneous movement, we would recommend that these funds not be distributed as departure aid, to help pay the transportation costs. Not only is the fact of organizing one's own departure a form of selection for dynamic migrants, but it would be nearly impossible to control such a distribution to avoid misuse of funds in the sending areas.

It would seem preferable to distribute any monetary allocation (calculated per family) in the receiving area settlements themselves to be managed by the settlement leaders and used for collective investments. A spontaneous settler's leaving will thus not be a loss for the entire project.

Building a house and opening up a parcel of land usually do not pose insurmountable problems for spontaneous settlers. Nevertheless, the communities need special tools (for example, to cut down trees, make planks, dig wells, build trails, provide light), a stock of basic medicine, food, seed for the first planting or cash to pay the land registration and deed expenses. All this depends on the amount of the grant, the amount each brings and the amount that can be contributed locally by the settlers themselves.

The distribution of aid to isolated spontaneous settlers is more difficult to control. The question arises as to when is the proper time to intervene in what is often a drawn-out settlement process.

Aid could also be allocated to an indigenous village if it offered a receiving space near an activity center (village itself or a road, for example) for spontaneous settlers who are already settled in an isolated part of the village territory. This would be in exchange for landownership documents, the equivalent of the *pancung alas* traditionally used in South Sumatra.

In the event a community wishes to reserve part of its territory to receive migrants, be they spontaneous or transmigrants, this grant could serve in part to improve roads and infrastructures for the whole community, as payment and in exchange for landownership documents.

This series of measures should, in the coffee areas, encourage grouped rather than dispersed residence. In each case, it is necessary to consider the details of implementation so that undesired effects can be avoided. Misuse of funds must be prevented, for example by not allowing false spontaneous settlers to receive direct aid, and by insuring that indigenous communities are serious about receiving migrants and fulfilling their obligations.

5. FOR A BETTER ENVIRONMENTAL CONSERVATION

Indonesia is a developing country that has experienced serious problems distributing its steady population growth while attempting to maintain a precarious self-sufficiency in agricultural production. It would be utopic to believe that the natural environment could be entirely preserved in its present state. The evolution of land use in the developed countries as in Java provide proof to the contrary.

The movement of spontaneous settlement is relatively weak considering the overpopulation of Java and compared to the same movement in Thailand. However, the experience of Lampung, where the movement is particularly strong, demonstrates the difficulties involved in managing the flow and the period necessary to develop sustainable and permanent village agriculture. The rest of Outer Indonesia will not be able to avoid increases in area put under cultivation. It is with this evolution in mind that a master plan should be established in order, on the one hand, to determine the zones to protect in priority (mountain areas, upper catchment areas, preservation of the flora and fauna) and, on the other hand, to permit the development of village agriculture elsewhere. This agricultural development must be supported by necessary infrastructural development (to allow access for agricultural inputs and outputs) with priority given to regions that receive spontaneous migrants, for two reasons:

- it is in these regions that changes are most rapid; local populations are under the most pressure to change their agricultural systems, and
- they often settle in the most strategic places, areas with strong agricultural potential and within reach of extended existing road or river systems and services.

Information campaigns for environmental conservation at the national level are relatively positive (due in part to international campaigns and the action of the Ministry of Population and Environment), however, the means of protection set up at the local level (information, initiatives) remain extremely limited.

Actions for better environmental conservation must be conceived and implemented rapidly at the village and *kecamatan* level, through the establishment of more specific fundamental principles for each major natural region: valleys, mountains, plains and coasts.

5.1. Forest Management

A NECESSARY REVISION OF FOREST STATUTES AND MANAGEMENT

Rectification of the area under the control of the Ministry of Forestry

The Ministry of Forestry is still the authority today over more than 143 million ha or close to three quarters of the country's territory while many experts agree that the actual forested area is much less. In 1984, in a report for the FAO, Guppy estimated the total at 113.6 million ha of which only 38.9 million ha were in primary forest.

For the province of South Sumatra, the local Ministry officials recognize that more than

40% of the land under their management are no longer forest. Given that the forest service personnel at the Ministry's disposal is far from sufficient to manage all this area, it would appear necessary for improved management to reduce its jurisdiction to only those lands actually covered by forest or subject to reforestation.

An interministerial discussion group could be established in which all the concerned ministries would participate, including the Ministries of Forestry, Transmigration, Agriculture and Environment.

In the short run, a Directorate under the Ministry of the Forest could be created in order to manage land designed for a different use and for which responsibility would be transferred to another ministry or to the regional authorities.

Modification of the classificatory system

This system (as described in the first paragraph of Part III, Technical report on Environment) does not permit effective management of the Indonesian forest. The criteria on which it is based include little other than a consideration of soil fragility without taking into account botanical and climatic factors. It would therefore appear necessary to define a more elaborate system of classification that would at least integrate botanical richness (endemism, rare species), fragility of certain ecosystems (heath forest, *Barringtonia* formation, forest on limestone), and precise climatic data (duration of the dry season, annual rainfall).

DRAWING-UP AND DISTRIBUTING ACCURATE DOCUMENTS AT THE NATIONAL AND REGIONAL LEVEL

As the Environmental Report shows, there is often a serious lack of information which makes decision-making a difficult and hazardous undertaking. Documents, when they exist, are too often of mediocre quality and are most often poorly distributed at the regional, sub-district and especially village level. It is therefore urgent to establish a critical synthesis which could serve as a tool both for government officials and for the personnel in charge of enforcing regulations in the field.

IMPROVEMENT OF THE FIELD MARKING AND SURVEILLANCE OF BORDERS BETWEEN VARIOUS CATEGORIES OF FOREST

An effort was undertaken by the Ministry of Forestry to mark the established boundaries in the field. This was made difficult by the lack of personnel and accurate documents, the large amount of territory under the Ministry's control, overlapping of zones or changes of status in the absence of an overall policy.

In addition, it would seem necessary to develop a system of buffer zones (see above for road infrastructures) and especially between transmigration projects and forest reserves in order to limit the possibility of incursions, voluntary or otherwise.

While buffer zones may have been established in certain cases, the means of implementation and recommendations were not transmitted to the *kecamatan* or village authorities in the interior. For example, the *kecamatan* of Pulau Beringin in the OKU *kabupaten* has to envisage

the transfer of two thirds of its population and will be condemned to economic stagnation and isolation.

IMPROVEMENT OF DIALOGUE BETWEEN THE AUTHORITIES AND THE PUBLIC

In the face of growing and uncontrollable forest clearing, the use of force to enforce the Government's decisions appears increasingly unreasonable. According to the authorities, only 15% of the spontaneous migrants have been displaced in 1990⁵⁷. Forced expulsions without any real alternative solution for the people concerned, local as well as migrant, can only lead them to go clear forest elsewhere, without inciting them to take the least precaution for the protection of fragile soils.

Dialogue is therefore necessary, with the defining of concrete propositions for the people that have settled illegally. These propositions could for example consist of offering land in the framework of TRANSABANGDEP or establishing cultivation systems inspired by the *Tumpangsari* system while assuming responsibility for the control of the adjoining reserves.

The *Tumpangsari* system planting narrow strips of trees (teak or other varieties, regularly pruned to reduce the shadow effect) and bushes (such as *leucaena glauca*, which returns nutrients to the soil) every 15 m to cut the slope, should be an alternative technique for agro-forestry systems.

The resettlement program should avoid offering a very contrasted way of life to those being expelled, for example, sending them from mountain areas to the swampy coast or sending smallholders to work in an estate plantation as workers with no hope of land ownership.

THE NECESSARY RECOGNITION OF THE GLOBAL NATURE OF THE PROBLEM

The stakes are not only regional or national, they are also global given the need to conserve sufficient forest cover for the planet in order to limit the greenhouse effect which leads to global warming. On this point, it is necessary for the international community to shoulder the responsibility to work for a new world ecological order.

Like cultural heritage, ecological resources traverse frontiers; it is not right that the countries on which they are found assume alone the burden of their conservation. While respecting the sovereignty of States, these countries, of which Indonesian is one of the most important representatives by virtue of its possessing the world's second largest tropical forest following that of Brazil, could thus receive technical and financial aid for better management of their environment, a heritage for all humanity.

⁵⁷ If we refer to the evaluation of 70,000 families given by the Kepala Kanwil Kehutanan Sumatra Selatan, in *Suara Pembaruan*, 11 February 1991.

5.2. Illegal settlers in protected forest

Illegal settlers in protected forests were not a part of our study, strictly speaking. They are difficult to reach in their settlements, interviewing them is difficult and the general atmosphere of such encounters is tense. A special study on this problem should be undertaken so that the human aspect of the problem will be taken into account in any new action.

We met some illegal settlers in small economic centers outside of the protected zones. They seem to be aware of what might happen to them, one day or another, and they do not plan to settle permanently, an attitude that is negative for proper management of the space. They will return either to their place of origin to invest their earnings or to continue the migratory trajectory. Most of these people, however, are searching for land to work, and they have invested much energy in their endeavors (clearing dense forest is difficult); these are therefore people whose energies can be used for new settlement projects where their expectations will be met. We met many families coming from the recently cleared areas of Lampung who were in the process of settling land practically offered by certain villages in South Sumatra (Sarekat Jaya/Simpang and Surabaya/Muaradua Kisam). Despite the lasting psychological shock, these families leave to settle new land with the hope of being able to settle for good.

A more serious situation has developed on the periphery of these protected zones. We have noted that in these areas where settlements are theoretically permitted, based on the latest maps drawn up by the competent authorities and by the *kabupaten*, the status of the land is not at all clear in the minds of the settlers. Moreover, administrative authorities and forestry officers have maintained this lack of precision. Due to this state of affairs, many peasants believe that they are in a precarious situation and are little concerned with developing an area that could be permanent.

5.3. A Better soil management

IN THE PLAINS LANDSCAPES

In these plains landscapes where gully erosion dominates despite the slight or moderate slopes, cultivation can therefore have grave consequences if a certain number of precautions are not taken and principles adhered to:

- The maintenance of a humic layer on the soil surface is indispensable through trees plantation,
- Classical anti-erosive agricultural techniques (development of terraces, alternating strips, etc.),

- Need for enriching agents in order to bring up the pH values and frequent application of fertilizers due to the very good permeability and the poor water retention capability of these soils. To this must be added a judicious choice of crops in order to put their low potential to the best use (this means the choice of varieties adapted to acidity or not too demanding of nutriment),

In the relationship between environmental conservation and population density, it is evident that such landscapes will not support heavy demographic overload in the traditional production systems. The situation is different in the large irrigated perimeters of the Transmigration where massive investments were injected in order to completely modify the landscape and artificially create a new type of soil to support the higher population densities. Conversely, low cost extensive exploitation, of the "Jungle Rubber" type, to the extent that it allows for the installation of much secondary vegetation providing good cover of the soil surface, does not cause too much degradation in these landscapes, so long as the quantity, the area, and the location of these plantations are controlled. As for industrial plantations, it is necessary to recreate, as rapidly as possible, a continuous cover of the soil surface, in order to limit as much as possible the ever-present risks of erosion. Techniques of land clearing are often too brutal to preserve the conservation of superficial layers.

HILLY LANDSCAPES

In the hilly landscapes, as in the plains, a number of precautions must be taken when slopes are being developed. These precautions concern both the conservation of soil potential and the prevention of erosion. It is therefore necessary:

- to preserve the humic layers as much as possible (avoid removing topsoil through deep and repeated weeding),
- implement antierosive techniques such as the construction of terraces, the use of residues from weeding in summit zones with slight slope,
- limit the current population density and control the number of new clearings, their location and their area.

The principles and the precautions suggested are thus similar to those proposed for the plains. Here, however, the population density factor is much more important. In these regions, where soils have many characteristics that are favorable for agriculture, the relationship between population density/risk of soil impoverishment and erosion is especially important.

VOLCANIC LANDSCAPES

- *On the old volcanic landforms*

It would seem indispensable to avoid land clearing on sharp slopes with inceptisols, of eutropepts and humitropepts type. If cultivation is unavoidable, it must be limited as much as possible in number and in area. Cultivation of this sharp slopes is a sort of gamble. If the slope

is not carried away by landslide, if the coffee plants can take root before being exposed and uprooted, one can, after three years, earn enough to compensate the years of waiting. Otherwise, there is nothing else to do except look for another plot of land. This type of land use does almost irremediable damage to the soils. The period necessary for reconstituting the top humic layers is extremely long. This blow to the environment will be all the more catastrophic as population density increases since this means the shortening of fallow periods. In such regions, despite the satisfactory soil potential, land use must be absolutely controlled, and in some place even prohibited.

- On the steep slopes of young volcanoes:

The characteristics of soils in the stratovolcanic landscapes are therefore extremely interesting from the point of view of agricultural development. In regions where the soils possess clear agricultural potential and would not seem to need costly antierosive systems, it is still logical to consider using them, despite the steep slopes. Also, steep spatial occupation appears possible, as field observations have shown.

It should be remembered, however, that this soil must remain in pedoclimatic conditions that correspond closely with their natural balance; otherwise, irreversible transformations can effect their agronomic potential and their resistance to erosion (disappearance of allophanes, loss of water retention capability, decrease in organic content, for example). Consequently, excessive clearing which runs the risk of modifying the current local pedoclimatic status (temperature rise and drop in soil humidity) are to be avoided. The modifications which total deforestation could force on this environment are still poorly understood. Nevertheless, field observations suggest that these soils can be used, but only under certain conditions which only a specific and more detailed study could identify. Such a study would have to be based on continuous observation of representative slopes with systematic measurements taken of erosion as functions of various agricultural systems which could be implemented.

REPUBLIK INDONESIA
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AN ANNOTATED BIBLIOGRAPHY

SPONTANEOUS TRANSMIGRATION PROJECT

Special Studies TRANS V Loan 2578 - IND

1991

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INTRODUCTION

Bibliographic research on the little-known topic of spontaneous migration began at the outset of the Project. The step by step search for relevant documents began with a general survey of definitions and typologies of migratory movements and extended to include data on the regions studied. References were sought in the various documentation centers in Jakarta.

Despite the systematic approach used, the study does not claim to be exhaustive. Nevertheless, given the increasing accessibility of data processing programs for micro-computers, we have decided to present this bibliography, indexed, and for some entries annotated (in printed and diskette format¹) in order to serve as a basis for other future studies. The difficulty of finding documents, dispersed throughout a large number of centers, provides another reason for producing this bibliography; the location and reference numbers are provided where possible. It should be noted that this bibliography provides a supplement to two earlier bibliographies on Transmigration, the one by the SKPHI, more oriented towards the problems of physical and cultural environment, and the one by Budiman Arief, published in 1985.

Meeting the criteria for selection were works dealing with the themes of spontaneous rural migration to Outer Indonesia and South Sumatra province, the case-study area, including: the process of spontaneous migration and settlement, farming systems, ecology and environment, land access and the economic situation. The literature listed in this bibliography touches on a wide range of disciplines: physical environment, government and policy, social and economic conditions, agriculture, demography, history as well as anthropology. In general, the emphasis has been on relevance for the social sciences.

The scarcity of first-hand information on spontaneous migration and settlements in rural areas required that we sift through a mass of documents, many of which turned out to be of marginal interest for the study. Out of the 830 documents consulted and entered into the original database, only 440 have been selected for the annotated bibliography.

Some of the documents concerning the *Swakarsa*² Transmigration Program without direct link to the study have been retained in the annotated bibliography to provide the definition and objectives of this program. Other entries on South Sumatra did not directly address the topic but provide a general background of the study area.

¹ The database is presented in DBase IV format, for PC computers.

² *Swakarsa* is a word of Sanskrit origin meaning "*keinginan sendiri yang timbul tanpa dorongan pihak lain*," or a decision made without external influence (*cf. Kamus Besar Bahasa Indonesia*.- 1988).

Among the sources used were books, book articles, journal articles, and congress or seminar communications, presented in a section entitled *Academic works*, and, in separate sections, *reports*, *press* articles, and legal texts and regulations classed under *law*.

Academic works

One of the most useful references offering information on spontaneous settlers is the book by U. Sholz on *The natural regions of Sumatra and their agricultural patterns* (1982). Much of the work by Joan Harjono is very useful to obtain a grasp of the terminology involved in and the evolution of official transmigration programs. In her essay entitled *The promotion of unassisted Transmigration in Indonesia* (1978), she discusses the definitions (p. 2-33) and main issues surrounding spontaneous movement to rural areas of Outer Indonesia. The World Bank's 1986 *Transmigration Sector Review* gives useful definitions and discusses the main problems involved with the movement and the government's desire to promote and control it.

Very few individual researchers have focused on spontaneous migrants. Kampto Utomo was the first to study this topic in his 1957 thesis (published in 1975) dealing with settlement on the fringes of a planned settlement in Lampung. Spontaneous Balinese settlers in Central Sulawesi have been studied by G. Davis (social history) and M. Charras (geography and anthropology). Several studies of Buginese coastal settlements in Sumatra and Kalimantan are available, including those on agro-economy by W. Collier and A. Vayda and the geographical and anthropological works by Japanese scholars from the Southeast Asian Study Center in Kyoto. Madurese spontaneous settlement in South Kalimantan was also the topic of a thesis by Soedarmo at UGM, Yogyakarta (1988).

Treating the largest receiving province, *Transmigration and spontaneous migration in Indonesia, Lampung* (1989, ORSTOM/MOT) gives a useful background primarily through spatial analysis and cartography.

Another recent study is the work edited by H. Uhlig, *Spontaneous and planned settlement in Southeast Asia*, (1984). As far as Indonesia is concerned, the book focuses more on organized settlements and little is said about spontaneous movement. Nevertheless, the research on spontaneous settlement in Thailand offers interesting points for comparison with Indonesia.

Reports

The *reports* emanate for the most part from the Ministry of Transmigration. A first group of documents covers the concept of *swakarsa* and policies linked to the program. Another group treat the new concept of TRANSABANGDEP, *Transmigrasi Swakarsa Pembangunan Desa Potentiel*, currently under experimentation in several receiving provinces, including South Sumatra. The new concept is based on small-scale transmigration settlements acting as satellites of indigenous villages or hamlets.

The Ministry of Transmigration is not directly concerned with the management of the genuine spontaneous movement. The *Swakarsa* department deals with selected transmigrants brought into receiving areas through special programs; these transmigrant classification is more a question of budgetary allowance and *Swakarsa* transmigrants are supposed to be self-supporting.

The PUSLITBANG has been interested in research on spontaneous migrants (see Puslitbang discussion in *Academic Work*, 1978). Like other reports (Transmigration: 1980c, 1981a, 1982), they focused on spontaneous migrants who live in planned transmigration villages with relatives who have been allocated land as official transmigrants. This is just one type of spontaneous settlement process. Since the early 1980's, these spontaneous migrants have been included in the Ministry's statistical data. Mixed with the *Swakarsa* planned transmigrants, interpretation of the data has become more difficult.

Press articles

Press articles were mainly collected in the libraries of the MOT (Human Relations Bureau), the CDIS, the Ministry of Forestry, and the SKPHI. Most of the articles are not annotated unless they are basic texts by scholars, which have been classed in the *Academic works*.

The role of the press in Indonesia is mainly to provide information on significant and often sensational events. The spontaneous migration movement is not yet a fashionable topic in the popular press. In articles on environment, protected forests, and floods and landslides in Outer Indonesia, however, the press sometimes makes reference to the people from Inner Indonesia.

Sometimes interesting and diverse information about spontaneous migrants is contained in biographical sketches. Recent events where people had to be dislodged by force from protected areas focussed attention on the topic.

Certain articles have been presented in order to provide a history of events and decisions related to spontaneous migration (i.e., 1980: promotion campaign for self-supported transmigration, *Swakarsa*; 1986: Self-motivated transmigration to be encouraged; 1986: *T. Swakarsa* implementation board).

Presentation of entries

Titles in Indonesian have been translated into English and placed in [...], followed by the bibliographic references. The first line gives the location of the document in small type. The second line gives the keywords: first the geographical location followed by the thematic keywords. The geographical place-names have been written using the accepted Indonesian acronyms (for the table of acronyms and their translation, see below). The name of the sub-region, town or village follows the name of the province (or island). Example:

Location YTKI/631.507 Lem/c

Keywords **Jabar**, Indramayu, **Lampung**. Lampung Tengah, Cropping Systems, Labor Utilization, Level of Technology, Input-output Analysis

The thematic directly follow the geographical keywords. In defining the keywords, some difficulties were encountered and a few remain unresolved, notably in categorizing transmigrants. The terms *Swakarsa* and *Spontan* or spontaneous sometimes refer to genuine spontaneous migrants and sometimes to those selected and administered by the Ministry of Transmigration. "T." signifies *Transmigrasi*/Transmigration.

Documents are organized by alphabetical order for author or institution and by date. Indonesian terms, acronyms and abbreviations used are presented below.

ACRONYMS for PROVINCES

<u>Indonesian</u>	<u>Acronyms</u>	<u>English</u>
D.I. Aceh*		
Sumat(e)ra Utara	Sumut	North Sumatra
Riau		
Sumatra Barat	Sumbar	West Sumatra
Bengkulu		
Jambi		
Sumatra Selatan	Sumsel	South Sumatra
D.K.I Jakarta**		
Jawa Barat	Jabar	West Java
Jawa Tengah	Jateng	Central Java
D.I. Yogyakarta*		
Jawa Timur	Jatim	East Java
Bali		
Nusa Tenggara Barat	NTB	West Oriental Archipelago
Nusa Tenggara Timur	NTT	East Oriental Archipelago
Timor Timur	Timtim	East Timor
Irian Jaya	Irja	
Maluku		Moluccas
Sulawesi Utara	Sulut	North Sulawesi
Sulawesi Tengah	Sulteng	Central Sulawesi
Sulawesi Selatan	Sulsel	South Sulawesi
Sulawesi Tenggara	Sultra	Southeast Sulawesi
Kalimantan Barat	Kalbar	West Kalimantan
Kalimantan Tengah	Kalteng	Central Kalimantan
Kalimantan Selatan	Kalsel	South Kalimantan
Kalimantan Timur	Kaltim	East Kalimantan

* D.I., Daerah Istimewa: *Provinces with a specific administrative status*

** D.K.I., Daerah Ibukota Istimewa: *National Capital Town*

INDONESIAN TERMS - ABBREVIATIONS - ACRONYMS

AAETE	Agency for Agricultural Education, Training & Extension
AARD	Agency for Agricultural Research and Development
Adat	Customary law
ADB	Asian Development Bank
Agraria	(ancient name for) National Land Board
AKAD	Angkatan Kerja Antara Daerah [Labor force exchange between provinces]
AKAN	<i>Angkatan Kerja Antara Negara</i> [International Labor Force exchange]
ANDAL	Former DG. of Agrarian Affairs in MHA
APBN	<i>Anggaran Pendapatan dan Belanja Negara</i> (National Revenue and Depense Budget)
ARTMS	Airborne Radar Topo Mapping System
BANPRES	<i>Bantuan Presiden</i> (Presidential Special Funding)
BAPPEDA	<i>Badan Perencanaan Pembangunan Daerah</i> [Provincial Planning and Development Board]
BAPPENAS	<i>Badan Perencanaan Pembangunan Nasional</i> (National Planning and Development Board)
BI	<i>Bank Indonesia</i> [Bank of Indonesia]
BIES	Bulletin of Indonesian Economic Studies, Australian National University, Canberra
BIMAS	<i>Bimbingan Massal</i> [Rice Intensification Mass Programme]
BKLH	<i>Biro Kependudukan dan Lingkungan Hidup</i> [representation of MKLH at the provincial level]
BPD	<i>Bank Pembangunan Daerah</i> (Regional Development Bank)
BPB	<i>Badan Pertanahan Nasional</i> (National Land Board)
BPS	<i>Biro Pusat Statistik</i> (Central Bureau of Statistics)
BRI	<i>Bank Rakyat Indonesia</i> [People's Bank of Indonesia]
BUKOPIN	<i>Bank Umum Koperasi Indonesia</i> [Public Cooperative's Bank of Indonesia]
CSIS	Centre of Strategic and International Studies
CRFIC	Central Research Institute for Food Crops, Bogor
CRIA	Central Research Institute for Agriculture
DAP	Direct Action Programme, (SSDP II)
DAS	<i>Daerah Aliran Sungai</i> [Upper river catchment area]
DGE	Directorate General of Estates in MOA
DGFCA	Directorate General of Food Crops Agriculture in MOA
DGLS	Directorate General of Livestock Services in MOA
DGSP	Directorate General for Settlement Preparation in MOA
PU	<i>Departemen Pekerjaan Umum</i> (Ministry of Public Works)

EIA	Environmental Impact Assessment
FAO	Food and Agricultural Organization of the United Nations
GBHN	<i>Garis-garis Besar Haluan Negara</i> [Broad Outlines of State Policy]
GOI	Government of Indonesia
HTI	<i>Hutan Tanaman Industri</i> (Industrial Forest Estate)
IBRD	International Bank for Reconstruction and Development (World Bank)
IFAD	International Fund for Agricultural Development
IFU	<i>Interpretasi Foto Udara</i> [Aerial Photo Interpretation]
INPRES	<i>Instruksi Presiden</i> Programs financed through Presidential Decree
IPB	<i>Institut Pertanian Bogor</i> [Intitut of Agriculture, Bogor]
IPPEDA	Land Local Taxes
IPSK	
Irja-DISC	Irian Jaya Development Information Service Center
IWGIA	International Work Group for Indigenous Affairs
JMT	Junior Minister for Transmigration
Kabupaten	Sub- provincial administrative unit.
KBLK	<i>Kelompok Besar Lahan Kering</i> (Large Settlement Administration)
Kecamatan	Sub-kabupaten administrative unit
KEPMEN	Ministerial Decree
KIK/KMKP	<i>Kredit Investasi Kecil</i> (Small investment credit) / <i>Kredit Modal Kerja Permanen</i> (Permanent working capital credit)
KK	<i>Kepala Keluarga</i> (Household/ hh)
KUD	<i>Koperasi Unit Desa</i> (Village cooperative)
KUPEDES	<i>Kredit Umum Pedesaan</i> (Public credit for small borrowers)
KUPT	<i>Kepala Unit Pemukiman Transmigrasi</i> (Head of Unit of transmigration settlement, under Trans. jurisdiction)
KUT	<i>Kredit Usahatani</i> (Small farm credit)
LEKNAS	National Institut of Economic and Social Reseach
LDUI	<i>Lembaga Demografi UI</i> [Institute of Demography University Indonesia]
LIPI	<i>Lembaga Ilmu Pengetahuan Indonesia</i> [Indonesian National Institut of Sciences]
LP3ES	<i>Lembaga Penelitian, Pendidikan dan Penerangan Ekonomi dan Sosial</i> [Research Institute for Education and Socio-Economic Information]
LSM	<i>Lembaga Sosial Masyarakat</i> [Social Institution for People, at the village level]
LU	<i>Lahan Usaha</i> (Land holding for Trans. Dep.)
Marga	Traditional political and territorial organization in Southern part of Sumatra
MHA	Ministry of Home Affairs
MIS	Management Information System
MKLH	<i>Mentery Negara Kependudukan dan Lingkungan Hidup</i> , MPE
MOA	Ministry of Agriculture
MOF	Ministry of Forestry
MOT	Ministry of Transmigration
MPE	Ministry of Population and Environment
NES	Nucleus Estates Scheme
NESS	Nuclear Estate and Smallholders System
NGO	Non-governmental organization
NITS	National Inventory of Transmigration Sites
NTB	<i>Nusa Tenggara Barat</i> [West part of Oriental Archipelago]

NTT	<i>Nusa Tenggara Timur</i> [East part of Oriental Archipelago]
ORSTOM	French Scientific Institute for Development in Cooperation, Paris
Outer Islands	The islands of Indonesia excluding Java, Madura, Bali
PANKINDG	<i>Penyiapan Pemukiman</i> (DG. Settlement Preparation within Pankim)
PAP	<i>Penyiapan Areal Pemukiman</i> (Directorate of Areal Preparation within Pankim)
Pasang surut	Tidal swamp area
PEP	Centre of Economic and Development Studies - LIPI
PDII	Indonesian Centre of Scientific Documentation - LIPI
PIH	<i>Pusat Informasi Hutan</i> (SKEPHI), Centre of Forest Information
PIR	<i>Perkebunan Inti Rakyat</i> (Nucleus Estate Small-holder)
PIR-TRANS	Nucleus Estate Smallholder with transmigrants settlers
PMU	Project Management Unit
PMB	Centre of Social and Cultural Studies - LIPI
PPL	<i>Penyuluh Pertanian Lapangan</i> (Agricultural Extension Worker)
PPS	<i>Penyuluh Pertanian Spesialis</i> (Extension Subject Matter Specialist)
PPT	Centre of Population and Labour Force Studies - LIPI
PRPTE	Government-financed tree crop development program
Prapelita	Before five year planification, before 1969
PTP	<i>Persewaan Terbatas Perkebunan</i> (State-owned tree-crop Estate Corporation)
REC	Rural Extension Center
(RE)PELITA	Five Year Development Plan (Repelita I, 1969-74; Replita II, 1974-79; Replita III, 1979-84 Replita IV, 1984-89, Repelita V, 1989-1994)
RePPPProT	Regional Physical Planning Programme for Transmigration
SCDP	Smallholder Coconut Development Project
SECDP	Smallholder Estate Crop Development Project
Sisipan	Fill-in transmigration program near already settled area
SKEPHI	<i>Sekretariat Kerjasama Pelestarian Hutan Indonesia</i> [Secretariat for Forest Protection]
SKP	<i>Satuan Kawasan Pengembangan</i> (Development Unit)
SP	<i>Satuan Pemukiman</i> (Settlement Unit)
SRDP	Smallholder Rubber Development Project
SSDP	Second Stage Development Programme
SUPAS	<i>Survey penduduk Antar Sensus</i> [Inter-Censal Population Survey]
SUSENAS	<i>Survey Sosio-Ekonomi Nasional</i> [National Socio-Economic Survey]
Swakarsa	Self-initiated Movement
TAG	Transmigration Advisory Group in Directorate Bina Programme (MOT)
TCSDP	Tree Crop Smallholder Development Project
T. Lokal	Transmigration programme within a province, provincial resettlement
TRANSABANGDEP	<i>Transmigrasi Swakarsa dan Pembangunan Desa Potensial</i> [Self-supported Transmigration and potentiel village development, programme]
TSP	Trisodium phosphate fertilizer
Umum	General, public
UNDP	United Nations Development Programme
UNHAS	University of Hasanudin, Ujung Pandang
UI	University of Indonesia, Jakarta
UNSRI	University Sriwijaya, Palembang
UGM	University Gajah Mada, Yogyakarta

UPT	Unit Pemukiman Transmigrasi (Settlement Administrative Unit of one or more SP)
YPMD	<i>Yayasan Pengembangan Masyarakat Desa</i> , [Institution for villagers development]
YSS	<i>Yayasan Sosial Soegiyapranata</i> , Semarang
YTKI	<i>Yayasan Tenaga Kerja Indonesia</i> [Indonesian Institution for Labor Force]
WALHI	<i>Wahana Lingkungan Hidup Indonesia</i> Indonesian Environmental Forum
WWF	World Wildlife Fund
YLBHI	<i>Yayasan LBH Indonesia</i> [Indonesian Legal Aid Foundation]

ACADEMIC WORKS

ABDULKADIR, Nadir

- 1985 *Mobilitas penduduk dan pengaruhnya terhadap peningkatan pendapatan: Studi kasus penduduk Pidie di Kabupaten Aceh Tengah* [Population mobility and its influence on income increase: Case study of ethnic Pidie in Central Aceh District].- Universitas Syah Kuala, Banda Aceh, VIII+ 50 p., tab, bibl.

LDUI/301.326 Abd/m

Aceh Tengah, Pidie, Aceh, Mobility, Circular Mobility, Income Transfer

The change from non-permanent to permanent mobility among the majority of Pidie population can be explained as follows: 1. Most of migrant already owned lands which was purchased from the local people or from the previous migrants. 2. Most of migrants have settled at the place for more than 3 years. 3. Many of them have well adjusted to the settlement place because of its good environment and opportunity.

ABIKOESNO

- 1987 "Transmigrasi dan kelompok pengembangan di Baturanta" [*Transmigration and the expansion team in Baturanta*], *Buletin Bina Desa*, no. 58, April 1987, pp. 15-20.

SKEPHI

Sumsel, Baturanta, Transmigration, LSM

The role of NGO's in the transmigration program in Baturanta, South Kalimantan consists of (1) motivating the existing institutions at the resettlement locations, (2) providing information and education as well as training, (3) providing initial financial assistance to loans and savings activities, as well as describing the history of Baturanta transmigration, its natural potentials and the development of its settlements. One can say that transmigration in Indonesia has already succeeded, as it is proved by the increase of 15% in the volume of spontaneous transmigrants.

ACHMAD, Sulistinah, ACHMAD, Rofiq et al.

- 1986 *Pendekatan mutu kehidupan transmigrasi* [An approach towards quality of life of transmigrants].- Lembaga Demografi UI & MKLH, Jakarta, 1986, XVI+ 183 p., tab, bibl.

LDUI/301.326 Ach/p

Kalbar, Sumsel, Quality of Life, Migration

In general, self-supported transmigrants are more flexible compared to general transmigrants. However, it became apparent that in Pematang Panggang (South Sumatra) the composition of self-supported DBB transmigrants, local APPDT transmigrants, inserted transmigrants, second generation transmigrants and self-supported TBB transmigrants were more numerous than in Rasan Jaya (West Kalimantan), whereas the success level was almost the same. This condition was influenced by the existence of more local APPDT migrants who in general have less experience in intensive agriculture, in West Kalimantan than in South Sumatra.

ADITJONDRO, George

- 1976 *Datang dengan kapal, tidur di pasar, buang air di kali, pulang naik pesawat: Suatu telaah tentang dampak migrasi suku-suku bangsa dari Sulsel & Sultra ke Irian Jaya* [Arriving by ship; sleeping in the market, relieving oneself in the river, returning by airplane: a study of migration impact of S.Sulawesi and S.Sumatra communities to Irian].- LRKN-LIPI, Jakarta, IV+ 79 p., tab, bibl.

PPT/325.33 Adi/d

Irja, Spontaneous Migration, Migration Decision, Indigenous Culture, Push-pull Factors, Impacts, Bugis, Butonese, Makasarese, Papua

It is an exploratory study on the causes of spontaneous migration of Bugisnese, Butonese and Makasarnese (BBM) groups to Irian Jaya and its impact on the local tribes. There are economic and political factors that encourage these BBM to migrate to Irian Jaya. The results/impacts are more positive for the BBM than for the Irian Jaya tribes who can not compete with the BBM. The writer is also worried about the risk to endanger the original culture of Irian Jaya.

- 1980 "Berbincang-bincang soal hama babi dan ilalang di Binuang: Masalah alih-sebar teknologi di daerah transmigrasi di Kalsel", *Buletin Bina Desa*, no. 18-22, April 1980, pp. 26-31.

BD

Kalsel, Binuang, Welfare, Communication, Water

- 1986 "Transmigration in Indonesia: The role of the World Bank in promoting Big Business, High-Tech and bureaucratic centralization...", Paper presented at the *Citizen's Conference on the World Bank*, Washington D.C., Sept. 28-30, 1986, 17 p.

Indonesia, Policy, World Bank, Bureaucracy, T. Swakarsa, Criticism

This book covers three main topics. First, the change in the migration politics; second, the positive and negative roles of the World Bank in making an ideal migration program a success; and third, the strategy proposed by the writer as an alternative to support the government policy in the migration program. Regarding the spontaneous migration, the World Bank and the Asian Development Bank (ADB) suggest a change of pattern from migration with food crops to migration with cash crops through the Nucleus Estate and Small holders (NES) or Nucleus Estate Plantation-transmigration (PIR), which involve spontaneous migrants.

ALAMSYAH, Nur

- 1986 "Perlu ada koordinasi untuk menjamin kepastian usaha: Mutu pelaksanaan transmigrasi swakarsa masih rendah" [*Coordination needed to ensure definite enterprise: The quality of the self-supported transmigration implementation is still very poor*], *Merdeka*, 26/11/1986.

MOT

Indonesia, Transmigran Swakarsa, Coordination, Communication, Environment, Problems

Although the volume of self-supported transmigration is increasing, its quality still needs improvement due to the weak coordination between the place of origin and the place of destination, the lack of complete and real information from the regional government (Pemda) towards prospective and potential spontaneous transmigrants as well as the complicated administrative service that the migrants have to encounter. Moreover, their arrival is still not yet well prepared, such as the example of the flood in Lampung has damaged the environment because people have the tendency to clear the land/forest for agriculture in the restricted areas.

AMAN, S.

- 1986a "'Menjual' Kalbar di Jawa Timur (I): Jatim sudah kelebihan 11 juta jiwa penduduk" [*'Selling' West Kalimantan in East Java (I): East Java already reached 11 million of inhabitants*], *Merdeka*, 20/11/1986.

MOT

Jatim, Kalbar, T. Swakarsa, Information, Motivation, Promotion

The cooperation in information between West Kalimantan and East Java regional government has for objective to provide motivation to East Javanese self-supported transmigrants who wish to resettle to West Kalimantan. They are provided with the same facilities accorded to general transmigrants.

- 1986b "'Menjual' Kalbar di Jawa Timur (II): Kaget dengan di Kalbar ada sawah pasang-surut" [*'Selling' West Kalimantan in East Java (II): Surprised when learnt that West Kalimantan have tidal rice field*], *Merdeka*, 21/11/1986.

MOT

Jatim, Kalbar, T. Swakarsa, Pasang-surut, Migration, Decisions, Communication

East Javanese prospective self-supported transmigrants are less interested to migrate to West Kalimantan because of wrong information about the existence of tidal areas. For that reasons, many migrants from East Java who already resettled in West Kalimantan went back home to promote the self-supported transmigration to West Kalimantan.

- 1986c "'Menjual' Kalbar di Jawa Timur (III): Orang Madura pantang disebut transmigran" [*'Selling' West Kalimantan in East Java (III): Madurese do not want to be called transmigration*], *Merdeka*, 22/11/1986.

MOT

Jatim, Kalbar, T. Swakarsa, Spontaneous Migration, Circular Migration, Madurese, Migration Decisions
In general, they migrate as self-supported and do not report to local authorities. They are not poor but looking for good fortune within two to six years in transmigration areas. Afterwards, they will return to Madura.

- 1986d "Menjual' Kalbar di Jawa Timur (IV habis): Jangan katakan bertransmigrasi tapi katakan hijrah" [*'Selling' West Kalimantan to East Java (IV): Do not say transmigration, but say pilgrimage*], *Merdeka*, 24/11/1986.

MOT

Jatim, Kalbar, T. Swakarsa, Communication, Kyai, Madurese, Migration Decisions, Aid

To straighten the mentality of Madurese people who do not want to be called "transmigrants", may request assistance from their religious leaders because those are most respected by the Madurese people. This is to direct inhabitants of Madura who to a certain part were never registered and went to Pontianak, in order to be placed in settlements prepared by the provincial government of West Kalimantan.

ANONYMOUS

- 1956 *Transmigrasi 1951-1955* [Transmigration 1951-1955].- Djawatan Transmigrasi, Djakarta, 172 p., tab, map.

LDUI/319.1 Ind/t

Indonesia, Data

- 1975 *Laporan penelitian sebab musabab out-flow penduduk Sulawesi Selatan (tahap II) (Studi kasus untuk daerah asal Sulawesi Selatan dan daerah tujuan Sumatera Selatan dan Irian Jaya)* [Reasons of out-flow of S.Sulawesi population, research report phase II: Case study for S.Sulawesi as the place of origin and S.Sumatra and Irian J. as the place of destination].- Universitas Hasanuddin & Bappeda Sulawesi Selatan, Ujung Pandang, 1975, XXV+401 p., tab, map.

LDUI/301.3295984Un/I

Sulsei, Sumsel, Irja, Out-Migration, Buginese, Migration Decisions, Migration Determinants

The paper describes the characteristics of migrants from South Sulawesi as well as the province's migration potential. Many aspects are discussed namely the decision making process, the population's perception towards the occurred out-flow, the motivation to resettle, the information received from relatives at the place of destination and the facilities provided. An evaluation on economic potential and general evaluation of the place of origin and the place of destination has been carried out (p. 275-285). The conclusion shows that the standard of living is better at the place of destination than at the place of origin. In this case, it conforms to the desire to move for a better life.

- 1980a *Laporan penelitian motivasi transmigrasi swakarsa di Jawa Timur* [Research report on the motivation of self-supported transmigrants in East Java].- Fakultas Ekonomi Universitas Airlangga, Surabaya, VII+56 p., app.

PPT

Kediri, Malang, Banyuwangi, Migration Determinants, Migration Decisions

The reports discusses population conditions, including the socio-economic situation, educational background, family, conceptions, and motivations regarding the self-supported transmigration program. In its conclusion the report remarks on the desperate situation caused by dense population, lack of job opportunities, care for family members and low income. However, these are certain obstacles for self-supported transmigration, i.e. low education level, relatively low willingness to transmigrate, traditional links with the native soil and lack of information facilities.

- 1980b *Laporan studi operasi gabungan transportasi transmigrasi (Bali, Sulawesi Tengah, Sulawesi Tenggara) 1979-1980* [Report on transmigration transportation integrated operation: Bali, Central Sulawesi, Southeast Sulawesi, 1979-1980].- DEPNAKER & LEKNAS-LIPI, Jakarta, XLIX, 180p., tab, bibl.

PPT/325.33 Lem/I

Bali, Sulteng, Sultra, Transmigration, Migrants, Communication, Implementation

The research focuses on the study of the transportation system and the administrative services. Bali has a good transportation system which motivates people to move, while Central Sulawesi and Southeast Sulawesi which still have a poor transportation system, experience difficulty in attracting migrants.

However, the sea transportation is a good alternative which can bring the Balinese migrants directly to the location. Information on suitable transportation and communication to the destination area is obtained from the local government and relatives or friends in migration areas.

- 1980c *Migrasi spontan sepanjang jalan Loa Janah - Balikpapan dan masalah yang ditimbulkan* [The spontaneous migration along the road of Loa Janah - Balikpapan and its problems].- Lembaga Riset Universitas Mulawarman, Balikpapan, 55 p., tab, map, bibl.

PDII/301.326 Uni/m

Kalteng, Welfare, Spontaneous Migration, Environment

This analysis tends to clarify physical conditions rather than to describe the socio-economic aspects of the setting. Loa Janah has a great potential to attract spontaneous migration, because of its interesting and strategic location, besides the strong kinship as well as the "merantau" spirit of Bugis people. It is the reason why their arrival needs to be linked to the utilization of natural resources. The regional government should limit the forest boundaries in order to maintain its beauty. The control is important to preserve land fertility (p. 45). It is also stated that spontaneous migrant's income is higher than the one of general transmigrants.

- 1981 "Pokok-pokok pikiran menuju transmigrasi swakarsa secara besar-besaran" [*Main ideas on how to promote the self initiated transmigration*], in: *Lokakarya Perencanaan Pembangunan Pedesaan dan Pertanian*. IPB, Bogor, 38 p., tab.

IPB-Sosek

Indonesia, T. Swakarsa, Pull Factors, Colonial History, Information

The explanation of the program, in particular of the implementation of the self-initiated transmigration, begins with the analysis of 10 problems that the transmigration program in Indonesia has encountered since 1905. The middle-term target (5 to 10 years) is to develop a base which is strong enough to be implemented. The long-term target (10 to 15 years) is the promotion of the spontaneous transmigration. Tripartite aspects such as pull factors, the dynamic of transmigration operation and economic considerations need to be taken into account. The program implementation needs information regarding time and departure date, supplies, transportation, place of destination, condition and coordination.

- 1982 "Transmigrasi, perlukah pola orientasinya diubah?" [*Should the orientation of transmigration pattern be changed?*], *Economica*, Vol. 10, No. 2, 1982, 76 p.

LDUI

Indonesia, T. Swakarsa, Motivation, Information, Migration Decisions

The change of transmigration orientation from general transmigration to spontaneous/self-initiated transmigration is very important. The program which is successful not only in term of volume but also in term of agricultural achievement tends to attract new comers and spontaneous transmigrants (p. 8, 15) to South Sumatra, Central Sulawesi and Lampung. The transmigration orientation also concentrates in the economic sector so it will attract highly motivated people to move (p. 9). According to the 1980 Census, the flow of spontaneous/self-supported transmigrants to the outer-islands was more important than the general transmigrants during the last 5 years. The basic of the transmigration policy is to boost the spontaneous transmigration. In order to get large number of spontaneous transmigrants, the policy will be operated under attractive conditions such as promoting the rural economic growth as well as paying attention to the social and technical aspects (p. 14,15). Information regarding the success in transmigration area attracts transmigrants from Bali and Lombok (p. 21). According to Abidin there are 2 types of prospective transmigrants: The very poor and the marginal group. The later group is considered potential to migrate spontaneously because they used to move and they are not too poor. Information about new settlement is needed in order to attract their relatives and friends.

- 1983a "Gambaran usaha tani di daerah pemukiman baru (desa Mulia Sari-Sultra)" [*An overview of farm in new settlement areas*], Paper presented at Lembaga Ekonomi dan Kemasyarakatan Nasional- LIPI, Jakarta, 22-23 Desember 1983, 20 p., tab, bibl.

PPT/101373

Sultra, Spontaneous Migration, Sponsored Migration, Educational, Income, Employment

Generally the spontaneous transmigrants have a higher level of education and are more productive in comparison to the sponsored migrants. However, their participation and their employment opportunity are lower than the sponsored migrants.

- 1983b "Rapat konsultasi Kantor Wilayah Departemen Transmigrasi daerah asal" [*Consultative meeting of Sending Region in Transmigration Programme*], KanWil Dep. Transmigrasi, Malang, 9-11 Aug. 1983, 10 p.
MOT/416 Rap/r
Indonesia, T. Swakarsa, Policy, Sending Area
Spontaneous transmigration can be well achieved if it is supported by a good level of transmigration preparation/organization from the point of view of implementation approach and problem solving. Several obstacles in the implementation of the spontaneous transmigration implementation are determined by the structure and the function of transmigration policies.
- 1984a *Masalah pelaksanaan pemindahan transmigrasi dalam rangka pelaksanaan transmigrasi swakarsa* [Problems of transfert in the spontaneous transmigration programme].- Direktorat Jenderal Transmigrasi, Pengerahan dan Pembinaan, Jakarta, 1984, p.20.
MOT
Indonesia, T. Swakarsa, Resettlement Policy, Pelita III, Pelita IV
An evaluation of the movement of spontaneous transmigrants in the Third Indonesian Five-year Plan (Pelita III) should be made in order to operate such a movement effectively. Discussions are based on many facts, including the bureaucratic system which is still being used. This manual can be served as a guidance for the implementation of such movement.
- 1984b *Transmigrasi: Dari daerah asal sampai benturan budaya di tempat pemukiman* [Transmigration: From the place of origin to the cultural conflict at the place of settlement].- Univ. Kristen Satya Wanca, C.V. Radjawali, Jakarta, XV+274 p., tab, bibl.
Indonesia, T. Tripartial, T. Swakarsa, Research Agenda
This article describes the history of successful spontaneous transmigration program since the "Bawon" system, followed afterward by the tripartite system which provides to the general transmigration an important push in the promotion of self-supported transmigration. There are three main topics: - Research on implementation coordination. - Research on general transmigration in order to assess pionner transmigrants. - Research on family inserted transmigration, their motivation and problems encountered (p. 241-271).
- 1985a *Pemantapan pelaksanaan program transmigrasi di Sulawesi tengah* [Implementation of the transmigration program in Central Sulawesi].- Kanwil Transmigrasi (Rapat Teknik Konsultasi Regional Departemen Transmigrasi Wilayah Indonesia Timur di Ujung Pandang tanggal 27-28 Agustus 1985), Sulteng, Palu, III+62 p., tab, map.
MOT/419 Sul/p
Sulteng, Settlement, Problem, Spontaneous Settlement
The book describes the land preparation and the transmigrants settlement as well as technical problems. It also indicates the volume of spontaneous migration from 1981 to 1986 (see p. 3) and the planning which is to be achieved until 1989 (see p. 15). Technical problems including coordination problems are the main obstacles in the implementation of the program.
- 1985b *Pola penguasaan, pemilikan dan penggunaan tanah secara tradisional daerah Sumatra Selatan* [Agricultural patterns in South Sumatra: land use and ownership].- DEPDIKBUD, Proyek Inventarisasi dan Dokumentasi Kebudayaan Daerah, Palembang, 1985, 145 p.
UNSRI
Sumsel, Cintamanis, Agricultural Sytem, Social Organization, Lebak
- 1986 *Seminar peningkatan kualitas manusia melalui transmigrasi terpadu* [Seminar on human improvement through integrated transmigration].- Departemen Pendidikan dan Kebudayaan, Universitas Lampung, Bandar Lampung, VIII+189 p., tab.
PDII/304.8 Sem
Indonesia, Lampung, Local Transmigration, Land Rights
This workshop focuses on many themes, among other things the transmigration goals re-orientation, the local transmigration (which is seem as an irony for Lampung but needs to be carried out for the environment's sake, and the land right for transmigrants as well as for local people. The local transmigration is an unique matter and only Lampung experiences this type of local transmigration for the first time, while the province also receives transmigration (from outside) for the first time.

- 1987a *Kedudukan dan peranan lembaga-lembaga adat di Sumatera Selatan setelah berlakunya undang-undang nomor 5, tahun 1979* [Situation and role of the traditional institutions in South Sumatra after the promulgation of the law n° 5, 1979].- Fakultas Hukum UNSRI & Pemerintah Daerah Propinsi, Sumatera Selatan, 1987, 107p.
UNSRI, FH
Sumsel, Custom, Change, Village administration
Description of the traditional custom for land and population managment. Main conclusion are that with the new administrative framework there is a breaking line between the formal and informal leaders. Informal leader should be integrated in the new administrative managment for a better transfert of knowledge.
- 1987b "Dari SKEPHI: Analogforestry sebagai suatu alternatif untuk transmigrasi" [*From SKEPHI: Analogforestry as an alternative for transmigration*], *Buletin Bina Desa*, no. 58, April 1987, pp. 1-14, 29.
SKEPHI
Indonesia, Forestry Transmigration; SKEPHI, LSM, Forestry, Ecology
Interview on views on analogforestry as an alternative for transmigration areas to avoid deforestation. In order to prove its views, SKEPHI undertook a study in South Kalimantan which focused on how transmigration could play a role in forest rehabilitation outside Java; however, SKEPHI has not yet entered the "action" level. In the frame work of involving private business in transmigration, imperata grass should be used; besides transmigrants as manpower, they should also be included as shareholders.
- 1988a "Transmigrasi dalam kaitannya dengan pengembangan wilayah" [*Transmigration in relation with the regional development*], Paper presented to Seminar Permasalahan dan Kebijakan pada sektor transmigrasi, Dep. Transmigrasi, Jakarta, 27 Januari 1988.
LDUI/301.326 Dir/t
Indonesia, Regional Development, SSDP, T. Swakarsa
The contribution of transmigration program in terms of infrastructure development, agricultural production etc., towards regional development has been examined. For Pelita V, the policy has been directed to the increase of transmigrants standard of living through SSDP program. With regards to self-supported transmigration, the policy has emphasized on: - Implementation of DBB self-supported transmigration, PIR-plantation and PIR transmigration. - Implementation of self-supported transmigration linking to regional cooperation (region of origin, region of acceptance). - Self-supported transmigration connecting to private enterprise. - Self-supported transmigration connecting to BANPRES (Presidential assistance). - Transmigration financing by self effort.
- 1988b *Buku panduan seminar nasional investasi swasta, pembangunan daerah dan transmigrasi swakarsa di Ujung Pandang, 9-11 Maret 1987* [Guide book for private investment, regional development, and self-initiated transmigration in Ujung Pandang, March 9 to 11, 1987].- Lembaga Kepeloporan Transmigrasi Indonesia, Jakarta, 68 p., tab.
MOT/410.11 Sem/u
Indonesia, T. Swakarsa, Private Investment, Plantation, Regional Development
Articles and speeches of some public figures emphasizing the role of private investment to support the growth of areas outside of Java through the self-initiated migration program or PIR-plantation pattern.
- 1989a "Berbagi bobot peran untuk transmigrasi swakarsa" [*Several important roles of self-supported transmigration*], *Majalah Transmigrasi*, no. 16, Februari-Maret 1989, pp. 5-6.
PPT
Indonesia, T. Swakarsa, Policy, Financing
From the results of the "Transmigration Communication Forum II", these following conclusions have been drawn: 1. Private investor, social organizations, institutions and regional government should be given more opportunities to develop the self-supported transmigration. 2. Facilities preparation should be delegated to private entrepreneurs. 3. Institutions, social organizations as well as regional government play only a part of the operation. 4. Selection and training practice contribute greatly to the self-supported transmigration flow. 5. Self-supported transmigration program will be developed jointly by Central Java and South Sumatra.
- 1989b "Berjabat tangan dengan YSS" [*Shaking hands with YSS*], *Majalah Transmigrasi*, no. 19, Agustus-September, 1989, pp. 26-27, 30.
PPT

Jateng, YSS, Social Institution, NGO, Aid

Soegiyapranata Social Foundation (YSS) provides financial assistance to the transmigration program implementation. Its support depends on the proposal and available budget. Assistance is not necessary under the cash form but can be materials, goods. Another objective of YSS consists in its effort to solve problems dealing with manpower and business opportunity.

- 1989c "Break...break...break: Sisi lain kehidupan transmigran PIR Danau Palau Kecamatan Rembang Daku Kabupaten Muara Enim Suamtera Selatan" [*Break...break...break: Another side of the transmigrants life of PIR Danau Palau, Rembang District, Muara Enim Regency, South Sumatra*], *Majalah Transmigrasi*, no. 16, Februari-Maret, pp. 29-30.

PPT

Sumsel, T. Swakarsa, PIR, Communication

The communication by the HT (Intercom) is popular amongst the transmigrants PIR-Sus Danau Palau, South Sumatra. 50% of them are self-supported transmigrants and the rest are local transmigrants. The conditions of the road and transportaion are relatively good, not so far from Prabumulih and facilities can be found from PTP X to bring the products (oil palm) to KUD's (Village Cooperation Unit) then to the factory. This situation made the transmigrants feel at home.

- 1989d "Pemantapan pelaksanaan transmigrasi swakarsa pengembangan desa potensial (TRANSABANGDEP) dalam Repelita V" [*The resolution to implement the 'self-supported transmigration and potential village' programme (TRANSABANGDEP) during the fifth plan*], *Majalah Transmigrasi*, no. 20, pp. 10-13., ann.

PPT

Indonesia, Policy, Development, Repelita V, T. Swakarsa, TRANSABANGDEP

- 1989e "Pengembangan desa potensial melalui transmigrasi swakarsa" [*Development of potential village through self-supported transmigration*], *Majalah Transmigrasi*, no. 16, Februari-Maret 1989, pp. 7-9.

PPT

Sumsel, T. Swakarsa, Rural Development, Coordination

In relation to the development of rural potential in South Sumatra, 17,032 families of self-supported transmigrants are accommodated between 1988-1989 in the province. They are inserted to villages with less than 500 HH, under productive, isolated and not advanced in agriculture. The purpose for such insertion is to hope that these villages can be developed with transmigrants playing a dynamic role so the skills can faster be transferred.

- 1989f "Peranan pemerintah daerah dalam pelaksanaan transmigrasi swakarsa" [*The role of regional government in the implementation of self-supported transmigration*], *Majalah Transmigrasi*, no. 16, Februari-Maret 1989, pp. 10-11.

PPT

Jateng, T. Swakarsa, Provincial Government, Policy, Coordination

Although there exists a cooperation agreement between the Regional Government of Central Java and South Sumatra in the implementation of the self-supported transmigration, the role of each party was not well defined. Therefore, the regional government of Central Java only covers the policy outline, its government aid and the coordination. As transmigrants usually come from the lower economic group, private investment is needed to help financing the operations. Between 1979/80 - 1989, 2500 HH of self-supported transmigrants are resettled.

- 1990 *The condition of National and Provincial road in the Province of Sumatera Selatan (Estimate: 31 March 1990).*- PU, DBM II Macs roject Sumatra selatan, 1990, 10p.

Sumsel, Statistical Data, Road Condition

- 1990 "Profil proyek pemukiman transmigrasi swakarsa pengembangan desa potensial (TRANSBANGDEP) di Kalimantan Timur 1990/1991. Lokasi: Desa Bantuas & Jelerai Selor" [*Project profiles for TRANSABANGDEP settlement in East Kalimantan 1990/91. Location: Batuas and Jelerai Selor*], Dep. Transmigrasi, Rakor Transabangdep, Surabaya, 19 Maret 1990.

MOT

Kaltim, Socio-economic Potentialities, Potential Villages

- nd *Penggunaan tanah kecamatan kabupaten/kodya propinsi Sumatera Selatan tahun 1978-1980* [The land use in municipalities, regencies of South Sumatra province, 1978-1980].- Direktorat Tata Guna Tanah, Publikasi No. 279.
Sumsel, Land Use, Statistical Data

ARINTADISASTRA, Sumitro

- 1989 *Performance of transmigration beneficiaries in three ecological areas of South Kalimantan, Indonesia*.- Ph.D thesis, University of The Philipines, 164 p., tab.
IPB-Sosok,
Kalsel, Marketing, Ecology, Tidal Swamp, Welfare, Irrigation, T. Swakarsa
Comparing three ecological areas such as area with irrigation, tidal area and area with rain water means also to compare the performance of two types of migrants who settle in these areas, that is to observe their technological adaptation, productivity, and the social institutions which support them. Spontaneous migrants who settle longer in the area and cultivate their land by irrigation technique certainly have better life than general migrants who are relatively new (6 years), both in the tidal and rain water areas.

ARNDT, H.W.

- 1983 "Transmigration: Achievements, Problems, Prospects", *BIES*, XIX, No. 3, Dec 1983, pp. 50-73, tab; bibl.
PPT
Sumatra, Java, Bali, Welfare, Regional Development, Spontaneous Migration, Return Migration, Migration Measurement
It discusses the problems on how to improve the transmigration program, particularly for the low level of welfare of the transmigrants. It also discusses other transmigration problems related to regional development. The flow of return migrants to Java is a warning that transmigration areas really need to be developed regionally, such as by improving the non-agricultural sector, the agricultural technology, the service and industrial sector.

ARNDT, H.W. & SUNDRUM, R.M.

- 1982 "Transmigrasi: Pemukiman atau pembangunan regional ?" [*Transmigration: Settlement or regional development?*], in: *Transmigrasi: Dari kolonisasi sampai swakarsa*. Hardjono, J. (ed.), 1982.
PPT
Indonesia, Transmigration, Regional Development, Labor Force, Wage
This writing tries to see the reorientation of the transmigration program. Transmigration in the sense of pure resettlement of population outside Java should be changed into more regional development orientation. Transmigration should be a vehicle to support labor supply to the outer- islands, based on the assumption that the economic growth (industrial investments) in the outer-islands is the same as in Java.

AZIZ, Iwan

- 1989 "Key Issues in Indonesian Regional Development", in: *Unity and diversity: Regional economic development in Indonesia since 1970*. Hill, H. (ed.), Oxford Univ. Press, Singapore, 1989:55-74.
Indonesia, Spatial Economy Analysis, Regional Development, Decentralization, Industrial Concentration

AZIZ, Nasrum

- 1984 *Tinjauan terhadap adat Tunggu Tubang di daerah Semendo Lembak dan kaitannya dengan kegiatan usaha tani* [Inheritance system Tunggu Tubang among Semendo Lembak and the relation to their agricultural system].- Skripsi, Fak. Pertanian UNSRI, Palembang, 1984, 66p.
Sumsel, Semendo, Inheritance, Custom, Social Organisation, Land Ownership, Land Clearing, Agricultural System

BABCOCK, Timothy

- 1983 "Land settlement in Indonesia: Some current needs for socio-economic research", *Prisma, The Indonesian Indicator*, No. 29, pp. 74-79.
PPT/100547

Indonesia, Land Use, Settlement, Socio-economic Impact

There are three main subjects that need to be observed: - The relationship between migrants and local community - The migrant settlement pattern and - The established social organization integrate them. The three themes above are not only relevant to certain migrants - Javanese and Balinese - but also relevant to the other ethnic groups who used to migrate spontaneously such as people from Bugis, Banggai and Toraja. Observations on migration are important to determine the policies towards spontaneous transmigration.

- 1986 "Transmigration: The regional impact of a miracle cure", in: *Central Government and Local Development in Indonesia*. Mac Andrew, C. (ed.), East Asian Social Science Monographs, Oxford Univ. Press, 1986: 157-189. tab.

PPT

Indonesia, Regional Impact, Transmigration, Budget, Spontaneous Settlement

Throughout the transmigration program, the central government can exercise a control on the regional level. This article actually evaluates the impact of transmigration in the population growth at the regional level, as well as the agricultural development, the socio-economic, growth of the infrastructure, and the job opportunities potential which are affected by the regional political and social problems. In addition, the author gives the share of transmigration programmes in the regional budget. This problem leads to an great effort to increase the standard of living for the transmigrants but not to promote regional growth which in turn should encourage the spontaneous transmigrants to move in.

BACHTIAR, Harsja

- 1974 "Negeri' Taram: A Minangkabau village community", in: *Villages in Indonesia*. Koentjaraningrat (ed.) Cornell University Press, Ithaca New York, 1974.

Sumbar, Cultural Values, Land Rights

It shows the position of clan-territory as an autonomous cultural-territory which has its own customs, and is owned by a certain tribe. Territories in West Sumatra are united in one region called Minangkabau. They believe in the practice that those who clear a forest will automatically own the forest. Even if they only marked the trees with an axe.

BAKIR ALI

- 1988 *Inventarisasi masalah transmigrasi di Sumatera Selatan dan implikasinya bagi alternatif strategi pengembangan daerah* [Transmigration problems inventorization and implication for strategic regional development in South Sumatra].- Pusat Penelitian UNSRI, Palembang, 1988, 145p.

UNSRI

Sumsel, Telang, Batumarta, Land Clearing, Agricultural System, Marketing, Social Welfare, Capital

BAKIR, S.Z. & HUMAIDI, M.

- 1989 "Lampung: Spontaneous Transmigration", in: *Unity and diversity: Regional development in Indonesia since 1970*. Hill, H (ed.), 1989:349-361.

Lampung, Regional Development

BANDIYONO, Suko

- 1982 "Mobilitas dan kebijaksanaan distribusi penduduk" [*Mobility and policy on population distribution*], *Masyarakat Indonesia*, tahun IX, No. 1, pp. 69-80; tab; bibl.

PPT

Indonesia, Java, Population, Mobility, Distribution, Policy, Regional Development, Land Reform

With the objective to develop the understanding of the interrelation between population mobility and population distribution policy, four programs are proposed: 1. To control urbanization in the big cities in order to counterbalance the flow of rural-urban mobility. 2. To improve dwelling and environment in urban areas. 3. To promote the growth of smaller towns and regional centers so people will be less tempted to urbanize. 4. To develop rural areas by transferring people from densely areas to the less dense areas including transmigration.

- 1987 "Menuju transmigrasi swakarsa" [*Towards self-initiated transmigration*], Paper, Seminar relevansi geografi dalam pembangunan, Fakultas Geografi UGM, Yogyakarta, 29 Aug. 1987, 14 p., bibl.

PPT

Indonesia.

- 1988a "Gerak perpindahan penduduk Indonesia berdasarkan SUPAS 1985" [*Population movement in Indonesia according to SUPAS 1985*], Paper, Seminar IPADI, Jakarta, 11-14 January 1988, 26 p., tab, bibl.

PPT

Indonesia, Migration, Lifetime Migration, Population Redistribution, Spontaneous Transmigration

Urbanization in Java and "pull" and "push" factors of the migration to the outer-islands of Java-Madura are analyzed using the 1985 Indonesian Intercensal Survey (SUPAS 1985). This urbanization is mainly due to the attraction of big cities in Java. Migration to Kalimantan is the result of the transmigration program, as well as the mining and forest industries development.

- 1988b "Migrasi penduduk antar propinsi di Indonesia Timur" [*Inter-provincial migration in Eastern Indonesia*], Paper, Seminar pembangunan Irian Jaya dan penelitian ilmiah Indonesia Timur II, Jayapura, 18-23 Juli 1988, 36 p., tab, bibl.

PPT

East Indonesia, Sulsel, Migration Trends, Inter-provincial Migration, Transmigration, Life Improvement

This book presents the migration patterns in Eastern parts of Indonesia. According to the data obtained from the 1985 Indonesian Intercensal Survey (SUPAS 85), those migration patterns are mainly a result of the transmigration program. In addition, South Sulawesi are people who move spontaneously and they dominate in number among the in-migrants.

BAPPEDA Sumsel

- nd *Daftar peta* [List of maps].- Bappeda Sumsel.

Sumsel, List of Maps

BAPPENAS

- 1979 *Rencana Pembangunan Lima Tahun Ketiga 1979/80-1983/84* [The Third Five Year Development Plan (Pelita III) 1979/80-1983/84].- Percetakan Negara, Jakarta, 4 Vol.

PPT/325.4 Ind/r

Indonesia, Policy, Regional Development, Transmigration

Within five years, 500,000 families, mostly from East and Central Java are to be sent out mainly to Sumatra. Transmigration settlement planning is not only for the regional development but also to induce the flow of spontaneous transmigration. The land occupation is based on the "tripartite" principle: one part of the location is saved for local inhabitants, one part for general transmigrants and the rest for self-supported transmigrants. Fundings for self-supported transmigrants are to be increased. Services offered at the transit camps in relation to inter island transport, should be more and more accelerated to help the flow of spontaneous migration.

- 1990 *Rencana Pembangunan Lima Tahun Kelima 1989/1990-1993/94* [The Fifth Five Year Development Plan (Pelita V) 1989/90-1993/94].- Percetakan Negara, Jakarta, 4 Vol.

Indonesia, Policy, Regional Development, Transmigration

BARLOW, Colin & MUHARMINTO

- 1982 "The rubber smallholder economy", *BIES*, XVIII (2), July 1982: 86-119.

Indonesia, Sumsel, Rubber, Smallholding, Technic, Economy

After a general overview of the rubber smallholding situation in Indonesia, the article takes South Sumatra case (the largest province for rubber smallholdings) to analyze the agricultural system (clearing, planting, inter-cropping, tapping), the input and output, processing and marketing situation as well as the socio-economic factors in order to suggest policies for improvement. Farm sample came from Bangka island, Prabumulih, Banyuasin III, Muara Kelingi and Beliti, and Peninjauan.

BENOIT, Daniel

- 1989 "Migrations and structures of population", ORSTOM and Dep. Transmigration, Jakarta, 1989: 125-191, Atlas.

MOT

Lampung, Demography

BUDIARTO

- 1986 *Monografi migrasi permanen propinsi Lampung: Analisa berdasarkan data sensus penduduk Indonesia 1971 dan 1980* [Monography on permanent migration in Lampung province: An analysis based on Indonesian population data from Census 1971 and 1980].- Lembaga Demografi UI & MKLH, Jakarta, 1986, 64 p., tab, ann.

PPT/325.511 Bud/m

Lampung, Lifetime Migration, Migrants

The most important parts of this book is not derived from figures only, but consists of comparisons between migrants and non-migrants in their demographic characteristics, among others age, education, marital status, gender, occupation, and place of living. This factors are deemed to be very important for population growth in Lampung.

BUDIMAN, Arief (ed.)

- 1985 *Transmigrasi di Indonesia: Ringkasan tulisan dan hasil-hasil penelitian* [Transmigration in Indonesia: Summary of research reports].- PT Gramedia, Jakarta, X + 261 p.

PPT/325.5 Bud/t

Indonesia, Bibliography, T.

An annotated bibliography on transmigration document from 1978 to 1984.

BURBRIDGE, P., DIXON, J. & SOEWARDI, B.

- 1981 "Land allocation for transmigration", *BIES*, XVII (1), March 1981:108-113.

Indonesia, Land Allocation, Imperata, Pasang-surut, Forest Reclamation

The author examines the pros and cons in the choice of allocation for transmigration project. There are three types of allocation, they are tidal, high grass land and primary forest. The selection criteria includes the rice productivity as well as cassava's. From this criteria, primary forest seems to be the most suitable, followed by tidal then high grass land. However, the opportunity cost also matches such productivity while grass clearing turns out to be the less expensive and the fastest in operation.

CHARRAS, Muriel

- 1982 *De la forêt maléfique à l'herbe divine: la transmigration en Indonésie, les Balinais à Sulawesi* [From dark jungle to divin herb: Transmigration in Indonesia, the Balinese in Sulawesi].- Les Cahiers d'Archipel N°5, MSH, Paris, 1982, 340 p.

Sulteng, Sulsel, Bali, Transmigration, Spontaneous Agricultural Settlement, Agricultural System, Social Organisation

This research make a comparison between two Balinese communities: one settled by the transmigration programme (Luwu, South Sulawesi) and one who came and settled by themself (Parigi, Central Sulawesi). Migration process, settlement process, working organization, agricultural system, economic result and socialization process are studied for the two groups as well as adaptation of the religious practictis. The study concludes on the necessity to find a middle way of organization between spontaneous settlement and sponsored transmigration in order to preserve the pionneer dynamic of the spontaneous migrants.

- 1987 "Le giroflier: évolution de l'agriculture et transformation de l'espace en Pays Minahasa" [*Clove: agricultural evolution and spatial transformation in Minahasa country*], *Archipel*, 34, 1987: 144-163.

Sulut, Minahasa, Gorontalo, Buton, Bugis, Clove, Coconut, smallholder, Clearing, Agroecconomy, spontaneous settler

The article mention (p.161) the participation of shifting cultivators coming from Buton, Gorontalo and Bugis land, to open frontiere area by clearing land for future clove or coconut plantation with Minahasan owners.

CHEETHAM, Russel

- 1984 "Prioritas bantuan tetap pada sektor pertanian dan sumber daya manusia" [*Permanent assistance priority remains for agricultural sector and human resources*], *Suara Karya*, 01/08/1984.

YTKI

Indonesia, Agricultural, PIR, Human Resources

This is the result from the interview with Russel J. Cheetham (Representative of World Bank in Indonesia). According to him, the World Bank assistance towards PIR still remains the priority because of its very good prospective, especially outside Java. PIR has export potential, provides job opportunities and increases peasants' income. Human resources assistance is directed in particular towards education and vocational training.

CLAUSS, W., EVERS, H.-D. & GERKE, S.

- 1988 "The formation of a peasant society: Javanese transmigrants in East Kalimantan", *Indonesia*, no. 46, October 1988, pp. 79-90, tab.

IPSK

Kaltim, Resettlement, Integration, Regional Development, Return Migration, Family Migration, Migration Decisions, APPDT

An introduction to the life of transmigrants in Rimbayu, East Kalimantan. Two thirds of the transmigrants come from Java, the rest are local transmigrants (APPDT) from Kutai. At the beginning, because of the settlement areas and harvest failures, many transmigrants left the location and returned to Java or moved to other places. On the other hand, many new comers arrived; it is not known whether they were self-supported or not (p. 83). In general, transmigrants went to East Kalimantan because of existing contacts beforehand. The difference in socio-economic patterns and social relation pattern between them happened because of varying socio-economic backgrounds. The ones who succeed usually sent for family members from their native places either as self-supported transmigrants or by following the government program.

COLCHESTER, Marcus

- 1987 "Paradise promised", *New International*, November 1987, pp. 24-25.

Indonesia, Deforestation, Land Rights, Spontaneous Migration, Indigenous Ethnic Groups, Criticism, Environment, Ecology

It portrays the negative aspects of the transmigration such as deforestation, dispute on land right with the local inhabitants, in particular in Irian Jaya. High pressure exercised by international amnesties, human rights agencies and environmentalists as well as the United States on Indonesia to stop the transmigration program. Consequently, the Indonesian government has chosen another alternative for its population migration with the spontaneous transmigration program.

- 1987 "Transmigration update programme slashed in response to transmigration campaign", *The Ecologist*, Vol. XVII, No. 1, pp. 35-41.

Indonesia, Environment, Foreign Aid, Criticism

An environmentalist interpretes that the correlation between the critical analysis towards transmigration program (made by some group of environmentalists, concerning human rights and tribal society), and the decline of the transmigration budget is positive. If that is the case, foreign aids agencies should think over whether the funds for transmigration program will be appropriately used to improve environment (in term of transmigrants attitude towards tropical forest use and local ethnics). The author also recommends donnors to investigate the further impacts of the "new Indonesian government policy" regarding the "spontaneous transmigration" and the justification of 50% increase in fundings for the low income housing.

COLLIER, William

- 1978 "Development Problems and conflicts in coastal zone in Sumatra: Swamps are for people", Paper (mimeo) at *Programmatic Workshop on Land-Water Interactive Systems*, Bogor, 1978.

Sumatra, Planning, Coastal Swamp, Development

- 1979 "Social and economic aspects of tidal swamp land development", Paper (mimeo) at *Symposium on Tidal Swamp Land Development*, Palembang, 1979.

Sumatra, Kalimantan, Tidal Swamp, Land use, Socio-economy

- 1982 "50 tahun transmigrasi spontan dan transmigrasi pemerintah di tanah berawa di Kalimantan" [*50 years of spontaneous and sponsored transmigration in Kalimantan*], in: *Transmigrasi dari Kolonisasi sampai Swakarsa* [Transmigration: From colonisation to spontaneous]. Joan Hardjono (ed.), Gramedia, Jakarta, pp. 113-122.

PPT

Kalsel, Tamban Luar, Tamban Lupok, Kalteng, Samada Kecil, Spontaneous Migration, Pasang-surut, Agricultural system, Mixed Cropping, Rice, Coconut

It deals with five tidal settlement areas. Three of them are spontaneous transmigration settlement among which one is the most successful area. The reasons of success distinguished themselves in many ways from the general transmigration scheme. These spontaneous transmigrants applied local agriculture pattern, they can purchase uncultivated land from others, they are provided with additional land by the government since they are successful and have been settled for a long time in the area. It is also suggested that transmigration can determine the choice of suitable crops/plants while the Central Government will concentrate on the improvement of the irrigation system and the environment.

- 1972 "Smallholder rubber producer's replanting and use of improved technology on Sumatra", *Agro-Economic Survey*, Bogor, 1972.

Sumatra, Smallholder, Rubber, Improvement

CSIS

- 1985 *Transmigrasi 1980* [1980 Transmigration].- Clipping vol. I & II, Biro Informasi dan Data, Jakarta.

PPT/325.5 Cen/t

Indonesia, Policy, Target, Implementation, Problems, Evaluation

The collection of the newspaper clippings on transmigration from CSIS covers mostly central and regional government policies, targets to be achieved, assistances given, obstacles and evaluation as well as various opinions (feed backs) on transmigration topic. Not systematic, but clear and giving chronological insights on transmigration from the press that shows a real interest to the issue due to the success of the program during Pelita III and moreover since five Ministries are involved in the present Pelita.

CUNNINGHAM, Clark

- 1958 *The postway migration of the Toba-Bataks to East Sumatra*.- Yale University, Southeast Asia Studies, Cultural report series, 1958, XII+189 p., tab, bibl.

LDUI/301.326 Cun/p

East Sumatra, Sungai Bengkuang, Kampung Rawang, Pioneer, Rice, Batak, Javanese, Banjar, Melayu

A socio-anthropological approach is used in this study to describe the migration process of the Toba-Batak ethnic from the mountain to the East Sumatra Coast on search for land which is difficult to be owned in their place of origin. Their conflict with Javanese people and their integration process (internal as well as inter-tribal) are also explained in this report.

DAVIS, Gloria

- 1976 *Parigi: A social history of the Balinese movement to central Sulawesi 1907-1974*.- PhD, Stanford University, 1976, VI+315 p., tab, map, app, bibl.

MOT

Sulteng, Spontaneous Migration Process, Social History, Exile, Minorities, Balinese, Javanese, Hinduism, Christianity, Green Revolution

First, the isolation stage, that is the exile of all political and traditional dissidents. Second, the pioneer stage comes along with the initiative from inhabitants of Parigi calling for people from Bali to open new frontier. During this stage, Christians first have played an important role; Hindus pioneers did start to moved after 1965. The factor inspiring the migration process of Balinese people consists in the successful planting of a new rice variety in Parigi. The third stage is characterized by "followers", that is migrants sponsoring by the government under the general transmigration program for people from Bali and Java. Economical motif is the principal factor that explains the presence of migrants in Parigi and their figures are such that the dichotomy "Christian - Hindu" become effaced and given place to the "pragmatism" in search for a better land.

- 1978 "Berbagai cara beradaptasi: Kaum migran Bali di Sulawesi Tengah" [*Some ways of adaptation: The Balinese migrant community in Central Sulawesi*], in: *Pemukiman di Asia Tenggara: Transmigrasi di Indonesia*. Mac Andrews, Rahardjo (ed), Gadjah Mada University Press, Yogyakarta, 1978:183-189.

PPT/325.33.5 Mac/t

Sulteng, Spontaneous Migrants, Balinese, History, Adaptation

A brief history of Balinese migration to Central Sulawesi is given, including earlier migrations not connected to the Dutch and Indonesian transmigration programs. The theme of the paper is the return to Hinduism and other traditional Balinese practices by the longer established migrants (many of whom had converted to Christianity) after the arrival of transmigrants in a large scale in the early 1920's.

- 1982 "Pelaksanaan transmigrasi umum di Way Abung, Propinsi Lampung" [*General transmigration implementation in Way Abung, Lampung Province*], in: *Transmigrasi: Dari kolonisasi sampai swakarsa*. Hardjono, J. (ed.), 1982.

PPT

Sumatra, Lampung, T. Umum, T. Spontan

It explains the difference in development level between the general and spontaneous transmigrants. The latter who come much later to replace the drop-out general transmigrants, are able, however, to catch-up the success of longer stayed general transmigrants. This is due to the fact that former general transmigrants had to face greater natural challenges and also, spontaneous transmigrants have more

money and skills, they generally know the environment better and have relatives who have already settled at the location.

- 1982 "Transmigrasi swakarsa: Kasus Parigi" [*Spontaneous Transmigration: Case study of Parigi*], in: *Transmigrasi dari Kolonisasi sampai Swakarsa*. Joan Hardjono (ed.), Gramedia, Jakarta; pp. 113-122.

Sulteng, Massari, Parigi, Torue, Individual Migration, T. Swakarsa, Green Revolution, Labor Force, Hinduism, Christianity

It covers the social history of transmigration settlement in Central Sulawesi, which was pioneered by some exiled Balinese families in the beginning of the Century. The movement has grown very fast due to the pioneer spirit of Christian and Hindu Balinese, the superiority and the variety of rice, the irrigation system, the economic pressure in Bali as well as the existence of general transmigration program in 1967. Important findings from the study can be resumed as follows: - Firstly, the lack of labor force in Central Sulawesi encourages spontaneous migration. - Secondly, the migration to this area can be accelerated because there have been migration before.

DEPDIKBUD

- 1979 "Adat dan upacara perkawinan daerah Sumatra Selatan" [*Wedding in South Sumatra: Custom and rituals*], Pusat penelitian sejarah & budaya, 1979.

UNSRI

Sumsel, Anthropology

- 1982 *Sejarah pengaruh Pelita terhadap kehidupan masyarakat pedesaan di daerah Sumatera Selatan* [History of the Pelita influence upon villagers life in South Sumatra].- Direktorat Sejarah dan Nilai Traditional, Proyek Inventorisasi dan Dokumentasi

UNSRI

Sumsel, Socio-economic, Pelita, Prapelita

It explains the influence of Pelita upon the social life of South Sumatra villagers, especially in relation to government and politics matters.

- 1986 *Dampak modernisasi terhadap hubungan kekerabatan daerah Sumatra Selatan* [Modernisation impact on kinship in South Sumatra].- Dir. Sejarah dan Nilai Tradisional, Proyek Inventarisasi dan Dokumentasi Kebudayaan Daerah, 1986.

UNSRI

Sumsel, Anthropology, Social Change

- 1987 *Sistem ekonomi tradisional daerah Sumatera Selatan* [Traditional economic system in South Sumatra].- DEPDIKBUD, Proyek inventarisasi dan dokumentasi kebudayaan daerah, 1986/1987, 102p.

Sumsel, Agricultural Economy, Agricultural System, Agricultural Technic

Description of agricultural system and economy in South Sumatra through to case studies in Musi Banyuasin regency. From humid rice to shifting cultivation, sharecropping arrangement and consumption.

- 1987 *Sistem ekonomi tradisional daerah Sumatra Selatan* [Traditional economic system in South Sumatra].- Proyek Inventarisasi dan Dokumentasi Kebudayaan Daerah, 1987.

UNSRI

Sumsel, Anthropology, Economy

DESTRIANI

- 1986 *Masalah kependudukan dan transmigrasi swakarsa* [Population and spontaneous transmigration problems].- Jurusan Ilmu-ilmu Sosial Ekonomi Pertanian, Fakultas Pertanian, IPB, 30 pp.

IPB-Sosek

Indonesia, T. Swakarsa, Definition, Population

This thesis describes various types of spontaneous transmigrants, their success and their problems. This is a study based on literature data.

DJAILANI

- 1980 "Melongok proyek transmigrasi Pematang Panggang I: Walau ratusan datang kembali, yang spontan lebih banyak" [*Pematang Panggang I: although hundreds back home, spontan lebih banyak*]

spontaneous settlers are much more numerous], *Suara Karya*, 14/08/1980.

PPT

Sumsel, OKI, Spontaneous settlement, Transmigration

After 5 years the number of spontaneous migration to Pematang Panggang I seems to be bigger than the transmigrants who left the location. The fertile land is a great attraction to the spontaneous migrants to move in.

DJAUHARI, Aman

- 1977 *Cropping patterns in Indramayu and Central Lampung Area: Result of a base line survey.*- Lembaga Pusat Penelitian Pertanian, Bogor, XIV, 49 p., tab, ann.

YTKI/631.507 Lem/c

Jabar, Indramayu, Lampung, Lampung Tengah, Cropping Systems, Labor Utilization, Level of Technology, Input-output Analysis

From the differences between the three irrigation access levels, Indramayu agriculture is more oriented to rice crop, while in Lampung a variety of crops can be planted. Labor is contracted in Indramayu due to the field work dimension while in Lampung, unpaid family workers are used. In consequence, the technological awareness is better in Indramayu than in Lampung and the input-output ratio gives more advantages to Indramayu farmers.

DJENEN

- 1972 *Sumatera Selatan, di pandang dari sudut geografi, sejarah dan kebudayaan* [South Sumatra: geography, history and cultural overview].- Dir. Jend. Kebudayaan, Proyek Inventorisasi dan Dokumentasi Kebudayaan Nasional, 1972, 206 p.

Sumsel, Geography, History, Custom, Marga

DOVE, Michael

- 1983 "Theories of swidden agriculture and political economy of ignorance", *Agroforestry Systems*, 1, 1983: 87.

Swidden Cultivation, Agricultural System, Environment Conservation

DOVE, Michael (ed.)

- 1988 *The real and imagined role of culture in development, case studies from Indonesia.*- Univ. of Hawaii Press, 1988, 289 p., bibli., index.

Indonesia, Kalimantan, Java, Sulawesi, Flores, Community Development, Social Change, Social Institutions

EFFENDI, Tadjuddin Noer

- 1979 "Pattern of migration to an industrial areas: A case study in Lhokseumawe, Aceh, Sumatra, Indonesia", *The Indonesian Journal of Geography*, Vol. 9, no. 37, June 1979; pp. 33-44.

LDUI

Aceh, Lhokseumawe, Motivation, Interaction, Ethnic Relations, Industry, Migration Decisions

This study assesses the migration pattern to the industrial area of Lhokseumawe, North Aceh, in particular the migration motivation, the characteristics and the social integration for migrants originally from other places of Sumatra as well as from Java. Education seems to be a stronger "push" factor than other socio-cultural factors. The social integration with other ethnics can not be realised without hurt due to tradition and job competition. The migration is done by stage, first the individual, then family and others (single women). This pattern applies to spontaneous migrants.

EVANS, D. & HASIBUAN, N.

- 1989 "South Sumatra: Dualism and Export Orientation", in: *Unity and diversity: Regional development in Indonesia since 1970*. Hill, H. (ed.), 1989:455-472.

Sumsel, Regional Economy

FACHRURROZI, Saleh

- 1984 *Aspek tata niaga dalam pengembangan wilayah transmigrasi pasang-surut Delta Upang, Propinsi Sumatera Selatan* [Marketing aspects in the regional development of tidal transmigration area: Delta Upang, South Sumatra].- Fakultas Pasca Sarjana, Institut Pertanian Bogor, 1984, 98 p., tab, map.

IPB

Sumsel, Delta Upang, Environment, Welfare, Pasang-surut, Marketing

It discusses the commerce of rice, of other crops as well as of necessity goods. Local traders play an important role regarding the rice trading, but for the commerce of other necessity goods, regional traders hold the market. Village retailers (*warung desa*) form the link between producers and customers in dealing with other crops. Trading activity is growing due to the rice production surplus and transportation development (less than 2 hours from Palembang). Village Cooperation Units (*KUD*) still not fully act as village economic institution due to the "oligopsony" market situation where there is an excess of whole sellers, retailers and marketing process. Transportation constitutes the highest cost.

FACHRURROZI, S. & MAC ANDREWS, C.

- 1978 "Empat puluh tahun transmigrasi di Belitung, Sumatera Selatan" [*Forty years of transmigration in Belitung, South Sumatra*], in: *Pemukiman di Asia Tenggara: Transmigrasi di Indonesia*. Mac Andrews, Rahardjo (eds.), Gajah Mada Univ. Press, Yogyakarta, 1978.

PPT/325.33.5 Mac/t

Sumsel, Belitung, Land Use, Integration, T. Swakarsa, Income Generating, Regional Development, Contemporary History

This study which is meant to bridge the difference between macro and micro research discusses in a descriptive way about land problems, land fragmentation, the developing of self-supported transmigration as well as social integration of transmigrants. In short, it includes the following findings: 1) Land disputes occur because there exist no clear agreements between the local population and the government. 2) Self-supported transmigrants entering Belitung are attracted by economic opportunities like jobs and trade. In general, they are educated (82,5% as compared to government sponsored transmigrant, of whom 67,6% are illiterate) 3) Social integration of transmigrants into the local community appears to be quite uniform in all the villages or research locations.

FADJAR, Abdullah

- 1988 "Bumiayu, potongan pulau Jawa di Sulawesi Selatan" [*Bumiayu, a piece of Java in South Sulawesi*], in: *Migrasi, Kolonisasi, Perubahan Sosial*. Sahur et al (eds.), Pustaka Grafika Kita, Jakarta, 1988: 104-198, tab.

Sulsel, Polewali, Mamasa, Wonomulyo, Bumiayu, Political Unrest, Landlessness, Colonial History

The use of "life history" method relates the history of Bumiayu settlement in South Sulawesi since they were placed in the "debt system" during colonization era. But then the political situation stopped its accelerated growth. Since the beginning, due to the success and the land fertility of Bumiayu, numerous Mandarese have joint the settlement, followed by Javanese. But at this moment, the second generation already realizes the limitation of agricultural cultivation; even now 28% of the population are farm-lands who do not own any land or are out of work because some of the rich workers own tractors.

FIC, Servatius Br.

- 1987 "Transmigrasi berbeda dengan kolonisasi" [*Transmigration is different from colonization*],

Buletin Bina Desa, Jakarta, no. 58, April 1987; pp. 20-22.

SKEPHI

Jateng, Population, T. Swakarsa Murni, LSM, Aid

NGO's (in particular Soegiyapranata Social Foundation) played a role in the transmigration program, since 1967 - 1986, by sending 2,222 families of self-supported transmigrants from Central Java to various settlement areas. Assistance from YSS consisted of providing transport, food during the journey, survival guarantee for six months, education and agrocltural training as well as motivation. This article also describes the transmigration target as different from colonization, besides providing an assesment alternative towards the transmigration program.

GARDINER, Peter

- 1990 "The impact of development policies and programmes on population distribution and mobility", Communication to the PEP-LIPI, Unpublished paper, 1990.

PEP

Indonesia, Regional Development, Migration, Population Distribution, Agricultural Policies, Industrial Concentration

GOESWONO SOEPARDI

- 1988 "Menjinakan peladang dan penebang hutan" [*To tame shifting cultivation and clearing forest*], *Kompas*, 19/04/1988.

Indonesia, Environment Conservation, Shifting Cultivation, Forest Concession

General discussion to stop the large forest concession and to give the means for a more permanent agriculture to the shifting cultivators but also the new transmigrant settlers.

GONDOWARSITO, Ria

1990 "Transmigrasi bedol desa: Inter-island village settlement from Wonogiri to Bengkulu", *BIES*, XXVI (1), April 1990: 48-68.

Bengkulu, Transmigration, settlement

Short artical on the history of a village entire resettlement, comparaisn of the situation between those in resettled in Sumatra and those who settled down near the origin village flooded for a dam building.

GREGERSEN, Hans et al.

1989 *People and Trees: The Role of the Social Forestry in Sustainable Development.*- Economic Development Institute of the World Bank, EDI Seminar series, Washington, 273 p, Bibliography, Index.

World, Social forestry, Planning, Implementation

GUINNESS, Patrick

1977 *Transmigrants in South Kalimantan and South Sulawesi: Inter-islands government sponsored migration in Indonesia.*- Population Institute, Gadjah Mada University, Yogyakarta, VI+148 p.; tab; bibl.

PPT/325.5 Gui/t

Kalsel, Binuang, Sulsel, Luwu, Spontaneous Migration, Javanese, Banjarese, Buginese

Most of this report covers the programed migration in South Kalimantan and South Sulawesi. One chapter, however, deals with the spontaneous transmigration in Binuang which is not assisted by the government. These people have migrated to this area before the governmental migration program started. Their farming methods which can be adapted to the local techniques as well as the availability of facilities around the location help to speed up the welfare of the spontaneous migrants and attracts their relatives to join them from Java or Madura. Their willingness to share the power with local people is another factor that makes them well integrated in the local society.

HABIDUN, Ismail

1982 "Pertumbuhan dan persebaran penduduk di Sumatera bagian selatan" [*Population growth and distribution in Southern Sumatra*], *Warta Kependudukan*, Th. IV, no. 1, April 1982, pp. 1-19, tab.

LDUI

Sumsel, Population Growth, Population Distribution

During these two decades, the population growth of Southern Sumatra (Lampung, South Sumatra, Bengkulu and Jambi) has increased to 3,27% (1961-1971) and 4,38% (1971-1981), rate much higher than the national growth which is 2.1% and 2.32% while Lampung is the faster with 5.29% and 5.77% respectively. The density in Lampung is also very high, 139 inhabitants per km² in comparison to Jambi with 32 inhabitants per km². Rural population counts for 90% in Lampung and 70% in Jambi.

1982 *Saluran tataniaga karet rakyat* [Marketing network for rubber smallholders].- UNSRI, Palembang, 1982, 76 p.

UNSRI

Sumsel, Musibanyuasin, Rubber smallholding, agricultural System, production, Marketing

HAMID, A., TAHIR, K. & RAHMAN, P.

1980 *Penelitian potensi perekonomian daerah Sulawesi Selatan: Suatu studi identifikasi sosio-antropologi ekonomi tentang tanah, wiraswasta dan migrasi ke luar* [Research on economic potential of South Sulawesi: an identification study on social, anthropological, and economical aspects of land, private investors, and out-migration].- LEKNAS-LIPI & Universitas Hasanuddin, Ujung Pandang, 1980, VI+158 p., tab, bibl.

PPT

Sulsel, Spontaneous Migration, Cultural Value, Kinship, Economy, Politic, Makasarese, Bugis, Mandarese

In addition to the economic and political roles, the cultural roles also contributed to a high level the outmigration pattern of the Bugis tribe of Makasar. Moreover, this engenders the lost of their heritage as well as of their territorial attachment sentiment but not of their kindship. As fishermen who are greatly flexible, they tend to translate the sailing regulations and transfer them into their new settlement.

Political crisis in South Sulawesi during the 50's and 60's and the low activities in the agricultural produces in the 70's, have forced them to move out. This fact lowered the population growth rate down to 1.4% per annum. This rate is even under the average of the 1971 national growth rate which is 2.3% per annum.

HANSON, Arthur

- 1982 "Transmigrasi dan pengembangan wilayah marjinal" [*Transmigration and marginal regional development*], in: *Transmigrasi: Dari kolonisasi sampai swakarsa*. Hardjono, J. (ed.)

PPT

Indonesia, Frontier area, Transmigration

It elaborates that marginal land, in particular the swamp and dry land (yellow-red podzolic), has a great potential for the transmigration development. But it needs non-conventional agricultural system and a lot of funds. For swamp areas, the Bugis people are quite successful, however, attention needs to be paid more towards the environmental impact. Dry land is more suitable for plantation especially on podzolic land. When the farmers used to plant foodcrops, they can not enjoy the result immediately, particularly if they have to use new method, but this will certainly benefit them in the future. Experiences on marginal land through the transmigration program still need to be renewed.

HANSON, A. & KOESOE BIONO

- 1979 "Settling coastal swamplands in Sumatra", in: *Developing Economies and the Environment: The Southeast Asian Experience*. McAndrews and Chi Linsien (eds.), Singapore, 1979.

Sumatra, Swamp, settlement, Agricultural System

HARDJONO, Joan

- 1977 *Transmigration in Indonesia*.- Oxford University Press, Kuala Lumpur, 1977, XV + 116 p., tab, map, index, bibl.

YTKI/D.1402

Indonesia, History, Policy, Problems, Spontaneous Migrants

This book gives one of the best overview of the planned agricultural colonisation during the Dutch and until 1975, under the Republic of Indonesia. The author gives the right definitions for each type of transmigrant. Every main islands (sending and receiving ones) are reviewed in terms of geographical setting and resettlement already realized.

- 1978a *Access to land in a Javanese settlement in South Sumatra, Indonesia*.- Bach. Thesis, University of New England, N.S.W, 1978.

Sumsel, Belitang, Spontaneous migration, Spontaneous settlement, Land Access, Javanese

- 1978b *The promotion of unassisted transmigration in Indonesia*.- International Labor Organization, Jakarta, 79 p., bibl.

YTKI/304.809 Har/p

Indonesia, Sponsored Migration, T. Spontan, T. Swakarsa, T. Sisipan, Programme, Evaluation

The author gives usefull definition of all the transmigrant classification and put the right definition on true spontaneous migrants. She identifies several current concepts on transmigration and tries to evaluate them by showing the strength and the weakness especially in promoting the unassisted transmigration. It is also mentioned that the critical point for unassisted transmigration lies on land issue. If this issue does not tackle properly, could develop further disaster such as destroying forest, unplanned settlement, social conflicts. The author also mentioned the role of government especially in spreading information, facilitating growth centres in outer-islands, and encouraging the participation of private sectors.

- 1978c "Transmigration: A new concept ?", *BIES*, Vol. XIV, no. 1, 1978: 107-112.

PPT

Indonesia, Land Settlement, Labor Force, Regional Development

The author argues that transmigration, as land settlement, can not be separated from region development at least in a few cases. This study also criticizes the "Transmigration Model", introduced by Arndt and Sundrum, which emphasises transmigration as a mean to supply labor force. According to the author, such model can only be justified if the "wage levels" out of Java are much higher than in Java, and this kind of criteria can only be implemented by foreign oil dwelling activities. Another critic points out that there is no guarantee of job opportunity for the second generation of transmigrants. However, if transmigrants is oriented towards regional development, as interpreted by the Department of Public

Works, which relates it to "Highway" construction, the costs will be far too expensive. There should exist a few possibilities of "mixed" development to provide job to local transmigrants by the government and the private sector in order to support the "land settlement". These possibilities need to be studied further and not only at the conceptual stage.

- 1980 "Transmigrasi umum dan swakarsa dalam konteks target-target Pelita III" [*General and self-initiated transmigration in the target context of Pelita III*], *Prisma*, no. 5, Mei 1980: 3-11.

Indonesia, T. Umum, T. Swakarsa, Target, Pelita III, Constraints, Land Clearing, Information, Rekomendasi Policy

This article focuses on the primary problems which related to the target increase of the transmigration program in Pelita III. Considering problems occurred in Java, particularly in urbanization and unemployment matter, this article supports the target of Pelita III. In this case, obstacles which were experienced by the general transmigration implementation needed to be reconsidered. Those obstacles are as follows: - Land allocation. - Good coordination in order to move and to place the transmigrants. - Land and soil allocated sometimes were not appropriate for certain crops. Since the objectives of transmigration program lead towards the implementation of self-initiated transmigration, those obstacles should strongly be taken into account, particularly in dealing with land distribution. There is no need to make regulations to transfer or to place the self-initiated transmigration but there will be a need for land regulations and land allocation policy. As a consequence, a tripartite pattern should be implemented in order to stop the inserted transmigration, to underline and clarify the role of regional authorities, to enhance the participation of private sector in the outer-islands.

- 1986a "Beberapa segi geografis daripada transmigrasi swakarsa" [*Some geographical aspects of the self-supported transmigration*], in: *Transmigrasi di Indonesia 1905-1985*. Swasono, S. E. & Singarimbun, M. (eds.), 1985: 287-297.

PPT/325.5 Swa/s

Indonesia, Lampung, T. Swakarsa, Reserved-Land, Pelita IV

The author emphasizes the important impact of suitable land as a pull factor to attract the self-supported transmigrants from Java-Bali. Land availability became an urgent matter due to special targets for this category of transmigration which have been continuously increased throughout Five Year Development Plans (Pelita). If there is not enough land available, the self-supported transmigration flow will decline or illegal forest clearing will take place.

- 1986b "Transmigration: Looking to the future", *BIES*, Vol. 22, No. 2, August 1986: 28-53.

PPT

Java, Bali, Sumsel, Spontaneous Migration, T. Sisipan, Prospect

Description is made of the natural and structural obstacles of the transmigration program, and of their connection with the future transmigration planning, especially the spontaneous transmigration. The author also analyses the problems and results of transmigration during the Third and the Fourth Indonesian Five-Year Development Plans (Pelita III-IV) with the objective to formulate future transmigration policies. One of the policies is to increase spontaneous transmigration by determining integrally the implementation and guidance of inserted-transmigration.

HARDJONO, Joan (ed.)

- 1982 *Transmigrasi: Dari kolonisasi sampai swakarsa* [Transmigration; from the colonization to the self-initiated].- Gramedia, Jakarta, 198p., tab, index, bibl.

PPT/325.33 Har/t

Indonesia, Sumatra, Kalimantan, Sulawesi, History, T.Swakarsa, Land Use, Settlement, Culture

This study deals with the government policies (Dutch and Indonesia) in moving population from Java to the outer islands by transmigration system, contract-workers, bawon system as well as spontaneous migration. From the quantitative point of view, spontaneous migration is generally more successful although it doesn't mean that their life quality will be improved. Cultural problems have always been an obstacle that transmigration program should encounter, besides funds limitation, manpower and land availability problems. However, the government determines to provide necessary land by carefully planning its use. It is the primary key to make general or spontaneous migration a success.

HARDJOSUDARMO, Soedigdo

- 1965 *Kebijaksanaan transmigrasi dalam rangka pembangunan masyarakat desa di Indonesia* [Transmigration policy within the rural community development framework in Indonesia].- Bhratara, Djakarta, 219 p., tab, bibl.

LDUI/325.9 Har/k

Indonesia, Policy, Development, Contemporary History

Besides reviewing many aspects of the transmigration policy, this book also describes various types of transmigrants that come across during the period between 1953-1960 (see page 125-146). Serious problems have been encountered dealing with personnel equipments, expenses and operational formulation. One of the solutions to these problems can be achieved through the implementation of spontaneous transmigration so the government main task remains only to create attractive environment for new comers.

HASIBUAN, Ismail

- 1980 "Persebaran penduduk di Sumatera Selatan" [*Population distribution of South Sumatra*], *Warta Kependudukan*, Th. II, no. 2, 1980; pp. 4-21, tab; bibl.

LDUI

Sumsel, Population Distribution, Contemporary History

This article discusses problems of the population distribution of South Sumatra based on the 1961 and 1971 Population Census Data. In general, the distribution pattern in 1971 and in 1961 is relatively the same with regards to the rural-urban disparity and density. Taking for example, Musi Banyuasin and Musi Rawas districts have a lower density in comparison to Kodeg Palembang district. Urbanization can be perceived as a consequence of rural-urban income disparity factors and the existence of facilities in urban areas. The author also looks at the possibility of the linkage between the transmigration and the regional development that will influence the population distribution in the future (4.1.).

HASIBUAN, Nuriman

- 1980 "Pembagian pendapatan dan tanah usaha transmigran: Kasus desa Kemumu di Bengkulu Utara" [*Income distribution and cultivated land among transmigrants: the case of Kemumu Village in North Bengkulu*], *Masyarakat Indonesia*, Juni-Desember 1980, Th. VII, no. 1-2, pp. 93-108.

PPT

Bengkulu Utara, Bawon system, T. Umum, T. Sisipan, Income Distribution

A study on village level, an old settlement created before World War II, focussing on income distribution and the reasons for shortcomings. Differences in income mainly occurred due to unequal access to irrigation water and off-farm employment. The situation turned out to become the same as in Java, while land become scarce, new and replaced transmigrants were still arriving.

- 1986 *Evaluasi Perusahaan Inti Rakyat Perkebunan (PIR-Bun)* [Evaluation towards Nucleus Estate Plantation].- Fakultas Ekonomi Universitas Sriwijaya, Palembang, 44 p., tab.

PEP/631.96 Has/e

Indonesia, PIR, Labor Force, Income

The evaluation towards Nucleus Estate Plantation (PIR) is conducted covering problems such as peasant's income, job opportunity, informal sector, the roles of nucleus estates, involved institutions, marketing and the coordination. Financial support seems to be the primary problem occurring in nucleus estate plantation, although certain community is willing to participate.

HASSAN, Tjetje Soekarna

- 1987 *Pengaruh lamanya tahun pembukaan hutan terhadap beberapa sifat tanah podzolik merah kuning Sumatera Selatan dan kaitannya dengan proses degradasi tanah* [The influence of land allocation duration on the quality of podzolic land in South Sumatra and its linkages to land degradation process].- X+223 pp. Disertasi sebagai salah satu syarat untuk memperoleh derajat Doktor pada Fakultas Pasca Sarjana, IPB.

Sumsel, Soils, Forest Reclamation, Agriculture, Ecology

HATLEY, Ron

- 1989 "NGO's want a greater say on transmigration", *Inside Indonesia*, April 1989, pp. 33.

Indonesia, NGO, World Bank, Monitoring, Environmental, Land Reform, Welfare

Some international non-government organizations (NGO) ask the World Bank to pay more attention on the environmental and social aspects of the transmigration program. They also expect the World Bank to let the Indonesian Institutions monitoring its implementation. The World Bank is also demanded to find new alternative for transmigration program and family planning as well as land reform for Java and Bali. To avoid failures, local public figures and social institutions need to be involved.

HEEREN, H.J.

- 1979 *Transmigrasi di Indonesia: Hubungan antara transmigrasi dan penduduk asli, dengan titik berat Sumatera Selatan dan Tengah* [Transmigration in Indonesia: Relations between transmigration and local population, with focus on South and Central Sumatra].- Gramedia, Jakarta, XV+208 p., tab, index, map, bibl.

PPT/325.33 Hee/t

Sumsel, T. Swakarsa, Ehtnic Relations, Integration, Conflict, Policy

Spontaneous transmigration from Java to Lampung is reviewed: 1) From the political situation concerning transmigration issues as well as the economics conditions in Java and Lampung 2) Legal reactions of the traditional communities and clans in Lampung as well as the respective government policies and attitudes. 3) Integration process regarding migrants and non-migrants. The scope of this paper is characterized by the description and evaluation towards the politics or transmigration systems, whereas regarding migrants and non migrants the focus lies on integration, by using an analytical approach based on migration sociology.

HIDAYATI, Deny et al.

- 1987 *Arus modal antara daerah transmigrasi dan daerah asal (studi kasus di Sungai Pagar - Riau)* [Capital flow between transmigration area and places of origin: Case study of Sungai Pagar-Riau].- Proyek Penelitian Dinamika Masyarakat - LIPI, Jakarta, III+67 p.; tab.

PPT/325.33 Hid/a

Riau, Sungai Pagar, Regional Development, Pull-factors, Migration Determinants, Capital Flow, Welfare

From the economic data on transmigrants one can conclude that: - Besides contributing to the regional growth, the capital flow also becomes a social bond between the new settlement and the place of origin. -

In terms of volume, the capital flow indicates that a better income level has been reached by the transmigrants. - Contribution to the surrounding areas of Riau is also relevant, particularly in term of food supplies.

HILL, H. & WEIDEMANN, A.

- 1989 "Regional development in Indonesia: Patterns and issues", in: *Unity and diversity: Regional development in Indonesia since 1970*. Hill, H. (ed.), 1989: 1-53.

Indonesia, Regional Development, Economy, National

HUGO, Graeme

- 1980 "Indonesia: Population distribution and redistribution", *Majalah Demografi Indonesia*, no. 13, Th. VII, Juni 1980: 70-100., tab, map; bibl.

LDUI

Indonesia, Population, Mobility

The author examines the population distribution according to the 1961 and 1971 censuses and 1976 inter census surveys. There is often mentioned imbalance between Java-Madura and Bali which only represents 6.90% of the total surface of the country but are occupied by 64.8% of the national population. Since 1930, the proportion of Central and East Java population has decreased in comparison to North Sumatra and Lampung as well as to West Sumatra, South Kalimantan, South Sulawesi and NTT. For these two provinces of Java, the main cause of the proportional population decrease result from the transmigration program, the migration to Jakarta or to other places and the slowing down of the natality rate while for other provinces of Java, the population decrease is mostly due to out-migration. Some provinces including Jakarta grew quickly (annual 3%), whereas Ujung Pandang and Manado even 7% yearly from 1930 - 1976. A high population growth is noted for Sumatra, due to natural growth, high natality rates and being the foremost destination for transmigration.

- 1982 "Sources of internal migration data in Indonesia: Their potential and limitations", *Majalah Demografi Indonesia*, no. 17, Tahun ke IX, Juni, 1982: 23-52, tab; bibl.

LDUI

Indonesia, Census, Internal Migration, Bibliography

This article analyses the changes and the quality of the 1971 and 1980 population censuses data. Besides these, it also reviews data which are used for analysing population migration.

HUGO, Graeme et al.

- 1987 *The demographic dimension in Indonesian development*.-Singapore, Oxford Univ. Press, 1987, 417 p., tab., bibli.

Indonesia, Demography, Migration, Interregional Variation, Labor Force, Population Planning

A reference book on demography with large knowledge of regional setting variation.

HUMAI, H. & IMRON HUSIN

- 1979 *Profil perekonomian Sumatera Selatan* [Economic profil of South Sumatra].- Lembaga Penelitian Ekonomi dan Masyarakat, UNSRI, Palembang, 1979, 95 p.

UNSRI/338.959.816.Hum

Sumsel, Population, Labor Force, Agriculture, Mining

HUSIN, Imron

- 1977 "The growth of urban population in South Sumatra province", *Majalah Demografi Indonesia*, no. 8/Th. IV Desember 1977.

LDUI

Sumsel, Urban Growth, Social History

According to Kingsley Davis, South Sumatra is an urban province because 27% of its inhabitants live in the cities (urban areas). This article tries to figure out the urban growth in South Sumatra during various periods and some influencing factors. Many areas have been reviewed since 1920.

- 1978 *Migration to South Sumatra and some of its implications*.- PhD, ANU, Canberra, 1978, XIV + 173 p., tab, app, bibl.

LDUI/301.326 Hus/m

Sumsel, Jawa, T. Swakarsa, Contemporary History

During the period 1961 - 1971, many Javanese came to South Sumatra under the transmigration program or voluntarily. Among these, the self-initiated migrants headed for urban areas especially Palembang. In general they were more selective and worked as traders or in the services while general transmigrants were sent to the rural areas and worked in the agricultural sector, particularly in Ogan Komering Ulu and Ogan Komering Muara Regency. About 18% of the labor force coming from migrants. In the agriculture, migrants constituted 14% of the sector active population (p. 145). Voluntary migrants covered 0.47% of the total population while general transmigrants 0.15% (p. 146). Self-supported transmigrants were assisted with land, Trans-Sumatra transportation and industrial development. The biggest in-migration flow from Java to South Sumatra happened within the period 1966 - 1971. The out-migration mostly headed to Lampung (p. 85).

ILYAS, M.

- 1981 "Spontaneous transmigration, in Republic of Indonesia, Department of Manpower & Transmigration", in: *Management of Transmigration Project*, ASEAN Technical Cooperation among Developing Countries Program, Indonesia 24/8/81-6/9/81, Department of Manpower & Transmigration, pp. D1-D8.

Indonesia, Spontaneous Migration

It studies the changes from the five to three spontaneous transmigration definitions based on financial support system. Those are invited-spontaneous (*swakarsa ajakan*), sectoral-spontaneous (*swakarsa sektoral*), and spontaneous transmigrant related to capital investment.

INAWATI, Yuli

- 1986 "PNP/PTP memanfaatkan tenaga transmigrasi swakarsa" [*Plantation Corporation Limited utilizes self-initiated transmigrants labors*], *Angkatan Bersenjata*, 11/04/1986.

MOT

Indonesia, T. Swakarsa, PIR

Plantation Corporation Limited utilizes self-initiated transmigrants in order to develop nucleus estate plantation. Their arrival is organized by the Transmigration Department, including land and housing allocation, whereas the plantation corporation limited only provides 1.25 ha of plantation which will be reimbursed later.

INDAS, Yamin

- 1978 "Tosiba, Desa transmigran-spontan asal Sulsel" [*Tosiba, a spontaneous migrant village from South Sulawesi*], *Kompas*, 28/12/1978.

Sultra, Migration process, Bugis, Spontaneous Settlement

- 1980 "Melihat Lampung dari aspek pemukiman transmigrasi" [*Lampung: some aspects of trans-migration settlement*], *Kompas*, 31/12/1980.

PPT

Lampung, T. Swakarsa, Population Growth

The success of the transmigrant farmers in Lampung is now becoming an attraction power to prospective spontaneous migrants. The spontaneous transmigrant boom has started in the 60's and has increased Lampung population at the rate of 6.5% annually while its natural growth is only 2.3%. In 1980, the population of Lampung reached 4.7 million from which only 25% are local. As a consequence, the environment is expected to be damaged.

ISMANI

- 1976 "Migrasi spontan orang Batak Toba ke daerah Kabupaten Aceh Tenggara" [*Spontaneous migration by Toba Bataks to the district of Southeast Aceh*], *Berita Antropologi*, VIII (27), Agustus 1976: 46-56, tab, map.

IPSK

Sumut, Aceh Tenggara, Ethnic Relations, Communication, Interaction

The district of Southeast Aceh has an influx of many newcomers from both surrounding areas and from Java. The pull factors of this area are fertile land and good transport. Most in-migrants belong to the Toba Batak ethnic group which differ from the local Alas people in customs, culture, religion and habits which encourages conflicts and competition instead of integration. Stiff labour competition between in-migrants and native population is evident. Transmigration is the main means for Javanese to come to this area. No division is mentioned whether they come spontaneously or not, whereas the other in-migrants come spontaneously to seek a livelihood.

JASPAN, M.A.

- 1967 "Tolerance and rejection of cultural impediments to economic growth: The South Sumatran case", *BIES*, (7), June 1967.

Sumsel, Ethnic interaction, Socio-economic conflict, Integration

It explains the cultural reaction of various political groups towards the economic problems in South Sumatra prior to 1965. Although there exists a terminology describing the existence of groups conflicts, there is also a terminology expressing the justification and apology towards certain economic cultural practices of government officials which are clearly qualified as immoral/corrupted. This terminology in general is accepted by everybody as a tolerance expression towards existing problems.

JOHNSON, W., SANUSI, A. & TAMNEY, J.

- 1976 "Transmigration potential in Indonesia", in: *The dynamics of migration: internal migration and fertility?* Occasional Monograph Series no. 5, vol. 1, Washington D.C. 1976: 41-75, tab, bibl.

LDUI/301.326 Dyn

Indonesia, Migration Decisions, Push - Pull Factors, Values

The wish to migrate out of Java can be seen from various characteristics: 14% who wish to transmigrate gave as reasons the specific benefits that they could get from moving (transport assistance, better school facilities). The wish to transmigrate is more influenced by individual factors such as age, sex, education than institutional factors. Thus constituting a "push" factor as for example the situation at the place of origin. The less people attract to their tradition, the easier they can leave their place. People who wish to move are people with higher education, more capable in Bahasa Indonesia, they are innovators and can foresee greater opportunities at the place of destination.

JONES, Gavin

- 1978 "Pembangunan regional dan pertambahan penduduk di luar Jawa: Di mana transmigrasi bisa berperan?" [*Regional development and population increase outside Java: where can transmigration play a role*], in: *Pemukiman di Asia Tenggara: Transmigrasi di Indonesia*. Mac Andrews, Rahardjo (eds), Gadjah Mada Univ. Press, Yogyakarta, 1978.

PPT/325.33.5 Mac/t

Indonesia, Regional Development, Population Growth, History

A very useful overview of the program is given, including a brief history (with tables on numbers of migrants by settlement area) and a critique of the first and second Five Years Development Plans. The greatest impact of the program is its role in the development of Southern Sumatra because of an over-representation of fertile-age couples in its large, transmigrant community, the population of Lampung province is projected to increase from 2.69 million to between 17 and 9 million by the year 2000.

JULIMAR, F., RABAI, D. & ARTATI, S.

- 1986 *Monografi migrasi permanen propinsi Sulawesi Selatan: Analisa berdasarkan data sensus penduduk Indonesia 1971 dan 1980* [Monograph on permanent migration of South

Sulawesi: Analysis based on 1971 and 1980 Indonesian Population Census Data].- LDUI, MKLH, Jakarta, 1986, VI+ 53 p., tab, bibl.

LDUI

Sulsel, Lifetime Migration, Out Migration, Census

The monograph describes the pattern and characteristics of life- time migration of South Sulawesi, both for in-migrants and out-migrants. For 1971 and 1980, out-migrants are more important than in-migrants. They are at productive age, already married and have low education. Their destination is Sulawesi itself, Kalimantan, Sumatra and Irian Jaya. The majority of in-migrants comes from East Java.

KANA, Nico

- 1979 "Penyiapan integrasi sosial budaya transmigrasi di Jawa Tengah dengan daerah transmigrasi" [*The socio-cultural integration of transmigrants from Central Java*], *Cakrawala*, XI (4), 1979: 53-58.

LDUI

Jateng, Integration, Integration, T. Swakarsa, Culture, Religion

The integration between migrants and local inhabitants is difficult to achieve due to several factors, among other things transmigrants are still strongly oriented (attached) to their place of origin; there is also differences in religion and culture; and conflicts resulting in the existence of government policy that only provides facilities to transmigrants. From these problems point of view, to gain national integration via transmigration program, it is required that policy should be based on "cultural acculturation" strategy. From this aspect, accurate information provided to spontaneous transmigrants must be the first step towards integration process. These information are also needed at the receiving place.

KARTASASMITA, Ginanjar

- 1987 "Pokok-pokok pembahasan" [*Discussion of some issues*], in: *Seminar Nasional "Investasi Swasta", Pembangunan Daerah dan Transmigrasi Swakarsa*. Ujung Pandang, 9-11 Maret 1987, 11 p.

PDII/332 609 598 Sem

Indonesia, T. Swakarsa, Private Enterprise Participation

Various issues have been discussed among which: 1) Private investment needs to be encouraged in order to supplement the government fund shortage. 2) All transportation means (road, bridge) should be provided by private investors. 3) Information should be provided by the government to private investors (economic potential, infrastructure) in order to stimulate their participation. 4) Estate plantation and agro-business are subject to attract private investment.

KATO, Tsuyoshi

- 1982 *Matrilinity and migration, evoking Minangkabau traditions in Indonesia*.- Cornell University Press, Ithaca, 1982, 253 p., bibl, index.

YTKI

Sumbar, Anthropology, Migration, Minangkabau

This book focuses on the causal relation between matrilineal custom and the usual "merantau" practice of Minangkabau people, especially men. According to the Minangkabau tradition which is matrilineal, a bachelor will feel oppressed and somewhat left out from the inheritance and these facts push them to migrate (merantau) to other places. A longitudinal observation shows that the out-migration has been increased for both men and women. The non-agricultural sector seems to be the most important pull-factor, especially for the highly educated migrants with the emergence of "nuclear family", the diminishing role of extended family and matrilineal home as well as the responsibility towards the family economy (present and future) constitute a strong motive for younger generation to leave their village (p. 143-153 and p. 169-193).

- 1989 "Different fields, similar locusts: Adat communities and the 'Village Law' of 1979 in Indonesia", *Indonesia*, 47, 1989:89-114.

Riau, Sumsel, Administration Change, Village Organisation, Marga

KAWAGOE & HAYAMI

- 1989 "Farmers and Middlemen in a Transmigration area in Indonesia", *BIES*, XXV (3), Dec. 1989: 73-98.

Indonesia, Lampung, Marketing, food crop

The Author did not find any significative difference between long settlers in West Java and in transmigration area studied (near Metro, Lampung) concerning marketing margins or middleman profits.

High risk and transaction costs, associated with long-distance trade under poor infrastructure, together with delays in the issue of formal land titles to transmigrants settlers, operate as entry barriers to marketing activities. These factors are compensated by the larger marketable agricultural agricultural surplus per farm, reducing transportation and transaction costs.

KEMP, Oda van der

- 1985 *The nucleus estate smallholders development programme; An overview of the programme's operation and implementation, and its impact on income and employment.*- Employment Creation Strategy Project, INS, 1985, IV + 82 p., tab, ann.

PEP-LIPI

Indonesia, PIR, Coordination, Socio-economic Impact, Palm, Rubber

This ILO report tries to overview the impact of NES project in Indonesia on employment and income as well as their main obstacles. The results are as follows: First, the coordination between governmental departments is difficult to achieve; second, the output (production) is too small compared with the input (cost) invested in the project; third, the NES project (oil-palm and rubber) is far from absorbing the labor force and does not influence the income of NES members. It is suggested to choose cotton or any other plant which can absorb better the labor force.

KEYFITZ, N. & NITISASTRO, W.

- 1955 *Soal penduduk dan pembangunan Indonesia* [Population and development problems in Indonesia].- P.T. Pembangunan, Jakarta, 139 p., tab.

IPSK/312:338 Key/s

Indonesia, Population, Family Migration, Colonial History

It discusses the migration history since colonial era until independence. Spontaneous migrants existed since colonial era when Javanese farmers join their families as the Dutch policy wished to maintain the social structure of colonial villages. This family migration (spontaneous migration) did not get financial support but was provided with a loan consisting of a piece of land, transmigration fees, farming and housing tools which should be reimbursed within 2-3 years. During Independence, family migration started to move to South Sumatra and some of them to Sulawesi.

KINGSTON, Jeff

- 1990 "Agricultural involution among Lampung's Javanese?"; *Southeast Asian Studies*, Kyoto University, vol.24 (4), 1990:485-507.

Lampung, Kolonisasi, Bawon System, Involution Concept

KIPP, R.D.

- 1977 "Adaptive strategy in a migrant community: The extension of the Karo Batak kinship network", *Symposium on cultural-ecological perspectives on Southeast Asia*. Wood, W (ed.) Ohio Univ. Centre for International Studies, Southeast Asia Series n° 41, 1977.

Sumut, Migration Process, Settlement Process, Kinship

KNOX, G. A. & MIYABARA, T.

- 1984 *Coastal zone resource development and conservation in Southeast Asia: with special reference to Indonesia.*- United Nation Educational, Scientific and Cultural Organization Regional Office of Science & Technology for Southeast Asia, Jakarta, XIX + 182 p., tab, map, bibl.

SKEPHI

Southeast Asia, Indonesia, Spontaneous Migration, Mangrove, Ecology, Pasang-surut

The use of mangrove as a coastal ecosystem has functionally and ecologically showed a great potential. This book provides an explanation of the ecology which needs to be considered when people want to deal with land, soil or environment to build a new settlement in a coastal area. Chapter 5 of this book describes the colonization, the transmigration and the spontaneous migration which tried to develop the swam areas which have never been touched. Buginese, Banjar people, Malay, as well as Palembang people are people who are experienced in this kind of practice and the Buginese as spontaneous migrants who practically have more ability to succeed than those who are not experienced in selecting suitable plants. The chapter 6 considers the "negative impacts" regarding the case of swamp and grass area.

KOJI TANAKA

- 1984 "Agricultural adaptation of the Bugis spontaneous migrants: A case study in the Northeastern Kabupaten Luwu", in: *Transformation of the Agricultural Landscape in Indonesia*.

Maeda.N & Mattulada (eds.) 1984: 61-84, The Center for Southeast Asian studies, Kyoto University.

- Indonesia, Sulsel, Luwu, Bugis, Spontaneous Settlers, Agricultural Pattern, Smallholder Plantation, Sawah
 1986a "A note on spontaneous migrants and their settlements in Northeastern Kabupaten Luwu, South Sulawesi", in: *Environement, Landuse and Society in Wallacea*. 1986: 71-92, The Center for Southeast Asian Studies, Kyoto University.

Indonesia, Sulsel, Luwu, Spontaneous Settlers, Ethnic Interaction, Agricultural Pattern, Javanese, Bugis, Toraja

- 1986b "Bugis and Javanese peasants in the coastal lowland of the Province of Riau, Sumatra: differences in agricultural adaptation", in: *Environment, Agriculture and Society in the Malay World*. 1986: 102-131, The Center for Southeast Asian Studies, Kyoto University.

Indonesia, Riau, Spontaneous Settlers, Pasang-Surut, Bugis, Javanese, Agricultural Pattern, Rice, Intensification, Attitude, Coconut Plantation

A comparison of the agricultural adaptation among the Javanese and the Bugis spontaneous settlers on a tidal swamp area and the landuse transformation. If the agricultural patterns of the two group are similar and inspired from the Banjarese methode, the aspiration of the two are quite different. The Javanese usely are satisfied with their agriculture revenu and the Bugis tried to invest in other activities like transport and commerce.

KOMARUDDIN

- 1985 *Peran serta tokoh tani dalam penyebaran pengetahuan pertanian di daerah transmigrasi Pangkalan Kersik, Kec Bayung Lincir, Kab. Musi Banyuasin, Sumsel*. [Farmers role in diffusing agricultural knowledge in Pangkalan Kersik, Bayung Lincir, Musi, Banyuasin, South Sumatra].- Jurusan Ilmu-Ilmu Sosial Ekonomi Pertanian, Institut Pertanian Bogor, 1985.

IPB-Sosek

Sumsel, Coordination, Information

Farmers have obviously a positive role in diffusing agricultural knowledge although sometimes the problem solvings faced by agricultural extension (PPL) are not quite satisfactory. Training activities (LAKU), however, already reached the target but there is some constraints related to the quality and coordination of the personnel as well as method of disseminating information.

KUNTJORO & RACHMAN, A.

- 1977 *A study of the Buginese newcomers in the tidal areas of Musibanyuasin II, South Sumatra*.- Fakultas Pasca Sarjana, IPB, Bogor, 1977.

IPB-Sosek

Sumsel, Banyuasin, Spontaneous Settlement, Bugis, Agricultural System

KUSTADI

- 1983 "Transmigran dan tanahnya" [*The transmigrant and his land*], *Cakrawala*, XV (1), 1983: 37-76.

LDUI

Indonesia, Adat Law, Land Clearing, Land Distribution

This article focuses on land rights in transmigration projects. The issue is seen from the aspects of national law, traditional law concerning the land involved, the departments who have the right of negotiation and the awarding of concessions, to implement land clearing as well as the acquisition of land rights and their handing-over to transmigrants. Furthermore, selected cases on land conflict are added, as well as a list of infertile transmigration land.

KUSUMOSUWIDHO, Sisdjiatmo

- 1982 "Suatu pandangan mengenai strategi pemecahan masalah transmigrasi di Indonesia" [*Overview on transmigration problem solving strategy in Indonesia*], in: *Ceramah ilmiah 15-18 Nov. 1982*, Universitas Tanjung Pura. Pontianak, 10 p., tab.

LDUI/301.326 Kus/s

Indonesia, Migration Decisions, Settlement

Encouraging people to migrate and making the land "ready for use" are recommended as strategy in dealing with transmigration problems.

LASNY, Soeria

- 1980 "Transmigran Parigi paling berhasil di Sulteng: Lebih kurang 80% datang secara spontan dan atas biaya mereka sendiri" [*Parigi transmigrants are the most successful in Central Sulawesi: About 80% of them are self-supported*], *Sinar Harapan*, 08/07/1980.

PPT

Sulteng, Parigi, Balinese, Self supported migration, Spontaneous Settlement, Balinese, Irrigation

The region of the District of Parigi, characterized by a typical Balinese lifestyle, reveals to be the most successful transmigration area in the province of Central Sulawesi. 80% of its prosperous inhabitants came by themselves all the way from Bali. Setting examples by Mrs Drige and followers, the plain was, at the beginning, a virgin forest, has become now-a-days the first rice plantation in the province. With an annual production of 2000 tons, farmers, who have worked together to set up a traditional irrigation system, put a lot of hope on the government assistance for a more advanced irrigation system.

LEGOWO, Martinus

- 1987 *Primordialisme masyarakat perantauan: studi kasus etnis Jawa di Kotamadya Palembang* [Primordial link among migrants: case study on Javanese in Palembang].- Pusat Penelitian UNSRI, 1987, 54p..

UNSRI

Sumsel, Palembang, Social Change, Migration

This short study shows that migration start when people are young and unmarried (68%) to find a job (90%) with information from relatives. Attachment to traditional origine custom get weaker with time spends in the new area.

LEVANG, Patrice

- 1989 "Farming systems and households incomes", ORSTOM and Dép. Transmigration, Jakarta, 1989: 193-283, Atlas.

MOT

Lampung, Coffee, Mixed cropping, Smallholders, Agroecology

LEVANG, Patrice et al.

- 1986 *Sausu, Malonas, Tolai: Lessons in succesful transmigration.*- ORSTOM Transmigration project PTA-44, Jakarta, 1986, 76 p.

MOT

Sulteng, Parigi, Spontaneous Settlers, Transmigration, Farming System, Incomes

This study emphasis on the very good economic level of spontaneous settlers compared with the usual transmigrant realization.

LINETON, J.

- 1975 "Pasompe' Ugi': Bugis migrants and wanderers", *Archipel*, 10, 1975:173-201.

PDII

Sulsel, Bugis, Migration Process

LP3S

- 1985 *Studi pengembangan industri kecil rumah tangga* [Study on home industries development].- Proyek Penyiapan pemukiman, penempatan dan pembinaan Transmigrasi di Jambi dan Sumsel (Trans IBRD II), LP3ES, Jakarta, 1985, tab, map.

LP3ES

Jambi, Sumsel, Home Industry, Development

It is expected that the development of industries in these research areas will succeed if investment, marketing and organization are made available. Majority of transmigrants still depend on farming and pay less attention to small cottage industries which generally tend to orientate towards food commodity, wood, furniture and housing construction materials (bricks, tiles). Commitment and perseverance are needed from field leaders to promote dynamic industrialization at the rural areas.

MAC ANDREWS, Colin

- 1978 *Land settlement policies in Malaysia and Indonesia: A preliminary analysis.*- Institute of Southeast Asian Studies, Occasional Paper Series n° 52, Singapore, 62 p., tab, bibl.

PPT/325.5 Mac/I

- Malaysia, Indonesia, Bilut Valley, Belitung, Land Settlement, Policy, FELDA, Migration
 1986 *Central government and local development in Indonesia* [Central government and local development in Indonesia].- Oxford University Press, Singapore, 1986, XV + 253 p., tab, index.

PPT/312.711 Mac/c

Indonesia, Policy, Administration

This book covers many themes dealing with the public administration and the political regulations established during the new order era such as the relationship between the central government and local authorities, the government structure, Pancasila Ideology, the role of local community, their strengths and weaknesses, the decentralisation of fiscal policy, the rural credit institutions, industries operating as development factors, the transportation development and the ideology of agricultural development. Transmigration topic figures in the chapter 9 (cf. abstract).

MAC ANDREWS, C. & RAHARDJO (eds.)

- 1974 *Pemukiman di Asia Tenggara dan transmigrasi di Indonesia: Suatu perbandingan* [Human settlement in Southeast Asia and Transmigration in Indonesia: A comparative study].- Gadjah Mada University Press, Yogyakarta, XIX + 241 p., tab, index, bibl.

PPT/325.5 Mac/p

Kalbar, Sulteng, Bali, Java, Asia Tenggara, Land Settlement, Land Use, T. Swakarsa, Regional Development, Welfare

The book discusses as well as answers questions on how to overcome transmigration problems. It examines the government roles; portrays the conditions of migration settlement in Indonesia, compares the transmigration program in Indonesia and in other countries. The first part deals with land development in South East Asia, the second part evaluates the transmigration program in Indonesia, in relation its position and roles in the development and their aspiration. The third part relates to some concepts on migration development and regional development such as migration development which is in line with labor absorption/utilization, fact that will, without any doubt, contributes to the regional development.

MAKMUR, Ahdi

- 1988 "Migran Toraja di Tombang, kecamatan Walenrang, kabupaten Luwu" [*Toraja migrants in Tombang, Walenrang sub district, Luwu Regency*], in: *Migrasi, Kolonisasi, Perubahan Sosial*. Shaur, A. et al (eds.), Pustaka Grafika Kita, Jakarta, 1988: 199-254, bibl.

Sulsel, Luwu, Walenrang, Tombang, Migrant, Interaction, Toraja, Religion Adaptation

The paper explains the migration process of Christian Toraja people to Tombang where the local inhabitants are traditional Muslims, as well as their adaptation and integration. Toraja people migrate especially because the land is fertile and inexpensive, furthermore sometimes the traditional moslem leaders gave them unoccupied land to cultivate (in particular to the first arrivals). Religious expressions for formalized traditional relations were found to accomodate both groups in one ritual, without touching their respective religious identities. Inter-ethnic marriages do happen, however sometimes conflicts occur caused by pig-breeding.

MANGOENPOEROJO, Roch Basocki

- 1987 "Pengembangan usaha transmigrasi menurut pandangan LSM: Pemanfaatan lokasi transmigrasi dan kendalanya" [*Advantage and obstacle of migration location from LSM point of view*], in: *Seminar Nasional "Investasi Swasta", Pembangunan Daerah dan Transmigrasi Swakarsa*. Ujung Pandang, 9-11 Maret 1987, 13 p.

PDII/332 609 598 Sem

Indonesia, T. Swakarsa, Private Enterprise Participation, LSM, Bureaucracy

Transmigration location can be developed as a business place for private investors under the following circumstances: 1) There is a market to sell the products, so the facilities on transportation and safety should be guaranteed. 2) Migrants are prepared to participate in the business, which can be assisted by LSM. 3) Loosen the bureaucracy. The possibility can be achieved through the marketing of migrant's products, processing, leasing of second business field to cultivate certain commodity which has an added value.

- 1982 "Pemikiran GBHN 1983, transmigrasi citra alternatif" [*Thoughts on GBHN 1983, an alternative image of transmigration*], *Kompas*, 14/01/1982.

PPT

Indonesia, Policy, Criticism

Until today, the evaluation regarding the transmigration success still remains a problem often associated to a bad image (*Citra buruk*) of the issue. This bad image has to disappear. Technically, self-supported transmigration is more looked forward to than general transmigration and needs to be carried out by a Ditjen itself in order to facilitate the responsibility system from each program and also to make the evaluation easier (cf. BUDIMAN Arief, p. 84).

MANTRA, Ida Bagus

- 1987 "Dampak lingkungan transmigrasi" [*Impact of transmigration environment*], in: *Lokakarya pendidikan kependudukan dan lingkungan hidup di Yogyakarta*. 16 Februari - 7 Maret 1989: 252-269., tab, bibl.

PDII/304.6 Lok/k

Indonesia, Population Distribution, Environment

The demographic approach shows that the transmigration program implemented under the Dutch government until the present produces some impacts towards the place of origin. The impacts are as follows: 1) Eventhough it is not a success, the transmigration program at least lessens the size of population. 2) Job opportunities and income distribution are positively affected by the large number of population who moved out of the place of origin. 3) Farming production is not obvious. 4) Interest to transmigrate becoming chain-transmigration. 5) Environment improvement needs to be maintained.

- 1988 "Migrasi penduduk antar propinsi di Indonesia sejak pembangunan lima tahun pertama" [*Inter-provincial migration in Indonesia since PELITA I*], Paper for Seminar *Penduduk dan Pembangunan dalam Transisi Demografi*, 28-29 November 1988, PAN-Studi Sosial UGM, Yogyakarta, 31 p., tab, bibl.

LDUI/301.326 Man/m

Indonesia, Inter-provincial Migration, Contemporary History

The author reviews the migration development in Indonesia since PELITA I especially the inter-provincial migration flow, the migrants characteristics and their motives to move in using data from the 1971, 1980 Population Census and SUPAS 1985. The author also observes that there is uneven distribution of inter-provincial migration from which the flow between Java-Sumatra is still dominant. Sumatra experiences an increase of migrants in 1980 and 1985 in comparison to 1971 and most of them are spontaneous. There is also an increase of migration in Eastern mainly due to the transmigration program (see page 7-13).

MANURUNG, Victor

- 1989 "Kebijaksanaan transmigrasi dalam Repelita V" [*Transmigration Policy in The Fifth Indonesian Five-year Plan*], Paper, Lokakarya Dep. Transmigrasi, Jakarta, 28-29 Juni 1989, 28 p., tab.

PPT

Indonesia, Repelita V, T. Swakarsa, Policy

This paper underlines the transmigration policies in the Fifth Indonesian Five-year Development Plan (Pelita V). Those policies are: 1. To give priority to the self-initiated transmigration, 2. To boost the regional growth, 3. To develop the quality of transmigration settlements, 4. To promote the involvement of private companies, 5. To attract spontaneous migrants by different activities such as plantation, fishery, forestry and services, 6. To pay more attention to the coordination and synchronization in the program implementation.

MARTONO

- 1985 *Pancamatra transmigrasi terpadu: The five dimensions of integrated transmigration* [*Pancamatra transmigrasi terpadu: The five dimensions of integrated transmigration*].-Departemen Transmigrasi, Jakarta, IV + 39 p.

YTKI/D 01365

Indonesia, Policy, T. Swakarsa, T. Sisipan

This book features the base of the implementation of transmigration policy and strategy. The author views it from the five dimensions including Ideological, Constitutional, Structural and Operational. From these, only constitutional and operational dimensions are relevant for self-supported transmigration. In the conceptual dimension of the general policy based on GBHN in 1983, the spontaneous transmigration needs to be encouraged and applied in PELITA IV besides the general transmigration. Tripartite model is prepared to settle general, spontaneous, as well as local transmigrants. Besides this, inserted transmigration model is also planned.

- 1986 "Tidak ada target" [*It is not question of targets*], *H.K.T.I.*, ??/08/1986.

MOT

Indonesia, Social Organization, T. Swakarsa

In 1986/87, the transmigration program is no longer turned around target but rather become qualitative. Minister Martono stressed that, in order to increase the spontaneous migration, it is important to activate social, professional and functional organizations. This year, the Spontaneous Transmigration Implementation Board is established. So the government just has to arrange, plan and support as few as possible. 49,600 HH of spontaneous migrants are sent this year.

MCNICOLL, Geoffrey

- 1968 "Net migration between Java and the outer islands", *BIES*, Vol. V. no. 1, March 1968: 78-80.

PEP

Indonesia, Spontaneous Migrants, Census, Data

This article analyses the transmigration data 1950-1967. The data on the ferry traffic between Merak-Panjang (Java and Sumatra), the Census 1961 and the Susenas data (1964-1965) show that the flow out of Java is bigger than the one in. Data Susenas indicated that the main reasons are the planned transmigrants (around 35.000 people) and the spontaneous movement. The spontaneous are mainly civil servant, contract estate workers.

MEYER, P. & MACANDREWS, C.

- 1978 *Transmigration in Indonesia*.- Population Institute, Gadjah Mada University, 1978.

PPT

Indonesia, Bibliography

MKLH

- 1985 *Konperensi Nasional Pusat Studi Kependudukan III, Jakarta 15-17 Oktober 1985* [Third National Conference of Center for Population Studies, Jakarta 15 - 17 October 1985].-

Menteri Negara Kependudukan dan Lingkungan Hidup, 1985, page mult, bibl.

LDUI/301.32 Kon/k

Sulsel, Kalteng, Sultra, T. Swakarsa, PIR, Urbanization, Mobility, Migration

The out migration from South Sulawesi is important enough (12,4%) during the period 1971-1980 as far as many potential land have not been prepared. The destination which was Jambi from the beginning, had changed to East Kalimantan due to the shorter distance as well as to the development of the province. People also moved because they are "perantau" and because their relatives/friends have already moved. Central Kalimantan is becoming a potential area for migrants but still very few have come in comparison to other areas of Kalimantan. The transmigration program plays an important role in the population growth of the province. Its location is relatively closed to Java, the land is vast and its density is low, interesting for cash-crop. South Sumatra population growth is relatively high (3,3% in 1980). Its socio-economic situation is low although there is continual improvement. The province has a young population structure and a low health level.

MUBYARTO

- 1983 "Sistem perkebunan di Indonesia masa lalu dan masa depan" [*Indonesian plantation system in the past and in the future*], in: *Seminar Masa Depan Perkebunan di Indonesia*. PERHEPI, Jakarta, 29 September - 1 Oktober 1983: 1-13.

YTKI/338.1 Sem

Indonesia, Plantation, Prospect, Policy, Problems

This articles give a broad perspective starting with past history of the philosophy of plantation economy, its social tension, and its futur prospect. It is interesting to observe that the geographical population movement and cultural change of the peasant society are evaluated in Nucleus Estate System or Plantation Nucleus Estate (p. 10-11). This static and underdeveloped system as stated by Boeke and Greetz is going to be changed so that the social and economic situation can also be changed.

MULYANA, B.S.

- 1959 *Pengaruh transmigrasi terhadap daerah pemberi* [Impact of transmigration on the place of origin].- Lembaga Penyelidikan Ekonomi dan Masyarakat - FEUI, Djakarta, IV + 46 p., tab.

PDII/301.32 Mul/p

Jateng, Communication, Sending Area, Migration Decisions

The reasons why choosing to be a transmigrant, the transmigration process as well as the attitude of local people towards the transmigration program are observed in using qualitative (anthopological) approach. This research concludes that the motives to transmigrate is strongly associated with economical reasons

(p. 10-13). The role of the regional government (at the place of origin and the place of destination) is an important factor to make people decide whether they will migrate or not (p. 14-22 and 27-29). As the program is still limited to peasants/farmers, it is recommendable that industrial labor should also be sent to transmigration areas.

MUSILIMIN, Amrah

- 1986 *Sejarah Ringkas: perkembangan pemerintahan marga/kampung menjadi pemerintahan desa/kelurahan dalam propinsi Sumatera Selatan* [Short history: development after changing marga/kampung to desa/lurah in South Sumatra].- Fakultas Hukum UNSRI, Palembang, 1986, 91 p..

UNSRI, FH

Sumsel, Marga, village government

Historical study about change in traditional land and population control with intervention of the Dutch, influence of Islam and change introduced by the Village Law in 1979.

- 1989 "Perlindungan dan ketertiban lingkungan pemukiman transmigrasi swakarsa" [*Environment protection and disciplin for self-supported transmigration settlement*], *Majalah Transmigrasi*, 20, 1989: 18-20.

PPT

Indonesia, T. Swakarsa, Settlement, Environment Conservation

In order to make the transmigrants feel at home and safe, a good social condition is needed in new settlement areas. To create a healthy environment, autonomy should be granted to transmigrants as an individu as well as a family and as a community member. Autonomy in term of self sufficiency, cooperation and mutual assistance.

MUTALIB, Amir Hasan

- 1986 "Saran tentang pola transmigrasi swakarsa inti melalui pembinaan sumber daya manusia" [*Suggestions regarding the pattern self-supported transmigration base by way of guidance for human resources*], in: *Transmigration di Indonesia, 1905-1985*. Swasono, S.E. & Singarimbun, M. (eds.), 1986: 204-217.

PPT/325.5 Swa/s

Indonesia, T. Swakarsa, Labor Force

This recommendation is based on the facts and forecasts of the magnitude of educated unemployed. On the other hand, transmigrants who have already been resettled are generally low-educated and in need of direction. The private sector is regarded as a potential for the development of this special "core" self-supported transmigrant pattern.

McSTOKER, Robert

- 1987 "The Indonesian coffee Industry", *BIES*, XXIII (1), April 1987: 40-69.

Indonesia, Coffee, region, smallholding, marketing, international market

Return income to coffee smallholders in Outer Indonesia, both real and elative, has been very favourable throughout the last 25 years. The paper conclusion is that Indonesia should embark upon vigorous promotion and extension campaign mentioning the migrants position.

NAGIB, Laila

- 1986 *Monografi migrasi permanen propinsi D.I Yogyakarta: Analisa berdasarkan data sensus penduduk Indonesia 1971 dan 1980* [Monograph on permanent migration of DI. Yogyakarta: Analysis based on 1971 and 1980 Indonesian population census data].- LDUI & MKLH, Jakarta, 1986, VIII+101 p., tab, map, bibl.

LDUI

Yogyakarta, Lifetime Migration, Census, Migrants

This monograph shows the pattern and characteristics of in-migrants of D.I. Yogyakarta in 1980 who are more important than in 1971. The characteristics of 1970 and 1980 in-migrants are the same, i.e. the age is younger for urban destination (15-24 years) while it is older for movement to rural areas. The majority of the out-flow goes directly to Lampung in 1971 and to Jakarta in 1980. This change can be explained because Lampung is closed for transmigration. 1971 and 1980 in-migrants came from the same place of origin namely Central Jaya, South Sumatra, Lampung and North Sumatra and in general their education level reaches SLTP-SLTA.

NAIM, Muchtar

- 1976 "Voluntary migration in Indonesia", in: *Internal migration: the new world and the third world*. Kubat, D. & Richmond, A. (eds.), Sage Publication London, 1976: 148-183, bibl.

PPT/325.33 i

Indonesia, Migration, Migration Determinants

The author distinguishes the "Voluntary Migration" from the transmigration. He describes the ethnic groups that have a high level of voluntary migration as well as the one who have a low level, and factors causing the voluntary migration level of each tribe in Indonesia. From the data of 1930 and 1961 censuses, it can be concluded that some groups tend to have a high voluntary migration such as Bawean, Batak, Banjar, Minangkabau, Bugis and Ambon, while Javanese, Sundanese and Balinese which are actually the biggest component of the transmigration, do not have a high level of voluntary migration.

NOOR, Iswan

- 1986 *Sikap tukang becak terhadap transmigrasi: Studi kasus di Kotamadya Malang* [Becak driver's attitude towards transmigration: Case study in Malang Regency].- Universitas Brawijaya, Malang, 44 p., tab.

PDII/88/0439

Jatim, Malang, Paddicap Driver, Motivation

There is a potential among the observed "becak" drivers to be moved to the transmigration areas but they are wish to be able to work in the non-agricultural sector. In this case they are willing to become transmigrants.

NURHIKMAT, Tedi

- 1989 *Penentuan pola tanam optimal di daerah pasang-surut: Studi kasus lahan salin di lokasi transmigrasi Delta Upang, Sumatera Selatan* [Optimum pattern determinants in tidal areas: Case study of Delta Upang, South Sumatra].- Ilmu-Ilmu Sosial Ekonomi Pertanian, Fakultas Pertanian, IPB, Bogor, 1989: 32-55., tab.

IPB-Sosek

Sumsel, Land Use, Pasang surut

The author explains the condition and structure of tidal land as well as its farming system. This paper also describes the institutional aspects and transportation means in Delta Upang.

OEMAR, Usailan

- 1989 *Pola karakteristik migran kembali penduduk Sumatera Selatan tahun 1980-1985* [South Sumatra return-migrants characteristics pattern: 1980-1985].- Lembaga Demografi, Universitas Indonesia, Jakarta, 1989, VII+31 p., tab, bibl.

LDUI/301.326 Oem/p

Sumsel, Migration, Return Migration, Migration Decision

Improvement in the socio-economic conditions of South Sumatra seems to attract its population, who has already migrated to return to the place of origin. However, it is not stated whether there are others factors influencing the return migration such as "not successful for resettle" which can cause the same phenomenon.

OBY-GARDINER, M. & RAHARDJO, Y.

- 1986 "Sasaran pemindahan melalui transmigrasi swakarsa demi kepentingan pembangunan daerah asal dan daerah penerima" [*Resettlement target through self-supported transmigration for the benefit of regional development in places of origin as well as receiving areas*], Paper, Lokakarya penyiapan pemukiman transmigrasi swakarsa, LIPI, Jakarta, 1-2 September 1986, 22 p.

PPT/700449

Indonesia, T. Swakarsa, Policy, Land Settlement

The paper examines the implementation of the transmigration program which is directed towards an increase of the self-supported transmigrants, as well as its impact on the places of origin and destination areas. The discussion is based on laws and regulations without neglecting the population potential dimension in Java and Bali. The conclusions are as follows: - The role of self-supported transmigrants in Pelita III is quite influenced by the existence of the general transmigration program, as the self-supported transmigration promotion cannot be separated from the implementation the of general transmigration. - Job opportunities opened to self-supported transmigrants are estimated to be the same as to general transmigrants. - The impact of transmigration on the development planning of the

destination areas needs to be considered, in particular the maintenance of facilities (schools, teacher, road, etc.) which will become the responsibility of the provincial governments once the transmigration areas are handed over to them.

OLDEMAN, L.R., LAS, I. & DARWIS, S.N.

- 1979 "An agroclimatic map of Sumatra", in: *Contributions*. Central Research Institute for Agriculture Bogor, Indonesia No. 52, 1979.

IPB

Sumatra, Climate, Rainfall, Map

OTTEN, Mariel

- 1986 *Transmigrasi: Myths and realities: Indonesian resettlement policy, 1965-1985*.- International Work Group for Indigenous Affairs, Document 57, Copenhagen, 1986, 254 p., bibl.

Indonesia, Policy, Implementation, T. Swakarsa, Criticism

The book consists of three main parts: 1. The Transmigration "myth" and its derivation to political policy as well as to the program of Repelita IV 2. The field implementation from selection, dispatch, and resettlement to problem to be faced by transmigrants. 3. The analysis on whether transmigration goals have been achieved at the field. Furthermore, the book also describes the transmigration prospects. From its outcomes, few points are relevant to spontaneous transmigration among which the "Bawon system" introduced since the colonization era has attracted people to Lampung. However, economical problems have to be handled by old colonists while forest clearing has to be dealt by new colonists. The interesting critics made by Wertheim (29) is (1) why the food crop transmigration scheme which creates the "land hunger situation", can become the mean to solve population density in Java and (2) why not to expand the industries that can attract labor (or spontaneous migrants) from Java. These critics have been responded by Minister Martono by introducing the relationship between the transmigration regional development and the possibilities to attract spontaneous migrants.

PAIN, Marc

- 1989 "Spatial organization and regional development", ORSTOM and Dep. Transmigrasi, Jakarta, 1989: 295-399, Atlas.

MOT

Lampung, Transmigration, History, Spontaneous settlement, Farming system, Regional Development

PAIN, Marc (ed.)

- 1989 *Transmigration and spontaneous migrations in Indonesia: Propinsi Lampung*.- ORSTOM and Dep. Transmigrasi, Jakarta, 1989, 443 p., Atlas.

MOT

Lampung, Transmigration, History, Spontaneous settlement, Farming system, Regional Planning, Geography, Demography

PAMBUDY, R. & BAHAOEDDIN, A.

- 1988 "Model farm", pola pengembangan wilayah hulu DAS [Model farm for development of protected upper river], *Kompas*, 18/03/88.

Indonesia, Upper River Basin Protection, Agricultural Pattern, Agroforestry

General discussion on the spatial progress of agricultural frontiere through the mountain slope and the need of adapted technology for environment conservation. Model Farm of upland technology taken from Java case of Citanduy.

PAPAYUNGAN, M. & MANGUNRAI, H.

- 1987 *Penelitian transmigrasi spontan di tiga propinsi di Sulawesi* [Study on Spontaneous transmigration in 3 provinces of Sulawesi].- Pusat Penelitian dan Studi Kependudukan. Universitas Hasanuddin, Ujung Pandang; IV+90 p.; tab; bibl.

PPT/301.3261

Sulteng, Sulsel, Sultra, T. Swakarsa, Spontaneous Migration, Migration Decisions, Occupational Migration, Development

This research tries to assess the process and the development of the spontaneous transmigration program, in particularly to evaluate the decision making process of the spontaneous transmigrants, their socio-economic and demographic characteristics, the procedure in getting their land and the relationship with their place of origin. Many factors were used to evaluate the voluntary and self-expense level of migrants. They are: Factors at the place of origin and the place of destination, the psychological and

sociological factors of the migrants. The conclusion and implication of this research suggest an improvement of the services, amelioration of suitable land and other facilities such as education, transportation and communication in order to increase the spontaneous migration flow.

PERRY, Douglas

- 1985 "The economics of transmigrant farming", *BIES*, XXI (3), 1985: 104-117, tab, bibl.

PPT

Sumbar, Sitiung, Farming System, Input-output, Marketing, Alternatives of Crops

PRAMONO, Titus

- 1987 *Perencanaan lokasi dan penyiapan lahan pemukiman transmigrasi sebagai tahap-tahap kegiatan penting dalam penyelenggaraan transmigrasi* [Planning on localization and on land clearing are the major steps towards transmigration program implementation].- Fakultas Ekonomi UI, Jakarta, V + 146 p., tab, bibl.

LDUI/301.326 Pra/p

Indonesia, Contemporary History, Policy

Transmigration implementation during Pelita III has reached its targets but its quality needs to be reviewed. The execution is now well synchronized at the planning and location preparation stages, which has caused many settlements to be rehabilitated, moreover, many of them can even not be used (p. 73-76). The interest of local inhabitants should also be taken into consideration. The transmigrants standard of living should be increased in accordance to the "second stage development" program carrying out through several transmigration patterns in particularly the PIR-Transmigration.

PRYOR, Robin (ed.)

- 1979 *Migration and development in South-East Asia, a demographic perspective.* - Oxford University Press, Kuala Lumpur, 1979, 354 p., bibl., index.

PPT

Thailand, Malaysia, Singapore, Indonesia, The Philippines, Interprovincial, Lifetime Migrant, Population Redistribution, Return Migration, Remittances, Transmigration Programme, Development, Chain Migration

This book explains the population mobility patterns in Southeast Asian countries based on the censuses data collected in the 1970's as well as their linkages to the development particularly to the urban growth. In general, the analysis does not explicitly differentiate whether the movements are implemented by the government or self-initiated. For Indonesia, three papers written by G. Hugo explain the mobility patterns, in particular the mobility to and from Jakarta as well as the impact of these movements towards Javanese rural areas (Out-migration of Javanese). The last chapter is written by G. Jones in which the author focuses on the policy development of the transmigration program from the colonization era to the Pelita II in the context of development planning. In general, the data used in this book cover all types of migrants, except for Jones' paper which dealt only with registered transmigrants. From these data, the role of the self-initiated transmigration within the population mobility patterns is quite implicate. Explicitly, Hugo states that the role of spontaneous migrants is important enough for the urban growth in the outer-islands. The data collected in the 60's gave evidence that urban growth in the outer-islands is faster than in Java (p. 182). In reference to the success of the program, Jones also underlines that spontaneous migrants are more successful than general migrants since from the beginning (colonization era). The more attention paid to the chain migration and infrastructure development outside of Java, the more spontaneous migration will be increased. The success of the transmigration should be seen from the movement in general but not from the program. * According to Hugo (p. 128), the terminology spontaneous transmigrant means self-initiated transmigrant (without subsidy) while Jones (p. 220) refers more to transmigrants with semi-subsidy.

PUDOC, Wageningen

- 1982 *Indonesian forestry Abstracts, Dutch literature until about 1960.* - Centre for agricultural publishing and documentation, Wageningen, 1982, 657 p., biblio, index.

Indonesia, Forest, Environment, Silviculture, Forest Management, Marketing

A reference book for all maps and other documents written on the subject until 1960.

PUSLITBANG, Transmigrasi

- 1978 *Kesimpulan diskusi team policy research terbatas tentang transmigrasi sisipan* [Conclusion discussion from the research team on 'sisipan' transmigration policies].- Puslitbang, Transmigrasi (Dep.), Jakarta, 1978, 60 p.

MOT

Indonesia, T. Sisispan

RACHMAN, Bochari

- 1981 "Transmigrasi di Sumatera Selatan: Kasus daerah pasang-surut" [*Transmigration in South Sumatra: A case of tidal area*], in: *Laporan hasil seminar regional transmigrasi di Sumbagsel tahun 2.000*. UNSRI, Palembang, 19-20 Oktober 1981:1-11.

LDUI/301.32 Sem/1

Sumsel, Fertility, Family Planning, Mortality, Health, Ecology, Labor Force

The transmigration settlement in tidal area, besides giving access to transmigrants, is also opened for local farmers and new comers. The aim of the transmigration program is not just to transfer people, but also to change social norms within cultural pattern. The confrontation of different cultural norms has caused few social unrest in the area. However, with the time and since people start to work together, especially in business, the conflict has become less and less frequent.

RAHARDJO, Sri Pamoedjo

- 1982 "Program transmigrasi: Suatu pandangan alternatif" [*Transmigration program: an alternative outlook*], *Economica*, vol. 10 (2), 1982: 31-33.

LDUI

Indonesia, T. Swakarsa, Criticism, Ecology

The "Ecological complex" model which is comprised of population, organizations, environment and technology should be used to observe the problems occurring during the transmigration program implementation, in particular when transmigrants are placed. This model gives a warning towards the self-supported transmigration program from which it seems to rely more on the "human aspects" so that less attention is given towards other aspects of the "ecological complex" (p. 31-33).

RAMBEE, Aspon

- 1980 *Migrasi spontan orang Jawa di Kalimantan Selatan* [Spontaneous migration of Javanese to South Kalimantan].- Lembaga Penelitian Universitas Lambung Mangkurat, Banjarmasin, 1980.

PPT/325.5

Kalsel, Spontaneous Migration, adaptation Process, Java, Banjar, Dayak

It examines the migration process of Javanese (especially East Javanese) to South Kalimantan as spontaneous migrants and their adaptation to the new environment. The migration process is generally motivated by relatives or friends who have moved to South Kalimantan while the adaptation is achieved through jobs, social organisations and marriage.

RESMIDAR

- 1986 "Transmigrasi Swakarsa" [*Spontaneous Transmigration*], *Prioritas*, 29/08/1986.

MOT

Indonesia, T. Swakarsa, T. Umum, T. Tripartial, T. Sektoral, Integration, Ecosystem

According to the law No 2/1972, the type/status of transmigration was divided into general transmigration and spontaneous transmigration. Spontaneous transmigration is self-supported or financed by private sector or institutions. The government is in charge of land preparation, coordination, funds and social integration. Spontaneous transmigration was more successful than general transmigration as it was shown in the 1966-75 data. Such success is needed as guidance for future policy formulation.

RICE, Robert

- 1989 "Riau and Jambi: Rapid growth in dualistic natural resource-intensive economies", in: *Unity and diversity: Regional development in Indonesia since 1970*. Hill, H. (ed.), 1989:125-149.

Riau, Jambi, Regional Development

RIYANTO

- 1987 "Dukungan perbankan dalam perluasan investasi nasional" [*Banking sector supports the national investment development*], in: *Seminar Nasional "Investasi Swasta", Pembangunan Daerah dan Transmigrasi Swakarsa*. Ujung Pandang, 9-11 Maret 1987, 22 p., tab.

PDII/332 609 598 Sem

Indonesia, T. Swakarsa, Private Enterprise Participation, Financing

This study is on self-initiated transmigration related to private sector participation. The involvement of private and banking sectors in transmigration programs still consider the cost and benefit, risk, optimal profit and other healthy banking principles.

ROMDIATI, Haning

- 1989 "Peranan komunikasi dalam transmigrasi swakarsa murni: kasus pemukiman transmigrasi Sungai Pagar, Riau" [*The role of communication in the pure self-supported transmigration program: The case of Sungai Pagar settlement, Riau*], *Journal Penelitian dan Komunikasi Pembangunan*, Badan Litbang Penerangan, Jakarta, 1989: 48-59, bibl.

PPT

Riau, Sungai Pagar, Communication, Spontaneous Migration

The paper discusses the communications network among the self-supported migrants. Communication in the form of "to pay a call" or in the form of "letters correspondence" can play an important role in the attraction of "pure" self-supported transmigrants. Other supporting factors are the good condition of the roads and the low transportation cost, the close distance of the settlement location to the main roads. Moreover, the most interesting factor that attracts the self-supported transmigrants lies in the possibility to get certificate for the land they intended to work.

ROMSAN, Achmad

- 1989 *The future role of public participation in environmental management and decision making process: A case study of Indonesian transmigration sites in the province of South Sumatra*.- Master of Laws, Dalhousie Univ., Canada, 1989, 220 p.

UNSRI

Sumsel, Land Rights, Environment, Policy, Development, Problems

RUSLI, Said

- 1978 *Inter-rural migration and circulation in Indonesia: The case of West Java*.- PhD, ANU, Canberra, XII+148 p., tab, app, bibl.

PPT/325.511 Rus/i

West Java, Spontaneous Migration, Rural Migration, Micro Analysis, Migration Decisions, Development, Marriage, Circulation

Main factors for migration decisions are the existence of relatives in the new place even for destination outside Java island.

- 1985 *Karakteristik struktural mobilitas penduduk di Bali* [Structural characteristics of population mobility in Bali].- Lembaga Ekonomi dan Kemasyarakatan Nasional-LIPI, Jakarta, IV+51 p., tab, bibl.

PPT

Bali, Internal Migration, Socio-economic Change

This report examines the internal migration in Bali and its socio-economic background. The characteristics of migrants and their professional status reflect their background; that is the change in the economic structure resulting from narrow man-land ratio, as well as the expansion of the industrial and service sectors in the cities induces the higher educated people to "urbanize". Bali as an originary place for spontaneous migrants, factors are considered which induces them to transmigrate in general.

SAHUR, Ahmad

- 1988 "Merantau bagi orang Pidie" [*Out-migration of Pidie people*], in: *Migrasi, Kolonisasi, Perubahan Sosial*. Sahur, A. et al (eds.), Pustaka Grafika Kita, Jakarta, 1988: 13-48, tab, bibl.

Aceh, Pidie, Out Migration, Religion, Cultural Values

There are three reasons causing Pidie people to out-migrate: 1. Economic reason: In the Pidie community, there exist no clearcut social classes except for economical strata, therefore Pidie people are motivated to become wealthy in order to achieve highly regarded social status. 2. The process of children's socialisation through religious education, that starts at the age of six years, links them more to the life outside the households. Furthermore, after marriage, the wife stays with her family while the husband out-migrates to strive for a higher social status. 3. "Bale" as environmental factor, the meeting place of the inhabitants, induces young people to out-migrate. People who do not out-migrate will be looked down upon.

SAHUR, A., LEUWOL, E., FADJAR, A. & MAKMUR, A.

- 1988 *Migrasi, kolonisasi, perubahan sosial* [Migration, 'kolonisasi', social change].- Yayasan Ilmu-Ilmu Sosial, Pustaka Grafika Kita, Jakarta, VIII+255 p., tab, bibl.

Aceh, Susel, Toraja, Jakarta, Migration, Social Change

This book gives some migration behaviors among different ethnic groups. Pidie people of Aceh usually go on migration to be merchant and will be back to their rice field for the planting season. Toraja people, like the Javanese, go on migration to find land but the Toraja regularly return to their origin place for important life ritual. Javanese are to faraway to go back and that will be the reason for them to create an "enclave" type of life in the new residence area.

SAJOGYO

- 1980 "Meningkatkan martabat petani buruh (I): Beragam masalah mengapa mereka miskin dan rendah martabatnya" [*Increasing the status of agricultural waged labor (1): Various problems why they are poor and low status*], *Sinar Harapan*, 06/02/1980.

YTKI

Indonesia, Smallholder, Agricultural Labor, Poverty, Social Structure, SUSENAS

The seminar on "Labor Potency" held by HKTI in Jakarta discusses the poverty problems of waged farmers. According to the 1976 Census, 50% of them still live under insufficient conditions in Java. Structural problems such as population growth, land distribution, employment policy seem to be the main causes of the poverty.

- 1981 "Rural development in Indonesia: its agrarian base in Republic of Indonesia, Department of Manpower & Transmigration", Management of Transmigration Project, ASEAN Technical Cooperation among Developing Countries Program, Indonesia 24/8/81-6/9/81, Department of Manpower & Transmigration, p. E1-E16.

Indonesia, Rural Development, Agricultural Development, Farmers Organizations, Estate

Due to the existence of stratification in the organization process, the management is concentrated on certain layers only. The interaction between each layer is described in the context of rural development which is structurally based on natural resources management. As agriculture in Indonesia consists of farming and shifting cultivation, the problems of rural development are related to how to start the decentralization process, now to develop the appropriate technology, and how to lessen the gap between the rich and the poor.

SANTOSO, Djoko & WARDHANA, Ali (eds).

- 1957 "Some aspects of spontaneous transmigration in Indonesia", *Ekonomi dan Keuangan Indonesia*, Vol. X, no. 6, June 1957; pp. 413-430; tab.

LDUI/325.9 San/s

South Lampung, Banyumas, Banyuwangi, Central Lampung, Spontaneous Migration, T. Swakarsa

Towards the possibility of a government aid program to accelerate the spontaneous transmigration flow, various suggestions or important findings from 3 research areas can be resumed as follows: 1. Jobs and fertile land should be made available. 2. Accessibility of transportation. 3. Existence of marketing channel for agricultural products. 4. Illegal settlement should be handled.

SAWIDAK, Mohammad Arief

- 1985 *Analisa tingkat kesejahteraan ekonomi petani transmigran di Delta Upang Propinsi Sumatera Selatan* [Analysis on economic welfare of farmers in Delta Upang, South Sumatra].- Fakultas Pasca Sarjana, Institut Pertanian Bogor, 104 pp.

IPB-Sosek

Sumsel, Delta Upang, Income, Off-farm Employment, Tidal Swamp

This research shows the failure of the transmigration settlement in Delta Upang. It seems that there is no differences in income between transmigrants. And if there is any, it is mostly due to their off-farm employment. Food expenditures take the biggest share from their income. Even Balinese transmigrants are more successful than the other ethnics, still the difference is not remarkable. There is no improvement in this tidal location for there exists almost no differences between old settlers and new comers.

SCHOLZ, Ulrich

- 1980 "Land reserves in southern Sumatra and their potentialities for agricultural utilization", *Geo-Journal*, 4 (1), 1980, Wiesbaden.

Southern Sumatra, Agricultural Potentiality, Arable land

- 1983 *The natural regions of Sumatra and their agricultural production pattern.* - Central Research Institute for Food Crops (CRFIC), Bogor, Indonesia, 1983, 257 p., Atlas vol.2.

Sumatra, Agricultural Region, Agricultural System

This book gives a very good detailed overview of the agricultural pattern for each natural regions of Sumatra. A reference book. A more developed version in German "Agrargeographie von Sumatra", Geographischen Instituts, Universität Giessen, Heft 63.

SCHOPHUYS, H.J.

- 1986 "Transmigrasi di Kalimantan" [*Transmigration in Kalimantan*], in: *Transmigrasi di Indonesia, 1905-1985*. Swasono, S.E. & Singarimbun, M. (eds.), 1986: 43-69, map, bibl.

PPT

Kalimantan, T. Swakarsa, Migration, History, Madurese, Banjarese, Dayak, Pasang-surut

"Self-supported" migration has appeared in Kalimantan since a long time. Dayaks, Banjarese, and Madurese have settle in new place in Kalimantan over the centuries. As the natural resources are abundant, the flow of self-supported migration has never ceased. However, the government has to think about the use of appropriate technology and facilities; among others, how to cultivate the potential of tidal areas in Kalimantan.

SECRET, Charles

- 1986 "The environmental impact of transmigration" [*The environmental impact of transmigration*], *The Ecologist*, Vol. 16, no. 2/3, pp. 77-88., bibl.

Indonesia, Forestry, Farming system, Foreign Aid

The author acutely observes the environmental impact of the migration program towards the Indonesian tropical forest ecosystem which is very complicated and therefore, sensitive. The undeniable fact is that, even a successful migration program might increase environmental disaster; let alone, a failed migration program! The failure is due to inaccurate mapping, wrong land classification, inappropriate farming system. Even if the settlement was successful, the new comers would cross the reserved forest. It would happen because they were given limited land. If the settlement failed, the transmigrants would try to survive by occupying the nearby forest. The author also expresses his disappointments towards funding agencies such as the World Bank and IGGI. He suggests that the development of the transmigration program should consider more the environmental factor than the political target. In other words, it should look at the "quality first".

SETIADI, Bambang

- 1983 "Dilema kehidupan petani kecil dan buruh tani" [*Livelihood dilemma for small farmers and landless peasants*], *Kompas*, 03/08/1983.

YTKI

Indonesia, Smallholders, Income, Agricultural Labor

This article reviews PERHEPI's response on the said Presidential speech; furthermore, it tries to analyze in-depth "Who is a small peasant", and shows a way-out for the problems of small and landless peasants.

SEVIN, Olivier

- 1989 "History and population", ORSTOM and Dep. Transmigrasi, Jakarta, 1989, 443 p., Atlas.

MOT

Lampung, History, Agricultural Colonization

SIAHAAN, N.H.T.

- 1986 "Transmigrasi swakarsa dan reorientasi pembangunan regional (2)" [*Spontaneous migration and reorientation of regional development (2)*], *Suara Karya*, 15/10/1986.

MOT

Indonesia, T. Swakarsa, Development, Policy

Inconventional efforts (spontaneous transmigration) need to be developed to speed up the flow of Javanese migration. It is necessary to create a pull-factor policy (for example, incentives, subsidies for those who intend to open private business outside of Java) and to develop the outer-islands.

SIMONS, H. & VERHEUGT, W.

- 1989 "Integrating wetlands conservation with coastal swamplands development", in: *Coastal zone environmental planning in the strait of Malacca*. Sjarkowi & Verheugt & Dirschl (eds.), Palembang, 1989: 145-154.

UNSRI

Sumsel, Project, Swamp, Mangrove, Development

This paper give the proposed research activities initiated by the Asian Wetland Bureau in South Sumatra. The programme will be executed with the Indonesian Directorate General of Forest Protection and Nature Conservation and the Environmental Study Centre of Srivijaya University, Palembang. The first phase is conducted in South Sumatra and could be regarded as a model for second stage studies in Lampung, Jambi and Riau provinces.

SINAR, Tengku Luckman

- 1986 "Laporan tahun 1933: Kolonisasi spontan orang Jawa di Sumatera Timur" [*1933 annual report: Javanese spontaneous colonization in East Sumatra*], *Waspada*, 22/04/1986.

MOT

Sumatra Timur, Spontaneous Migration, Colonial History

The first Javanese group entering East Sumatra was in 1866 when a number of plantation labor came to Malaya and then moved to East Java, but afterward, they left the plantation and became preachers among local people. After 1880, many Javanese came directly from Java. In 1915, Sultan Serdang accommodated and gave land to Javanese who terminated their contract with the Dutch plantation. The Sultan's strategy was to encourage the population growth so people will quit the plantation and become free. As a consequence, Javanese villages were spreading in Langkat, Deli, Asahan, Simalungun etc. Up to 1920, their population reached 40,51% and become the most important cultural group.

SIPAYUNG, Lerman

- 1980 "Pemukiman sosial di Lampung Utara: Mereka bukan gelandangan lagi, tetapi keluarga binaan sosial" [*Social settlement in North Lampung: they are not beggar anymore, but assisted family by the Social departement*], *Suara Karya*, 08/05/1980.

PPT

Lampung Utara, T. Swakarsa, Mutual Aid

At the beginning, Balinese people liked to settle in Lampung as spontaneous migrants but their families who moved there earlier did not seem to look forward for their arrival. To a consequence, they were accommodated by the Ministry of Social Affairs and finally sent to North Lampung to be transmigrants.

SJAMSU, Amral

- 1960 *Dari kolonisasi ke transmigrasi 1905-1955* [From colonization to transmigration 1905 - 1955].- Djambatan, Djakarta, 1960, VI+141 p., tab, bibl.

PPT/325.5 Sja/d

Indonesia, Lampung, History, Bawon, Spontaneous Migration, Family Migration

This book focuses on the political history of the population migration to the outer islands before Pelita by explaining various colonization systems and their weaknesses. 1) "Free of charge system (1905-1911): from which colons are provided with everything by the government. 2) "Borrowing system (1921-1931): migrants have to reimburse all the expenses. 3) "Bawon system (1932-1941): new migrants should be employed by pembawon (farmers). The "bawon" system emerged from the fact that spontaneous migrants are contracted from Java by the two previous system migrants. The third system is efficient because from the quantitative point of view, it reduces costs but creates the landless category. From the qualitative point of view, all previous systems failed mainly because migrants were taken by force into the Javanese socio-economic structure which intentionally brought back to life by the government at the colony area. Those three systems were applied in Lampung. The government has learnt lessons from these systems and tried its own system for the first time, that is the "family system" (1905-1955). This system is quite similar to the "Bawon system" but it is more selective and limited only to people who requested by the old colony. The financial support is similar to the "Borrowing system", "Borrowing" transmigrants in time should reimburse all expenses. This system was not successful either because the government of Indonesia did not pay enough attention to the preparation stages (selection of prospective migrants, land allocation, land clearing). Besides these four systems, the government also tried other systems in Sumatra, Kalimantan, Sulawesi and Maluku as well as Java (local transmigration to Banten).

SJARKOWI, F. & NURDIN, A.

- 1989 "Potensi, tantangan dan gagasan pembangunan berwawasan lingkungan di kawasan pantai timur Sumatera Selatan" [*Potential, challenge and proposal for environmental development in Eastern coast of South Sumatra*], in: *Coastal zone environmental planning in the strait of Malacca*. Sjarkowi & Verheugt & Dirschl (eds.), Palembang, 1989: 71-81.

UNMRI

Sumsel, Coast, Development, Land conservation, Swamp

The coastal zone in the province covers about three million hectares (32% of the total area). Major problems for development are: lack of infrastructure, lack of control on forest concessions, strong and increasing sedimentation, illegal logging activities, overlapping land allocation and inappropriate technology for swamp and peat land development.

SJARKOWI, F., VERHEUGT, W. & DIRSCHL, H.

- 1989 *Coastal zone environmental planning in the strait of Malacca: Towards sustainable development of coastal resources of the east coast of Sumatra*.- Technical workshop, Palembang, 7-9 June 1988, Development of environmental study centres, 1989, 237 p.

UNMRI

East Sumatra, Aceh, Sumut, Riau, Sumsel, Mangrove, Environment, Fishery, Swamp

SKEPHI

- 1987 *Bunga rampai transmigrasi* [Readings on transmigration issues].- SKEPHI & CUSO (Canadian University Service Overseas), Pusat Informasi Hutan, Jakarta, 1987, 106.

PPT

Indonesia, Library Directory, Transmigration, List of Contact

This book contains a bibliography which emphasis on environment (forest and cultural) issues linked with the national program. It gives also a very useful list and address of libraries and resource persons dealing with transmigration and environment issues.

SOEDARMO

- 1988 *Motivasi bertransmigrasi swakarsa penduduk Pulau Madura* [Motivation of Madurese people to be self-initiated transmigrants].- PhD, UGM, Fakultas Geografi, Yogyakarta, XVI+242 p.

PDII/304.8 Sud/m

Madura, Madurese, Motivation, Sending Area, Migration Decisions

With a poor and infertile land in addition to its geographical situation which is surrounded by the sea, Madurese people are well motivated to be self-initiated transmigrants to other islands. Their motivation is strengthened by three other factors: 1) Funding or financial assistance can be obtained through the informal leader. 2) Support and guidance at the place of destination are provided by Madurese people who already settled there a long time ago. 3) Chain-transmigration has been developed for Madurese ethnic. The dissertation findings come from survey, questionnaire interview and secondary data analysis.

SOEGIARTO

- 1989 *Transmigrasi di Indonesia dan permasalahannya* [Transmigration in Indonesia and its problems].- Dep. Transmigrasi, Jakarta, III+31 p., tab.

LDUI/301.326 Soe/t

Indonesia, National Development, Policy, Repelita V

The main objective of the transmigration programme have been modified between Pelita I and Pelita V. Before Pelita V, the government main goal focuses on the even distribution of population while the present Pelita V is more oriented towards development projects to increase national products (See page 19).

SOEKOWIKARJO, S.

- 1987 "Ledakan penduduk, transmigrasi dan Rasau Jaya" [*Population explosion, transmigration and Rasau Jaya*], *Buletin Bina Desa*, no. 58, April 1987: 22-24.

SKEPHI

Kalbar, Rasau Jaya, Pasang-surut, LPSM, Culture

Among other things, LPSM in West Kalimantan solved clean water problems, provided information and basic professional education for self-help business groups, bookkeeping, handicraft etc. Difficulties encountered by LPSM during its guidance endeavor for transmigrants were mainly based on the different socio-cultural factors.

SOERYAJAYA, William

- 1987 "Strategi pengembangan usaha di luar Jambal menurut pandangan pengusaha" [*Effort improvement strategy outside of Java, Madura, Bali, Lombok according to*

businessman point of view], in: *Seminar Nasional "Investasi Swasta", Pembangunan Daerah dan Transmigrasi Swakarsa*. Ujung Pandang, 9-11 Maret 1987, 23 p., tab.

PDII/332 609 598 Sem

Indonesia, T. Swakarsa, Private Enterprise Participation

The participation of the private investors needed to boost the self initiated transmigration. This thinking is based on the assumption that private capital would be a primary source for development. In order to stimulate them to participate, various efforts from the government should be reviewed regarding business license; easy and fast services and consistency of the government regulations; besides the information about the economic potential without omitting the availability of infrastructure and transportation.

SPEARE, Alden Jr.

1979 "Migration assumptions for use in regional population projections in Indonesia", *Majalah Demografi Indonesia*, VI, no. 11, 1979: 21-34, tab.

LDUI

Indonesia, Population Projection, Sex Ratio, Spontaneous Migration

The paper explains the assumption based on which LEKNAS has projected the population for 19 regions in using the adjusted data of 1931, 1961, 1971 censuses. In relation to spontaneous migration, rural data in Sumatra shows that between 1971-1976, the sex-ratio (men/women) was 1.69. It is an evidence that man first migrate to Sumatra and once settled, ask their family to join them.

STANDING, Guy

1985 *Konsep-konsep mobilitas di negara sedang berkembang* [Mobility concepts in developing countries].- Pusat Penelitian Kependudukan, Seri terjemahan no.24, UGM, Yogyakarta, 1985, 48 p.

LDUI/301.326 Sta/r

Developing Countries, Mobility

The original title is "Conceptualizing Territorial Mobility in Low-Income Countries", ILO, Geneve, 1982. The author brings out criteria, classifies different types of mobility (according to their status), and presents various types of migrations (especially their measurements) in referring to the main concepts using in the literature.

STIFTUNG, Friedrich

1980 *Pemantapan usaha pembangunan di daerah transmigrasi* [The stabilization of development initiatives in transmigration areas].- Pusat Pembinaan Sumber Daya Manusia, YTKI, Jakarta, 1980, 223 p.

PPT/325.33 Yay/p

Sumatra, Regional Development, Land Use, Labor Utilization

Contains the summary of a workshop and two seminars on transmigration, whose participants comprised of experts from various universities, government institutions and NGOs. The Seminars were divided into two parts: 1) Typology of available land in transmigration areas and models of development. Various land types were identified according to cultivation patterns, and pertinent recommendations. 2) Training methods and manpower needs for the development of each type of transmigration areas. The workshop on regional development and transmigration settlement program come to the following conclusions: 1) The areas in the vicinity of the Sumatra Highway should be developed and advanced. 2) The implementation should be in accordance with the factors of natural resources and human characteristics. 3) An integrated approach towards the development of transmigration settlements are of utmost importance. 4) Scientists and Universities should play an important role in the search for the best possible synthesis regarding the said development. 5) An integrating coordination between the various parties involved should be established. One special topic of the seminar was a recommendation on spontaneous transmigration i.e. land distribution and the preparation of reserve land specially for spontaneous transmigrants.

SUDANA, Wayan

1988 *Alokasi optimal sumber daya di daerah transmigrasi Pematang Panggang Sumatera Selatan* [Optimum allocation of natural resources in Pematang Panggang transmigration area, South Sumatra].- Fakultas Pasca Sarjana, IPB, Bogor, 1988: 32-66, tab.

IPB-Sosek

Sumsel, Income, Land Use, Agriculture

This thesis compares the income of traditional farmers, PIR farmers and non-PIR farmers (food crops and animal husbandry). The research shows that rubber-PIR farmers have the highest income, followed by the oil palm farmers, non-PIR farmers and food crop farmers respectively. The writer concludes that the farmers income can be increased through diversification (foodcrop, land and PIR).

SUGIANDI, Y.

- 1989 *Faktor-faktor penghambat keberhasilan petani kopi di kecamatan Tanjung Sakti, Kabupaten Lahat* [The constrain factors for coffee smallholders in Kec. Tanjung Sakti, Kab. Lahat.].- Laporan Penelitian, Pusat Penelitian UNSRI, 1989, 23 p..

UNSRI

Sumsel, Lahat, Smallholder, Coffee, Agricultural Technic

Short study on coffee smallholder using traditional and extensive methode.

SUHARSO

- 1982 *Laporan singkat dan hasil perumusan temukarya mengenai kesempatan kerja kemiskinan dan mobilitas penduduk daerah pedesaan* [Brief report and results of the workshop on job opportunity, poverty and population mobility in rural areas].- LEKNAS-LIPI, Jakarta, 13 p.

LDUI/331.11 Suh/I

Indonesia, Mobility, Poverty, Employment

Population mobility is one of the problems which can be foreseen and linked to the spontaneous transmigration implementation. Other problems can be found in Bulletin LEKNAS No. 2, 1982

SUHARSO, SPEARE, A., REDMANA, H. & IMRON HUSIN

- 1976 *Rural urban migration in Indonesia*.- National Institute of Economic and Social Research (LEKNAS-LIPI), Jakarta, 1976, VI+ 142 p., tab.

PPT/325 Suh/r

Indonesia, Rural-Urban Migration, Socio-economic, Characteristic of Migrants, Motivation

This research describes the level of rural-urban migration in Indonesia, the characteristics of migrants, their success in the city and their rural socio-economic conditions. The most relevant aspect related to the spontaneous migration is the rural socio-economic pressure, especially since most of them have no land and employment (p. 79-91).

SUJARWADI

- 1979 "Kerawanan masalah tanah di pulau Jawa" [*To settle land problems in Java*], *Cakrawala*, Majalah Penelitian Sosial Triwulan III/1979.

Jawa, Population Density, Land Reform, Land Ownership

SUNARTO, S.

- 1985 *Penduduk Indonesia dalam dinamika migrasi 1971-1980* [Indonesian population through migration dynamics: 1971-1980].- Dua Dimensi, Yogyakarta, IX+ 120 p., tab, index, bibl.

PPT/312:325.33Sun/p

Indonesia, Inter-provincial Migration, Lifetime Migration, T. Swakarsa, Census

The total of migrants in 1980 has doubled (10,2 million or 6,9%) as compared to 1971 (5,7 million or 7,3% of the total population). The proportion of migrants from Java has increased from 58% (1971) to 62% (1988) from which 85% went to Sumatra. On the other hand, migrants from Sumatra have declined from 19% to 16,5% still following the same direction, that is 90% went to Java. The migration flow from Java to Kalimantan and Sulawesi has increased. Spontaneous transmigration plays an important role. During the last five years, 3 out of 4 out-migrants from Java were self-supported.

SUNDRUM., R.M.

- 1976 "Inter-provincial migration", *BIES*, Vol. XXII (1), 1976: 70-92, tab.

Indonesia, Java, Sumatra, Inter-provincial Migration, Policy

In using the 1971 Indonesian Census, this article shows that almost 5% of the population are ever inter-provincially migrated, 40% of them permanently migrate to Jakarta and the other 24% to Lampung. The flow of migration from Java to Sumatra decreases due firstly to the decline in the number of migrants to Sumatra and secondly to a greater number of people who migrate from Sumatra to Java. People who migrate to Sumatra then return to Java represent only 1/7 of the stream. This implies that migration to the outer-islands of Java should be encouraged by expanding the productive land, motivating young people to work out of Java and enhancing the growth of middle cities and developing rural areas as well as the transmigration program.

SUPADI, Stephanus

- 1978 *Internal migration in Indonesia: Outmigration from Java and Bali.*- PhD, Development Studies Centre, ANU, Canberra, 1978, X+115 p., tab, app, bibl.

PPT/325.511 Sup/1

Indonesia, Java, Bali, Outer Indonesia, Out-migration, Birthplace

This book focuses on the intern-island migrations, particularly from the Java-Bali islands. Using information such as the Indonesian Migration Censuses, Indonesian Intercensus surveys, and other transmigration and inter-island migration data, the author tries to explain, besides the quantitative data, the socio-demographic characteristics of the migrants. The book also discusses the causes and effects of the Java-Bali migration streams.

SURATMAN, & GUINNESS, P.

- 1977 "The changing focus of transmigration", *BIES*, Vol. XIII (2), July 1977: 78-102, tab.

PEP

Indonesia, Policies, Alternatives Strategy, Spontaneous Migration, Regional Development, Colonization, T. Sisipan

This article examines the development history of the transmigration policy programs from 1905 to the Third Indonesian Five-Year Development Plan (Pelita III). Evidences used in this article are based on some individual and institutional researches. The conclusions draw some alternatives regarding the transmigration program such as the importance of the regional development, the better efforts to locate the land, the cultural integration program, the increase in the skill and the goodwill of spontaneous transmigrants, and the government tasks to develop the infrastructure. In addition, this article discusses two groups of definitions of transmigrants. They are spontaneous and general transmigrants. The spontaneous transmigrant is the one who is registered both in the place of origin and place of destination, but migrates by her/his own expenses and will be provided the land, and housing equipments at the destination place. Voluntary transmigrant who self-initiatively and self expensively migrates to the transmigration areas is included in this definition (page 86). The flow of movement which has increased, relates to the improvement of transportation between South Sumatra and Java. Data from the 1971 Indonesian Census also shows a greater number of these voluntary transmigrants who move to Lampung province. They are also emerged socio-economically more successfull in comparison with the general transmigrants (pages 99-101). Their prospects will be even higher if the outer-islands of Java are economically and politically more attractive.

SUSENO, Alek

- 1988 "Memantapkan peran sistem transmigrasi sebagai wahana pembangunan nasional Indonesia" [*Determining the role of transmigration system as vehicle to promote National Development*], in: *Sidang Pleno "Forum Komunikasi Transmigrasi ke I"*. Dep. Transmigrasi, Puslitbang, Jakarta, 26 Januari 1988, II+64 p., tab, ann.

YTKI

Indonesia, Development, T. Swakarsa

There are two issues to be concerned: The national development regarding the role of institutions/organizations and the role of individual especially transmigrants as vehicle to promote the development.

SUWARNO, Bambang

- 1981 "Analisa path dan penggunaannya dalam studi tentang transmigrasi" [Path analysis and its utilization in transmigration study], *Majalah Demografi Indonesia*, no. 16, Th. VIII, Desember 1981: 54-73, tab, ann, bibl.

Indonesia, Policy, Path Analysis

This article discusses transmigration problems, in particular examines factors which influence people who do not wish or hesitate to transmigrate. In using the path analysis, various independent variables such as socio-cultural environment (place of residence, education and assets), intermediate variables (behavior and personality) and dependant variables (hesitation to transmigrate) are taken into consideration. The author has found out that: - Education seems to decrease the hesitation to transmigrate. However, this study does not prove that higher educated people will be more inclined to transmigrate - Among the rural population, many decline to transmigrate - Experienced farmers with little land do not reject the idea to transmigrate.

SWASONO, Sri Edi

- 1980 "Memperingati tiga perempat abad transmigrasi di Indonesia: Dapatkah kita merubah orientasi berpikir lama?" [*To celebrate the 3/4 century of transmigration in Indonesia: Can old orientation be changed?*], *Sinar Harapan*, 18/11/1980.

PPT

Indonesia, History, Policy

After independence, the colonization program continued under the name of transmigration. The main problem of transmigration, in term of solving population density and poverty in Java is still a myth and demographic oriented policy. The author suggests to attach transmigration program to regional development.

- 1988 "Mencari bentuk, posisi dan peranan: Transmigrasi sebagai bagian strategis dari pembangunan nasional" [*Searching for form, position and role of transmigration as strategy for National Development*], Paper, Seminar Pengembangan Daerah Pemukiman Transmigran, 27 Januari 1988: Universitas Prof. Dr. Moestopo, Jakarta, 7 p., tab; ann.

LDUI/301.326 Swa/m

Indonesia, Policy, Regional Development, Second Stage Development Project (SSDP), World Bank

In relation to the change from "demographic oriented" to "development oriented" of the transmigration political orientation, the author, in using the data from the World Bank shows that 26% of the inhabitants of the outer-islands are "migrants" (or descendants of migrants) from Java-Bali in accordance to their spoken language. It is also mentioned that the volume of transmigration can have an impact on the regional development and SSDP can play a corrective role towards the old transmigration pattern.

SWASONO, Sri Edi, Masri SINGARIMBUN (eds.)

- 1986 *Transmigrasi di Indonesia 1905-1985* [Transmigration in Indonesia 1905 - 1985].- New Edition of "Sepuluh windhu transmigrasi di Indonesia, 1905-1985", Universitas Indonesia Press, Jakarta; XXV+409 p., tab, map.

PPT/325.5 Swa/s

Indonesia, Policy, Innovation, Socio-economic Cost, T. Swakarsa, Culture

This compilation of 25 articles includes deliberations on the history of migration since pre-historical times, transmigration policy since the Dutch period, problems to be faced, as well as means of recent reorientation and innovations. Furthermore, there are articles focussing on special migration and settlement patterns. This book looks at the wide angle of "transmigration observed from various aspects", without restricting itself to a certain period. It serves keen and wide-dimensioned retrospection, among others on self-supported migration, by various authors.

SYAFRIZAL

- 1987 "Kebijaksanaan pengendalian urbanisasi di Indonesia" [*Urbanisation management policy in Indonesia*], *Majalah Demografi Indonesia*, (27) Juni 1987: 51-76, tab, bibl.

LDUI

Indonesia, Urbanization, Transmigration, Service Sector

Transmigration is to be seen as motor for the urbanisation management policy. In this respect, self-supported and transmigrants who could not get a job in urban areas are chosen. Urban transmigrants should be directed to the services sector (construction, manufacturing, handicraft, etc...) so that they can be settled in well developed transmigration sites.

THALA, M., SAADUDDIN, K. & RASYID, A.

- 1982 *Prospek pengembangan transmigrasi swakarsa di Parigi Sulawesi Tengah* [Self-initiated transmigration prospect in Parigi, Central Sulawesi].- Prospek penelitian Universitas Hasanuddin, Ujung Pandang, 1982, VII+47 p., tab.

PDII/0046/86

Sulteng, Economy, Motivation, Information, Spontaneous Migration

This analysis on the development of self-initiated transmigration is resulted from a multidisciplinary study. It is found out that since 1968, the area have increasingly received "pure" spontaneous migrants from Bali. They are usually informed by their relatives/friends about the area good opportunities (p. 23-25). At the new settlement, they generally succeed due to their high motivation to increase their standard of living (table 3.6.1). The success can be seen through houses, places of worship, air travel tickets when they come back to visit their relatives in Bali. Parigi has a great potential to promote the "pure" self-supported transmigration (without government assistance).

THEE KIAN WIE & SHINICHI ICHIMURA

- 1975 *The regional economic survey of the province of South Sumatra, 1970-1971.- Masyarakat Indonesia*, seri monografi 2, LIPI, Jakarta, 1975, 221 p.

PEP

Sumsel, Regional Income, Method, Macro Economy, Regional Economy

TIRTOSUDARMO, Riwanto

- 1985 *Migration decision making: The case of East Java.- National Institute of Economy and Social Research - LIPI, Jakarta, 1985, X+115 p., tab, index, bibl. (monograph series).*

PPT/325.511

Jatim, Migration Decision, Population Mobility, Urbanization, Rural-Urban Migration, Population Growth

- 1985 "Migration patterns and development in Indonesia: A review of literature", *Masyarakat Indonesia*, XII (3), Desember 1985: 303-318, bibl.

PPT

Indonesia, Colonial History, Contemporary History, Urbanization, Plantation, Development

A review on migration studies in Indonesia dating from colonial up to post-independence times, in particular studies on migration patterns and studies on the interrelation between migration and development. Five types of migration were identified from the studies, i.e. migration to plantation sites, emigration abroad, moving from village to village (transmigration program), village-city migration (urbanization) and voluntary traditional migration by members of well known mobile ethnic groups (e.g. Minang, Bugis, Banjar, Makasar) (p. 305). The largest in-migration happened in provinces with economic growth (among others DKI, North Sumatra, South Sumatra, Riau, East Kalimantan). Non-economic factors like the upgrading of infrastructure, communication, education, health facilities during the Suharto era, constituted an important push-factor, especially for urban migration.

TJAHJONO, Hendro

- 1987 *Evaluasi pelaksanaan program transmigrasi sehubungan dengan peningkatan taraf hidup transmigrasi* [The evaluation of transmigration programme organization in relation to transmigrant's quality of life].- Institut Teknologi Bandung, Bandung, XX+150 p., tab, bibl.

LDUI/301.326 Tja/e

Riau, Sumsel, Kalteng, Kalsel, Kaltim, Sulteng, Sultra, Quality of Life, Evaluation, Welfare

The author tries to assess the improvement of transmigrants standard of living in using four indications namely income, consumption, welfare perception and minimal income criteria. The research has been conducted in 7 provinces in 1986 and has showed that the transmigration program during Pelita was successful in increasing transmigrants quality of life. Analysis factors which correlate to income, in particular to the type of transmigrants reveal that spontaneous transmigrants income from farming sector is the lowest. However, after other variables have been controlled, then income become about the same in comparison to others types of transmigrants.

TJIPTOHERIJANTO, P. & MUNIR, R.

- 1984 *Kriteria keberhasilan program transmigrasi* [Success criteria of the transmigration program].- Ciputat, 25 p., tab, bibl.

LDUI/301.326 Tji/k

Indonesia, T. Swakarsa, Evaluation

Due to many problems among which the imbalance between general transmigration and self-supported transmigration, the choice of variables to measure the success to transmigration program have emerged. It is proposed that variables having an economic impact such as PDRB, KUD, health, assets etc., and having a social impact on criminality level, safety disturbance etc., will be used for this purpose.

TJONDRONEGORO, S.

- 1978 "Beberapa pokok-pokok pemikiran mengenai transmigran sisipan dalam proyek transmigrasi" [*Some basic features about 'sisipan' transmigration inside transmigration project*], in: *Kesimpulan diskusi team policy research terbatas tentang Transmigrasi Sisipan*. Puslibang Transmigrasi, Dep. Transmigrasi, 1978.

MOT

Indonesia, T. Sisipan, Evaluation, Family Linkage

TRANSMIGRASI (Dep.)

- 1985 *Data pelaksanaan program transmigrasi* [Implementation data on Transmigration Program].- Departemen Transmigrasi, Jakarta, II + 24 p., tab.
MOT/410.21 Ind/d
Indonesia, Data, Repelita III, Repelita IV, T. Swakarsa
Self-initiated transmigration are included in transmigration figures under PELITA III and are also emphasized for PELITA IV planning.
- 1985 *Petunjuk teknis bidang transmigrasi swakarsa* [The technical guidance of self-initiated transmigration].- Direktorat Jenderal Pengerahan dan Pembinaan, Jakarta, 52 p.
MOT
Indonesia, T. Swakarsa, Improvement, Motivation, Land Preparation
Self-initiated transmigration manual.
- 1985 *Transmigration policies in Repelita IV*.- Departemen Transmigrasi, Jakarta, 57 p., tab (paper prepared for a meeting of Ambassadors of IGGI countries, March 20, 1985).
MOT/410 Ind/t
Indonesia, Policy, Repelita IV
According to the National Guidelines GBHN and the Parliament's statements No. 11/MPR/1983, policies towards the transmigration program in Pelita IV (Indonesian Five-year Development) consists: - Firstly to increase the population distribution and to produce new productive land in relation to the regional development. - Secondly, to boost spontaneous transmigration. - Thirdly, to resettle people who practice the sifting cultivation. - Forthly, to develop the inter-relationship between local people and transmigrants in term of trading and agricultural industry. - Finally, to pay more attention to the coordination between different authorities implementing those policies.
- 1987 *Anggapan & jawaban atas saran, himbauan & pertanyaan-pertanyaan komisi IV DPR-RI dalam rapat dengar pendapat dengan Direktorat Jenderal Pengerahan & Pembinaan Deptrans, tgl 23-2-87*. [Discussion regarding some questions raised by the Fourth Commission of the Indonesian Parliament, held by the G.D.D.C., Deptrans 23-2-87].- Direktorat Jenderal Pengerahan dan Pembinaan, Jakarta, 15 p.
MOT/414 Dir/t
Indonesia, Policy, Transmigration Swakarsa, Target, Parliament
This article describes the policy being made to anticipate the decrease the Indonesian 1987/1988 budgets. The point of the policy is to take action towards the implementation of spontaneous transmigration. The target is to move 164.000 families of spontaneous transmigrants as well as 1000 families of general transmigrants. To reach these targets some actions are being undertaken such as arranging the coordination between regional authority of the place of origin and the place of destination, enhancing the information flow, the registration and the coordination of related ministry as well as private sector.
- 1988 "Konsepsi peningkatan penyelenggaraan transmigrasi swakarsa" [*Concept of development for self-supported transmigration programme*], in: *Sidang Pleno Forum Komunikasi Transmigrasi ke I tanggal 26 Januari 1988*. Puslitbang Transmigrasi, Jakarta, 1988, II + 64 p., tab, ann.
YTKI
Indonesia, T. Swakarsa, Policy, Implementation
The idea of this paper comes from the self-supported transmigration program that still not well organized and directed. It can be resumed as follows: 1. No further explanation for existing regulations. 2. No stipulation regarding the preparation and organization of new comers (transmigrants). 3. Limitation of Institutions in charge of the self-supported transmigration program. 4. Limitation of NGOs dealing with spontaneous transmigration. 5. No cooperation among government, private and community on how to organize/coordinate the self-supported transmigration programme. To solve these problems especially for point (5), oriented policy should be increased so that the private investor will be interested to cooperate in the same time the goals of transmigration programme will be achieved such as follows: - Develop the existing transmigration areas. - Open new projects that involve private investors. - Open new projects that link to bigger projects. - Encourage self-supported transmigration in relation to settlement areas.
- 1989 *Forum Komunikasi Transmigrasi III* [Transmigration Communication Forum III].- Jakarta, 27-28 Oktober 1989.

MOT

Indonesia, Policies, Spontaneous Transmigration, Potential Village, Sending Area, Receiving Area, Coordination, TRANSABANGDEP

About the new concept of TRANSABANGDEP based on small scale transmigration settlement as satellite to indigenous village. This programme should be financed by the sending and receiving provincial government, by the Transmigration Dep. and the candidat themself. The new settlement will be directly under the local jurisdiction and not the Transmigration Dep. as usual.

TRANSMIGRASI (Kawwil NTB)

- 1990 "Program TRANSABANGDEP daerah asal propinsi NTB Tahun 1990/1991" [*TRANSABANGDEP program for sending area West Nusa Tenggara, 1990/1991*], Dep. Transmigrasi, Rakor Transabangdep di Surabaya tanggal 19 Maret 1990.

NTB, Program, Problem, Agenda, Budget

UHLIG, Harald (ed.)

- 1984 *Spontaneous and planned settlement in Southeast Asia: Forest clearing & recent pioneer colonization in the Asean Countries & 2 Case-Studies on Thailand.*- Institute of Asian Affairs, Hamburg, 1984, XV+331 p., tab, map, bibl.

Asean, Spontaneous Settlement, Policy, Agriculture

The author examines the spontaneous settlements and the settlements sponsored by the different governments in Southeast Asia. Differences in policy depended on the orientation of agricultural policies on each government. The way to handle the program are also very different. In Malaysia, there are hardly any spontaneous settlements because the national agency "FELDA" provides a "luxurious" alternative program to prospective settlers, mainly in plantation, but the question of ownership is not clear. In the Philippines and especially in Thailand, the government was active behind spontaneous settlements although at the beginning issued regulations which slow it down. Thailand case is more developed in the second part of the book and stress the role of chinese merchants as sponsor for agricultural inputs (information, new seeds, fertilizer and other). About Indonesia, the book focused mainly on settlements planned by the Government although it seems to be less successful in comparison to the spontaneous settlements. Another dimension to be discussed that is the positive relation between: 1) Logging ventures which proliferate and the appearance of illegal settlements and land clearings in one place (very strong in Thailand), 2) The positive relation between the pioneer traders in the mentioned area, with the growing extent of illegal settlements and land clearings. 3) Chain of attraction for newcomers to buy land from the initial settlers, while the money received by the original settlers is invested to open new forest areas. 4) Growing density and improvement of physical and social infrastructure, induced first by the settlers them self then relayed by government aid.

UGM

- 1987 *Sejarah agraria* [Land Right History].- Clipping book edited by Pusat Penelitian Pembangunan Pedesaan dan Kawasan, UGM, Yogyakarta, 1987, 130 p..

UGM-PPBDK

Land Reform, Land Dispute, Ownership Title

A useful clipping book when land issues in Java and in outer Indonesia became a major source of conflict.

UTOMO, Kampto

- 1974 "Villages of unplanned resettlers in the subdistrict Kaliredjo, Central Lampung" [*Villages of unplanned resettlers in the subdistrict Kaliredjo, Central Lampung*], in: *Villages in Indonesia*. Koentjaraningrat (ed.) Cornell University Press, Ithaca New York, 1974.

Sumatra, Lampung, Pioneers, Tribe-land, Adaptation, Spontaneous Migrant, Organization, Social Conflict

It describes the growth process of a new settlement district established by pioneers, their relationship with local people, their adaptation to the cultivation method, the social organizations, the presence of recent spontaneous migrants, their success, and their existing social conflict.

- 1975 *Masyarakat transmigrasi spontan di daerah Way Sekampung (Lampung)* [Spontaneous transmigrants community in Way Sekampung, Lampung].- Gadjah Mada University Press, Yogyakarta, 1975, XIV+194 p., tab, map, bibl.

PPT/325.32 Uto/m

Lampung, Way Sekampung, Ecological Adaptation, Agricultural Enterprises, Welfare, Spontaneous Transmigrants, Social Structure

The research focuses on the transmigrants community and their adaptation to the new natural and social ecology. It discusses in details their knowledge of the nature and the land condition, the history or background of the settlement areas, their place of origin, and the population structure in Way Sekampung. The main subject of the research stresses on the relationship between spontaneous migrants and the Javanese community which have inhabited the area as well as the local people of Way Sekampung. The research was done by interviews and depth-observation. The significant findings refer to the social organization aspect and ecological adaptation.

- 1982 "Marga Lampung dan kedudukan kaum pendatang" [*Inhabitants of Lampung and situation of the newcomers*], in: *Transmigrasi: Dari kolonisasi sampai swakarsa*. Hardjono, J. (ed.), 1982.

PPT

Sumatra, Lampung, Custom, Marga, Newcomer, Foreigner

It explains, on one hand, the position of the local people as a territorial law unity with a changing governmental system (from Banten, Deutch, Japan to RI.) and on the other hand, the situation of immigrants towards the local inhabitants as an individual or as a "migrants group". It seems that the position and situation of new comers has been modified accordingly to the political change although, as a matter of fact, the attitude of the local inhabitants towards immigrants is relatively the same.

UTOYO

- 1986 "Perladangan berpindah, buah simalakama bagi penduduk asli hutan tropis" [*Shifting cultivation, a dilemma for local inhabitants of tropical forest*], *Merdeka*, 05/06/1986.

MOT

Indonesia, Kalimantan, Shifting Cultivation, Deforestation, Transmigration, Erosion

43 million ha or 22.4% of the Indonesian land are in a critical condition. This article explains the shifting cultivation process, the importance of land protecting substances, and the consequences towards forest damage. Transmigration being the settlement/dry farming type needs definitely to be cautious in dealing with the land protecting substances, if not, the transmigrants will destroy the surrounding forest. Special attention should be paid to East and South Kalimantan.

VAYDA, A.

- 1980 "Buginese colonization of Sumatra's coastal swamplands and its significance for development planning", in: *Proceedings of Jakarta workshop on coastal resources management*. eds. Bird and Soegarto, Tokyo, United Nations Univ., 1980: 80-87.

PDII

Sumatra, Bugis, Agricultural Colonization, Agricultural Systems, Mixed Cropping, Paddy, Coconut, Tidal Swamp

VAYDA, A. & SAHUR, A.

- 1985 "Forest clearing and pepper farming by Bugis migrants in East Kalimantan: antecedents and impact", *Indonesia*, 39, 1985: 93-110.

Kaltim, Samarinda, Balikpapan, Spontaneous migrant, Agricultural Colonization, Bugis, Pepper, Agricultural System

The article reports on the migration process of the Buginese people to the district of Loa Janan, some 25 km of the main road Samarinda and Balikpapan. The mobility of the Bugis farmers is viewed in relation to their use of land and their impact on environment: forest clearing, land opening, land use activities. At the beginning, early 60', the migration process was a chain migration from the same area. Latter on the flow get stronger and more diversified. Among others: - the candidat migrant is helped first in Sulawesi by a "migration organizer", (pengurus rantau), who arrange for boat travel and administrative letters, - migrant are welcomed by a 'migrant receivers', (penerima rantau), who makes arrangement on local administrative matters and for access of land (forest) on a share cropping base with him, - most of the Bugis farmers have not a strong desir to get land certificate which grant ownership because of the complicated procedure, fear of taxes and also because the Bugis migrant strategy is not to settled permanently.

VERSTAPPEN, H.

- 1973 *Ageomorphological reconnaissance of Sumatra and adjacent islands of Indonesia.*- International Institute for Aerial Survey and Earth Sciences (ITC), Enschede, Royal Dutch Geographical Society, The Netherlands, 1973, 182 p., maps, Bibl.
Sumatra, Geomorphology, Soil, Landscape

VRIES, Egbert de

- 1986 "Kolonisasi dan kemajuan dalam dasawarsa 1930-an" [*Colonization and progress in the 1930 decade*], in: *Transmigrasi di Indonesia, 1905-1985*. Swasono, S.E. & Singarimbun, M. (eds.), 1986: 1-7.

PPT/325.5 Swa/s

Indonesia, Adaptation, Migrant, Colonial History, Culture

Based on his experiences during his tours of duty at the time of Dutch administration, the author relates cases which emphasize the high rationality of village inhabitants, especially migrants, in facing the precariousness of daily life. The policy of the Netherlands-India's government is regarded as too protective, resulting in the lack of self-reliance. The lesson to be learned of this is to smoothen the flow of self-relying migrants, to abolish obstacles faced by them, and avoid the introduction of too much administrative "red tape" which in the end will only burden those new comers.

WALIDJAN

- 1987 "Pelaksanaan program transmigrasi swakarsa di Yogyakarta 1987/1988: Sebuah harapan untuk keberhasilan program" [*The implementation of self-initiated transmigration program in D.I. Yogyakarta, 1987/1988: an expectation/a hope towards success*], Paper, Seminar Relevansi Geografi dalam Pembangunan, Fakultas Geografi, UGM, Yogyakarta, 29 Aug. 1987, 16 p., tab, bibl.

PPT/101642

DI Yogyakarta, Spontaneous Transmigration, T. Swakarsa

Operational program related to the spontaneous transmigration is not mainly a task of the society (government), but also of the individual or private concerns; of the national investment board, of the regional investment board, as well as of the community organization.

WARDJONO K.J.

- 1980 "Transmigrasi dan permasalahannya: Kalau spontan justru menjadi buruh tani" [*Transmigration and problems: when spontaneous migrants become farming workers*], *Merdeka*, 07/03/1980.

PPT

Kalteng, Spontaneous migrants, Fertility

The case happened when a family of spontaneous transmigrants who first lived with local transmigrants then finally got their own house and land by buying them from returned migrants. Generally transmigrants have many children, this maybe because of the misinterpretation of information given in Java. Similar cases also happened in Lampung.

WHITTEN, A. et al

- 1984 *The ecology of Sumatra.*- Gadjah mada Univ. Press, Yogyakarta, 1984, 582 p.

Sumatra, Natural Region, Fauna, Flora, Ecology, Forest, Settlement History

A reference book on ecology and natural vegetation and its evolution in the whole Sumatra Island.

WIDODO, J.

- 1980 "Lampung, bumi harapan yang keberatan beban" [*Lampung, land of hope with big burden*], *Kompas*, 05/06/1980.

PPT

Lampung, Environment, Problems

Since the colonization, Lampung is showered with people and investment as if Lampung is the only target for resettlement. These facts brought in a burden for previous transmigrants who have not yet overcome the poverty. They also destroyed forest and land use system in Lampung which originally provided the hope for moving Javanese people with a complete Javanese atmosphere. Now this can be seen, nevertheless, the misery and the destruction of nature can not be avoided (cf. BUDIMAN Arief, P. 174)

WIRADI, Gunawan

- 1983 "Nasib buruh tani: Benarkah lebih baik daripada petani gurem?" [*Landless agricultural workers: Are they better off than small farmers?*], *Kompas*, 21/10/1983.

YTKI

Indonesia, Landlessness Smallholders, Income Disparity

Strong rejection of the statement appearing in the *Kompas* of July 22, 1983 that the fate of landless agricultural workers is better than that of small farmers. Evidence is offered by producing selected samples and responsible calculation methods. The "analysis unit" became a "critical" matter and it was emphasized that the rejected statement had not enough observed this "analysis unit" as disparities in income of "landless agricultural workers families" and "small farmer families" become evident when the "analysis units" are compared.

WIROSARDJONO, Soetjipto

- 1986 "Transmigrasi swakarsa di Indonesia" [*Self-supported transmigration in Indonesia*], in: *Transmigrasi di Indonesia, 1905-1985*. Swasono, S.E. & Singarimbun, M. (eds.), 1986: 298-302.

PPT/325.5 Swa/s

Indonesia, Internal Migration, T. Swakarsa, Census, SUPAS

Inter-island migration in Indonesia is quite important (3,6 million in 1974) from which 57,7% of them were out-migrants from Java. Yet, the population distribution pattern of Javanese out-migrants in 1961, 1971 and 1976 has not changed that much (65%, 64%, 63% respectively). The changes were affected in the first place, by the natural increase outside Java (which is quite significant), the flow of spontaneous migration from Java as well as transmigration. The role of transmigration during the period 1966-70 was quite unimportant, only 50,74% out of 422,212 out-migrants (or 12%) were transmigrants, whereas the role played by spontaneous migrants has been increased. In spite of that, during 1971-75, the migration flow from Sumatra to Java was bigger than the one from Java to Sumatra.

WIROSUARDJO, Kartomo

- 1979 "Pola penyebaran penduduk dari migrasi" [*Pattern of population distribution from migration data*], *Majalah Demografi Indonesia*, VI (12), Desember 1979.

LDUI

Indonesia, Migration Flow, Characteristic

- 1982 "Transmigrasi dalam hubungan dengan mobilitas di daerah pedesaan, mobilitas dikaitkan dengan pendapatan dan kemiskinan" [*Transmigration in the context of rural mobility, mobility connected with income and poverty*], *Buletin LEKNAS*, I (2), 1982: 93-108.

PPT

Indonesia, Lampung Utara, Way Abung, PIR, Land Reform, DBB, WFP, Circular Migration, Mobility

An article on transmigration policy as an important aspect of development shown in a case study on self-supported transmigration in Margakencana (North Lampung). The initial aim of transmigration as outcome of a policy intending to decrease population in densely populated Java, turned out to be not realistic. However, the transmigration program gets an important meaning when connected with regional development, e.g. development of agricultural industries etc. Furthermore, the transmigration program is expected to alleviate poverty, to stabilize environment etc. The transmigration site Margakencana in North Lampung is an example for successful self-supported transmigration DBB started in 1973. This study sees the key factors of success in the good leader of the project, who is described as honest, practical, daring and good in personal contacts with the population. Self-supported transmigration DBB are transmigrants who set out on own costs and reported to Way Abung project area. They received 2 ha of land, houses built in communal self-help organization and survival aid from WFP.

- 1983 *Patterns and trends of internal migration and urbanization in Indonesia and their policy implication.*- Universitas Indonesia, Jakarta, XVI+329 p., tab, bibl.

YTKI/307.209598Wir/p

Indonesia, Internal Migration, Urbanization, Inter-regional Migration

This dissertation analyses the pattern and migration flow in Indonesia based on the 1930, 1970 and 1980 Census data. Urbanization and inter-island migration are highlighted and also are differences from one place to another. The paper particularly focuses on the movement between Java and Sumatra. Gradual changes between 1930 and 1980 are also observed (see page 238 to 255).

WIRYOKUSUMO, Hardjanto

- 1988 *Mencari lintasan pertumbuhan optimal bagi usaha tani lahan kering transmigrasi: Studi kasus di pemukiman baru Baturaja, Martapura, Sumatera Selatan* [In search for optimum growth in dry farming: Case study of Baturaja, Martapura - South Sumatra].- Fakultas Pasca Sarjana, IPB, Bogor, 1988, 216 p., tab.

IPB-Sosek

Sumsel, Land use, Labor force

This study used linear program method. Basic information relevant to policy guidance for farming in new settlements has been found. Farming which requires the application of new technology and land extension. While income generating is influenced more by the technology factor, animal labor needs to be used in order to facilitate the work on land over 1,25 ha.

WIRYONO, P.

- 1977 "Spontanitas dalam peningkatan transmigrasi" [*Spontaneity in transmigration improvement*], *BASIS*, Vol. XXVI (10), Juli 1977: 300-305.

IPSK/V26 (1-2) 76-77

Lampung, Way Sekampung, Lampung Tengah, Spontaneous Migration, Family Migration, Migration

Referring to Kampo Utomo research in 1957, the spontaneity of migration flow can be explained as follows: a. Usually there is family relationship, or the attachment of people that come from the same village. b. Many decisions are chosen irrationally, 1. - Factors that boosts the spontaneity consists in the strong Javanese sentiments. Kinship is a protection guarantee and tradition preservation in a new settlement, 2. - Road and transportation is another supporting factor, 3. - Integration appears when the local authority needs to build a new community.

- 1980 "Hanya dengan keuletan pemukiman baru berhasil" [*Hard working is the only way for a new settlement to succeed*], *Kompas*, 02/01/1980.

PPT

Indonesia, T. Swakarsa, Pioneer, Settlement

There are two things that should be well recognized by the Government in order to achieve the spontaneous transmigration success. First is the mechanism of the spontaneous transmigration, second is the typology of pioneer.

WORYONO, P.

- 1988 "Strategi pembangunan pertanian lahan kering" [*A development strategy for dry field agriculture*], *Kompas*, 02/04/1988.

Indonesia, Agriculture Development Policy, Dry Field, permanent Field

A call for a development program for permanent dry field agriculture same as the Bimas program in order to protect environment.

YONEKURA, H.

- 1988 "Smallholder coffee production and market structure in Indonesia", in: *Primary commodity issues in Indonesian economy*. Institute of developing economies, Joint presearch programme series n°70, Tokyo, 1988: 97-121.

Indonesia, Coffee, Marketing

YUSUF, Tayar

- 1986 "'Integrasi Sosial' dalam masyarakat transmigrasi" [*'Social-integration' among transmigration community*], *Merdeka*, 30/01/1986.

MOT

Lampung, Integration, Planning

It is noted that the social integration among the transmigrants themselves or with their surroundings is neither conflicted nor integrated. The Javanese "enclave" which has emerged in Lampung, creates an isolated society. There exists however an integrated factor which manifests in their religious life from which each religion asks its followers to be tolerant to each other and be pacific.

REPORTS

BALAI PENELITIAN PERKEBUNAN SEMBAWA

- 1986 *Hasil penelitian dan pengembangan balai penelitian perkebunan Sembawa 1984-1986* [Research findings and development for the centre for plantation studies, Sembawa 1984-1986].- Badan Penelitian dan Pengembangan Pertanian, Sembawa, Sumatera Selatan, 1986, V, 216 pp.

Indonesia, Development, Tree crop, Rubber, Economy, Agriculture

BAPPEDA SUMATERA SELATAN

- 1985 *Sumatera Selatan dalam angka 1985* [South Sumatra in figures 1985].- Bappeda dan Kantor Statistik, Sumatera Selatan, Palembang, 1985.

Sumsel, Data, Statistics

BAPPEDA SUMATERA SELATAN

- 1988 *Sumatera Selatan dalam angka 1988* [South Sumatra in figures 1988].- Bappeda dan Kantor Statistik, Sumatera Selatan, Palembang, 1988.

Data, Statistics

BIRO PUSAT STATISTIK

- 1984 *Perpindahan penduduk antar propinsi di Indonesia: Hasil sensus penduduk 1980* [Inter-provincial transmigration in Indonesia: Results of 1980 population Census].- Unpublished, Jakarta, 1984, 69 p., tab, bibl.

LDUI/301.326 Per

Indonesia, Migration, Flow, Census

According to the 1971 and 1980 Population Censuses, migration from Java to Sumatra is quite important. All provinces of Java, with exception of DKI Jakarta have a negative net migration while Sulawesi and Kalimantan benefit from the flow during the period 1971-1980. Factors which influence the out-migration of Java consist of the socio-economic development of the outer-islands and the transmigration programme but no explanation is given regarding the weight of these two factors.

- 1986a *Sensus Pertanian, Sumatera Selatan* [Agricultural Census, South Sumatra, 1983].- Seri B.06, Hasil Sensus sample, Jakarta, 1986.

Statistical Data

- 1986b *Sensus Pertanian, 1983 (Buku I, III, IV)* [Agricultural Census, 1983 (Book I, III, IV)].- Kerjasama BPS & IPB & UGM, Seri J.5, Jakarta, 1986.

Indonesia, Data

- 1986c *Statistik perkebunan besar, 1985* [Estate plantation statistics, 1985].- Jakarta, 1986, 107 p.

Indonesia, Estate Plantation, Statistics, Development

DIREKTORAT JENDERAL KEHUTANAN

- 1980 *Laporan survai inventarisasi satwa di kawasan sub Balai Pelestarian Alam Sumatera Selatan I* [Survey report on fauna inventory in subdivision of South Sumatra Natural preservation I].- Direktorat Perlindungan dan Pengawetan Alam, Direktorat Jenderal Kehutanan, 1980.

HUTAN

Sumsel, T. Spontan, Reserve Forest, Fauna Preservation

A large number of spontaneous transmigrants have forced the preserved forest and endangered the existence and continuity of wild animals in terms of quality, type, and environment.

DIREKTORAT PEMBANGUNAN DESA

- 1978 *Pola tata desa* [Pattern for village implementation].- Sumatera Selatan, Palembang, 1977/1978, 16 p.

BINA DESA

Settlement Pattern, Guideline

INSTITUT PERTANIAN BOGOR

- 1976 *Telaah kemungkinan pengembangan dan pembinaan Taman Nasional Sumatera Selatan I selama Pelita II* [Study of possibilities for development and establishment of South Sumatra I National Park during Pelita II].- Kerjasama antara Fakultas Kehutanan Institut Pertanian Bogor dengan Proyek Pengembangan dan Pembinaan Hutan Wisata Suaka Alam & Satwa, 1976.

IPB

Sumsel, National Park, Reserved Forest

- 1977a *Monitoring dan evaluasi proyek-proyek transmigrasi Baturaja dan Way Abung Jilid II: Kondisi lingkungan dan ciri-ciri keluarga* [Monitoring and evaluation of transmigration projects in Baturaja and Wang Abung (1976/1977). Volume II: Environment conditions and household characteristics].- Kerjasama Dirjen Transmigrasi, IPB, Bogor, XI+85 p., tab.

IPB-Sosek/325.33 Ins/m

Sumsel, Lampung, Income, Infrastructure, Evaluation, Welfare

This report is part of a study on the monitoring and evaluation of transmigration projects, especially on the welfare and socio-economic development. The independent variables taken into consideration are the environmental condition, the population density, the socio economic facilities and the socio economic organization. The production and household income constitute dependent variables while the intervening variables consist of all household potential variables (land size, labor, education, consumption level), economic participation and aspiration as well as expenditures.

- 1977b *Monitoring dan evaluasi proyek-proyek transmigrasi Baturaja dan Way Abung (1976/1977). Jilid I: Laporan Utama* [Monitoring and evaluation of transmigration projects in Baturaja and Way Abung (1976/1977). Volume I: Main Report].- Kerjasama Dirjen Transmigrasi, IPB, Bogor, IV+86 p., tab, ann.

IPB-Sosek/325.33 Ins/m

Sumsel, Lampung, Land use, Welfare

It describes transmigrants welfare, farming system and its institutions. The approach on monitoring and evaluation create new farming activities without leaving behind transmigrant's motivation and environment potential factors.

- 1977c *Monitoring dan evaluasi proyek-proyek transmigrasi Baturaja dan Way Abung (1976/1977). Jilid IV: Tataniaga* [Monitoring and evaluation of transmigration projects in Baturaja and Way Abung (1976/1977). Volume IV: Trading].- Kerjasama Dirjen Transmigrasi, IPB, Bogor, IX+65 p., tab, ann.

IPB-Sosek/325.33 Ins/m

Sumsel, Lampung, Trasmigrasi, Perdagangan, Produksi, Infrastructure

The main crop product of the transmigrants in Baturaja is cassava (about 74% of the total production), whereas the rest is secondary crops and plantation products which are not well being sold due to the trading procedures and the transportation problems. Besides these obstacles, market information also needs to be provided by formal institutions, such as village cooperation unit or village operational board (BUUD/KUD).

- 1977d *Monitoring dan evaluasi proyek-proyek transmigrasi Baturaja dan Way Abung (1976/1977). Jilis III: Pengkajian adaptasi pertanian* [Monitoring and evaluation of transmigration projects in Baturaja and Way Abung (1976/1977). Volume III: Agricultural adaptation review].- Kerjasama Dirjen Transmigrasi, IPB, Bogor, pp. 40-63, tab.

IPB-Sosek/325.33 Ins/m

Sumsel, Lampung, Animal Husbandry, Income, Labor Force

From the two research areas (Baturaja and Way Abung), only around 50% of the productive labor are allocated as family workers, while 25-35% are absorbed by land cultivation and for the whole farming activities, 45% of the labor are observed. In comparison to human labor, animal labor is more effective in producing bigger out-puts within the same period of time. In general, income from farming is smaller than the one received from off-farming. This paper is supplemented with tables and histogram resulting research findings in both areas.

- 1980 *Laporan penelitian pengkajian/orientasi pengaruh penggunaan aneka ragam keadaan lahan oleh karet rakyat terhadap produksi & pendapatan petani (Sumut, Riau, Jambi, Sumsel & Kalbar)* [Research report on the impact of land diversification on the production and income of rubber smallholders (North Sumatra, Riau, Jambi, South Sumatra and West Kalimantan)].- Kerjasama Dirjen Perkebunan Dep. Pertanian, IPB, Bogor, VIII + 183 p., tab.

IPB-Sosek

Sumut, Riau, Jambi, Sumsel, Kalbar, Rubber, Income, Marketing

This report deals with the general conditions of rubber plantation, its marketing, its processing, condition and quality at the factory. Villagers rubber which is in "slab" form and "sheet" quality can only be found in Bangka Regency and South Sumatra. The rubber is marketed through 2 following channels: - The peasants sell directly their products to the factory ("sheet" quality). - The peasants first dealt with the brokers and the brokers will re-sell the products to the factory ("slab" form). Regarding the quality of the product processing at the factory, the peasants in South Sumatra can only get less than 60% of their FOB price. It means that their income is still very low.

- 1983 *Studi perumusan pola usaha tani tanaman pangan di daerah transmigrasi: Laporan akhir* [Final Report on the study of land use formulation in transmigration area].- Studi Monitoring dan Evaluasi Transmigrasi, IPB, Bogor, pp. 31-73, tab.

IPB-Sosek/631.1 Stu/s

Sumsel, Land Use

This articles describes the land use for dry as well as tidal transmigration areas of Batumarta, Delta Upang, and Delta Talang, in South Sumatra. The description also takes into account the physical condition, the land distribution and allocation, the support facilities, as well as problems occurred in order to promote the production.

KANTOR AGRARIA SUMATERA SELATAN

- 1980 *Data pokok untuk pengembangan wilayah propinsi Sumatera Selatan* [Primary data for South Sumatra province].- Kantor Agraria, Sumatera Selatan, 1980.

Sumsel, Data, Topography, Land Used, Climate, Population Density, Drainage & Hydrology.

KEHUTANAN (Dep.)

- 1982 *Himpunan peraturan perundangan dibidang kehutanan Indonesia (revisi II)* [Collection of legal issues concerning the Forest in Indonesia (revision II)].- Jakarta, 1982, 214 p.

Indonesia, Legal Issues, Forest Status

- 1986 *Sejarah kehutanan Indonesia: buku I, periode pra-sejarah- tahun 1942* [The history of forest in Indonesia: book I, prehistory periode-1942].- Jakarta, 1986, 229 p.

Indonesia, Forest Status, Forest Use, History

KANTOR STATISTIK SUMATERA SELATAN

- 1971 *Sensus penduduk 1971, Sumatera Selatan* [Population census 1971, South Sumatra].- Kantor Statistik Sumatera Selatan, 1971.

Sumsel, Population Data, Kecamatan, Marga

- 1988 *Registrasi Penduduk 1986* [Population registration, 1986].- Palembang, 1988.

Sumsel, Population Data, Kecamatan, Village

- 1990 *Registrasi Penduduk 1988* [Population registration, 1988].- Palembang, 1990.

Sumsel, Population Data, Kecamatan, Village

LEMBAGA ADMINISTRASI NEGARA

- 1990 *Integrasi perencanaan dalam kebijaksanaan pengembangan Desa Potensial yang dikaitkan dengan program transmigrasi* [Integrated planning in the context of rural

potential development implementation relating to the transmigration program].- Sekolah Pimpinan Administrasi Tingkat Madya Angkatan X, Kelompok I-Deptrans, 1990.

MOT

Indonesia, Integrated Planning, Spontaneous Transmigration, Coordination, Low Density, Potential Village, Transabangdep

LIPI

- 1983 *Orang Bugis di Banyuasin, Delta Upang Sumatera Selatan: Laporan akhir* [Bugis people in Banjarmasin, Delta Upang, South Sumatra: Final report].- Panitia Program MAB-LIPI, Jakarta, 1983, III, 27 p., tab.

PDII/304.82 Ora

Sumsel, Bugis, Social Conflict, Land Right

It is about the history and migration process of the Bugis people as spontaneous transmigrants in Delta Upang, South Sumatra. A complete description is given, beginning with how did they select the settlement; the problems occurred in relation with land allocation; the pattern of settlement; the utilization of natural resources; and ending with the threat caused by the arrival of general transmigrants. The development of the socio-economic institutions is an evidence that Bugis people is already well settled (p. 10-23). When new transmigrants moved into the area, the social life of Bugis people become disorganised and in particularly it rises social conflict. This phenomena occurs in relation with their land which is occupied illegally by the transmigrants. Their ill-feeling is even re-enforced by the fact that the government provides more facilities to transmigrants.

NUDS

- 1984 *Tinjauan berbagai masalah di bidang hukum yang bersangkutan dengan perencanaan pembangunan, pengembangan kota dan daerah* [Review on legal issues in relation to development planning and urban and regional expansion].- NUDS, Directorate General of Cipta Karya, Jakarta, 1984, IV, 126 p., tab.

PPT/312.321 Ind/t

Indonesia, Land Reform, Land Use, Regional Development, Urban Development, Land Redistribution.

A study on the land regulations: land reform, sectoral regulations, local autonomy, function and evaluation towards the coordination mechanism among several departments involving in the land issues.

PEKERJAAN UMUM (DEP.)

- 1989 *Musi river basin study: Enviromental survey*.- Technical report 9, BCEOM, DOXIADIS, KAMPSAX, Jakarta, 1989, 61p., maps.

Sumsel, Geology, Soil conservation, Tidal Swamp, Erosion

PEMDA SUMATERA SELATAN

- 1989 *Pola Dasar Pembangunan Daerah Propinsi Daerah Tingkat I Sumatera Selatan 1989/90 - 1993/94* [South Sumatra province basic pattern for Regional Development 1989/90 - 1993/94].- Bappeda Sumatera Selatan, 1990.

Sumsel, Development, Planning, Medium, Longterm Planning

- 1990 *Rencana Pembangunan Lima Tahun Kelima 1989/90 - 1993/94* [The fifth Indonesian five-year plan, 1989/90 - 1993/94].- Bappeda Sumatera Selatan, vol. I,II,III,IV, 1990.

Sumsel, Goals, Condition, Direction, Target, Strategy, Employment, Budget

PERTANIAN (KANWIL) SUMATERA SELATAN

- 1981 *Perkembangan sektor pertanian, propinsi Sumatera Selatan, 1979/1980* [Agricultural development in South Sumatra, 1979/1980].- Palembang, 1981, 193 p., tab..

UNSRI/208/PPLH/H/90

Sumsel, Food crop, Tree crop, Cattle, Fishery, Forest, Agricultural services

RISET DAN TEKNOLOGI (DEP.)

- 1982 *Technology for increasing rural productivity in Indonesia: Report of a workshop*.- Workshop "Technology for Increasing Rural Productivity", Jakarta, October 7-15, 1982, IV, 53 p., app.

PDII/3381609598Wor/r

Sumsel, Batumarta, Action Research, Rural Technology

In the workshop on technology for increasing the rural productivity, an "action research" is proposed for Batumarta. The basic thinking of "action research", its requirements, different stages of action, and its supporting organization are also put forward. Besides Batumarta, Ciamis (West Java) is also "one of the target areas". In comparing Ciamis (Jabar) and the transmigration project (Sumsel), the authors of this project make recommendation for a better human resources management through agricultural and technological input that can be controlled as much as possible by the farmers themselves.

TRANSMIGRASI (DEP.)

- 1958 *Daerah transmigrasi Sumatera Selatan* [South Sumatra, a Transmigration receiving region].- Seleksi Penghubung Masyarakat. Djawatan Transmigrasi Pusat, Jakarta, 1958, 82 p., tab, map.

PDII/301.326 Ind/d

Sumsel, Lampung, Constrain, Implementation, Motivation

This report results from the visit of the Minister for Transmigration Affairs in South Sumatra. It explains the conditions, achievements and problems in transmigration areas. According to the Minister, even though transmigration areas have been increasingly developed, however, many fields (government, public services, agriculture, animal husbandry, health, education) still experience some difficulties. Facilities and services should be primarily taken into consideration, while forest clearing and house building can be handled by spontaneous transmigration themselves with funding from the Government. The report gives map illustrating the Swakarsa transmigration implementation plan in South Sumatra.

- 1979 *Laporan akhir penyusunan identifikasi potensi daerah Sumatera Selatan dan Lampung* [Final report on potential identification of South Sumatra and Lampung].- Deserco Development Services, Consulting Engineers, Jakarta, 1979, 89 p., tab.

PEP/33898:353 Des/l

Sumsel, Lampung, Evaluation, Feasibility

It evaluates the physical condition of South Sumatra and Lampung regarding their potential to be developed, the feasibility studies as well as their implementation. South Sumatra has a potential for agriculture development (Ogan Komering, Kota Kayu Agung and Belitung Tugu Mulyo), fishery, industry and also plantation (Musi Banyuasin and Musi Rawas). Based on the above potencies, the feasibility study is also related to the food program improvement, industry and infrastructure.

- 1980a *Laporan penelitian penyusunan dan perencanaan transmigrasi swakarsa 1980/1981* [Research report on self-initiated transmigration designs and plans].- Direktorat Jenderal Transmigrasi, Jakarta, 1980, I, 70 p., tab, map, bibl.

MOT

T. Swakarsa, Receiving Area

The book shows the potentiality of some areas in Sumatra, Kalimantan, and Sulawesi as target areas for the self-initiated migration. These are especially around the general transmigration and the rural areas which grew as receiving areas for the migrants.

- 1980b *Konsepsi penyelenggaraan transmigrasi swakarsa* [Concept for the implementation of self-supported transmigration].- Direktorat Jenderal Transmigrasi, Jakarta, 1980, IV, 77 p.

MOT

T. Swakarsa, Multisectoral Approach, Regional Development, Labor Force

This paper constitutes an explorative thinking for the development of the role of self-supported transmigration while still being at a normative speculative stage. It intends to identify the needs for the development of self-supported transmigration on the broadest level. The most important normative question lies on how the implementation of self-supported transmigration fits into the development of general transmigration project, regional development and the role of self-supported transmigration participating in private (non-government) projects.

- 1980c *Laporan penelitian dan pengembangan sistem transmigrasi yang dapat memperlancar pelaksanaan transmigrasi swakarsa/spontan* [Research report on development of migration system to promote implementation of spontaneous migration].- Direktorat Jenderal Transmigrasi, Jakarta, 1980, 216 p., tab, bibl.

MOT

Indonesia, Spontaneous Migration, Migration Process, Economic Evaluation

This report explains the implementation of self-initiated/spontaneous transmigration from the place of origin to the place of destination. Some places of origin are being studied such as East Java, Central Java, D.I. Yogyakarta and West Java. The place of destination are South Sumatra, Lampung, South Kalimantan and Central Sulawesi. The spontaneous/self-initiated migrants in question are not sponsored by government, but moved by their own expenses during the period of 1978/1979. They are about 30,000 families. They moved to the location with the assistance of 19 travel agencies. Most of them are farming waged workers and are forced to migrate for economical reasons. With the exception for migrants to Central Sulawesi who brought their own capital (for trading, industry and transportation business) all migrants are generally assisted by their relatives. They succeeded at the new settlement area except for migrants in Cintamanis, South Sumatra, who experienced soil problems in tidal areas.

- 1981 *Transmigrasi swakarsa, kasus propinsi Lampung dan Kalimantan Selatan* [Self-supported transmigration, the cases of Lampung and South Kalimantan].- Badan Penelitian dan Pengembangan, Proyek Team Policy Research (TPR), Jakarta, 1981, 94 p., tab, bibl.

MOT

Lampung, Kalsel, T. Swakarsa, Migration, Decisions, Migrants, Pull-factors

This case study on self-supported transmigration uses qualitative primary data (in-depth interviews) besides secondary data (1971 Population Census). Two principal matters have been focussed on, that is the motivation and the migrants characteristics on one hand and the attraction that Lampung and South Kalimantan exercised on migrants on the other.

- 1982a *Laporan penyusunan program transmigrasi swakarsa di 6 propinsi daerah transmigrasi tahun 1981/82* [Report on spontaneous transmigration program in six transmigration areas: 1981/1982].- Transmigration Directorate General, Jakarta, 1982, XIII, 222 p., tab, ann, map.

MOT

Jatim, Sumatra, Kalimantan, Irian Jaya, Sulawesi, Spontaneous Migration, T. Swakarsa, Swakarsa Murni, Pioneer, Follower

- 1982b *Masalah tanah bagi pemukiman transmigrasi* [Land problems in transmigration areas].- Badan Penelitian dan Pengembangan Dep. Nakertrans, Jakarta, 1982, XVIII, 140 p., tab, bibl.

PDII/304.8 Pro/ta

Sumbar, Riau, Jambi, Kalbar, Land Rights, Implementation

The conflict between the local and the government on one hand, and the conflict between the local people and the transmigrants on the other hand are mostly caused by the land allocation problems. Between the local people and the government, the problems concern the payment, the administration and the land legal status in addition to the privilege granted to the transmigrants regarding the land ownership.

- 1983a *Penelitian kebijaksanaan pengembangan transmigrasi sisipan untuk menunjang sektor jasa & industri di daerah transmigrasi* [Study on development of inserted-transmigration policy in order to enhance services and industry in transmigration areas].- Badan Penelitian dan Pengembangan, Jakarta, 1983, 34 p., tab, ann.

MOT/420.2 Pro/p

Indonesia, Policy, T. Sisipan, T. Swakarsa, Off-Farm Activity, Service, Trade, Industry

It is important to define the inserted migration, which is different from the general or self-initiated movement. Their supportive roles in the development of non-agricultural sector are discussed, especially in the service and industry sectors. "Fact findings" show that at the time of transfer of the location to the local government, the flow of self-initiated migration has increased. Its variation depends on the level of development in the service and industry sectors which is different from one place to another. There is a positive correlation between the success of the location and the flow of self-initiated migration entering to that location. The right effort, selection and insertion to the area are needed so that the inserted migration will support the non-agricultural activities.

- 1983b *Penelitian model komunikasi yang mendorong transmigrasi swakarsa* [Research on communication model which enhances self-initiated transmigration].- Badan Penelitian dan Pengembangan, Jakarta, 1983, XV, 99 p., tab, ann, bibl.

MOT

Sumsel, Kalsel, Jatim, Jabar, T. Swakarsa, Mass Communication, Interpersonal Communication, Return Migration, Migration Decisions

The sources, type of information received by self-initiated transmigrants are discussed. An effective model of communication in three transmigration sites and another two places of origin are also examined.

- 1984a *Laporan perkembangan pelaksanaan pemindahan dan penempatan transmigran Pelita III dan cicilan program Pelita IV Th. I (1984/85) posisi s/d tgl 31-3-1984* [Periodical report on the implementation of transmigration in the Third Indonesian Five Year Development (Pelita III), the first fiscal year (1984/1985) ends at 31.03.1984.]- Departement Transmigrasi, Jakarta, 1984, 21 p., tab.

MOT/410.21 Ind/I

Indonesia, T. Swakarsa, Spontaneous Migration, Repelita III/IV

Most of the spontaneous migrants who move to the outer islands of Java between the period of 1979 to 1984 are originally from East Java Province of which 75% are settled in Sumatra Island. Self-supported migrants who move to the outer islands of Java during 1984-1985 are mostly East Javanese, approximately 75%. Buses or other land transportation were the main ways of communication used by the migrants to reach their new settlement during the Third Indonesian III Year Development Plan.

- 1984b *Transmigration improvement and growth in Indonesia*.- Department of Transmigration, Jakarta, 1984, 50 pp.

MOT/410 Mar/t

Indonesia, Population Policy, Transmigration Program, T. Swakarsa, Policy, Pelita IV

This book presents the background of the transmigration programs, particularly for those stated in the Forth Indonesian Five-Year Development Plan (Pelita IV). In order to increase the implementation of spontaneous transmigration program, which represents one tenth of the transmigration policy in Pelita IV, the government reformulated the procedures, improved the preparation of settlement sites, and enhanced the role of communication (p.25).

- 1984c *Laporan evaluasi pengumpulan data pelaksanaan transwakarsa perkebunan pola PIR dan transmigrasi lokal di daerah asal dan daerah transmigrasi dalam rangka pembinaan peraturan perUU* [Evaluative report on the data collection of Nucleus Estate Plantation (PIR) self-initiated transmigrants and local transmigrants at the place of origin and the place of destination].- Sekretariat Jenderal Transmigrasi Biro Hukum dan Organisasi, Jakarta, 1984, 59 p., tab.

MOT, P/412.3 Ind/I

Indonesia, Aceh, Riau, Lampung, Regulations, T. Swakarsa, T. Lokal, PIR, Plantation, Policy

This book evaluates whether the verdicts from different legal cases could be integrated into the new law to solve the problems which are related to the self-initiated transmigrants of Nucleus Estate Plantation (PIR).

- 1985 *Laporan Menteri Transmigrasi bulan Mei 1985 mengenai perkembangan pelaksanaan program transmigrasi* [Report of the Transmigration Ministry about the prospect of the transmigration program implementation].- Departemen Transmigrasi, Jakarta, 1985, IV, 22 p., tab, ann.

MOT/413 Ind/I

Indonesia, T. Swakarsa, Budget, IGGL.

The report explains that during the last year, the number of self-supported transmigrants (TBB) is almost a half of the total transmigrants. Those are estimated at 125.075 families. Almost all of them are originally from East Java, following by Central Java. 40% of them are using land transportation. Their places of destination are South Sumatra, Lampung, and Riau. (p. 1-3)

- 1986a *Laporan Sidang Pleno V Forum Konsultasi Transmigrasi: pemantapan konsep teknis pola transmigrasi dengan usaha pokok tani nelayan, Jakarta, 24-25 Februari 1986* [Report on the 5th Consultation Forum on Transmigration : Technical concept of farming and fishing transmigration pattern].- Center for Research and Development Transmigration, Jakarta, 1986, XI, 221 p., tab, map, ann, bibl.

MOT/410.12 For/p

Indonesia, Bangka, Kurau, Bengkulu, Kalsel, Irja, Sorong, Cilacap, Kendal, Spontaneous Migration, PIR-Perikanan, Fishery, Cultural Constraints, Department's Coordination, Traditional Technology, Fisherman, Pelita IV

Feasibility study on PIR Fishery Swakarsa Transmigration Program is based on successful and unsuccessful program in nucleus scheme and in general scheme. In this forum the discussion focusses on factors and required infrastructure to make the program a success. However, it is still in a normative stage.

- 1986b *Penyusunan prosedur standar dan manual pemilihan lokasi transmigrasi spontan (swakarsa) tahap I (final report)* [Compilation of standard and manual procedure for the selection of spontaneous transmigration location. First part [Final Report]].- P.T. Karsa Yasa Cipta Consult, Jakarta, 1986, 110 p., tab, ann, bibl.
PPT/325.33 Ind/p
Indonesia, T. Swakarsa, Welfare, Land Use, Spatial Organization
The objective of this study is to define the selection criteria for the spontaneous transmigration location especially the technical and socio-economic aspects. It consists of two main topics. The first part discusses the background and some observations regarding the spontaneous transmigration such as its basic law, type of spontaneous transmigration and the government support to the program. The second topic examines several possible criteria and locations, including the technical and non technical aspects (socio-economical aspects).
- 1986c *Penyusunan konsep operasional pola pemukiman transmigrasi dengan usaha pokok perkebunan: Kasus Perkebunan Inti Rakyat (PIR), PIR Khusus dengan komoditi karet fase konversi & pasca* [Operational concept for Cash crop plantation transmigration pattern: the case of PIR-Rubber scheme, PIR khusus in the phase of conversion & post-conversion].- Puslitbang Transmigrasi, Jakarta, 1986, 100 p., tab, ann, bibl. (Buku seri B).
MOT
Kalbar, Sumsel, Aceh, PIR, Adaptation, Conversion, Rubber
- 1986d *Laporan akhir kesempatan kerja produktif mendukung program transmigrasi* [Final report on the productive employment to support transmigration program].- Kerjasama IPB dengan Departemen Transmigrasi, Jakarta, 1986, XXX, 293 p., tab.
PPT/325.33 Ins/1
Riau, Pasir Pangarayan, Siak, Sulteng, Toili, Kalbar, Sintang, Jangkang. Off-farm Activity Opportunity, Income, Land Use
This report compares employment in tidal area and dry area. In average, labor participation in dry area is higher than the one in tidal area. Their income, however, is lower. Siak is the most successful with an annual income of 529,3 kg of rice in comparing to other areas which only achieve 297,4 kg.
- 1987a *Buku panduan seminar nasional investasi swasta, pembangunan daerah dan transmigrasi swakarsa di Ujung Pandang, 9-11 Maret 1987* [Guide book for private investment, regional development, and self-initiated transmigration in Ujung Pandang, March 9 to 11, 1987].- Lembaga Kepeloporan Transmigrasi Indonesia, Jakarta, 1987, 68 p., tab.
MOT, P/410.11 Sem/u
T. Swakarsa, Private Investment, Plantation, Regional Development
Articles and speeches of some public figures emphasizing the role of private investment to support the growth of areas outside of Java through the self-initiated migration program or PIR-plantation pattern.
- 1987b *Second stage development programme feasibility studies and detailed engineering WPP II IPUH: Bengkulu, Vol I Regional context and outline development plan (Project formulation)*.- Halcrow Fox and Ass. & Indulexco-Parama Consortium & Dir. Bina Program, Jakarta, 1987, 135 p., tab, map.
PPT/101612
Sumatra, Bengkulu, Tree crop, Feasibility Study, Land Development, Regional
This book clarifies the conditions required to develop a rubber plantation which commodity now has a good market. They are demographic composition, natural resources potency, infrastructural facilities; and other social and institutional factors.
- 1987c *Executive report: Studi dampak sosial ekonomi PIR-Bun dikaitkan dengan pengembangan wilayah dan pemukiman* [Executive report: Socio economic impact of PIR-BUN in relation to regional development and human settlement].- Departemen Pertanian & Institut Pertanian Bogor, Bogor, 1987, 27 p.

PPT/325.33 Ind/e

Sumsel, Musi Banyuasin, Lahat, Muara Enim, PIR, Plantation, Socio-economic Impacts

It studies the impact of PIR-BUN rubber and oil palm on the regional income in South Sumatra as well as on the job opportunity in the surrounding areas. Data used are primary data from sample surveys and also secondary data from statistics of regional income. It uses input-output analysis and multiplier effects such as income and job opportunity which are made available since the opening of PIR-BUN.

- 1987d *National inventory of transmigration sites*.- Ministry of Transmigration, Dir. Gen. Settlement Preparation, Jakarta, 1987, Appendices, 350 p, maps, tab, app.

MOT

Indonesia, Inventory, Transmigration

A useful catalog for data on demography, agricultural productions, market and main environment problems for each transmigration site still under the Departemen jurisdiction, all over Indonesia.

- 1988 *Laporan akhir penelitian pengembangan transmigrasi swakarsa di proyek-proyek transmigrasi* [Final report on Swakarsa Transmigration research in transmigration sites].- Pusat Penelitian dan Pengembangan Transmigrasi, Jakarta, V, 97 p., tab, ann, bibl.

MOT

Kalsel, Sumsel, T. Swakarsa, Spontaneous Transmigrant, Welfare

In addition to the procedure and spontaneous transmigrants settlement process in Transmigration villages, it is found out that: - Spontaneous transmigrants are generally young, not yet finished elementary school and most of them are farmers (p. 24-33), - Majority of them come from Java and 22 % are "stepwise migrants" (p. 32-33), - They are motivated by "negative factors" in their place of origin, - 89 % of them do not follow administrative procedure.

- 1989a *Penelitian pengembangan program transmigrasi swakarsa* [Research on Swakarsa transmigration development].- Pusat Penelitian dan Pengembangan Transmigrasi, Jakarta, XIV, 178 p., tab, map, ann, bibl.

MOT

Sumsel, Jambi, Kalbar, T. Swakarsa, T. Swakarsa Murni, Financing

Spontaneous transmigration program has been carried out for a long time (80 years) and has settled 579,593 families. Most of them are PBB; while "pure" spontaneous migrants are in a very small number due to the low-attraction of the transmigration settlement. The flow of spontaneous migration tends to be high when the area is in the developing stage, or when there is reserved land as the case in Pematang Panggang and Baturanta (South Sumatra). Therefore, areas need to be improved and regulations on spontaneous migration need to be clearly defined.

- 1989b *Rumusan hasil Forum Komunikasi Transmigrasi III* [The formulation of the Third Transmigration Communication Forum, Jakarta 27-28 October 1989].- Dep. Transmigrasi, Biro Perencanaan 27-28 Oktober 1989.

MOT

Potential Village, Transabangdep, Criteria, Transmigrant Candidate, Proposal, Coordination, Target

- 1989c *Kebijaksanaan penyelenggaraan transmigrasi swakarsa pengembangan desa potensial* [Policy implementation on self-initiated transmigration for rural potential development].- Biro Perencanaan, 1989.

MOT

Indonesia, Policy, Spontaneous Transmigration, Potential Village.

- 1990 *Pengembangan transmigrasi swakarsa melalui pengembangan desa potensial, laporan sementara* [Self-supported transmigration development linked to the development of potential village].- Pusat penelitian dan pengembangan transmigrasi, 1990, 115 p., maps.

MOT

Sumsel, Aceh, Bengkulu, Kalbar, Transabangdep, Concept, Organization, Realization

The new concept of TRAN(smigrasi swakar)SABANG(unan)DE(sa)P(otensial) did born in South Sumatra after some prior experiment of small implementation of transmigrant near a indigenous settlement. Main ideas are: small scale resettlement (50 transmigrant families minimum) near an indigenous village in order to develop its potentialities and upgrade the existing infrastructures. Some receiving province already answer to this programme for an experimental stage. The resettlement candidat will be selected as the general transmigration pattern in the sending area. It is not question of spontaneous migrants already in the receiving province and still in search for land to work.

TRANSMIGRASI (KANWIL)

- 1981 *Penelitian sosial ekonomi dan budaya di kecamatan Pamarican dan Banjarsari kabupaten Ciamis, dalam kaitannya dengan pelaksanaan Transmigrasi Swakarsa* [Socio-economic and cultural research in relation to spontaneous transmigration implementation, Pamarican and Banjarsari, Ciamis district].- Kantor Wilayah Direktorat Jenderal Transmigrasi Jawa Barat, Bandung, XIII, 68 p., tab, map, ann.

MOT

Jabar, T. Swakarsa, Communication, Welfare, T. Umum

The following factors have affected the willingness of the spontaneous transmigrants : - Many of them do not own any land (or very little of them own a piece of land), - Decreasing attachment to their place of origin, - Success of their relatives who have migrated. There are no significant differences between the research findings in Bangunsari which sent a big number of spontaneous migrants and Sindangsih which implemented the general transmigration.

TRANSMIGRASI (KANWIL) KALIMANTAN SELATAN

- 1981 *Penelitian dan perencanaan sosial ekonomi dalam rangka menjajagi kemungkinan-kemungkinan penempatan transmigrasi swakarsa di kabupaten Tapin propinsi Kalimantan Selatan* [Research and socio-economical planning towards finding appropriate location for self-initiated transmigration in the district of Tapin, South Kalimantan].- Proyek Penelitian Transmigrasi, Banjarmasin, 1981, 146 p., tab, bibl.

PPT/325.5 Ind/p

Kalsel, T. Swakarsa, Socio-economic, Ecology, Culture

This research describes the socio-economic, cultural and ecological settlement sites of self-initiated and inserted transmigration and offers the description of potential scheme for new settlement.

TRANSMIGRASI (KANWIL) SUMATERA SELATAN

- 1990 *Buku Data* [Data book].- Kanwil Transmigrasi, Sumatera Selatan, Palembang, 1990.
Sumsel, Statistical Data, Transmigration, Colonial History, Contemporary History

TRANSMIGRASI (KANWIL) LAMPUNG

- 1986 *Laporan kegiatan kerja tahun anggaran 1985/1986* [Operational report on 1985/1986 budgets].- Kantor Wilayah Departemen Transmigrasi, Lampung, 1986, 66 p., tab, ann.

MOT/417 Lam/I

Lampung, T. Swakarsa, T. Sisipan, T. Lokal, Target, Equipment

This paper provides information on the implementation of the spontaneous and local migration in the Pelita III; during the first and the second year of Pelita IV, and planned target for the end of Pelita IV. Many problems have been raised among which there are an increase in the number of spontaneous transmigrants, the difficulty to obtain location, land status and limited public facilities. The policy is to monitor spontaneous migration with the coordination between local government and KUPT, in order to prepare suitable land and to get government support in the matter of land status.

UNIVERSITAS GADJAH MADA

- 1978 *Karangmenjangan: A transmigration village (1965)* [Karangmenjangan: A transmigration village (1965)].- Institute of Rural and Regional Studies: Gadjah Mada University, Yogyakarta, 1978, X, 118 p., tab.

PDII/330.95981 Kar

Sumsel, Belitang, Karangmenjangan, Adaptation, Culture

This paper is part of a three series report on Balitang dealing with land issues namely rights of land allocation, fragmentation, ownership and transmigration adaptation in Belitang. Regarding the adaptation, this study has used socio-anthropological approach to observe facilities and socio-economic institutions which turn up to be the "answer" for the social-economic challenge that all transmigrants have to face in their new environment.

UNIVERSITAS PADJADJARAN

- 1979 *Penelitian dalam rangka penyelenggaraan transmigrasi sisipan di Lampung, Sumatera Selatan, Sumatera Barat dan Kalimantan Barat* [Research on the implementation of inserted transmigration program in Lampung, West Sumatra and West

Kalimantan.].- Lembaga Management Fakultas Ekonomi, Bandung, 1979, IX, 196 p., tab, map, bibl.

MOT

Lampung, Sumsel, Sumbar, Kalbar, Management, Sponsored Migrant, T. Umum, T. Swakarsa, T. Sisipan

This paper analyses the management process of the inserted transmigration in relation to the problems and conditions at the 4 research locations. Inserted transmigration consists of general and spontaneous transmigrants but with higher quality. The author also differentiates between the one which is handled by the government from the spontaneous which is handled by private at the location determined by the government.

USAID/IBRD

1984 *Upland Agriculture and Conservation Project: Indonesia* [Upland Agriculture and Conservation Project: Indonesia].- Staff Appraisal Report, Jakarta, 1984.

Indonesia

A large number of spontaneous transmigrants have forced the preserved forest and endangered the existence and continuity of wild animals in terms of quality, type, and environment.

WORLD BANK

1988 *Indonesia: The transmigration program in perspective*.- Washington D.C., the World Bank, 1988, 271 p., tab, map.

PPT

Indonesia, Settlement, Internal Migration, Land Use, Rural Development, Spontaneous Migration, T. Sisipan

This report is important since it analyzes in details the process, assessments and prospect of the transmigration program such as population impact, field of work, migrant welfare, regional growth as well as social and environmental effects. It also examines the factors which will influence the transmigration planning in the future, towards a better planning for spontaneous migration in terms of land availability considering the limited funds along with other institutional considerations. The World Bank also states its roles, in addition to the components needed for improving the spontaneous migration.

YAYASAN TENAGA KERJA INDONESIA

1981 *Lokakarya tentang transmigrasi swakarsa kaitannya dengan penanaman modal* [Workshop on self-initiated transmigration in relation with investment].- Yayasan Tenaga Kerja Indonesia, Jakarta, 15-19 Juni 1981, 146 p., tab.

MOT

T. Swakarsa, Investment, Cross-sectoral Approach, Regional Development, Export Commodity

This book collects the multi-disciplinary articles and examines: 1) whether capital investment could play a booster role to the export of commodities of the agricultural sector by subsidizing the Nucleus Estate Plantation (PIR) in the spontaneous transmigration project and 2) whether capital investment can also develop the outer islands of Java.

LEGAL TEXTS

- 1973 *Government regulation No. 42, 1973 concerning the implementation of Transmigration.*
MOT/410 Ind/g
- 1974 *Undang-Undang RI No. 5 Tahun 1974 Tentang Pokok-pokok Pemeritahan Daerah* [Law No. 5 of 1974 on Principles of Local Administration].
- 1976 *Himpunan hasil karya Badan Pengembangan Pembangunan Daerah Transmigrasi* [Compilation of regulations from the Institute for Transmigration Development].
YTKI/305.809598Ind/h
- 1978 *Keputusan Presiden RI No. 1 Th. 1978 tentang kesempatan bagi penduduk setempat berpindah ke dalam proyek transmigrasi dan keputusan bersama Menakertrans dan Menteri Dalam Negeri* [Presidential Decree No. 1, 1978 of the R.I. on the opportunities for local people to move into the Transmigration project coordinated by Min. of Manpower and Transmigration and Min. of Internal Affairs].
MOT/411.6 Ind/k
- 1979 *Undang-Undang RI No. 5 Thahun 1979 tentang Pemerintahan Desa* [Law No. 5 of 1974 on principles of Village administration].
- 1980 *Keputusan Menteri Tenaga Kerja & Transmigrasi No. KEP.136/MEN/1980 ttg Pembentukan Team antar Departemen penyusunan rancangan peraturan pemerintah ttg pelaksanaan transwakarsa* [Decree ltr No. KEP 136/MEN/1980 of the Minister for Manpower and Transmigration on the set up of inter-departmental team to prepare guidelines for implementation of the Transmigration Swakarsa implementation].
- 1982 *Petunjuk pelaksanaan transmigrasi swakarsa PIR-Khusus tahun 1981/1982* [Guideline for implementation of Spontaneous transmigrants in Specific Nucleus Estate Plantation, 1981/1982].
MOT
- 1982 *Keputusan Menteri Tenaga Kerja & Transmigrasi No. KEP.36/MEN/1982 tentang organisasi & tata kerja direktorat transmigrasi swakarsa di lingkungan Direktorat Jenderal Transmigrasi* [Decree No. KEP.36/MEN/1982 of the Minister of Manpower and Transmigration on the organization and work of the Transmigration Swakarsa directorate in the Dir. Gen. Transmigration].
MOT
- 1983 *Surat Keputusan Gubernur Kepala Daerah tingkat I Sumatra Selatan, No. 142/KPTS/III/1983, tentang penghapusan pemerintah Marga* [Decree letter from South Sumatra Governor, No. 142/KPTS/III/1983, regarding the abolishment of the Marga political system].
UNSRI, Fak. Hukum
- 1984 *Keputusan Menteri Transmigrasi RI No. KEP. 163/MEN/1984 tentang pelaksanaan transmigrasi swakarsa* [Decree No. KEP/163/MEN/1984 of the Minister for Transmigration regarding the self-supported Transmigration implementation].
MOT

- 1984 *Keputusan Menteri Transmigrasi No. KEP.164/MEN/1984 tentang penyediaan areal lahan untuk transmigrasi swakarsa* [Decree No. KEP/164/MEN/1984 of the Minister for Transmigration regarding land accessibility for Swakarsa Transmigrants].
MOT
- 1984 *Instruksi Gubernur Kepala Daerah Tingkat I Sumatra Selatan No. 868/KPTS/I/1984 tentang larangan para Camat/Kepala wilayah Kecamatan memberi izin membuka tanah* [Instruction from South Sumatra Governor No. 868/KPTS/I/1984 regarding interdiction for the Camat to give authorization to open land].
UNSRI, Fak. Hukum
- 1985 *Instruksi Menteri Transmigrasi RI No. INS. 83/MEN/1985 tentang peningkatan transmigrasi swakarsa di Pulau Sumatera* [Intruccion No. INS.83/MEN/1985 of the Minister for Transmigration regarding the self-supported Transmigration improvement in Sumatra].
MOT
- 1986 *Pedoman prosedur kepindahan transmigrasi swakarsa: Peraturan Pemerintah RI No. 42 tahun 1973 tentang penyelenggaraan transmigrasi* [Procedure manual on Swakarsa Transmigration implementation: Indonesian government regulation No. 42, 1973 regarding the implementation of Transmigration].
MOT/101148
- 1986 *Himpunan peraturan/ketentuan untuk landasan operasional pengembangan perkebunan dengan pola Perusahaan Inti Rakyat yang dikaitkan dengan program transmigrasi* [Compilation of regulations for the operational base for PIR development linked to the Transmigration program].
MOT
- 1986 *Himpunan peraturan pelaksanaan transmigrasi swakarsa* [Collection of regulations for Swakarsa Transmigration implementation].
MOT
- 1987 *Pedoman pelaksanaan transmigrasi swakarsa. (TS.02/87)* [Manual on Swakarsa Transmigration implementation].
MOT
- 1987 *Keputusan Menteri Transmigrasi RI No. KEP.145/MEN/S.J./1987 tentang Tim Perumus Penyusunan peraturan perundang-undangan transmigrasi swakarsa* [Decree No. KEP.145/MEN/S.J./1987 of the Minister for Transmigration regarding the team preparing regulations for Swakarsa Transmigration].
MOT
- 1989 *Keputusan Menteri Transmigrasi RI No. KEP. 82/MEN/1988 tentang Transmigrasi Swakarsa* [Decision No. KEP. 82/MEN/1988 of the Ministry of Transmigration regarding the self-supported Transmigration].
MOT
- nd *Undang-undang Simbur Tjahaja* [Traditional law in South Sumatra].
UNSRI, F. Hukum

PRESS ARTICLES

23/03/78

"Banyak petani Sulawesi Selatan bertransmigrasi ke Kolaka" [*Many peasants from South Sulawesi transmigrate to Kolaka*], KOMPAS.

Sulsel, Sultra, Bugis, Interaction, Spontaneous Migrants

22/08/78

"Menteri Muda Martono: Perlu penginapan gratis bagi transmigrasi spontan" [*Junior Minister Martono declares: More free accomodation for spontaneous transmigrants*], SUARA KARYA.

Indonesia, T. Swakarsa, Aid

29/03/79

"Menengok bekas hutan Rasuan (1): Kulo lingsem yen blokosuto" [*Visiting the former forest of Rasunan [1]: I feel ashamed of your nakedness*], KOMPAS.

Rasuan, Contractor, Land Fertility, Welfare

03/01/80

"Transmigrasi swakarya di Kolaka berkembang maju" [*Spontaneous transmigration in Kolaka well-developed*], ANTARA.

South Sulawesi/Kabupaten Sinjai, Kabupaten Bone., Bugis, Spontaneous Migration, T. Umum, Troduction

20/02/80

"Presiden Soeharto instruksikan penanggulangan mengalirnya 1.000 tenaga kerja ke Lampung" [*President Soeharto instructs to handle the overflow of 1000 labour force to Lampung*], ANTARA.

Lampung, Transmigrasi Swakarsa, Labor Flow, Deforestation.

27/02/80

"Tindak lanjut laporan Gubernur Lampung: Presiden instruksikan pembentukan team untuk atasi masalah transmigrasi" [*Further action from the Lampung government's report: The President instructs to form a team to overcome the transmigration problems*], KOMPAS.

Lampung, Circular Migration, Transmigrasi Swakarsa

18/03/80

"Memanjakan transmigrasi tidak selalu menelorkan hasil positif" [*Spoiling transmigration not always gives a positive result*], SINAR HARAPAN.

Indonesia, Self-initiative Transmigration, Pelita III.

09/04/80

"Transmigrasi swakarsa terus didorong" [*Pushing promotion for Transmigration swakarsa*], KOMPAS.

Indonesia., T. Swakarsa, Promotion.

21/04/80

"Karena belum ditangani tuntas: Banyak keluarga transmigran swakarsa hidup terlunta-lunta" [*Not yet taken in hand seriously: Many self-supported transmigrants families lead a miserable existence*], KOMPAS.

Indonesia, T. Swakarsa, Land.

29/04/80

"Presiden bantu biaya pemukiman transmigrasi spontan di Lampung" [*President helps funding the budget for spontaneous transmigration in Lampung*], KOMPAS.

Lampung, T. Swakarsa, Financing, Deforestation

29/04/80

"Pemukiman kembali 5.000 KK penduduk ke Lampung Utara" [*Resettlement of 5,000 families to North Lampung*], PELITA.

Lampung Utara, Financing, T. Swakarsa

07/05/80

"Target transmigran dari Bali dalam Pelita III 18.750 KK" [*Transmigration target from Bali during Pelita III is estimated at 18,750 HH*], ANTARA.

Bali, Spontaneous Migration, Return Migration, Procedure.

19/05/80

"Kepada transmigran swakarsa: Wajar diberi bantuan yang lebih mantap" [*To the self-initiated transmigrants: it is worth to give big support*], KOMPAS.

Jateng, Sumsel, Transmigrasi Swakarsa, Development, Infrastructure

07/06/80

"Masalah Gunung Balak membutuhkan pendekatan manusiawi" [*Human approach of Gunung Balak problems*], KOMPAS.

Lampung, Spontaneous Migration, Resettlement, Irrigation, Problems

21/08/80

"Terpilih tiga transmigran teladan; Kadarusno: Transmigran spontan lebih cepat berkembang" [*The best three transmigrants are chosen; Kadarusno: spontaneous transmigrant is achieving faster*], KOMPAS.

Sultra, Kalsel, Sumsel., Transmigran Teladan, Spontaneous Transmigration.

03/09/80

"Supodo dan kawan-kawan: Ingin jadi transmigran tetapi 'dipaksa' kembali ke Jawa" [*Supodo and friends deserved to be transmigrants but are forced to go back to Java*], KOMPAS.

Kalsel, Sulteng., Labor Force, Return Migration

30/09/80

"Karena masalah tanah: Banyak transmigran spontan di Sultra berbalik pulang" [*Because of land problems, many spontaneous transmigrants from Central Sulawesi return home*], KOMPAS.

Sultra, Problems, T. Swakarsa

13/10/80

"Sulteng kewalahan menghadapi arus transmigrasi swakarsa" [*The province of Central Sulawesi is almost unable to receive the self initiated transmigrants*], ANTARA.

Sulteng, Spontaneous Migration, Management

13/12/80

"Sjarkawi Basrie dan Sulaiman Afif dari Komisi IV DPR: Para transmigran spontan bantu program reboisasi" [*Sjarkawi Basri and Sulaiman Afif from the Parliament's Commission IV: the spontaneous transmigrants help the reforestation*], MERDEKA.

Lampung, T. Swakarsa, Reforestation

22/12/80

"Permainan calo dan buruh tertipu" [*Labor touts' games and workers deceived*], KOMPAS.

Lampung, Sponsor, Impostor, Spontaneous Migration.

- 19/06/81
 "Transmigrasi swakarsa yang semula terkatung-katung" [*In the beginning, self-supported transmigration was floating*], KOMPAS.
 Sultra, T. Swakarsa, Land Scarcity, Land Right.
- 29/06/81
 "Petani Pati: Tak tertarik jadi buruh perkebunan" [*Pati peasants: Not interested in becoming plantation workers*], KOMPAS.
 Jateng/Pati, Plantation workers, Behavior
- 01/09/82
 "Menurun gairah bertransmigrasi swakarsa di Sulawesi Tenggara" [*Decrease of desire for self-supported transmigration in Southeast Sulawesi*], KOMPAS.
 Sulteng, T. Swakarsa, Problems, Land Allocation
- 02/09/82
 "Pemerintah perlu menetapkan lahan garapan transmigrasi spontan" [*The Government should confirm available land for spontaneous transmigration*], KOMPAS.
 Indonesia, Regulation, Land Allocation, T. Swakarsa
- 22/07/83
 "Pendapat dua ahli UGM: Nasib buruh tani lebih baik daripada petani gurem" [*Statements from two UGM experts: Landless agricultural workers' fate is better than that of small farmers*], KOMPAS.
 Indonesia, Agricultural Labor, Petani Gurem
- 02/10/84
 "Tenaga kerja AKAD diminta tak kembali ke daerah asalnya" [*AKAD workers requested not to be sent back home*], SURABAYA POST.
 Jawa, Bengkulu Selatan., AKAD, Follow up T. Lokal, PIR.
- 01/04/85
 "Seorang lurah jadi calo: Ratusan tenaga kerja asal Pati terlantar di Sumatera" [*One village head becoming broker: Hundreds of labor from Pati are neglected in Sumatera*], PELITA.
 Jateng/Pati, Sum-Sel/Palembang., Middlemen, Labor Force
- 03/01/86
 "Marius Tumakaka yang dilupakan: Perintis transmigrasi spontan Kabupaten Donggala" [*The forgotten Marius Tumakaka: pioneer of spontaneous migration in Donggala*], SINAR HARAPAN.
 Sulteng, Life History, Spontaneous Migration, Recruiter/Pioneer.
- 01/02/86
 "'Idola' para transmigran adalah Sumatera" [*Sumatera is the ideal place for the transmigrants*], PELITA.
 Indonesia, Transmigrasi Swakarsa
- 12/02/86
 "Indonesia potensi lahan kering untuk perluasan areal pertanian" [*Land potential for expanding agricultural areas in Indonesia*], ANTARA.
 Sumsel, Transmigration Area, Imperata
- 15/02/86
 "Transmigran swakarsa murni kabupaten Subang duduki jumlah terbesar dalam Pelita IV" [*Subang Regency has the biggest spontaneous migration population in Pelita IV*], P.A.B..
 Jabar/Subang, Spontaneous Migration, Pelita IV.

27/02/86

"Transmigrasi, pertanian dan irigasi jadi fokus utama" [*Transmigration, agriculture and irrigation are the main focusses*], MERDEKA.

Lampung/Musi Rawas, Infrastructure, Accessibility, Agriculture, Irrigation

14/04/86

"Lahan usaha dua belum diberikan, transmigran babat hutan larangan" [*Land No. 2 not yet allocated, transmigrants cleared away restricted forest*], KOMPAS.

Sumsel, Problems, Forestry, Environment, Land Allocation

17/04/86

"Populasi ternak sapi IFAD di Sumsel meningkat" [*IFAD cattle in South Sumatera is increased*], ANTARA.

Sumsel, Animal Husbandry, Aid

21/04/86

"Gubernur H. Sainan Sagiman mengakui: 11.000 Km jalan di Sumsel rusak berat dan perlu segera diperbaiki" [*Governor H. Sainan Sagiman admits: 11,000 km of road in South Sumatera are in a poor condition and need to be repaired*], PAB.

Sumsel, Infrastructure, Environment, Road

25/04/86

"Gubernur Sumsel, H. Sainan Sagiman: Sepertiga rakyat Sumsel hidup dari perkebunan" [*The Governor of South Sumatra, H. Sainan Sagiman: 1/3 of the villagers live on plantation*], MERDEKA.

Sumsel, PIR, World Bank, Plantation

29/04/86

"Hutan lindung di Bengkulu terancam penyerobotan" [*Reserved forest in Bengkulu is illegally occupied*], SUARA KARYA.

Bengkulu, Forestry, PIR, Environment, Ecology

20/05/86

"7.473 KK transmigran swakarsa murni dan PIR Khusus di Kalbar" [*7,473 families of self-supported transmigrants and PIR-Khusus in West Kalimantan*], NERACA.

Kalbar, Spontaneous Settlers, PIR

28/05/86

"Pemukiman di wilayah Lampung diwarnai kepentingan manusia, lingkungan dan hewan" [*Lampung is built up with human, environmental and animal interests*], SINAR HARAPAN.

Lampung, Transmigrasi Swakarsa, Transmigrasi Lokal.

29/05/86

"Transmigran swakarsa di Kalbar sudah tersedia rumah dan lahan" [*Spontaneous migrants in West Kalimantan are provided with housing and land*], ANTARA.

Kalbar, Transmigrasi Swakarsa.

04/06/86

"Self-motivated transmigration to be encouraged" [*Self-motivated transmigration to be encouraged*], THE INDONESIA TIMES.

Indonesia, Self-motivated Transmigration, Promotion.

07/06/86

"Otto: Sebaiknya pemerintah hanya perencana transmigrasi dan masyarakat sebagai pelaksana" [*Otto: The government should only plan transmigration, and the people themselves should implement it*], SINAR HARAPAN.

Indonesia, Environment, Transmigrasi Swakarsa, Social Conflict

14/06/86

"Transmigrasi TBB pulang kampung: Sakidjo pembawa kabar gembira" [*TBB Transmigrant returned home : Sakidjo brings good news*], MERDEKA.

Sulsel, Transmigrasi Swakarsa TBB, Promotion.

04/07/86

"Badan pelaksana transmigrasi swakarsa tahun ini dibentuk" [*The self-supported transmigration implementation board is being formed this year*], KOMPAS.

Indonesia, Transmigrasi Swakarsa, Coordination, Implementation

08/07/86

"Mengapa tidak bertransmigrasi swakarsa saja ?" [*Why not be a self-initiated transmigrant?*], ANGKATAN BERSENJATA.

Kaltim, T. Swakarsa, Rubber Plantation

08/07/86

"Para santri Jawa Barat berbondong-bondong ikut program transmigrasi Bedol Pesantren" [*Religious West-Javanese in masses join transmigration programmes led by their religious leaders*], TERBIT.

Jabar, Pesantren, Transmigrasi Swakarsa, PIR.

09/07/86

"Mengenai kampung Yabakti" [*The story of Yabakti village*], SINAR HARAPAN.

Lampung, Transmigrasi Lokal, Regulations

16/07/86

"Hak atas tanah PIR-Trans tidak dapat dialihkan selama 15 tahun" [*PIR-Trans land rights cannot be transferred during 15 years*], SINAR HARAPAN.

Indonesia, PIR, Land Right, Problems

25/07/86

"Land reform, transmigrasi dan koperasi: Jangan biarkan petani gurem berkembang" [*Land reform, transmigration and cooperation: Do not let small peasants progress*], SINAR HARAPAN.

Indonesia, Land Reform, Cooperation, Poverty

31/07/86

"Lokakarya transmigrasi swakarsa: Transmigrasi ke Jawa lebih besar daripada ke luar Jawa" [*Workshop on spontaneous migration: migration to Java is higher than to outer island*], H.K.T.I..

Indonesia, Internal Migration, Transmigrasi Swakarsa

26/08/86

"Meningkat animo bertransmigrasi dari DIY ke Kalbar" [*To increase the number of transmigration from D.I. Yogyakarta to West Kalimantan*], KEDAULATAN RAKYAT.

DIY, Kalbar., PIR, NGO, Transmigrasi Swakarsa.

27/08/86

"320.000 Ha kawasan hutan di Sulsel diserobot" [*320,000 ha of forest of South Sulawesi are illegally occupied*], ANGKATAN BERSENJATA.

Sulsel, Transmigrasi Lokal, Forest Reclamation

27/08/86

"Irigasi di Musi Rawas tunjang program transmigrasi" [*Irrigation in Musi Rawas assists the transmigration program*], ANGKATAN BERSENJATA.

Sumsel/Musi Rawas., Irrigation, Intensification, Extensification, Transmigrasi Sisipan, Transmigrasi ABRI, Transmigrasi KNPI, Transmigrasi Pesantren.

29/08/86

"Semakin sulit, tanah perkebunan di Sumsel" [*It is harder to getting land for plantation in South Sumatera*], KOMPAS.

Sumsel, Perkebunan, Transmigrasi.

29/08/86

"Dana transmigrasi semakin menyusut" [*Transmigration funds are decreasing*], PRIORITAS.

Indonesia, Transmigrasi Umum, Lokal, Transmigrasi Swakarsa, PIR, Forum Komunikasi.

29/08/86

"Menurut Menteri Martono: Organisasi-organisasi masyarakat akan diikutsertakan dalam pelaksanaan transmigrasi swakarsa" [*According to Minister Martono: Social organizations will take part in the realisation of spontaneous transmigration*], P.A.B..

Indonesia, Transmigrasi Swakarsa, Culture, Promotion

30/08/86

"Masyarakat diminta bantu transmigrasi swakarsa" [*Society is invited to help spontaneous transmigration*], KOMPAS.

Indonesia, Transmigrasi Swakarsa, PIR, Transmigrasi Umum, Transmigrasi Lokal.

02/09/86

"Mengikuti transmigran teladan berkampanye: Sayang, perhatian Pemda Bali sangat kurang" [*To follow the outstanding transmigrants in their campaign: it's a pity that the Bali provincial government does not pay attention enough*], MERDEKA.

Bali, Sulteng., Information, T. Swakarsa, Motivation

09/09/86

"Kesejahteraan masyarakat di lokasi pengembangan karet" [*Community welfare in rubber development area*], ANTARA.

Sulteng, PIR, T. Swakarsa, Trader, Farmer, Irrigation

09/09/86

"MAWI setuju, bantu mengisi rumah transmigrasi yang kosong" [*MAWI agrees to help occupying the vacant transmigrants house*], ANTARA.

Kalbar, Transmigrasi Swakarsa, Christianity

09/09/86

"Baru satu PIR swasta yang benar-benar siap mulai usaha" [*Only one Private -PIR [Nucleus Estate Scheme] starts its activities*], KOMPAS.

Riau, PIR, Adaptation, Farmer, Land Purchase, Contractor, Labor Force

20/09/86

"Karena jalan utama rusak total, lokasi transmigrasi Sinusukan Sumsel terancam terisolir" [*Because the main road was completely destroyed, Sinusukan transmigration location threatened to be isolated*], MERDEKA.

Sumsel, Infrastructurs, Problems

23/09/86

"Kebiasaan merantau penduduk menunjang transmigrasi swakarsa: Studi kasus di Kabupaten Pacitan - Jatim" [*Migration habit among the population encourages self-supported transmigration: Case study of Pacitan Regency - East Java*], BERITA YUDHA.

Jatim, Mobility, Transmigrasi Swakarsa, Labor Force, Communication System.

23/09/86

"Transmigrasi sebaiknya dikaitkan dengan Pola Pembangunan Daerah" [*Migration should be intergrated with Regional Development*], KOMPAS.

Indonesia, Transmigrasi Swakarsa, Regional Development.

23/09/86

"Mencari transmigran swakarsa di tanah Jawa (1): 'Ono dino ono upo' sangat menghambat program transmigrasi" [*Searching for the self-initiated transmigrants in Java: (1) 'Ono dino ono upo' Javanese philosophy can hamper the transmigration program*], MERDEKA.

Kalbar, DI Yogyakarta, Jateng., Transmigrasi Swakarsa, Communication System.

24/09/86

"Pencalonan transmigran di PIR Beteleme, Poso ditangani Pemda" [*Nomination of transmigrants in PIR Beteleme, Poso handled by local authority*], ANTARA.

Sulteng, Transmigrasi Swakarsa, PIR, Transmigrasi Sisipan.

24/09/86

"Mencari transmigran swakarsa di tanah Jawa (2): 'Wong Dayak mangan wong' menghantui masyarakat Jawa" [*Searching for spontaneous migrants in Java (2): Wong Dayak mangan wong' Javanese prejudice haunted Javanese*], MERDEKA.

Jateng, Kalbar., Information, Labor Force, T. Swakarsa

25/09/86

"Transmigrasi spontan di Sumut terus meningkat" [*Spontaneous transmigration in North Sumatera continues to progress*], ANTARA.

Sumut, Transmigration, Spontaneous Transmigration, Transmigrasi Swakarsa Berbantuan.

25/09/86

"Mencari transmigran swakarsa di tanah Jawa (3): Memancing transmigran dengan transmigran" [*Searching for spontaneous migrants in Java (3): Fishing transmigrants with transmigrants*], MERDEKA.

Kalbar, Jateng, DI Yogyakarta., Transmigran Teladan, Daerah Pasang Surut, Transmigran Swakarsa, Motivasi.

29/09/86

"Transmigran swakarsa perlu didorong dengan penyuluh profesional" [*Spontaneous migrants need to be stimulated with professional training*], ANTARA.

Indonesia, Transmigrasi Swakarsa, Information

30/09/86

"Masyarakat Cirebon hanya mau transmigrasi ke Sumsel" [*People from Cirebon want to migrate only to South Sumatera*], MERDEKA.

Sumsel, Jabar., Information

02/10/86

"Pemasaran dan transportasi masalah daerah transmigrasi" [*Marketing and transportation problems in transmigration sites*], ANTARA.

Sumsel, Marketing, Transportation, Infrastructure, Problems

02/10/86

"Orang Jawa bertransmigrasi sejak lama" [*Javanese people migrated since a long long time ago*], ANTARA.

Jawa, Sumatera., Spontaneous Migration, Transmigrasi Swakarsa, Labor Force, Colonial History

03/10/86

"Orang Jawa transmigrasi spontan sejak lama, mereka tidak statis" [*Javanese are not static, they have been spontaneous migrants for a long time*], SINAR HARAPAN.

Jawa, Sumatera Bagian Timur., Spontaneous Migration, Transmigrasi Swakarsa, Labor Force, Javanese, Colonial History

04/10/86

"Transmigrasi bedol pesantren pertama di Sumsel" [*The first Pesantren settlement in South Sumatera*], ANTARA.

Sumsel, Jatim., Transmigrasi Pesantren, Education

04/10/86

"Transmigran swakarsa Jawa: Semula memilih Sumatera tapi kemudian menetap di Malaysia" [*Javanese spontaneous transmigrants: Initially chosen Sumatera, but were sent later to Malaysia*], KOMPAS.

Indonesia, Transmigrasi Swakarsa, PIR, Emigration, Labor Force.

04/10/86

"Transmigration already known to Javanese long time ago" [*Transmigration already known to Javanese long time ago*], THE INDONESIA TIMES.

Indonesia, Colonial History, Spontaneous Migration.

09/10/86

"Transmigran Bedol Pesantren ke Sumatera Selatan" [*Transmigrants led by religious leaders to South Sumatera*], ANTARA.

Jabar, Sumsel., Pesantren, Transmigrasi Swakarsa

10/10/86

"Sumsel jenuh menampung transmigrasi' (2): Kerjasama dengan Dep. Transmigrasi masih lancar" [*South Sumatera is fed up with placing transmigrants [2]: Cooperation with Transmigration Department still runs smoothly*], PELITA.

Sumsel, Land Reform, Certification, land rights

29/10/86

"Pemda Belitung sediakan bantuan bagi transmigran swakarsa Jateng" [*Belitung Authorities provide assistance to self-initiated transmigrants of Central Java*], SUARA KARYA.

Sumsel Belitung, Promotion, T. Swakarsa, Response

25/11/86

"Ihwal lokasi transmigrasi Batumarta, Sumsel" [*The case of Batumarta transmigration location, South Sumatera*], MERDEKA.

Sumsel, Land Right

03/12/86

"Program transmigrasi swakarsa gagal karena kurang persiapan" [*Self-supported transmigration program collapses due to the lack of preparation*], PELITA.

Indonesia, Spontaneous Transmigration, Environment.

06/12/86

"Kosgoro Sumsel buka lahan perkebunan sawit di Muba" [*Oil-palm plantation is opened in Muba, Kosgoro, South Sumatera*], SINAR TANI.

Sumsel, Palm, Plantation

09/12/86

"Sumsel yang kini mulai langka tanaman rotan" [*South Sumatera now starts to plant rattan*], SINAR TANI.

Sumsel, Rattan, Reforestation

10/12/86

"Antar daerah: Bandar Lampung" [*Inter region: Bandar Lampung*], SUARA KARYA.

Lampung, TSPD, Pasang-surut, Resettlement.

13/12/86

"Menteri Martono: Sumatera akan tertutup bagi transmigrasi umum" [*Minister Martono: Sumatera will be closed to general transmigration*], MERDEKA.

Sumatera, Spontaneous Transmigration, Problem, Closed Area, T. Umum

13/12/86

"Lampung kembangkan transmigrasi swakarsa pola daerah" [*Lampung develops self-supported transmigration TSPD pattern*], PRIORITAS.

Lampung, Migrasi Spontan, T. Swakarsa, Forestry, Environment

- 15/12/86
 "Transmigrasi swakarsa murni di Gunung Kidul masih sedikit" [*Pure self-supported transmigration in Gunung Kidul still very scarce*], KEDAULATAN RAKYAT.
 DI Yogyakarta, Transmigrasi Swakarsa Murni, Transmigrasi Swakarsa Famili.
- 16/12/86
 "PIR di Kabupaten Muara Enim terbesar di Asia Tenggara" [*PIR scheme in Muara Enim Regency is the largest in Southeast Asia*], P.A.B..
 Sumsel, PIR, Labor Force, Shifting Cultivation.
- 19/12/86
 "Transmigrasi swakarsa famili diharapkan geser pola umum" [*Self-supported transmigration families are expected to replace the general pattern*], KEDAULATAN RAKYAT.
 DI Yogyakarta, Transmigrasi Swakarsa Famili, Communication, Labor Force.
- 30/12/86
 "Transmigran swakarsa ke Kalteng bisa peroleh rumah dan lahan gratis" [*Self-supported transmigrants to Central Kalimantan getting free house and land*], HARIAN INDONESIA.
 Kalteng, Transmigran Swakarsa, Promotion
- 27/01/87
 "Riau kurang tenaga terampil" [*Riau lacks skilled labor*], KOMPAS.
 Riau, Plantation, Industry, AKAD, PTP, Labor Force
- 11/02/87
 "Kabupaten Pasir bahas kehadiran 103 AKAD" [*Pasir Regency discusses the arrival of 103 AKAD*], MERDEKA.
 Kaltim, AKAD, PIR, T. Lokal, T. Swakarsa, Palm
- 12/03/87
 "Transmigrasi swakarsa masih mengalir masuk ke Sulteng" [*Self-supported transmigration still arrived to Central Sulawesi*], ANTARA.
 Sulteng/Poso, T. Swakarsa, PIR, T. APPDT, Jateng, Jabar.
- 13/03/87
 "Transmigrasi swakarsa diserahkan ke swasta" [*Self-supported transmigration to be handled over to private*], MERDEKA.
 Indonesia, Transmigrasi Swakarsa, Private Sectors, Policy.
- 16/03/87
 "Transmigrasi swakarsa merupakan katup pengaman investasi" [*Self-supported transmigration as the safety valve of investment*], MERDEKA.
 Indonesia, Transmigrasi Swakarsa, Private Investment, Regional Development.
- 17/03/87
 "Lukman Sutrisno: Soal swastanisasi transmigrasi yang perlu, ciptakan petani bukan buruh" [*Lukman Sutrisno: Involving private sector in the transmigration program is necessary to produce farmers but not workers*], SUARA PEMBARUAN.
 Indonesia, Transmigrasi Swakarsa, Private Sector, Labor Force.
- 26/03/87
 "3.415 KK, transmigrasi swakarsa di Sulsel" [*3,415 head of households of self-supported transmigration in South Sulawesi*], ANTARA.
 Sulsel, T. Swakarsa, Industry, Palm-oil.
- 21/04/87
 "Peladang liar dihimbau huni rumah transmigran yang kosong" [*Shifting cultivators are requested to occupy vacant transmigrants houses*], ANTARA.
 Kalteng, Local Resettlement.

24/06/87

"Ditipu calo, transmigran terlantar" [*Transmigrants deceived by recruiter, feel neglected*], SURABAYA POST.

Jatim, Travel, Problem.

01/07/87

"Lombok Tengah rawan calo tenaga kerja" [*Central Lombok endangered by labor touts*], MERDEKA.

Lombok Tengah, Migration Determinants, Migrations Decisions

08/07/87

"Apa yang kemudian harus menjadi ukuran keberhasilan" [*What is the measure of success?*], KOMPAS.

Indonesia, History, Evaluation.

08/07/87

"Keberhasilan program transmigrasi dan kelanjutannya" [*The success of transmigration program and its continuation*], KOMPAS.

Indonesia, Lampung., History, Transmigrasi Swakarsa, Land Clearing.

23/07/87

"Penentuan lokasi transmigrasi harus dengan mempertimbangkan hak adat" [*The selection of transmigration location must take into consideration the factor 'tradition'*], SUARA PEMBARUAN.

Indonesia, Irian Jaya., Land Right, Adaptation, Planning, YPMD, Lingkungan Hidup, LSM.

27/07/87

"Transmigrasi swakarsa harus berpola 'Ada gula ada semut'" [*Self-supported transmigration must follow the pattern: 'There is sugar, there are ants'*], SUARA PEMBARUAN.

Indonesia, Transmigrasi Swakarsa, DPR, Regional Government, Pioneer.

28/07/87

"Akibat sulitnya lapangan pekerjaan: Para pemuda 'melarikan diri' dari NTB" [*The outcome of job-shortage: Young people 'flee' from NTB*], MERDEKA.

NTB, Employment, AKAD, AKA, Spontaneous Migration

11/08/87

"Diperlukan transmigrasi perkotaan menanggulangi kepadatan penduduk" [*Urban transmigration is required to overcome the population density*], SINAR HARAPAN.

Jakarta, AKAD, Informal Sector, Swakarsa.

02/09/87

"Transmigrasi swakarsa ditingkatkan; Indonesia masuk kembali ke Organisasi Petani Internasional" [*Self-supported transmigration is developed: Indonesia returns to the International Farmers Organization*], PELITA.

Indonesia, T. Swakarsa, Private Investment, Pioneer, Madurese, Bugis.

29/09/87

"Jangan cuma 'Orang Kecil': Kalau perlu, usahawan bisa jadi transmigran" [*Not only 'low-people': if it's necessary, businessmen could become transmigrants.*], PELITA.

Jateng, Transmigrasi Swakarsa, PIR, Peran Swasta, Pelita IV.

03/10/87

"Lampung translok 1.500 KK ke Rawa Jitu" [*Local transmigration of 1,500 families from Lampung to Rawa Jitu*], PELITA.

Lampung/Rawa Jitu, Riau, Bengkulu, South Sumatera., PIR, T. Lokal.

19/10/87

"Penduduk sudah padat, Lampung mulai kirim transmigran ke propinsi lain" [*Population target has been reached, Lampung starts to send transmigrants to another province*], SUARA KARYA.

Lampung, Resettlement, PIR.

09/11/87

"Masih dicari, konsep tepat penanganan transmigrasi swakarsa" [*Still in search for the right concept how to handle self-supported transmigration.*], MERDEKA.

Indonesia, Transmigrasi Swakarsa, Conceptualization, Bappeda, SSDP, World Bank

15/12/87

"Digagalkan pemberangkatan naker gelap dari Sragen" [*Illegal labor force from Sragen is foiled*], SUARA KARYA.

Jateng/Sragen, Irian Jaya., Labor Force, Middlemen

04/01/88

"Sumsel tertutup bagi transmigrasi umum" [*South Sumatera closed for general transmigration*], KOMPAS.

Sumsel, Closed-area, Pasang-surut (Swamp-area).

06/01/88

"296 ribu keluarga penebang liar di propinsi Kalbar perlu dibina" [*296 thousand shifting cultivators in West Kalimantan have to be guided*], SUARA PEMBARUAN.

Kalbar, Shifting Cultivation, Forest protection, Customs

16/01/88

"For Dayak people ecology is a legacy", THE JAKARTA POST.

Kalimantan, Environment protection, Tradition

20/01/88

"Masih dicari konsep transmigrasi swakarsa" [*In search for a spontaneous migration concept*], MERDEKA.

Indonesia, Self-initiated Transmigration, Policy.

25/01/88

"Konsep transmigrasi swakarsa harus utuh" [*Spontaneous migration concept should be integrated*], MERDEKA.

Indonesia, Self-initiated Transmigration, Policy, Pelita V, APBD.

27/01/88

"Praktek penebang liar di wilayah Kapuas jadi dilema" [*The dilemma for illegal forest production*], SUARA PEMBARUAN.

Kalbar, Forest Exploitation, Forest Protection, Off Farm Revenue

01/02/88

"Kabupaten Musi Rawas masih terima transmigran swakarsa" [*Spontaneous transmigration is still accepted in Musi Rawas*], SUARA PEMBARUAN.

Sumsel/Musi Rawas, Promotion T. Swakarsa.

14/02/88

"Prasangka terhadap Peladang berpindah belum juga berubah" [*Suspicion about traditional shifting cultivation same as before*], KOMPAS.

Indonesia, Kalimantan, Shifting cultivation, Land Protection

15/02/88

"Pencapaian sasaran program transmigrasi masih terhambat" [*Obstacles in achieving transmigration program target*], ANTARA.

Sumsel, Land Scarcity, Land Certification, Labor Force, Transmigrasi Swakarsa.

22/02/88

"Tumpang tindih lahan transmigrasi dengan hutan produksi di Sumsel" [*Overlapping of transmigration areas with productive forest in South Sumatera*], SUARA PEMBARUAN.
South Sumatera/Musi Rawas., Land Allocation, PIR.

23/03/88

"Transmigrasi swakarsa diharapkan peroleh kemudahan hak atas tanah" [*Spontaneous migrants expect privilege on land*], KOMPAS.
Indonesia, T. Swakarsa, Policy, Land Use.

23/03/88

"Ratusan ha hutan lindung di daerah Lampung dibabat untuk perladangan" [*Hundred ha of protected forest in Lampung cleared again for shifting cultivation*], SUARA PEMBARUAN.
North Lampung, Illegal settler, Protected Forest

18/04/88

"Daerah transmigrasi Karang Agung Sumsel potensial untuk tambak udang" [*Karang Agung in South Sumatera has potential for shrimp farming*], MERDEKA.
Sumsel/Karang Agung, Musi Banyuasin., Pasang-surut, Tambak, Investasi Swasta, Planning.

09/05/88

"Masalah sangat mendesak, mengatur transmigrasi swakarsa" [*Urgent problem: to take care of the spontaneous transmigration*], KOMPAS.
Lampung, Riau, West Java, Central Java., PIR, T. Swakarsa.

23/05/88

"1.000 KK perambah hutan di Lampung dimukimkan ke Rawa Jitu tahun ini" [*1,000 HH of land squatters in Lampung were resettled in Rawa Jitu in 1988*], SUARA KARYA.
Lampung/Rawa Jitu, Riau, South Sumatera., PIR, T. Swakarsa.

25/05/88

"Transmigran Spontan Murni terus mengalir ke Sultra" [*Increasing pure spontaneous migrants in North Sulawesi*], KOMPAS.
South East Sulawesi, Spontaneous Transmigration-Murni.

10/06/88

"Pemanfaatan hutan rawa Sumsel merusak lingkungan" [*Use of swampy forest is bad for environment*], MERDEKA.
Sumsel, Swampy forest, Environment Protection

11/06/88

"Hutan kemasyarakatan akan dikembangkan di Sumsel" [*Agroforestry program will be developed in Sumsel*], KOMPAS.
Sumsel, Shifting Cultivation, Agroforestry, Forest Protection

27/06/88

"Pemda Sumsel dinilai berhasil membangun lokasi transmigrasi" [*South Sumatera successful in developing transmigration location*], ANTARA.
Sumsel/Musi Rawas (kabupaten)., Transmigrasi Swakarsa, Regulation.

27/06/88

"Sumsel ajukan konsep pemukiman transmigrasi swakarsa" [*South Sumatera proposes a spontaneous transmigration concept*], MERDEKA.
Sumsel/Tanjung Tiga/Buaimadang/Ogan Komering Ulu., Transabangdep, T. sisipan, Coordination, Carrying capacity, Financing.

09/07/88

"Pengarap liar hutan negara di Kuala Tungkal, Jambi diterbitkan" [*Illegal settlers in state forest Kala Tungkal, Jambi*], SUARA PEMBARUAN.
Jambi, Illegal Settler, State Forest

08/08/88

"Tumpang tindih lahan hutan, transmigrasi dan pertambangan perlu segera dibenahi" [*Overlapping of forest, transmigration and mining land need to be reviewed*], SUARA PEMBARUAN.

, Land Status, Mining, Forestry

11/08/88

"Masih terdapat 65 ribu kk peladang liar di Sumsel".

[*Still 65 thousand families using shifting cultivation in South Sumatra*], SUARA PEMBARUAN, ^Sumsel, Shifting Cultivation, resettlement^

15/08/88

"Transmigrasi swakarsa melimpah, Deptrans kerepotan" [*Overflow of spontaneous migration, problem for the Department of Transmigration*], ANGKATAN BERSEJAJAT. Lampung, North Sulawesi., T. Swakarsa.

06/09/88

"Transmigrasi swakarsa ternyata butuh dana dari pemerintah" [*Self-initiated transmigration needs government fund*], MERDEKA.

, T. Swakarsa, Aid.

28/09/88

"Areal tanaman pangan transmigrasi swakarsa Dompu 2.600 Ha" [*Spontaneous migration area in Dompu 2.600 ha*], ANTARA.

Indonesia, T. Swakarsa, Policy.

08/10/88

"Raja Jambi' serobot hasil hutan" [*'The King of Jambi' steals wood*], MERDEKA.

, Forest Concession

12/10/88

"Usahatani di kawasan hutan mengurangi peladang berpindah" [*Agroforestry to reduce shifting cultivation*], SUARA KARYA.

Indonesia, Agroforestry, Shifting Cultivation, Forest Policy

26/10/88

"Pola transmigrasi swakarsa sisipan akan dikembangkan" [*Development of inserted spontaneous transmigration*], SUARA KARYA.

Sumsel, Ogan Komering Ulu (OKU)/Tanjung Tiga, Pulau Belitung., Transmigrasi Swakarsa, T. Sisipan, Javanese.

27/10/88

"Berkaitan hukum adat dengan perladangan berpindah" [*The link between custom and shifting cultivation*], KOMPAS.

Indonesia, Kalimantan,

19/11/88

"Perladangan liar di Kalsel, tiap tahun ribuan hektar hutan rusak" [*Every year, thousand ha of forest destroyed in South Kalimantan because of shifting cultivation*], SUARA KARYA.

Kalsel, Shifting Cultivation, Off Farm Revenue, Forest Exploitation

25/11/88

"Pembabatan hutan lindung di Kerinci masih terus berlangsung" [*Forest clearing still practised in Kerinci*], KOMPAS.

Jambi, Kerinci, Cash crop smallholding, Reserved Forest, Absent Owner

01/12/88

"Ada udang di balik pohon" [*There is shrimps behind trees*], SUARA PEMBARUAN.

Tropical Forest Countries, Forest Protection, Industry Interest

17/12/88

"Penebangan hutan dan peladangan liar risaukan Sumsel dan Sultra" [*Clearing forest and shifting cultivation disturb South Sumatra and South-east Sulawesi*], KOMPAS.

Sumsel, Sultra, Environment Protection, Shifting Cultivation, Forest Clearing

29/12/88

"Pemda bakar perumahan di hutan lindung Lampung" [*Regional government burns houses in the preserved forest of Lampung*], KOMPAS.

Lampung, Spontaneous Migration, Transmigrasi Lokal, PIR-Sus, Protected Forest.

29/12/88

"Tidak terpuji, membakar rumah di hutan lindung" [*It is not praiseworthy to burn houses in preserved forest*], KOMPAS.

Lampung, Resettlement, Criticism, Forest Preservation

30/12/88

"Masih 170.000 mukim di hutan lindung Lampung" [*170,000 settled in Lampung preserved forest*], KOMPAS.

Lampung, Resettlement, Forest Preservation.

31/12/88

"Tahun 1989/90 tersedia dana Rp 2,2 milyar: Kawasan hutan lindung di Lampung Selatan akan terus dikosongkan" [*Rp. 2,2 billion are ready for 1989/90: Preserved forest in Lampung will always remain unoccupied*], SUARA PEMBARUAN.

Lampung Selatan, Resettlement

04/12/89

"Industri kecil transmigrasi gaya Jamin: Swasta dan Pemda Sul-Teng membangun kawasan industri kecil" [*Transmigration small industries Jamin style : Private and regional government of Central Sulawesi create small industries areas*], WARTA EKONOMI.

Sulteng, Home Industri, Private Industry.

12/12/89

"Menghirup angin baru di tanah harapan" [*New hope in new land*], KOMPAS.

Lampung Tengah/Seputih Mataram, Kota Gajah, Metro., Spontaneous Migrant, Education, Adaptation.

26/02/90

"100 warga pulau Panggung mengadu nasib ke DPR" [*100 inhabitants from Panggung island protest at the Parliament*], SUARA PEMBARUAN.

Lampung, Transmigrasi Swakarsa, Problems, Forestry, Environment

09/08/90

"Kawanan gajah panen di lahan Transmigrasi" [*Friendly elephant harvested transmigration land*], SRIWIJAYA POST.

Predator problems, new land

20/08/90

"Ratusan hektar karet dibabat tengah malam" [*hundred rubber hectars cleared during the night*], SRIWIJAYA POST.

Sumsel, Land claim, Smallholder, Estate

21/08/90

"Kebun kopi dibakar, pelakunya ditangkap" [*Coffee plantation have been burnt, coffee plantors arrested*], SRIWIJAYA POST.

Sumsel, Lahat, Protected Forest, Eviction

21/08/90

"Ribuan KK masih menghuni hutan lindung Gunung raya" [*Thousand families still settled in Gunungraya protected forest*], SRIWIJAYA POST.

Sumsel, OKU, Protected forest, Settlement

21/08/90

"72 orang perambah asal OKU kerja di Belitung" [*72 people from protected forest area in OKU resettled in Belitung*], SRIWIJAYA POST.

Sumsel, OKU, Belitung, Protected Forest, Resettlement

22/08/90

"Harus pindah, 500kk perambah hutan lindung" [*500 families have to be resettled from protected forest*], SRIWIJAYA POST.

Sumsel, Lahat, Resettlement process, Protected forest

23/08/90

"Mengamankan hutan lindung tak harus dengan membakar" [*Protecting forest should not be with burning settlement*], SRIWIJAYA POST.

Sumsel, Protected Forest, coffee smallholder

25/08/90

"Perambah hutan harus ditampung" [*Settlers in the forest have to be resettled*], SRIWIJAYA POST.

Sumsel, Resettlement, Protected Forest

26/08/90

"Ketika pondok-pondok membara" [*When their huts were burning*], SRIWIJAYA POST.

Sumsel, Lahat, Protected Forest, Land Clearing, Land Access

REPUBLIK INDONESIA
DEPARTEMEN TRANSMIGRASI

REPUBLIQUE FRANCAISE
O R S T O M C N R S

avec la collaboration de - *in collaboration with*
INDECO Duta Utama PPT-LIPI

CARTOGRAPHIC DOCUMENTS AND THEMATIC MAPS

SPONTANEOUS TRANSMIGRATION PROJECT

Special Studies TRANS V Loan 2578 - IND

1991

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first part

DOCUMENTS USED

1 BASIC MAPS

Indonesia has several cartographic coverings. Some regions have been systematically inventoried during the colonial period. At the very beginning of the century, highly precise maps were made of Java and Madura at the scale of 1:50,000. Later, practically all of Sumatra was covered at 1:100,000 during the 1930's. These documents were redone at 1:250,000 and partially updated in the HIND Series, published by the War Office in 1945. Most of these maps are available at the National Library, at the following address: Perpustakaan Nasional, ...

Since the Second World War, cartographic work has continued with the goal of drawing up basic maps of vast and little-known areas of Kalimantan, the Indonesian part of Borneo, and more recently, Irian Jaya, which has become a priority. The documents now available can be consulted and acquired, under certain conditions, at BAKOSURTANAL (National Geographical Institute), Jalan Jakarta-Bogor km 46, Cibinong-Bogor.

1.1. Older topographical maps

- SUMATRA, *Topographische Dients*, 1:100,000, maps drawn from 1915 to 1938
 - *Overzichtskaart van Sumatra*, 1:250,000, 1924-1932
 - *GSGS 4278* (1st ed.); *HIND 1042 (AMS T 511)* 2nd ed. Published by the War Office, 1945 - Survey Directorate HQ. ALFSEA 1946
- Maps used: Djambi, Nipahpandjang, Sarolangoen, Sekajoe, Palembang, Muntok, Benkoelen, Lahat, Praboemoelih, Simpangtiga, Mana, Bintochan, Menggala, Kotaagoeng, Teloeckbetoeng

Indications as to land relief (equidistant contours of 100 or 50 m), administrative boundaries, lines of communication (roads, trails, rivers), partial information on agricultural crops, forests, location of villages.

- *Joint Operations Graphic - Ground* 1:250,000, series SB 48 D. Survey, Ministry of Defense - United Kingdom 1969

General maps that may be used at the regional level, giving indications concerning relief and lines of communication. Representation of habitat is summary and clearly outdated in some cases.

1.2. Recent topographical maps

MAPS AT 1:50,000

The island of Sumatra, where the study takes place, benefits from almost complete topographical coverage at the scale of 1:50,000. These maps were drawn up with aid from Australia and under the responsibility of the Army, JAWATAN TOPOGRAFI TNI - AD (JANTOP) which since 1986 has become DIREKTORAT TOPOGRAFI - AD (DITOP). Their acquisition is dependent on an official security clearance which must be requested at the BAIS ABRI, JALAN DR SAHARJO, No. 268, Jakarta, with a copy sent to the Kepala ASPAM KASAD, Jalan Veteran, No. 5, Jakarta, and to the Direktorat DI. TOP. - AD, Jalan Gunung Sahari, No. 90, Jakarta.

The maps are of satisfactory quality and they give good indications of relief and hydrography, habitat, road network and the main types of land use (forests, rice fields, etc.). Their precision was often verified in the field.

Unfortunately, these maps are not yet available for all areas in the printed paper form, thus one sometimes has to consult blueprints or temporary documents. Thus for the provinces of Lampung, Sumatra Selatan and the southern half of Bengkulu where the studies were centered in 1990 we used:

- printed maps: 125
- maps available in ozalid print form: 26
- maps available in temporary sketch form: 31
- unavailable maps: 5
- lack of information: 23

(refer to the detailed list in the Appendix and location sketch of topographical maps used).

Maps were also drawn up based on aerial photography in 1969 and 1976. The data are therefore old, and unfortunately outdated in many cases due to the great changes caused by migratory movement in a region where the population figure has gone from less than 5 million inhabitants in 1961 to more than 12 million in 1990 (the provinces of Lampung, Sumatra Selatan and Bengkulu). The photographs are available at BAKOSURTANAL. The coverage is complete for 1976, but the quality of the documents sometimes leaves much to be desired. Some photographs are unusable.

MAPS AT 1:250,000

Digital Database of Sumatra 1:250,000 (project LREP- BAKOSURTANAL) Bogor, 1989

A vast enterprise of digitalization and updating of the basic map at 1:250,000 was undertaken in the mid-1980's (LREP-BAKOSURTANAL Project). Digitalization is based on

existing 1:50,000 maps which are reduced and assembled in groups of 24, resulting in a rectangle of 1° Latitude and 1°30' Longitude. This basic map can be acquired at BAKOSURTANAL on paper print or on a stable support. Contours, hydrographic network and roads can be found on each print. A major drawback of these maps, however, is that habitat and forests are not represented.

Names of maps covering the study area:

1014 Jambi

0913 Bangka

1013 Palembang

1113 Pangkalpinang

0912 Bengkulu

1012 Lahat

1112 Tg Selapan

0911 Manna

1011 Baturaja

1111 Menggala

1010 Kotaagung

1110 Tanjungkarang

Adjustments, necessary because the joints between maps are not always perfect, and updating are currently being carried out. Updating is a real problem because the digitalized data are from 1969 and 1976. The only way to obtain recent information at the regional level was to refer to satellite and radar images where available.

2. SATELLITE AND RADAR IMAGERY

Satellite and radar images distributed by the BAKOSURTANAL can only be acquired following a security clearance, a rather long process that is similar to the clearance that is now necessary for acquiring topographical maps.

2.1. SPOT images

Recently, BAKOSURTANAL has begun collecting SPOT images covering Indonesia's territory. The documents are available in prints using false color at the scale of 1:250,000 and they can be enlarged to 1:100,000. The *Spontaneous Transmigration Project* benefitted from the existence of an almost complete covering of South Sumatra province, good legibility on the whole (Fig. 2: Table of SPOT photographs assembled [?or Location sketch of SPOT photographs used]). Many of the images are excellent. Remarkable for a region so close to the equator, cloud cover is totally absent on a large number of the photos.

In order to dispose of recent data over a significant portion of the study region, the project acquired 12 prints at 1:250,000. The images provide a diagonal strip one photo wide (65 km), from south to north covering the mountainous regions of Danau Ranau to the Musi Delta, downriver from Palembang, and from east to west, the swamp areas bordering on the Sea of Java and the mouth of the Mesuji to the hills overlooking the town of Lahat, situated at the foot of the Barisan Range.

Subsequently, circumstances fortunately enabled us to consult recently available images covering a vast portion of southeastern Sumatra, in a solid block over 200 km on each side. This was of special interest due to the extensive agricultural settlement taking place. In the following list are noted the references and principal characteristics of the images used (false color paper print):

E	excellent, no cloud cover, no veil, perfect legibility	
B	good, but having a minor defect (some cloud cover, an illegible portion)	
M	average, partially usable (much cloud cover, large veil)	
NO	unusable	
275.359	21.06.88	E, excellent
275.358	21.11.87	B, cloud cover in the west
275.357	21.11.87	M, cloud cover on most of the photo
275.356	26.11.87	B, veil and sparse cloud cover
275.355	-	M, some excellent parts
276.359	09.07.87	B, cloud cover in the northwest
276.358	21.11.87	M, cloud cover in the southeast and north
276.357	16.11.87	B, veil
276.356	26.11.87	B, sprinkling of clouds, northwest corner unusable in parts
277.358	20.08.86	E, excellent
277.357	20.08.86	E, excellent
277.356	20.08.86	E, excellent
278.360	21.07.86	E, excellent
278.359	21.07.86	E, excellent
278.358	21.07.86	E, excellent
278.357	21.07.86	E, excellent
278.356	21.07.86	E, excellent
278.355	-	E, excellent
279.358	21.11.87	B, cloud cover on the north edge
279.357	-	B, cloud cover, veil
279.356	21.11.87	B, cloud cover in the southeast
279.355	21.11.87	M, partially usable, some excellent parts
280.358	01.05.88	M, cloud cover
280.357	-	M
281.359	-	M, west excellent, east unusable
281.358	26.07.86	M, north unusable

2.2. Radar images

The images distributed by BAKOSURTANAL, produced in 1988 by PT. INTERA TECHNOLOGIES, Star-1 Synthetic Aperture Radar System, cover the entire island of Sumatra. They are available at the scale of 1:250,000 in the form of film of variable length and 18 cm large. These documents can also be found at PT Indo Georeka Nusantara, Kuningan Plaza, South Tower, Room 200, Jl. H.R. Rasuna Said, Jakarta 12940.

Recent images are useful for the study of relief, vegetation and land use. Roads, villages and towns are difficult to make out.

3 THEMATIC DOCUMENTS

In order to bring the data contained in the topographical maps up to date and put together the thematic documentation on the provinces studied, a systematic collection was made of all available maps. The documents collected are of varying quality. Some are unusable due to their approximate nature and their use of inaccurate source maps. Nevertheless, many are based on field studies or on accurate data. Despite slight errors, they are often the only sources available and they have information which, after checking, can be of great value.

3.1. Administrative maps

Each province has general maps, in color at the scale of 1:250,000 or 1:500,000, using a simple base where the contour is represented in the classical manner using shades of color for different altitudes. Administrative boundaries and the names of main towns are marked. A recent map (1990) at 1: ,000 shows the four provinces of the south of Sumatra, *Sumatra Bagian Selatan* (Lampung, Sumatra Selatan, Bengkulu and Jambi). These very general documents are inaccurate and contain major errors (for example, spelling errors, misplaced districts or even the representation of inexistent districts as can be seen in the south of Bengkulu province). All the same, below the map they contain a useful list of the district (*kabupaten*), sub-district (*kecamatan*) and town names classified according to their administrative status.

One can also find in the regional development services (BAPPEDA) or the Ministry of the Interior agricultural section (AGRARIA, renamed Badan Pertanahan Nasional, Departemen Dalam Negeri) ozalid prints of the administrative maps drawn up at the same scale as those just mentioned. These documents, though put together and drawn with care, do not always have the precision hoped for. From these sources, the "Administrative Boundaries" map was published in 1989 by the Ministry of Public Works (Departemen Pekerjaan Umum) for the provinces of

Sumatra Selatan and Bengkulu (Musi River Basin Study, color map at 1:500,000, offering information on boundaries and human settlement, transport-infrastructures, industrial and electrical facilities, and protected forest).

In fact, these regions suffer from a serious absence of accurate documents of medium and large scale, for defining administrative boundaries. Detailed maps drawn up by *kecamatan* by AGRARIA enable more precise analysis. The JANTOP and DITOP topographical maps are also helpful, but they remain imprecise where the boundaries are not based on physical features such as rivers or a water parting. Boundary lines on these maps are most often approximate and rarely is any indication given where information is lacking.

Under these conditions, it is understandable that major variations are encountered in the planimetry results for the provinces. The area of the province of Lampung varies depending on the sources from 32,000 km² to 35,550 km². To remedy this situation, a special program to draw up new administrative maps for the whole of Sumatra should be launched by BAKOSURTANAL.

3.2. Soil maps

- H. Jahja, Suhadi, R. Dudal, *Peta Tanah Eksplorasi, Sumatera Bagian Selatan*, Lembaga Penelitian Tanah dan Pemupukan, 1:1,000,000, 1964.

Soil map covering the south of Sumatra, from the Sunda Strait (6° S) to the equator. The major soil types are indicated as a function of the geological nature of the substratum. The classification, in English and Indonesian, follows the old FAO terminology.

- Center for Soil Research, *Land Resource Evaluation and Planning Project (LREP), Soil Data Base Management*, maps at 1:250,000, 1989.

Printed sheets: Tangjungkarang, Kota agung, Menggala, Toboali

Temporary ozalid prints were kindly offered by the research center: Manna, Bengkulu, Lahat, Baturaja, Palembang.

The maps, together with guides, give the location of landscape and pedological formations. They take into account the model, slope and nature of the soil along with its geological nature. At the scale of 1:250,000, they furnish a comprehensive picture of the physical environment. They are among the achievements of the geographical information system set up by the LREP Project, finished in 1990 for the island of Sumatra. Based on American Soil Taxonomy, the maps are good investigative documents that permit the recognition of the principal pedological characteristics of the region.

3.3. Land use and vegetation maps

-*Peta Liputan Tanah*, 1:250,000, 1985, BAKOSURTANAL, Bogor.

The most recent information comes from land use maps drawn up at 1:250,000 by the BAKOSURTANAL. These maps are based on the analysis of Landsat data from the beginning of the 1980's. The boundaries of each vegetational formation is marked by perimeters and the formation is given a letter. Though the maps are not easy to read and contain certain approximations, the document gives an acceptable picture of the forest and the main types of land use. Nevertheless, the maps must be compared with those drawn up before 1980 and with field studies to be used properly.

- *RePPProT* maps [maps at 1:250,000 (see the atlas section)]

- maps from *Badan Pertanahan Nasional* (formerly *AGRARIA*)

The soil use maps drawn up by the agricultural services generally use a scale of 1:50,000, or more recently, 1:25,000. They are based on field checks and aerial photography. They contain much precise and useful information on administrative boundaries, the number and location of villages, the location of secondary roads and trails and, of course, the main types of soil use classified as follows: rice fields (*sawah*) with the number of harvests per year, dry field cultivation (*tegalan, perladangan*), plantations with the type of plantation (*perkebunan, kebun campuran*), forests (*hutan*) by category, and fallow land covered by *Imperata cylindrica* (*padang rumput alang-alang*).

The maps are on squared paper (squares measure 1 cm on each side) in order to be used by various departments for planimetry of land use by type. Detail maps are then generalized, reduced and assembled at the scale of 1:125,000 or 1:250,000.

Good investigative tools, these maps are often the only documents easily found in government offices in the field. Unfortunately, the quality varies widely from map to map. Though some are obviously the product of serious data collection, others are imprecise or even give totally false information. One example is where the maps show primary forest in the place of cultivated land, an error which conceivably could be understandable for small parcels but certainly not for vast areas.

- *Carte Internationale du Tapis Vegetal - International Map of the Vegetation*
Sud de Sumatra - Southern Sumatra, SEAMEO-BIOTROP, Y. Laumonier *et al.*, 1983

Map having a scale of 1:1,000,000 representing vegetational formations by regional groups determined by altitude. These groups are: lower montane forest (>1000 m), the same of average altitude (300-1000 m), or of low altitude (<300 m); semi-deciduous forest of the central plains and coastal peat swamp forest. Secondary formations, mainly arborescent, are grouped under the

label "mosaic of derived types."

The main map is accompanied by a series of maps offering indications of the physical environment (geology, soils, climate), agriculture and natural environment, along with zoogeographic barriers and units.

3.4. Forest maps

MAPS OF FOREST CLASSIFICATION:

- *General maps covering all provinces at 1:250,000 and 1:500,000:*

Departemen Kehutanan (Jakarta), Kantor Wilayah Kehutanan (Bandarlampung, Palembang, Bengkulu), *Peta Dasar Propinsi Dati Lampung, Sumatra Selatan, Bengkulu*

- *Maps per district (kabupaten) mainly for the province of Sumatra Selatan: Peta Rencana Pengukuhan dan Penatagunaan Hutan, 1986/1987, Musi Rawas, Muara Enim, Dati II Lahat, 1:250,000*

- *Detail maps based on topographical maps (South Sumatra):*

- Ninety-eight (98) maps giving the classification or status of forested land, generally using a scale of 1:100,000. In addition, since most of these maps are based on colonial-era topographical maps, they give an idea of the extent of the forests in the years 1930-1940 as well as an additional reference for locating villages existing at the beginning of the century.

The maps contain the following information concerning forest classification:

- Hutan Suaka Alam dan Hutan Wisata / natural reserve and recreational forest
- Hutan Lindung / protected forest
- Hutan Produksi Tetap / production forest
- Hutan Produksi Terbatas / limited production forest
- Hutan Produksi yang dapat dikonversi / forest to be reconverted following exploitation
- Area in hectares and in percentage of the total land area of the province for each of the various categories of forest

MAPS OF FOREST CONCESSIONS AND FOREST CLAIMS

Peta "Perkembangan Pengukuran" Prop. Dati I Lampung, Peta Propinsi Dati I Bengkulu, Peta Prop. Dati I Sumsel, 1:500,000 including a list of concessions printed on the map or on a separate sheet

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THEMATIC MAPS

Thematic maps representing the forests according to their classification and areas reserved for transmigration, agro-industrial plantations and forest concessions: *Kantor Wilayah Kehutanan, Propinsi Sumatra Selatan, Peta Kawasan Hutan, Percadangan Tanah Lokasi Perkebunan dan Transmigrasi*, 1:500,000, 1986.

3.5. Plantation maps

LAMPUNG PROVINCE :

The study is based on the work already completed in the Atlas of Lampung (ORSTOM-DEPARTEMEN TRANSMIGRASI) and on field research carried out between 1986 and 1988.

SOUTH SUMATRA PROVINCE :

- 1) *Peta Proyek Perkebunan di daerah Sumatra Selatan*, Kanwil Perkebunan Palembang, 1:500,000, undated document.

Information given:

- Lokasi Proyek PRPTE dan realisasinya
- Pencadangan Lokasi Proyek PKKRI (SRDPI)
- Proyek PIR Berbantuan/PIR Khusus
- Pencadangan Lokasi (Calon Lokasi) PIR
- PT Perkebunan (PTP) dan Perkebunan Besar Swasta (PBS)
- Proyek Transmigrasi
- Proyek Transmigrasi yang telah diserahkan ke Pemda TK I Sumsel.

- 2) *Kantor Wilayah Kehutanan, Propinsi Sumatra Selatan, Peta Kawasan Hutan, Percadangan Tanah Lokasi Perkebunan dan Transmigrasi*, 1:500,000, 1986

BENGKULU PROVINCE :

Peta Penggunaan Lahan Tanah Produksi Konversi dan Peruntukan Lain, Kanwi Perkebunan Bengkulu, 1:500,000, undated document also indicating the location of Transmigration centers, mines, forest concessions and a list of the names of plantations with their area.

3.6. Maps prepared by the Ministry of Public Works

Technical maps of roads and irrigation and drainage canals, etc.

The maps available at Public Works (*Pekerjaan Umum*), are of variable quality. The maps range from very large-scale maps to small-scale regional maps. They constitute, however, one of the most important sources, being easy of access and regularly updated by departments having the

Thematic maps representing the forests according to their classification and areas reserved for transmigration, agro-industrial plantations and forest concessions: *Kantor Wilayah Kehutanan, Propinsi Sumatra Selatan, Peta Kawasan Hutan, Percadangan Tanah Lokasi Perkebunan dan Transmigrasi*, 1:500,000, 1986.

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- Proyek Transmigrasi
- Proyek Transmigrasi yang telah diserahkan ke Pemda TK I Sumsel.

2) *Kantor Wilayah Kehutanan, Propinsi Sumatra Selatan, Peta Kawasan Hutan, Percadangan Tanah Lokasi Perkebunan dan Transmigrasi*, 1:500,000, 1986

BENGKULU PROVINCE :

Peta Penggunaan Lahan Tanah Produksi Konversi dan Peruntukan Lain, Kanwi Perkebunan Bengkulu, 1:500,000, undated document also indicating the location of Transmigration centers, mines, forest concessions and a list of the names of plantations with their area.

3.6. Maps prepared by the Ministry of Public Works

Technical maps of roads and irrigation and drainage canals, etc.

The maps available at Public Works (*Pekerjaan Umum*), are of variable quality. The maps range from very large-scale maps to small-scale regional maps. They constitute, however, one of the most important sources, being easy of access and regularly updated by departments having the

best engineers in Indonesia.

3.7. Maps prepared by the Ministry of Transmigration

LAMPUNG PROVINCE :

The study is based on the work already completed in the Atlas of Lampung and on field research carried out between 1986 and 1988.

SOUTH SUMATRA PROVINCE :

- *Peta Lokasi Pemukiman Transmigrasi*, Kanwil Transmigrasi, Palembang, 1:500,000, undated document updated with the state of Transmigration centers (Laporan Bulanan Kependudukan, seksi sosial budaya) as of April 1990.
- Maps of individual projects are drawn up using various scales; the available maps, outside of detailed large scale maps, are most often sketches or reduced prints which are not always precise. While the information concerning the number of family heads that are to be settled in each project are more or less comparable to the figures given by other available sources, settlement location is rather vague in many cases. The scales are often in error.

BENGKULU PROVINCE :

Penempatan Transmigran di Propinsi Bengkulu, 1:500,000, Kanwil Departemen Transmigrasi, Bengkulu, 1989-1990. State of Transmigration in the province, with a list of the names of each project, the year of creation and the number of family heads settled.

3.8. Thematic works and atlases

ATLAS VAN TROPISCH NEDERLAND (1938)

Magnificent reference work, printed with high quality techniques in the Dutch tradition, edited in 1938 (Koninklijk Nederlandsch Aardrijkskundig Genootschap, Amsterdam), Southern Sumatra Bl.14, 1: 1,500,000

ATLAS EDITED BY UGM IN 1978

Compiled by: National Coordination Agency for Surveys and Mapping in cooperation with the Faculty of Geography, Gajah Mada University, Yogyakarta

Themes treated in the maps at 1:2,500,000, with English and Indonesian legends:

- Administrative divisions - Administrasi

- Vegetation - Vegetasi
- Geology - Geologi
- Roads - Jaringan Jalan
- Exploration land - Tanah Explorasi
- Production of main food crops outside of paddy /
Produksi Tanaman Bahan Makanan Pokok selain padi
- Population distribution - Penyebaran Penduduk
- Geomorphology - Ikhtisar Geomorfologi
- Penyebaran Bahan Galian
- Paddy: harvested area and production /
Luas Panen dan Produksi Padi
- Topography - Topografi
- Land cover - Liputan Lahan

ATLAS AGRARIA

The Palembang agricultural department put together an atlas which reproduces in a more general format the land use maps by *kecamatan* and various information concerning agricultural development in the region. This document, produced on the provincial and the *kabupaten* scale, gives a good overall view. It remains inaccurate, however, despite the considerable effort spent on the project.

It is difficult to comment more because only a few maps were consulted. Despite the official letters authorizing the consultation of these documents available in the Government bureaus, access to the documents was denied. The researchers tried several times but the head of the provincial office repeatedly refused to provide the documents.

MUSI RIVER BASIN STUDY

This document established by the consultants of the BCEOM, DOXIADIS and KAMPAX in 1989 is no doubt the most recent complete document available. It is the result of a major study using SPOT images available for the region and field surveys for the whole of the Musi River basin, which covers practically the whole of South Sumatra province.

The work adopts a scale of 1:750,000. It is not available on the market.

List of plates consulted for the research program:

Color:

- Present Land Use
- Land Resources
- Evaluation Map
- Soil Association
- Geological Map

Blueprint:

- Master plan of irrigation and drainage projects; proposed development
- Hydrometric Network
- Cyclodiagram Map
- Hydrochemical Map
- Geohydrological Regimes

- Location Map of: Shallow well, drilled well, spring and resistivity sounding
- Location of domestic and industrial water supply facilities
- Parent Material
- Land Forms
- Aquaculture: Present situation 1988
- Aquaculture: Future situation 2008
- Location Map of river training and flood control works
- Flight index map of aerial photos
- Cross-section and river training location
- Location of existing bench marks and triangulation points.

ATLAS OF THE PROVINCE OF LAMPUNG

*Transmigration et migrations spontanées - Transmigration and Spontaneous Migration
Propinsi Lampung, Sumatera, ORSTOM-DEPARTEMEN TRANSMIGRASI Paris-Jakarta 1969*

This is a collective work accompanied by twenty thematic plates at various scales dealing with the province of Lampung with legends in French, English and Indonesian.

List of plates:

1. Carte de localisation
Reference Map
2. Données climatiques
Climatic Data
3. Avant la Transmigration
Before Transmigration
4. Peuplement et occupation de l'espace
Settlement and Land Use
5. Répartition de la population
Population Distribution
6. Evolution de la population
Evolution of the population
7. Population: density and structures
Density and Structures
- 8-9. Groupes humains
Human Groups
- 10-11. Occupation du sol
Land Use 1969 1980/1985
- 12-13. Systèmes de production
Farming Systems
Pringsewu Way Jepar
14. Systèmes de production et de revenus familiaux
Farming Systems and Household Incomes
15. Terroirs et habitat villageois
Rural Settlement
16. Villes relais
Secondary Urban Centres
17. Bourges et petites villes
Market Towns and Secondary Urban Centres
18. Réseau d'irrigation et de drainage

- | | |
|-----|---|
| | <i>Irrigation and Drainage Networks</i> |
| 19. | Voies de communication et accessibilité
<i>Communication Network and Accessibility</i> |
| 20. | Propositions d'aménagement régional
<i>Proposals for Regional Development</i> |

REGIONAL PHYSICAL PLANNING PROGRAMME FOR TRANSMIGRATION

The regional maps

This is an enormous work of compilation covering the whole of Indonesia following a request from the Direktorat Bina Program, Direktorat Jenderal Penyiapan Pemukiman, Departemen Transmigrasi, to the Land Resources Department of the Overseas Development Natural Resources Institute, Overseas Development Administration, United Kingdom. The maps use a scale of 1:250,000. They are based on existing official documents and deal with several major subjects, among them land use, land systems and land status at the end of the 1980's. The documents were updated through field surveys and compiled from satellite and radar imagery and from aerial photography.

Drawn using a rudimentary foundation (including main roads, towns and some settlements), the thematic data are presented using a very simple system of colored bands or boundaries and letters (HSA for Hutan Suaka Alam dan Hutan Wisata, for example). Each island is presented through a series of general maps which deal with climatic conditions, hydrographic network and watershed boundaries, thus enabling an evaluation of irrigation potential. Three series of maps then follow:

- Land Status / Recommended Development Areas
- Present Land Use and Forest Status
- Land Systems and Land Suitability

Very detailed legends in English and Indonesian give information on the land system, area in km² for each type, land form (general description, parameters, cross section), lithology, soil association, climatic range, land suitability, reliability (land system limitations).

RePPProT has often been criticized for its lack of precision and errors, but the enterprise was a vast one. Quite often the errors came from the documents available to the authors. The main advantage of the maps is their uniformity, comparable for all of Indonesia. Of course the maps might appear incomplete or partial. They are however a foundation that could be completed, rectified and enriched in the future.

The Land Resources of Indonesia, A National Overview

These RePPProT maps were brought together in a national atlas. Due to its size the

atlas is somewhat difficult to handle. The scale is 1:2,500,000. This is the first atlas of its size (14 maps, unfolded size: 220 X 90 cm, 1990, available at BAKOSURTANAL).

List of atlas plates:

1. Geology
2. Mineral and Energy Resources
3. Mean Annual Rainfall
4. Agro-Climatic Zones
5. Groundwater potential
6. Physiographic Types
7. Physiographic regions and potential development areas
8. Soils
9. Land cover and suggested revised forest zoning
10. Land use and 1982 forest classification
11. Environmental hazard
12. Transmigration sites settled before end of Pelita IV (April 1989)
13. Population distribution
14. Regional Development

second part

CONCEPTION AND DESIGN OF THE MAPS

1 DRAWING UP THE BASIC MAP

Prints of the digitalized maps of Sumatra at 1:250,000 can be ordered on paper or on stable plastic support. They served as the basis for the map foundation used for research on South Sumatra province. These prints provide the coastline, hydrographic network, roads and contour lines, each bit of information represented by a different color. The documents were reduced to 1:500,000, the scale used for the thematic maps that were to illustrate the study, assembled and mounted on squared paper with the latitudes, longitudes and boundaries of the topographical maps at 1:50,000.

Topographical maps, themselves reduced to 1:500,000, are used to improve digitalized maps in two ways. First of all, they serve as the reference to correct errors contained in prints resulting from digitalization, for the most part roads or waterways which do not always fit well from one map to another. Second, they filled in one important lacunae, the absence of any representation of habitat. Even dated, the data from 1969 and 1976 allows us to see the overall population distribution and settlement patterns. Thus, following interpretation and simplification, towns, villages and hamlets could be represented. Dispersed habitat, unconsolidated or in the process of being built in 1969 and 1976, was generalized and drawn as dashes placed in the approximate locations. In this way, 144 maps were interpreted, giving a vision of the provinces that is much richer than what was generally available. This extremely simple method could be used throughout Indonesia where there is good topographical coverage by the BAKOSURTANAL. In a sense, it enables an updating of the Joint Operations Graphic Air at 1:250,000 edited in 1969 by D Survey, Ministry of Defense, United Kingdom. These maps are still widely used even though for settlement and road network reference is made to data that is much older than the date of edition. Only a few copies of a more recent edition show an updating of settlement data.

For the Lampung Atlas, it was possible to design a basic map consisting of an updating of the road network and administrative boundaries. This was not possible for South Sumatra province due to lack of time and the size of the province, three times larger than its southern neighbor. Aside from the correction of some details and the verification of place names, the work was based on existing documents, used only after verification against others. The road classification is based on the work of the Musi River Study, but one must keep in mind that changes in the state of the network can be extremely rapid. Administrative boundaries posed more problems, and it must be admitted that until the existing source documents have been improved on, the limits used in this study remain approximate.

The foundation obtained was then extended to cover the southern part of Bengkulu province. Drawn up at the same scale as the one used in the Lampung Atlas, this gave us a cartographic foundation at 1:500,000 that was correct for the south of the island of Sumatra, the part most directly concerned by the influx of migrants from Java.

2 CONCEPTION AND DESIGN OF THE THEMATIC MAPS

Five thematic maps accompany the text. They were designed using the documents presented above and field research carried out from 1986 to 1989 in the province of Lampung and from 1989 to 1990 in the provinces of Sumatra Selatan and Bengkulu.

Map 1. The south of Sumatra: general presentation

It was, of course, necessary to present the region that was the object of the study. To give the reader an easily accessible tool, the scale of 1:1,000,000 was chosen as it allows the whole of the south of Sumatra to be represented in an acceptable format (46.5 X 59 cm), both in terms of the folding necessary to fit into a book format (21 X 29.7 cm) and in terms of the standard dimensions of printing presses. This latter point is worth mentioning due to the sharply increased costs of using a large format press.

The map foundation was based on the assembly of films of the RePPProt maps initially drawn at 1:250,000 and reduced to 1:1,000,000 (these films were kindly provided by RePPProt program officials). The assembly obtained was verified and completed based on existing topographical maps.

The following data was marked on this foundation: administrative framework, road network and physical environment. For the administrative framework in Lampung, data from the Lampung Atlas was used. For the other provinces, available official documents were used, though it was not possible to verify them in all cases. The road network was simplified. Only the main roads were retained, with the most important local feeder roads. This was done in order to insure a certain degree of homogeneity due to the absence of reliable information and the fact that in many areas the data could not be verified. This is why some narrow asphalt roads are not identified despite the important role they might play at the local level.

The physical environment is represented in a classical manner by a system of colored bands corresponding to the altitudes. The contour lines were taken from the Joint Operations Graphic-Ground/Maps. The 50 meter contour line, which allows for a distinction being made between raised interfluvial plains and low plateaus, was drawn based on Dutch maps edited in 1945. Essential climatic data includes the amount of precipitation and pluviometric frequency showing the sharp drop in rainfall from west to east, at the local level, the relatively slight rainfall in certain basins, and 20° isotherm which characterizes the summits of the Barisan mountain range above about 1000 meters.

One of the major themes of this Project, deforestation, logical consequence of agricultural settlement, has been brought to the forefront in a region of Indonesia which has been particularly transformed by population movements. Two dates have been noted: 1920-1930 for the beginning of the century and 1980. Dutch maps furnished the documentation for the first period, and the international vegetation map enabled us to determine the extent of primary forests for the second period.

Map. 2 Human settlement and land use in 1920-1930

In order to show the magnitude of the changes taking place in a region where the population went from a little more than 1.5 million in 1930 to nearly 15 million in 1985, it was necessary to provide an overall view of settlement and land use at the beginning of the century. Topographical maps and general maps from the period were used for this. The fourth edition of the maps published in 1945 for the island of Sumatra, based on older topographical maps, provides a uniform picture.

All villages and lines of communication are mentioned as can be noted for the province of Lampung where verification was systematically carried out. Forests are represented with the warning "only jungle is confirmed," which could represent an important bit of information for these maps designed for military use. One might wonder about the true age of the data concerning forest cover. It would seem that the forest cover corresponds to a period before the Second World War, more likely in the 1930's, period when most of the region's maps were drawn up, rather than in the years 1940-1945. The argument might be made that the great land clearing undertaken in 1935 to set up the "kolonisatie" villages in the regions of Metro and Belitang are not found on the maps, nor are the new forms of habitat created from scratch around that time within forested areas, along with a few plantations.

The 16 maps covering the region were interpreted so as to retain only those elements essential to agricultural development, resulting in an contrast between cleared areas and forests. Villages and administrative centers where the colonial power was based were also characterized. The drafts obtained were reduced to 1:1,000,000 and then, after generalization, were assembled on the map foundation made earlier at the same scale. The areas without data on the original documents, though obviously covered with swamp forest, were left blank on the map in accordance with the sources used.

To this map was added a small map of the principal human groups identified at the turn of the century. The documents concerning the Lampung districts are accurate and give remarkable cartography of the *Marga* in 1930. The sources drawn up during the same period for the Palembang and Benkoelan residencies are less directly usable. Therefore, the data presented for these two provinces result from the compilation of Dutch documents available at the museum of the National Library in Jakarta and a thesis presented at an Australian university (Jaspan, M.A., 1964).

Map. 3 Agricultural settlement and deforestation

Three ideas have guided the design of this map. The first idea was to demonstrate that simple and immediate use of SPOT satellite images is feasible, provided the interpreter has experience in the field. The second was to shed light on the various causes of agricultural settlement, and by extension deforestation, and deal with the important question of locating

"fronts" of agricultural settlement, following a sweep of a vast region of some 45,000 km² that was impossible to cover in its entirety. The third idea was that this map, not planned at the outset of the study, must be one that could be drawn up rapidly using simple cartographic techniques.

As was noted earlier, the opportunity of consulting an additional group of SPOT images presented itself during the research program. This was an opportunity that had to be seized; the interest of the documents compensated for the short time allowed for their consultation.

The location of the images was possible using obvious physical features, such as major waterways, almost all of which were perfectly visible on the false color prints at 1:250,000, and portions of roads, more difficult to discern. The images were then analyzed using very simple criteria.

Only four classifications were used to express the extent of land use, the first theme to be treated. They were the following:

- spaces entirely occupied or cleared, only making a distinction between village and agro-industrial domain cultivation, the latter easily identifiable by the large area of cultivated parcels. Of course, the spaces identified give the approximate boundaries of entirely cultivated land and do not indicate the exact property lines for the domains. A flat yellow tint represents this first category.
- spaces where family fields and plantations still dominate the wooded areas, represented by a system of blue bands on a yellow background. These bands become green when the yellow and blue are superimposed for printing.
- spaces where forest is preponderant on the landscape but where traces of settlement are visible everywhere, indicating traditional modes of settlement in largely secondary forest. This category was represented by light blue on a yellow background, giving a light green color when printed.
- forests having no traces of human occupation and which, given their location on the highest summits or in the heart of little-penetrated plains regions, are no doubt residual expanses of primary forest. The international map of vegetation does not contradict this interpretation. The forests were drawn with a medium blue on a yellow background which became an medium green when printed.

The second theme analyzed put the spotlight on the actors themselves in these new agricultural settlements. This study is based on images and field research, and is confirmed by administrative documents at least for the Transmigration centers. A red shade represents settlement phenomena; hachures represent the Transmigration settlement programs already established or in the process of being established, arrows mark the land clearing "fronts" that

are active at the time of the photo, sparse dashes are used to show where clearings are visible on the photos showing scattered occupation of secondary forest. Blue dots on a yellow field indicate industrial plantations, important factors for agricultural development but not for causing population influx and settlement, contrary to the preceding factors.

The data collected was then applied to the existing basic map at 1:500,000. Collecting the information and putting together the draft took about one month. Drawing the plate limited to four colors (black, blue, yellow, red), one of which did not have to be separated (the yellow background covered the whole sheet), took another month.

Map. 4 Development of recent settlements - mountains and plains

The objective of this map is to show the forms of settlement and the systems of production in the plains and in the neighboring mountains which are located to the west of Sumatra and which for decades have been receiving spontaneous migrants, some of which came from agricultural settlement programs in the plains. The region studied covers the *kabupaten* of Ogan Komering Ulu (OKU) where most of the field research was carried out. It stretches from east to west from the plains of the Mesuji River and the colonial Belitang program to Lahat situated at the foot of the Barisan mountain range, and from the Batumarta Transmigration program in the north to the piedmont area of Muaradua and the highlands of Danau Ranau in the south.

The space represented occupies two 60 km wide strips, stretching 225 km from east to west and 150 km from the north to south. They are covered by excellent SPOT images. From this case study and the experience acquired beforehand in the province of Lampung, an overview of the types of settlement observed and the types of population growth was made for the entire southern part of Sumatra.

Settlement progression and the opening of new land in the southwest of Sumatra Selatan (OKU district) was analyzed over a period of about 20 years. The starting point for this study was 1969, reference date for most of the topographical maps which were compared with the SPOT images from 1986-1987.

Due to financial considerations, it was not possible to acquire magnetic tapes of the satellite images, the analysis of which could have been done at the center for remote sensing at Noumea. Interpretation is therefore limited to a close examination with magnifying glass and many field verifications. First the 1969 and 1976 topographical maps were used to create land use maps for that period; the latter were then tested for land-truth. Test zones were chosen and the older data was compared with recent data, both on the photos and in the field. It was impossible to cover the whole region in detail, due to the time and money that would have been necessary. Nevertheless, a good knowledge of the region and the use of an average

scale (1:250,000 for the first draft made using the same scale as the SPOT images, reduced and generalized at 1:500,000 for the final map) permitted us to correct errors.

Despite the difficulties encountered, the uncertain interpretations, which could not always be verified in the field, and the inevitable errors at the local level, the pragmatic method chosen allowed us to focus on several basic phenomena chosen for the study:

- The evolution of forest cover and settlement progression, divided into totally occupied spaces and spaces in the process of being occupied
- the principal forms of land use: primary and secondary forest, rice fields, small plantations and agro-industrial domains, fallows.
- the principal forms of settlement, distinguishing between dispersed habitat, characteristic of highland spontaneous settlement, the forms identified in 1969 and the precarious settlement pattern that generally is found with land clearings on the 1986-1987 photos. Dispersed habitat is marked by dashes, a suggestive and handy symbol that allows flexible representation. The frequency of the dashes is more or less proportional to the frequency of land clearings visible on the 1986-1987 SPOT photos.

The following difficulties must however be noted:

- The first has to do with the difference of three or four years between the SPOT images available and the facts observed in the field in 1990. In a region where changes are as rapid as they are in the south of Sumatra, this difference, as little as it is, is sometimes disturbing.
- The second is the absence of information on the criteria used by the interpreters of the 1969 aerial photographs which served as the basis for drawing up the topographical maps (types of forest, for example) and the imperfections of these same maps (errors in joining maps, errors or absence of information for certain portions of the mapped area).
- The third is the difficulty of interpreting, without any kind of computer treatment, the false color paper prints we had. It was difficult to differentiate between the various types of forest, between dry land cultivation and fallows, between swamp and certain rice fields, between recent forest clearings and rice fields depending on whether or not they had been harvested. This point will be developed further in the commentary to the plate entitled "Constraints on and evolution of land use" where the detailed study of the evolution of land use for the same region and the same reference dates is presented.

The slice that was chosen, analyzed at a scale of 1:500,000, was placed in the regional context at scales of 1:2,000,000 and 1:3,000,000 for the analysis and location of settlement and demographic regions in the south of Sumatra.

In order to make the necessarily complex map of settlement in South Sumatra easier to read, the use of tints and symbols in the detailed map and the general map permit immediate understanding of the phenomena. The detailed study, interpreted and situated within a larger area, facilitates both comparison and extrapolation.

With the same concern for clarity, the various demographic regions were represented by colored bands depending on the type of growth experienced, despite the risk of simplification that is liable to result. This method was preferable to a detailed study by administrative unit (*kecamatan*). Such a study was not neglected, however, since a map and chapter in the book are devoted to it.

Development of recent settlements - Swamps and delta (Maps inserted directly in the book)

Swampy regions which have long remained free of mass settlement today appear as vast free spaces with unexploited potential and vacant land to be developed through settlement programs, despite failed attempts in the southeast of Kalimantan. After studying the complementary environments of the plains and mountains, one could not ignore the great development projects in the Musi River delta. They are recent counterparts in the regularly-flooded swamp areas to the upland programs of the central plains.

A presentation map of the delta, downriver from Palembang, show at the scale of 1:500,00 the magnitude of systematic settlement of the swampy areas. As in the previous map, the reference point is 1969. The updating was done using a Landsat image from June 1978 and SPOT images from July 1986 and November 1987. (278 / 355-356, 279 / 355-356; three of them are extremely clear). Land use maps from the Badan Pertanahan Nasional and the Ministry of Public Works were used to complete the analysis. Data concerning the programs themselves were gathered on the spot, at the Transmigration office.

A SPOT photo that was both representative and exceptionally legible was selected for the detailed study of various forms of land use. It is centered on two delta estuaries, Air Calik and Air Banyuasin, which appear as the elongated body of a frog, a well-known natural formation for those familiar with aerial photography. Several field checks, carried out under the responsibility of W.B. Collier, enabled the location of the various types of food and cash crop cultivation sponsored by the State for Javanese settlers, the production systems of indigenous people located in a large old Malay village located along the banks of the Muara Telang and the Karanganyar, and those of the recent spontaneous migrants. Among the latter, not only do Bugis and Banjar inhabit the coastal regions and use tidal action to develop land that was until then left alone, but Javanese who have not succeeded in the Transmigration centers adopt local farming systems.

Intent on using corresponding scales for the studies, the interpretation of this rich environment was first done at the scale of the SPOT images, 1:250,000, and then at the local scale. This last analysis was based on the Muara Telang topographical map (1969) and on

several field surveys. Though it was not possible to precisely map the types of land use, the investigations allowed us to locate the various human groups in an environment where control over water and non-river transportation are essential problems. Despite repeated field trips, the data are not always perfectly in place and is sometimes based on unverified interpretations. Nevertheless, they give a coherent view of the situation.

Map. 5 Constraints on and evolution of land use

The guiding idea of this map is to put the evolution of land use back into the framework of institutional constraints which govern the province and natural factors which affect the agricultural settlement process. Shown on the same map, constraints on land use at the regional level and a detailed study of a band going from mountainous areas to the lower parts of the bordering plains provide a demonstration of landscape evolution as influenced by the State or determined by natural conditions.

The reader can make the direct comparison between the mapped constraints for the entire south of Sumatra and those which were reproduced at the local level for the year 1986. They can also make the correlation between, on the one hand, land status as it is defined by the legislation, and on the other, the magnitude of land clearing and the observance of administrative constraints in actuality.

INSTITUTIONAL CONSTRAINTS AND LAND STATUS (MAP NO. 1)

Major constraints can be grouped into two categories:

- development and settlement constraints imposed by the administration: protection of nature and forest management, military practice areas, transmigration
- constraints on agricultural development: agro-industrial plantations and forest concessions which, given their size and the capital they infuse into regional development, cannot be ignored.

The data result from surveys carried out by the provincial administration, systematic data comparison and field research. The documents gathered were generalized and transformed to the scale of 1:2,000,000. The rather frequent occurrence of jurisdictional overlap or doubling were expressly limited on the map which took into account recent regulations.

Estimates as to the observance of constraints are based on observations made in the region since 1986 and on observed practices. In certain cases, the notion is colored with subjectivity and depends more on what one considers a ban or the observance of a rule. In other cases, custom and the local situation are determinants. In order not to confuse the reader, the number of situations were limited to three: very strict constraint, strict constraint, and constraint often ignored.

MAJOR NATURAL FACTORS (MAP NO. 2)

This map is more the result of bibliographical analysis than field observations. Sources are many on the subject but they are not always in agreement. Thus, the boundaries of climatic phenomena vary widely from one publication to another. The data are sometimes too general or are limited to small areas.

Three factors have been identified: 1) conjunction of steep slopes and fertile soils; 2) risk of hydraulic shortfall, a real problem in the southeast of the island; and 3) constraint imposed by the presence of vast flooded and swampy areas that are sensitive to tidal action, which can be considered an advantage.

MAPS CHARTING THE EVOLUTION OF LAND USE

This commentary concerning the design of Maps No. 3 and 4 is taken from the "Methodology" part of the technical report dealing with the forests. It is reproduced here to avoid a lacunae in the report "Cartographic documents and map design."

Selection of documents and the study zone

Without a doubt, the south of the island of Sumatra is one of the Indonesian region that since the beginning of this century and especially over the last few decades has seen the most profound changes in land use and forest cover.

Many recent documents demonstrate the extent of the transformations. It was therefore decided to compare land use at two relatively close time intervals with the help of JANTOP topographical maps (1969-1976) and SPOT imagery (1986-1987).

Three series of maps were also available to represent the situation in the 1980's:

- the vegetation map of Laumonier et. al., 1983 at 1:1,000,000;
- the BAKOSURTANAL land use maps, 1985 at 1:250,000;
- the RePPPProT¹ maps, 1988 at 1:250,000.

The origin and the quality of the documents used varied greatly. Air photos, satellite imagery and existing maps were sometimes compiled and assembled though an interval of up to ten or more years separated them². It was impossible to differentiate with precision these sources and tell, for a given map, what year it represented. In addition, these maps sometimes exhibited significant differences that made them difficult to use to show an evolution over a short period of time.

¹ Regional Physical Planning Programme for Transmigration.

² Notably for the BAKOSURTANAL maps: "Peta Komoditi Perkebunan," 1:250,000, 1973-1983; Landsat imagery 1983-1984, and for the RePPPProT maps: air photos 1:100,000, 1979; Landsat imagery 1983-1984; SPOT imagery 1986-1987.

A comparison of the four most recent sources for the Gunung Raya region can demonstrate these differences (see Illustration 3A).

Of the four maps, the reduction of primary forest is clear, but it is much greater in the SPOT and RePPPProT documents than in the BAKOSURTANAL and Laumonier maps. In the latter case, it must be noted that this is an enlargement of a 1:1,000,000 map which cannot have the same precision as the others, which were reduced.

These differences correspond in part to actual changes in forest cover between the end of the 1970's and the beginning of the 1980's, but this is not enough to explain all the discrepancies, some of which reflect problems of interpretation.

Thus, for the region situated to the northwest of Lake Lebak Datuk we note one serious discrepancy (see Illustration 3B). The RePPPProT map, which bears closest resemblance to the SPOT photos in the example above, indicates a vast stretch of climactic forest to the west of the Ogan River while the BAKOSURTANAL map only represents a few scattered clumps. This is actually a zone of secondary forest associated with small rubber plantations found on the 1969 JANTOP map which the RePPPProT cartographers mistakenly took for primary forest. On the other hand, the forest to the east of the Ogan River still remained at the beginning of the 1980's as the BAKOSURTANAL map shows, but by the time the 1986 SPOT photos were taken it had been cleared to make way for agro-industrial plantations.

Full SPOT coverage of the south of Sumatra was not available, so this study had to limit itself to a zone falling between 3°50' and 5°10' Latitude South and 103°40' and 104°30' Longitude East.

The zone covers three provinces, the southwest of South Sumatra, the western part of Lampung and the eastern extremity of Bengkulu (see the Illustration of SPOT, JANTOP and administrative boundaries), an area which includes most forest types present in the region with the exception of the swamp and mangrove forests of the eastern coast.

Twenty-one JANTOP topographical maps at 1:50,000 and three SPOT photos from 1986 at 1:250,000 were thus prepared according to a common classification showing the major patterns of land use divided into three main categories, formations of primary vegetation, degraded formations and areas cultivated or under the process of being settled³. An attempt was also made to account for the forest areas where clearing was most active. These preparations were then reduced to 1:500,000.

Elaboration of the 1969-1976 land use map

The precision of the JANTOP maps could be appreciated in the field, especially concerning the toponymy, roads, waterways as well as the extent of rice fields. Edited in

³ For the formations of primary vegetation: dense humid forests, inundated or swampy forests; for degraded formations: secondary forests, mosaics, or fallows covered with *Imperata cylindrica*; for cultivated areas: agro-industrial plantations, small plantations, dry field cultivation or irrigated rice fields.

Indonesia with the collaboration of the Australian Government, the maps unfortunately were drawn up based on two series of air photos in 1969 and 1976 and do not cover the whole of the island of Sumatra.

In the region chosen for this study, this problem is relatively limited because more than 75% of the surface was mapped in 1969, and only one map is missing ("Pasar Banjit" no. 1011-22, left blank), situated to the east of Lake Ranau.

When the maps were assembled, it was impossible to join two important zones, one to the southwest of Lake Ranau and the other to the northeast of Baturaja; this is marked by transitional hachures. In the first case, it is the juxtaposition of a 1969 map with a 1976 map which might have caused the problem, though in the second case the maps were from the same period.

Elaboration of the 1986 land use map

Three SPOT photos of remarkable quality⁴, were taken the same date (21 July 1986), which gives a homogeneous view of the region. This period of the year, in the middle of the dry season, also presents the advantage of corresponding to the moment when tree-clearing is the most intense and when seasonal crops differentiate themselves most clearly from the natural vegetation. As the region's crops are mostly perennials, this last advantage remains slight.

Also used were four other photos⁵ offering overlapping zones with the 3 above photos. Taken on different dates, they provided a firm basis for analysis.

The interpretation was made based on the established classification on compositions colored with false color at the scale of 1:250,000. It was not possible to obtain 1:100,000 prints or magnetic tapes for computer analysis.

Several difficulties arose during the course of the analysis:

- the limit between "primary" and "secondary" forest was sometimes difficult to discern with certainty and generally corresponds in the field with a more or less large strip.
- it is often nearly impossible, without computer analysis⁶, to differentiate "pure" secondary forest

⁴ Out of the three photos, nos. 278/358, 278/359 and 278/360, only the last one presented several scattered clouds which posed no problems for the interpretation.

⁵ No. 278/357 of 21 July 1986, no. 277/357 of 20 August 1986, no. 277/358 of 20 August 1986 and no. 279/358 of 27 November 1987.

⁶ Computer analysis cannot always iron out all ambiguities. Deshayes et al. (1984), through cartography of vegetation in the south of Sumatra with the aid of Landsat, found that forest formations (dense forest, degraded forest and mangrove forest) gave confused responses on the MSS5 and MSS7 channels, while rice fields were a dispersed class due to the different aspects of the fields.

from secondary forests associated with bush or tree-crop plantations, especially rubber, in the northern part of the zone.

- new clearings in the forest present the same appearance of more or less dense blue dots on a red background as the slash-and-burn zones for the regeneration of old rubber plantations, for example.
- on the contrary, rice fields might appear under different shades of blue or red depending on the maturity of the plants and can be confused with flooded areas.

These problems of interpretation were resolved by taking into account the JANTOP data (especially for the regeneration of plantations) and through field checks in the month of June 1990. This of course presented a new difficulty because the SPOT photos were taken more than four years earlier. It was therefore necessary to take into account possible modifications coming about during this time lapse.

Finally, the boundaries of swampy and flooded forests according to JANTOP did not exactly correspond with that of SPOT.

For this last point, the apparent extent of each of these documents was retained, the differences likely corresponding to different criteria as well as actual changes (drainage or extension of flooded zones).

On Map no. 4, the data from the SPOT photos were added to the boundaries of protected forest as shown on the 1988 RePPProT map which was chosen out of concern for homogeneity, even though these boundaries did not always coincide perfectly with those from other sources.

The vast military practice area situated to the southeast of Baturaja and the Batumarta Transmigration center was also represented. With these we have a complete picture of the development constraints affecting the region and the settlement patterns of spontaneous migrants.

3 CONCLUSION

The thematic map-plates presented in this study make up a whole and express certain choices.

- the maps do not aim to make an exhaustive inventory of migratory phenomena and their consequences in the south of Sumatra.
- following the general presentation maps, at the scale of 1:1,000,000, the goal is to demonstrate the changes caused by migratory phenomena through studies using graduated scales, going from the particular to the general and vice versa, from the village to the region, each example studied at a scale of 1:250,000 being placed into the

larger context at the scale of 1:2,000,000 or 1:3,000,000.

- the concern with demonstrating the impact of environment and society require that we show the differences between river bank, swamp, mountain and plains development patterns. The settlement of new land is illustrated by two plates, one devoted to the Musi River delta and the other to the plains of Belitang and the mountains neighboring Danau Ranau.
- the Project makes use of recent data furnished by SPOT without requiring sophisticated techniques or large computers, both of which are lacking or rare in countries concerned by studies such as the *Spontaneous Transmigration Project*).
- the Project expresses a will to consider the map as a tool for development. The point where knowledge on a given subject is collected and a catalyst producing key questions, the maps must be rapidly available and remain accessible to the maximum number of people. Two remarks can be made on this subject:
 - 1) The document which must be submitted to competent authorities and to development officials is not usually required to be a topographical reference with perfect geodesy (however indispensable in certain cases) with all data subject to field verification as an absolute rule, inviolable, as a pre-condition for scientific worthiness. Without denying whatsoever the necessity for quality in the final product, the solution is not one of hiding behind the weaknesses of existing documents and doing nothing nor is it one of undertaking exhaustive verifications which demand investments in time and money which are often beyond the means of the research program.

We have sought to identify tendencies rather than inventories that could never be finished, and have preferred to offer an approximate representation rather than no representation at all. Can one ignore, for example, the thousands of families settled in land clearings which have been opened in the highland forests on the pretext that they cannot be all registered? Even if the location of these settlements based on field research and satellite photography remains uncertain, the fact is too significant to be overlooked. In the absence of detailed information or a perfect recognition of the data on the images, we must try to generalize the cartographic representation of the phenomena using appropriate symbols. The important point is to inform the user of the methods employed and the weaknesses of the maps which, it should be repeated, are products designed at a given time and stage, documents that are essentially evolving and perfectible.

- 2) Thematic maps are too often inaccessible for the non-specialist. Due to the richness of information and the complexity of facts represented, quite a few people are unable to read or use the documents. Therefore, as an indispensable complement to these maps,

mapped phenomena are presented again in simplified form, in sketches or models which suggest the synthesis to be made, or else particularly explicit portions of maps are reproduced to illustrate the text and commentaries accompanying the maps. In short, we attempt to give the user what might be called "the map manual," in order to move on to the scientific study of the reference document. Here the goal is the management of development, moving from research to action.

third part

THEMATIC MAPS

THEMATIC MAPS

1. LE SUD DE SUMATRA - DONNEES GENERALES

THE SOUTH OF SUMATRA - GENERAL PRESENTATION

- Administrative division - *cadre administratif*
- communication network - *voies de communication*
- Topography - *cadre physique*
- inset map : climatic data ; the withdrawal of the forest
en carton : données climatiques; le recul de la forêt

2. PEUPLEMENT ET OCCUPATION DU SOL 1920 - 1930

HUMAN SETTLEMENTS AND LAND USE 1920 - 1930

- A regional study on South Sumatra (Lampung, Sumatra Selatan, Bengkulu) at the beginning of the 20th century - *Etude régionale sur le peuplement du sud de Sumatra au début du siècle*
- Inset map: Human groups identified at the turn of the century - *En carton: Groupes humains identifiés au début du siècle*

3. COLONISATION AGRICOLE ET REcul DE LA FORET

AGRICULTURAL SETTLEMENT AND DEFORESTATION

1. Cultivated area and forest - *Espaces cultivés et forêts*
2. Extent of agricultural settlement and recent clearing - *Fronts de colonisation agricole et défrichements récents*
3. Principal types of settlement - *Principales formes d'habitat*

4. LA CONQUETE DE TERRES NOUVELLES / Plaines et montagnes

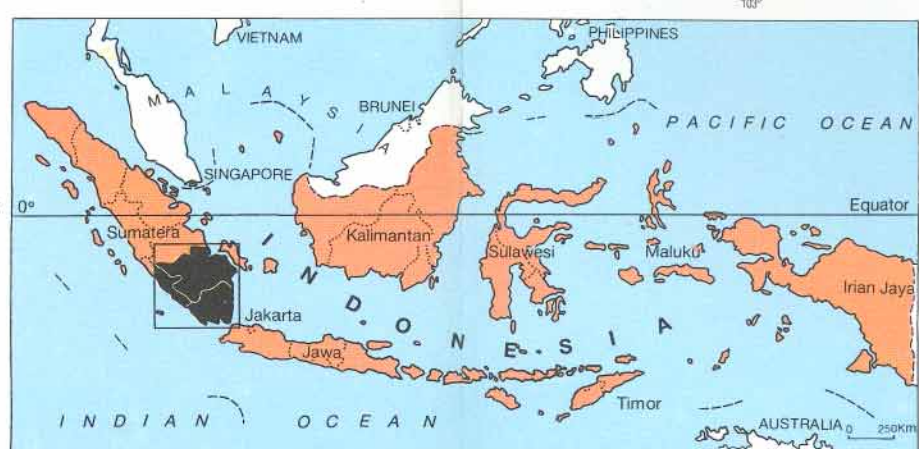
DEVELOPMENT OF RECENT SETTLEMENTS / Mountains and Plains

1. Settlement and Farming Systems- *Peuplement et systèmes de production*
Study in details - *Etude de détail :*
From Belitang to Muaradua - *De Belitang à Muaradua*
2. The Settlement of South Sumatra - *Le peuplement du sud de Sumatra*
Indigenous peoples at the beginning of the century, organized settlement, spontaneous settlement -
Peuplement autochtone en place au début du siècle, peuplement organisé, peuplement spontané
3. Evolution of the population 1970 - 1987 - *Evolution de la population 1970 - 1987*
localization of demographic regions - *individualisation des régions démographiques*

5. DYNAMIQUE DE L'OCCUPATION DE L'ESPACE

CONSTRAINTS ON AND EVOLUTION OF LAND USE

1. Land Use in 1969 - *Occupation du sol en 1969*
Land Use in 1986 - *Occupation du sol en 1986*
Study in details - *Etude de détail :*
From Danau Ranau Lake to Batumarta - *Du Lac Danau Ranau à Batumarta*
2. Major Natural Factors - *Facteurs naturels décisifs.*
3. Institutional Constraints and Land Status - *Contraintes institutionnelles et espaces affectés*
Study at a regional scale (South Sumatra) - *Etude à l'échelle régionale du sud de Sumatra*



SOURCES . SOURCES

Les informations utilisées pour réaliser le fond de carte ont été recueillies aux meilleurs sources disponibles au moment de l'étude et partiellement complétées par des enquêtes de terrain.

Data shown on this map derived from best available sources and partly enhanced by field surveys studies.

orographie - hydrographie - planimétrie / Topography - hydrography-planimetry :

- Joint Operations Graphic - Ground 1/250.000
- Ministry of Defense - United Kingdom 1969
- Digital Database of Sumatra 1/250 000 (project LREP-BAKOSURTANAL) Bogor, 1989
- Cartes marines - nautical chart - Peta Laut Indonesia No. 68-104-107
- TNI AL - Jawatan Hidro - Oseanografi Jakarta 1979-1982
- Cartes topographiques existantes - existing topographical maps 1/50.000
- JANTOP 1969 - 1977 BAKOSURTANAL, Bogor. Series 1010, 1110, 0911, 1011, 1111, 0912, 1012, 1112, 0913, 1013, 1113, 1014.

limites administratives - administrative boundaries :

- Badan Pertanahan Nasional, Kanwil Bandarlampung, Palembang, Bengkulu
- carte administrative par "kecamatan" - administrative map by kecamatan 1/500 000
- Kanwil Departemen Pekerjaan Umum, Palembang, 1989
- Administrative Boundaries Musi River Study 1/500 000

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Echelle 1.000.000
0 10 20 km
1 cm représente 10 km

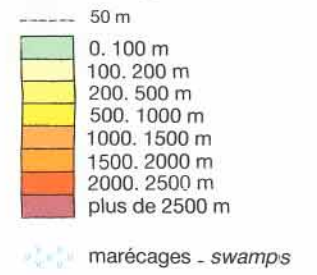
CADRE ADMINISTRATIF . ADMINISTRATIVE DIVISIONS
LIMITES ADMINISTRATIVES . ADMINISTRATIVE BOUNDARIES

— "propinsi" - province
— "kabupaten" - district
— "kecamatan" - sub-district

CENTRES ADMINISTRATIFS . ADMINISTRATIVE CENTERS

Benkulu capitale de province
provincial capital
Kalianda chef-lieu de "kabupaten" ou ville ayant le statut de "kota administratif"
head of "kabupaten" or city having the status of "kota administratif"

CADRE PHYSIQUE . RELIEF
altitudes - heights



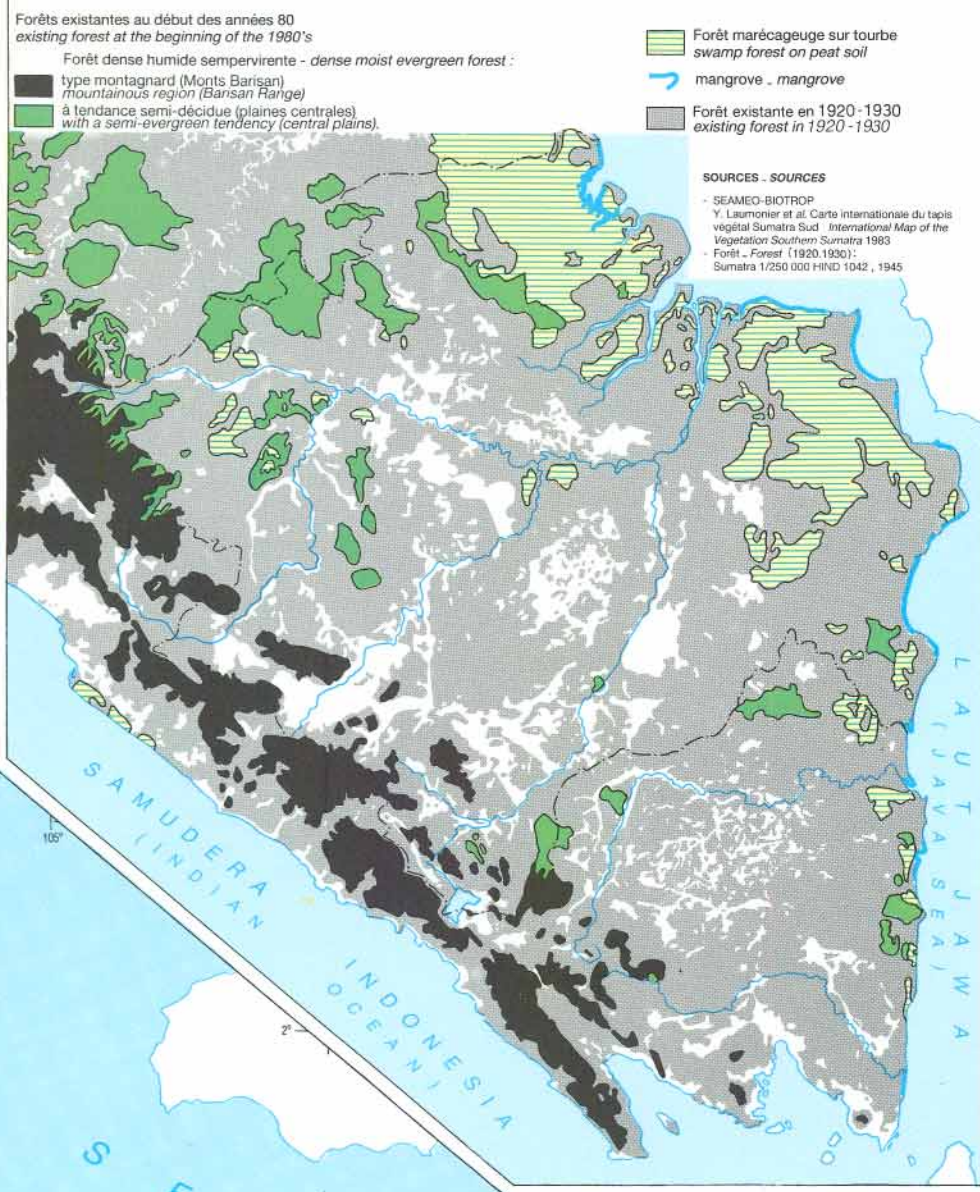
carte réalisée par . by **Marc Pain**
dessin-cartographie ORSTOM - DEPARTEMEN TRANSMIGRASI
drawing-cartography Yanto Wahyantonio, Geosum

VOIES DE COMMUNICATION . COMMUNICATION NETWORK

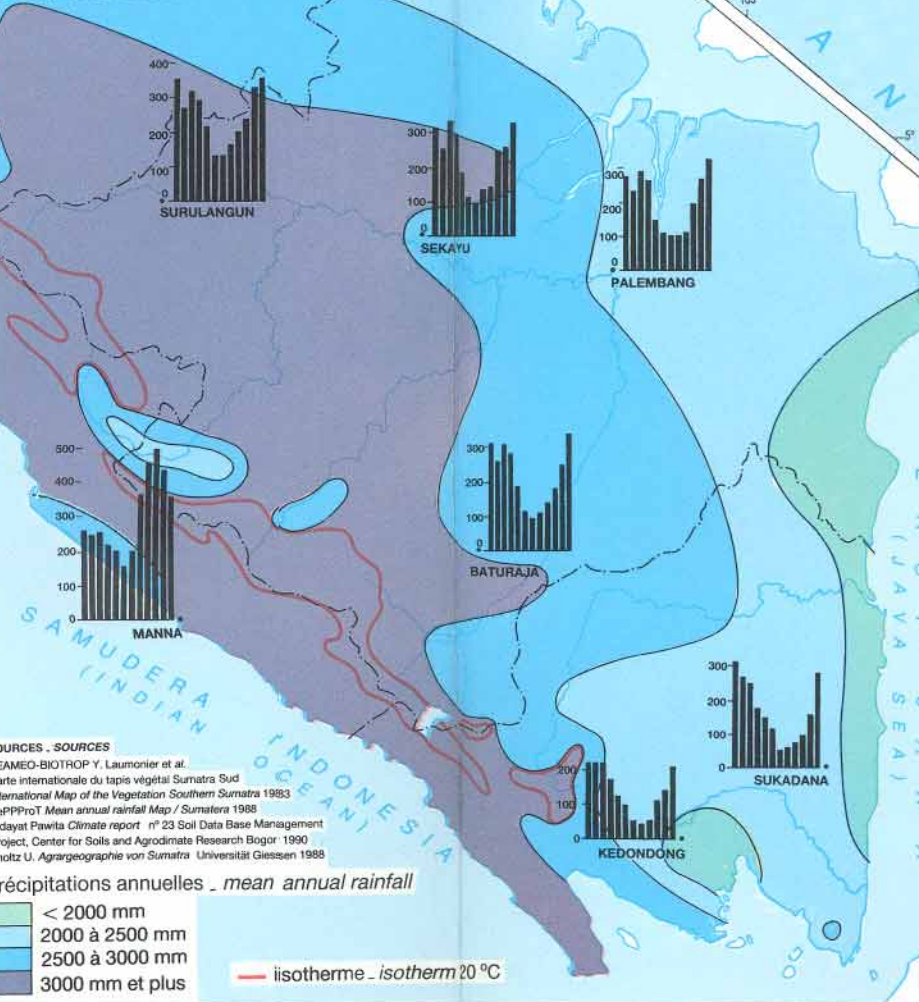
réseau routier - road network
desserte nationale - national road
desserte régionale - provincial road
desserte locale - feeder road

voile ferrée - railway
bac - ferry
aéroport régional - domestic airport

LE RECUL DE LA FORÊT - THE WITHDRAWAL OF THE FOREST 1930-1980



DONNÉES CLIMATIQUES
CLIMATIC DATA



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PEUPLEMENT ET OCCUPATION DU SOL
HUMANI SETTLEMENT AND LAND USE

- villages existants au début du siècle (1920-1930)
existing villages at the beginning of the 20th Century
- premiers villages de colonisation agricole ("Kolonisatie")
first agricultural colonization settlements

- espaces défrichés
cultivated or cleared land areas
- forêts
forest
- rizières
ricefields
- plantations
tree plantations
- mine
mine

CADRE ADMINISTRATIF - ADMINISTRATIVE DIVISIONS
LIMITES ADMINISTRATIVES - ADMINISTRATIVE BOUNDARIES

- "residentie" - residency
- "afdeeling" - division
- "onderafdeeling" - sub-division

POSTE ADMINISTRATIF - ADMINISTRATIVE POST

- "resident standplaats" - station of resident
- "assistent standplaats resident" - station of assistant resident
- "controleur standplaats" - station of district officer

VOIES DE COMMUNICATION - COMMUNICATION NETWORK

- routes principales - main roads
- voie ferrée - railway

carte réalisée par by Marc Pain
dessin - cartographie
drawing - cartography

Echelle, scale 1 : 1.000.000
0 10 20 30 km
1 cm représente 10 km

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SOURCES - SOURCES

SUMATRA 1/100.000 Topografische Dients, 1909 - 1929
Overzichtskaat van Sumatra 1/250.000 - 1924 - 1927
Overzichtskaat van Sumatra 1/750.000 - 1934
SUMATRA 1/250.000 4^e édition - fourth edition - 1945
Geographical Section, General Staff no. 4550 (Hind 1042,
A.M.S.T. 511, Djambi, Nipahpandjang, Sarolangoen,
Sekajoe, Palembang, Muntok, Benkoelen, Lahat,
Prabemoelie, Simpangtiga, Mana, Bintoean,
Mengalla, Kotaagoeng, Teloekebetoeng, Moearatebo).

GROUPES HUMAINS IDENTIFIÉS AU DÉBUT DU SIÈCLE
HUMAN GROUPS IDENTIFIED AT THE TURN OF THE CENTURY

Melayu	Redjang	Pasemah	région pratiquement inhabitée area almost uninhabited
Komerling/Mesuji	Lampung		

LOCALISATION - GEOGRAPHIC LOCATION
plaines et grandes vallées, plains and major valleys :
Rawas, Musi Ilir, Lematang Ilir, Ogan Ilir, Komeri
Way Kanan, Mesuji, Mengalla, Tulang Bawang, Abung
Musi Ulu, Kikim, Lematang Ulu, Ogan Ulu
Komerling Ulu, Aji, Daya, Sungkai, Pubian

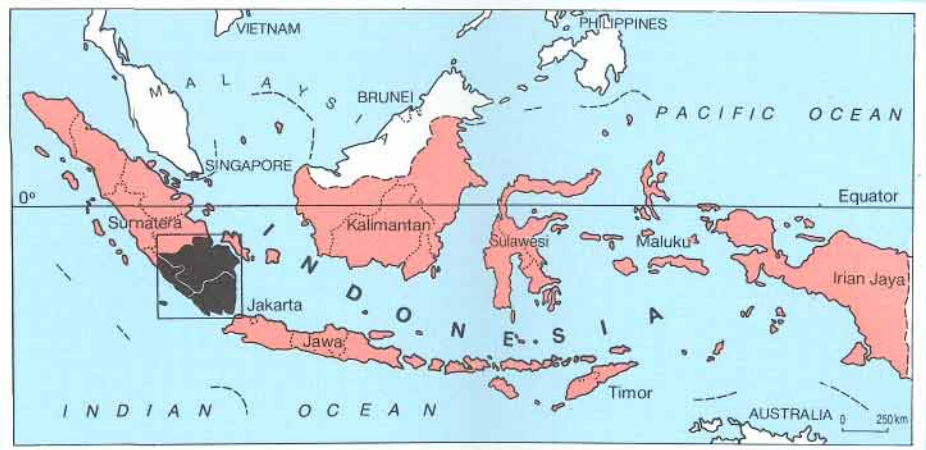
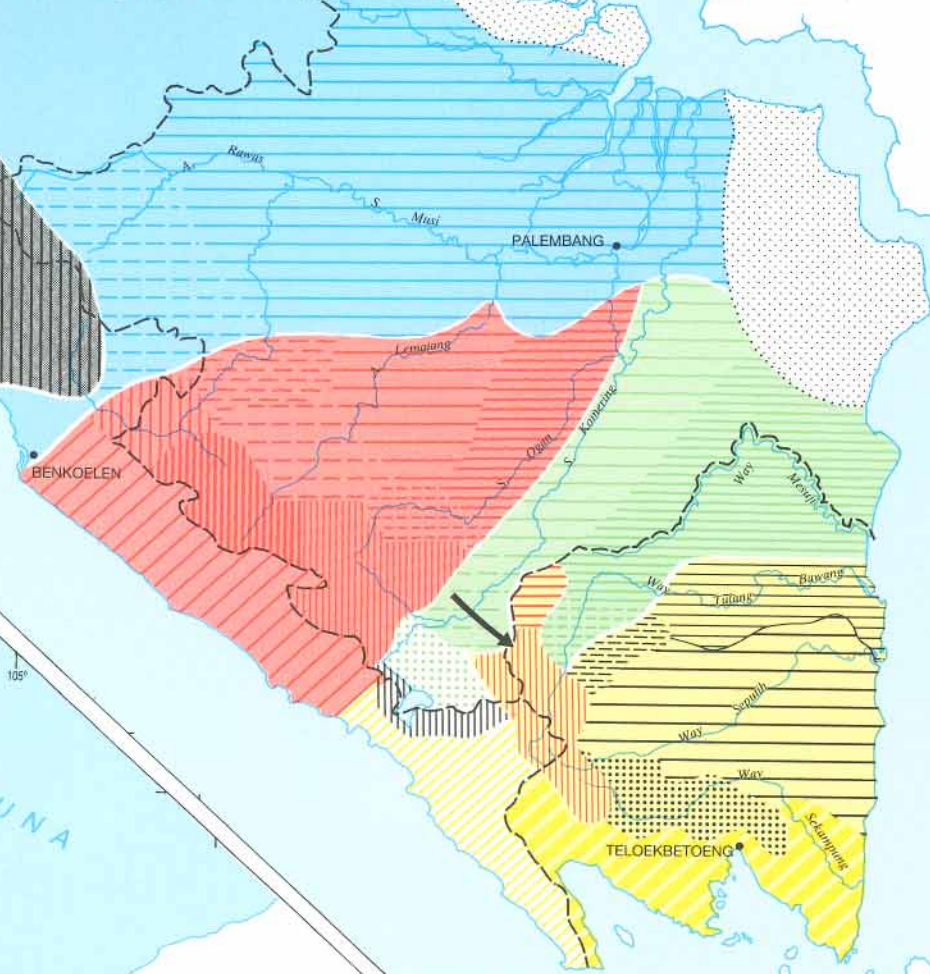
montagne - mountainous region :
Redjang, Ampat Lawang, Pasemah, Semendo, Kisam, Makakau, Ranau, Belatau

versant occidental des Monts Barisan, côtes de l'océan Indien et du Détroit de la Sonde
western side of Barisan Range, Indian Ocean coast and Sunda Strait :
Serawai, Kru, Teloe, Merinting, Melinting

migrations des Ogan et des Semendo au Lampung
Ogan and Semendo migration to Lampung districts

SOURCES - SOURCES
- ROYEN W. van, Nota over de Lampungische Marga's, serie B n° 7 ;
- TIDEMAN J., De Inlandsche landbouw, veeteelt en visscherij in Palembang, serie B n° 5,
Mededeelingen van de Afdeeling Bestuurszaken der Buitengewesten van het
Departement van Binnelandisch Bestuur, Landsdrukkerij Wiltewreden, 1930.
- JASPAN M.A., From Patriliney to Matriliney, Structural Change among the Redjang of
Southwest Sumatra, Ph. D. thesis, Australian National University 1964.

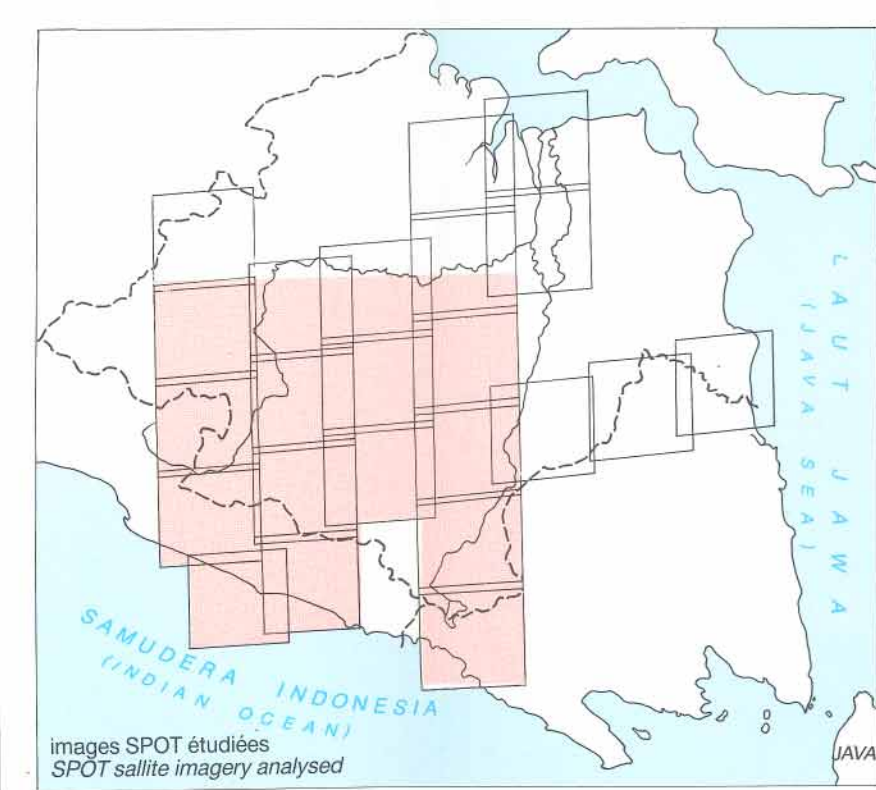
GROUPES HUMAINS
HUMAN GROUPS



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102°30'



ESPACES CULTIVÉS ET FORÊTS CULTIVATED AREA AND FOREST

- espace entièrement occupé ou déboisé : champs permanents, rizières, petites plantations denses, friches
permanent fields, rice-fields, small dense plantations, fallows
- domaine agro-industriel identifiable sur les images satellite SPOT
agro-industrial estates identifiable from SPOT imagery
- espace largement mis en culture ou déboisé: mosaïque champs permanents, petites plantations, clairières de défrichement et lambeaux forestiers
area largely cultivated or deforested: mosaic of permanent fields, small plantations, clearings and secondary forest
- espace en voie d'occupation ou occupation lâche dans massif forestier
généralement secondaire (petites plantations familiales)
area in the process of settlement or scattered settlement in predominantly secondary forest (smallholder plantations)
- massif forestier intact, généralement primaire
primary forest, largely intact

VOIES DE COMMUNICATION - COMMUNICATIONS

- desserte nationale (Trans-Sumatra) : national highway (Trans-Sumatra)
- desserte régionale : regional road
- desserte locale, piste non revêtue : local road, unimproved road
- voie ferrée : railway

FRONTS DE COLONISATION AGRICOLE ET DÉFRICHEMENTS RÉCENTS EXTENT OF AGRICULTURAL SETTLEMENT AND RECENT CLEARING

- peuplement organisé, implanté avant 1969
sponsored settlement program opened before 1969
- centres de Transmigration implantés après 1969 (post PRAPELITA)
Transmigration centers opened after 1969 (post PRAPELITA)
- défrichements spontanés : spontaneous clearing
(visibles sur les images satellite SPOT 1986-1987 : visible from SPOT imagery 1986-1987) :
clairières de défrichement éparées, mitage de la forêt
scattered clearings of forest
- forte réactivation de plantations anciennes ou défrichements importants : sens probable de la progression
rehabilitation of old plantations or major clearings : probable evolution

PRINCIPALES FORMES D'HABITAT - PRINCIPAL TYPES OF SETTLEMENT

- habitat villageois, en majorité d'origine autochtone
villages, mostly of indigenous origin
- habitat organisé par l'Etat : government-planned settlement
(Pour les projets récents dont les limites de l'habitat ne sont pas connues, seul le périmètre du projet est représenté. Data concerning settlement patterns within some recent transmigration programs are unavailable)
- centre urbain : urban center

SOURCES - SOURCES

- Digital Database of Sumatra 1/250 000 (project LREP-BAKOSURTANAL)
Bogor, 1989 (données partielles - partial data)
- Cartes topographiques existantes : existing topographical maps 1/50 000
JANTOP 1969 - 1976 BAKOSURTANAL - Bogor Séries, series 1010, 1110, 0911, 1011, 1111, 0912, 1012, 1112, 0913, 1013, 1113, 1014
La majorité des cartes de la région de Bengkulu n'ayant pas encore été éditée, la planimétrie de cette province n'a pas été représentée. As most of the Bengkulu maps have not yet been edited, the planimetry of this province is not represented
- images satellite SPOT : SPOT satellite imagery :
356/275 26/11/1987 356/276 26/11/1987
356/277 20/08/1986 356/278 21/07/1986
357/275 21/07/1987 357/276 16/11/1987
357/277 20/08/1986 357/278 21/07/1986
358/275 21/11/1987 358/276 21/11/1987
358/277 20/08/1986 358/278 21/07/1986
359/275 21/06/1988 359/276 09/07/1987
359/278 21/07/1986 360/279 21/07/1986
Les scènes SPOT ont été interprétées à partir de tirages papier en fausses couleurs à l'échelle de 1/250 000 puis, après réduction, adaptées au fond à l'échelle de 1/500 000 - The SPOT photography prints (false color) were analysed at 1/250 000 and, after reduction, adapted to 1/500 000

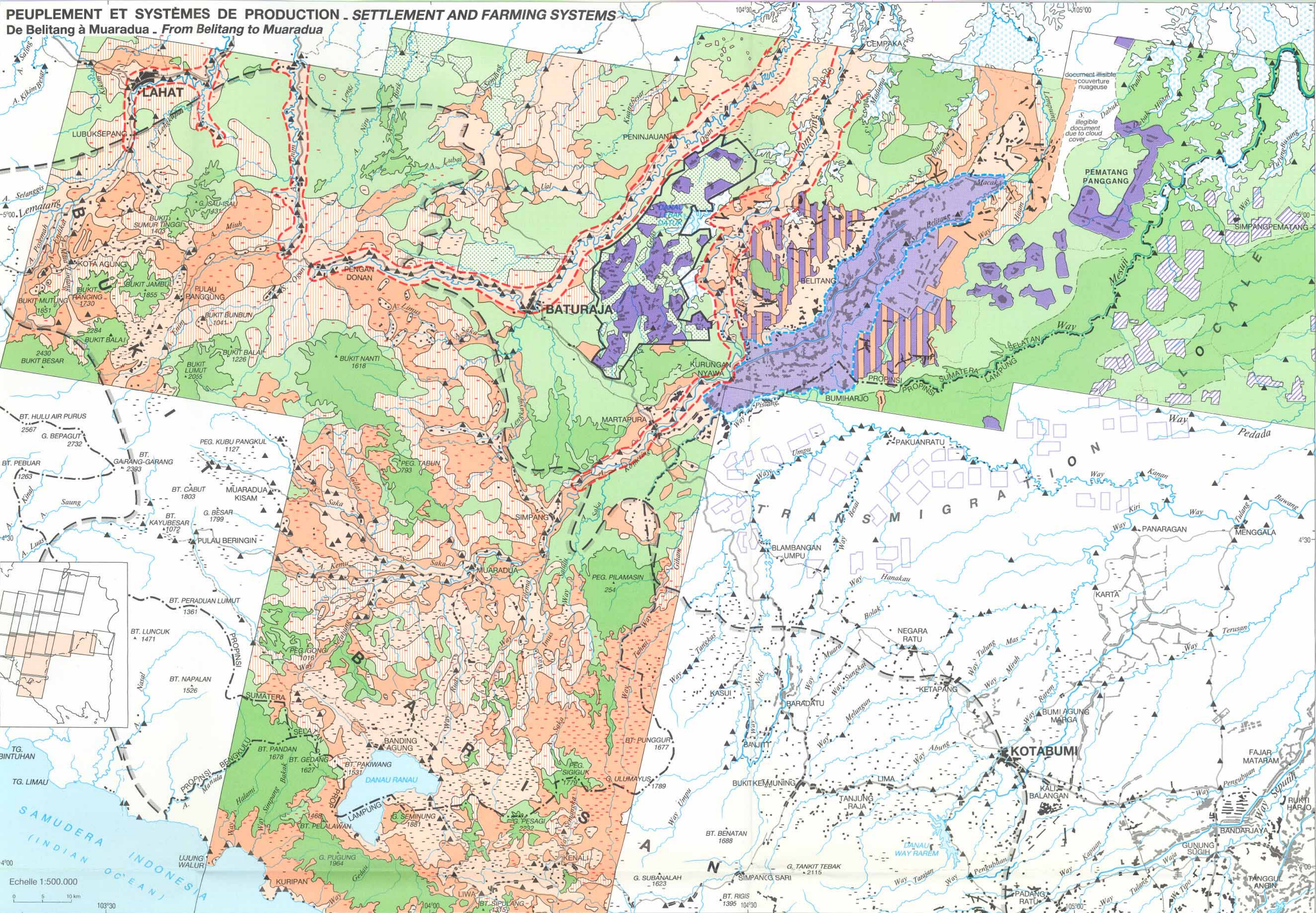
carte réalisée par : by

Marc Pain

dessin-cartographie
drawing-cartography

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Jaljar Geosum

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NATURE AND PROGRESSION OF SETTLEMENT
TYPES AND PROGRESSION OF SETTLEMENTS

peuplement spontané - spontaneous settlements
espace occupé en 1969 (d'après cartes topographiques de l'époque) - area occupied in 1969 (according to topographical maps)
progression entre 1969 et 1986-87 (d'après SPOT)
espace totalement occupé - densely occupied area
espace en voie d'occupation - area in process of being settled

peuplement organisé - organized settlement
programmes existants en 1969
programs existing in 1969
programmes réalisés entre 1969 et 1986
programs carried out between 1969 and 1986
Transmigration - Transmigration programs
Transmigration locale - Local transmigration
imbrication de formes de peuplement spontané et organisé - coexistence of spontaneous and organized settlements

FORMES D'HABITAT - TYPE OF SETTLEMENTS
centres urbains - urban center
habitat rural - rural settlement
village - village
village autochtone en place au début du siècle
indigenous settlements existing at the turn of the century
village des programmes officiels de peuplement
sponsored settlement program
village non caractérisé - unspecified village

habitat dispersé - scattered settlement
habitat dispersé, signalé en 1969 et généralement consolidé depuis
scattered farms identifiable in 1969 and often consolidated since
habitat précaire sur les clairières de défrichement récentes 1986/88
rudimentary housing on recent clearings (1986/88)

FONDEMENT DU SYSTÈME DE PRODUCTION
BASIS OF FARMING SYSTEMS
Les cultures délimitent les systèmes de production remarquables. Les cultures vivrières en sec n'ont pas été représentées. The outline indicates notable farming systems. Dry food-crops are not represented.
systèmes traditionnels - traditional systems
petites plantations sur bons sols d'origine volcanique - smallholdings on fertile soils of volcanic origin (limite approximative des latosols et des andosols approximate limit of latosols and andosols)
rizières et plantations dans terroirs de vallées alluviales valley rice-fields and smallholdings

colonisation agricole des terroirs de plaine :
agricultural colonization on the plains
riziculture irriguée - irrigated rice-fields
plantations et cultures vivrières (système P.I.R.)
plantations and food-crops (P.I.R. system)
plantation agro-industrielle - agro-industrial estates
landes forestières - remaining forest
forêt primaire - primary forest
forêts secondaires, recrus, friches ne portant pas de trace d'occupation humaine
uninhabited secondary forest, shrub and fallows

SOURCES - SOURCES
cartes topographiques - topographical maps
1:50 000 JAOTOP 1969 - 1976 - BAKOSURTANAL, Bogor, séries, séries 1010-1011-1012-1112-1111
images satellite SPOT - SPOT satellite images
358/277 20/08/1986 358/278 21/07/1986
359/279 27/11/1987 359/280 01/05/1989
359/278 21/07/1986 360/278 21/07/1986
les scènes SPOT ont été interprétées à partir de tirages papier en fausses couleurs à l'échelle du 1:250 000 puis, après réduction, adaptées au fond à l'échelle du 1:500 000
the SPOT photography prints (false color) were analysed at 1:250,000 and, after reduction, adapted to 1:500,000

LE PEUPELEMENT DU SUD DE SUMATRA
THE SETTLEMENT OF SOUTH SUMATRA



PEUPELEMENT AUTOCHTONE EN PLACE AU DÉBUT DU SIÈCLE
INDIGENOUS PEOPLES AT THE BEGINNING OF THE CENTURY
le long des côtes - along the coasts
le long des fleuves - along the rivers
occupation des interfluvies
settlements of inter-river uplands
occupation des bassins intra-montagnards
settlement of mountain basins

PEUPELEMENT ORGANISÉ - PLANNED SETTLEMENT
transfert de population inter-îles
inter-island migration
programme de peuplement à partir de Java, Bali, Lombok - settlement program sending from Java, Bali, Lombok
transfert de population interne à la province
population resettlement within the province
transmigration locale - local transmigration
(province de Lampung - province of Lampung - 1980-1990)
système fondé sur - system based on :
la maîtrise de l'eau - water control
riziculture irriguée - irrigated rice fields
aménagement des marais - swampland reclamation
l'association plantations familiales et cultures vivrières (P.I.R.) - combination of family plantations and food crops (P.I.R.)
(l'absence de cerne indique que le système est fondé sur les cultures vivrières en sec - lack of outline indicates system based on dry food-crops)

PEUPELEMENT SPONTANÉ - SPONTANEOUS SETTLEMENT
habitat et défrichements récents
settlements and recent clearings
cas remarquables - notable cases :
mitage de la forêt sur les versants montagneux - forest clearing on upland slopes
(le gris indique les altitudes supérieures à 200 m - grey indicates altitude in excess of 200 m)
utilisation du battement de la marée (pasang surut)
use of tidal swamps (pasang surut)
occupation linéaire le long des routes principales
linear settlement along major roads

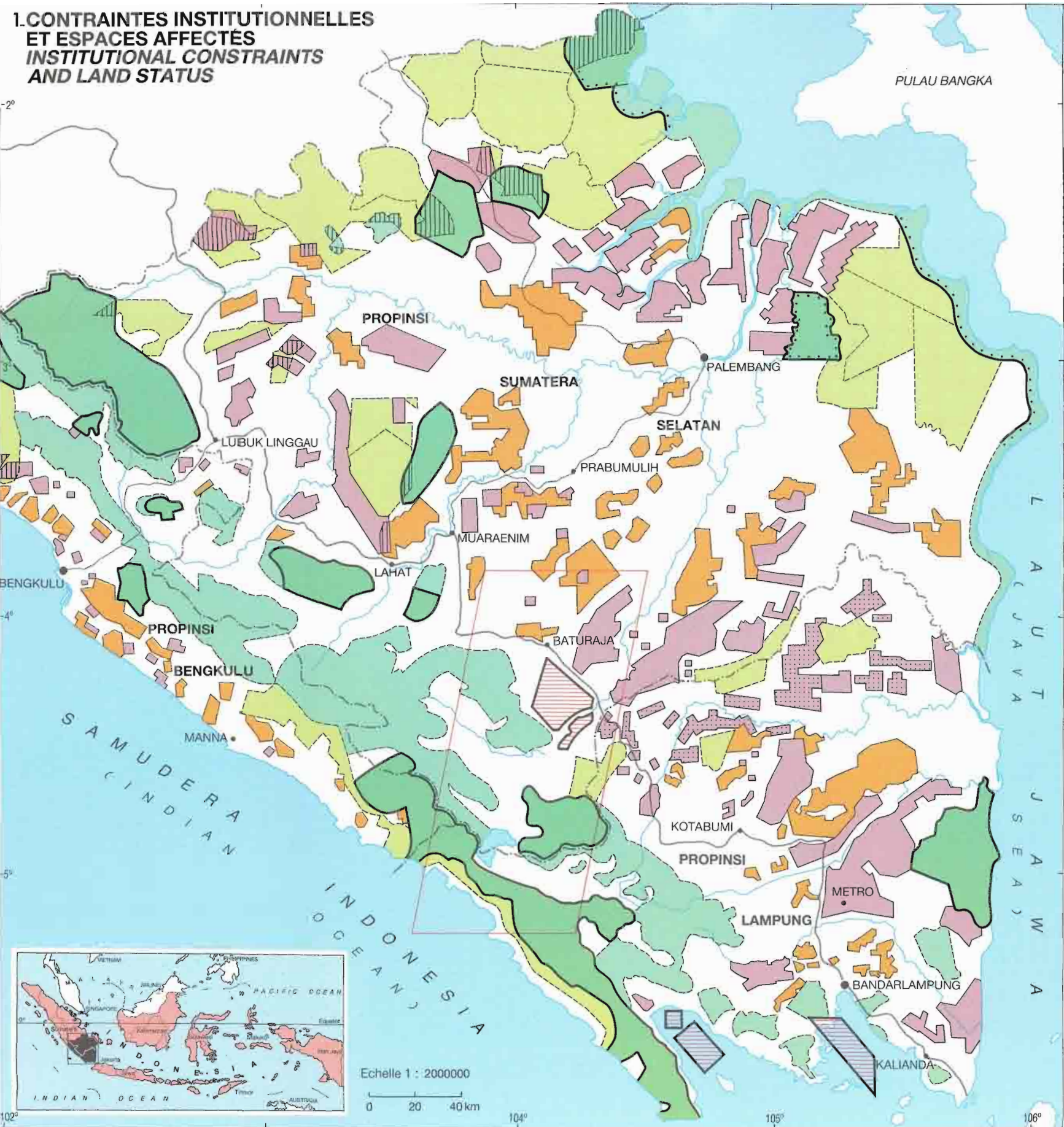
SOURCES - SOURCES
- SUMATRA 1:250,000 4^e édition - fourth edition - 1945 Geographical Section, General Staff no. 4550 (Hind 1042 A.M.S.T. 511)
- Kantor Wilayah Departemen Transmigrasi Prop. Bengkulu, Lampung, Sumatra Selatan, Peta lokal pemukiman transmigrasi (cartes de localisation des programmes Transmigration - location map of Transmigration settlements - different échelles - several scales)
- Transmigration et migrations spontanées - Transmigration and spontaneous migrations, Propinsi Lampung, Sumatera, ORSTOM - DEPARTEMENT TRANSMIGRASI, Jakarta-Pare 1988
- enquêtes de terrain - field surveys: 1986-1990
carte réalisée par - by Marc Pain
dessin-cartographie - ORSTOM - DEPT. TRANSMIGRASI
drawing-cartography - Yanto Wahyantono, Geosum
REPUBLIC INDONESIA
DEPARTEMEN TRANSMIGRASI
REPUBLIQUE FRANÇAISE
ORSTOM
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EVOLUTION DE LA POPULATION
EVOLUTION OF THE POPULATION
1971 - 1987/88

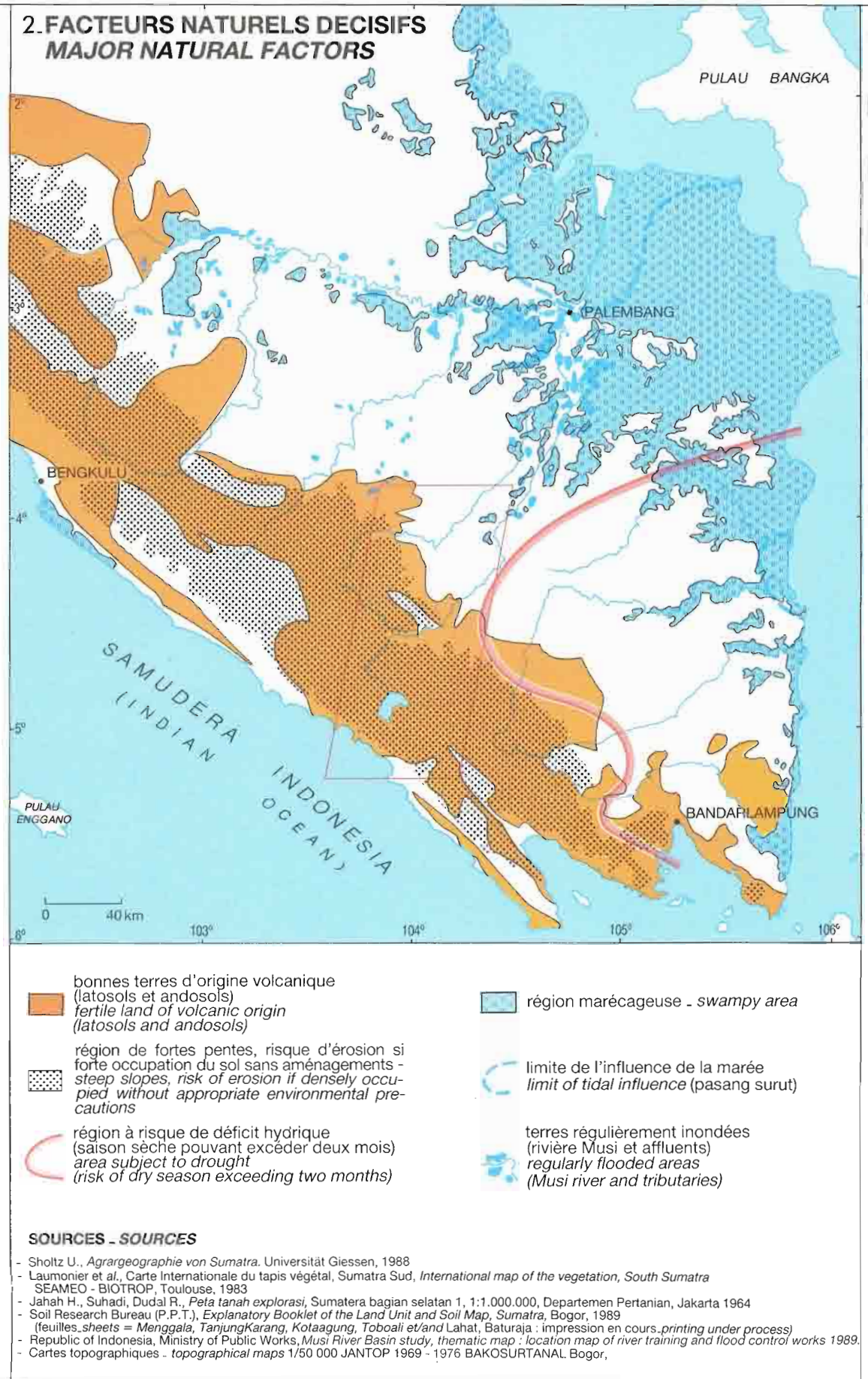


individualisation des régions démographiques
localization of demographic regions
(en dehors des cas voisins de la moyenne nationale 2,2%, except where rate approaches national average of 2.2%)
très forte croissance ou forte croissance liée aux programmes de transmigration ou à l'aménagement des marais - very high or high growth rates linked to transmigration or swamp reclamation programs
croissance soutenue ou forte croissance liée aux mouvements migratoires spontanés steady or high growth rates linked to spontaneous migratory movements
croissance modérée malgré les apports de la transmigration moderate growth rates despite influx caused by transmigration
croissance modérée malgré les apports migratoires spontanés en raison des ponctions de la transmigration locale - moderate growth rates despite spontaneous migrant influx due to the removal effect of local transmigration
faible croissance - low growth rates
régions déprimées des plaines centrales - depressed regions at the central plains
saturation des vieilles régions de transmigration (très fortes densités rurales) saturation of the old transmigration regions (very high rural densities)
croissance annuelle
yearly growth
1970-1987/88
5 à 10%, voire plus
5 to 10% or more
3 à 7%
3 to 7%
2 à 5%
2 to 5%
0,5 à 2,5%
0,5 to 2,5%
SOURCES - SOURCES
- Département Transmigrasi, Jakarta-Kanwil Transmigrasi Bandar Lampung, Bengkulu, Palembang
- Recensement de la population - Population census - Sensus Penduduk, 1971, 1980 BPS, Jakarta
- Penduduk Propinsi Lampung, Bengkulu, Sumatra Selatan, Kantor Statistik 1987/88 (projections et statistiques annuelles - annual projections and statistics)

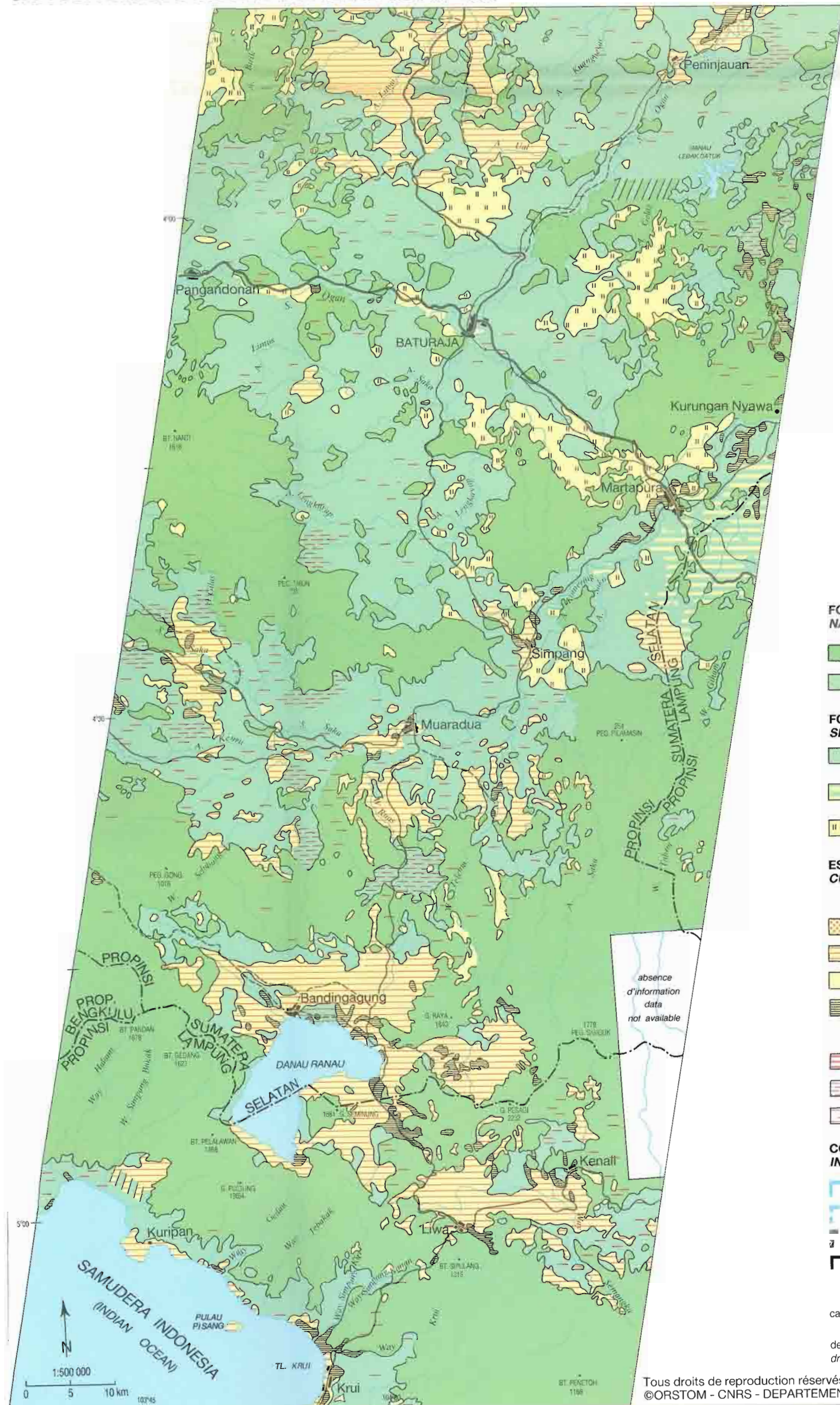
1. CONTRAINTES INSTITUTIONNELLES ET ESPACES AFFECTES INSTITUTIONAL CONSTRAINTS AND LAND STATUS



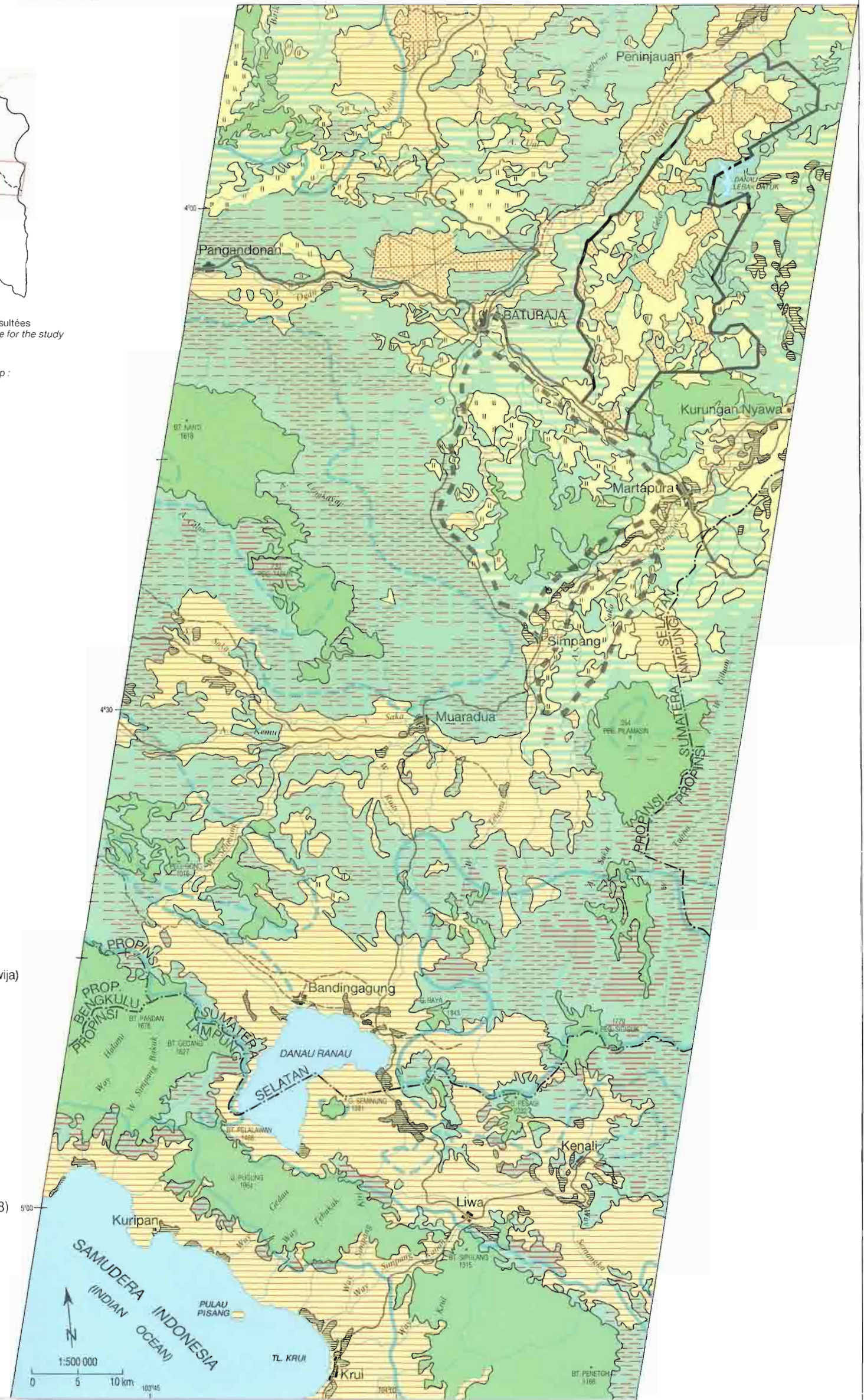
2. FACTEURS NATURELS DECISIFS MAJOR NATURAL FACTORS



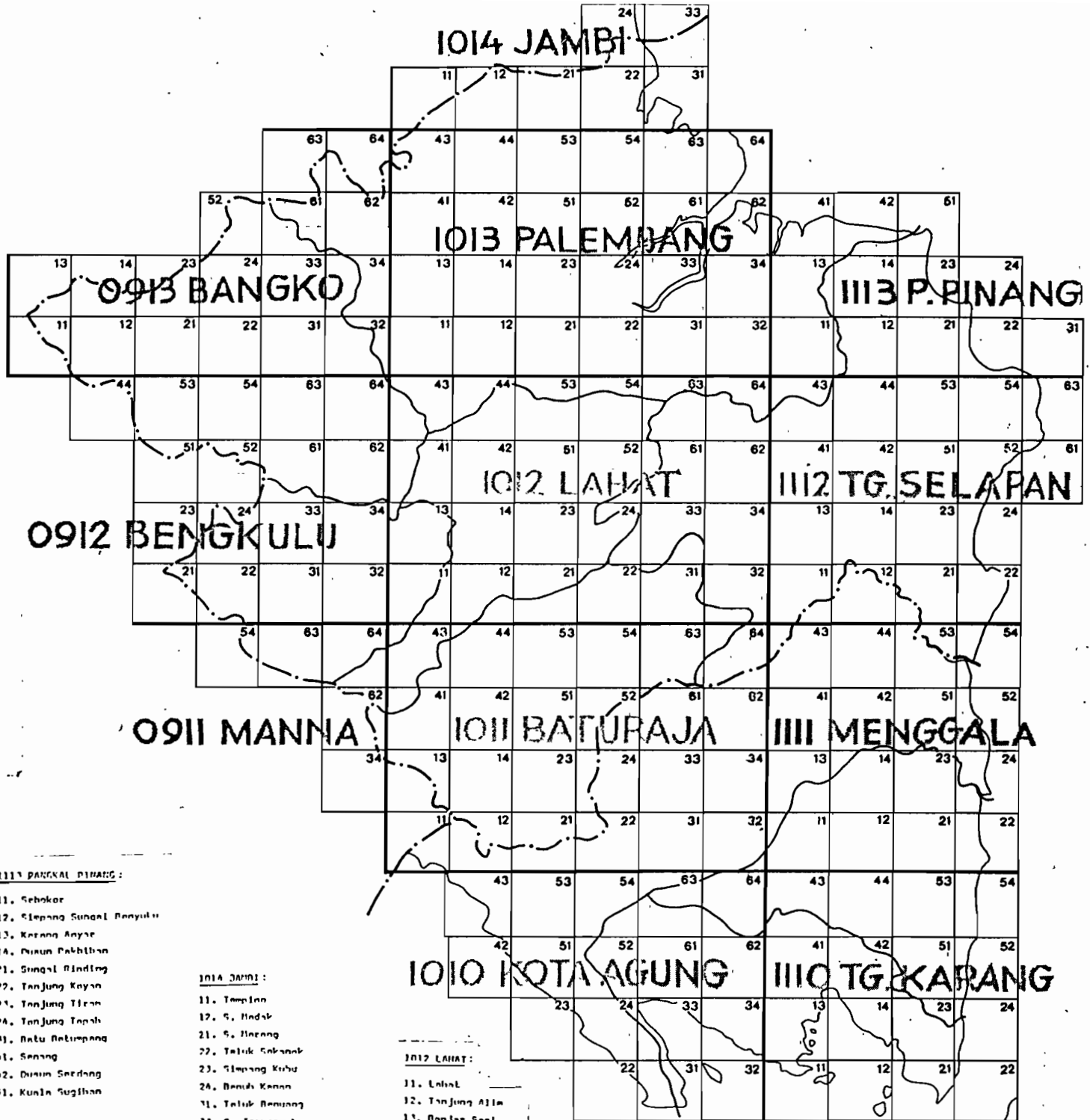
3. OCCUPATION DU SOL EN 1969 - LAND USE IN 1969



4. OCCUPATION DU SOL EN 1986 - LAND USE IN 1986



APPENDIX



1113 PANGKAL PINANG :

11. Sebok
12. Simpang Sungai Benyulu
13. Kerang Anyer
14. Dusun Pakblisan
21. Sungai Biding
22. Tanjung Koyan
23. Tanjung Tiran
24. Tanjung Tanah
31. Batu Belumpang
41. Senang
42. Dusun Serdang
51. Kuala Sugihan

1111 MEGGALA :

41. Luban betin
53. Sungai Sidang
54. Bagan Kuala Masuji

1112 TG. SELAPAN :

11. Pantai Panggang
12. Winalang
13. P. Geringgang
14. Sungai Menang
21. Gajah Mati
22. Tanjung Lumut
23. Sungai Jorayu
24. Bagan Kuala Sungai Pual
41. Sungai Bugin
42. Simpang Tiar
43. Pampangan
44. Telung Selapan
51. Dusun Tangkulan
52. Sungai Lumpur
53. Buntun
54. Bagan Tengah
61. Tg. Kait
63. Tg. Jalingan

1014 JAMBI :

11. Tempian
12. S. Hadak
21. S. Marang
22. Teluk Sekanak
23. Simpang Kubu
24. Bendi Kanan
31. Teluk Benuang
33. S. Terusan Lusi

1013 PALEMBANG :

11. Mangun Jaya
12. Sekayu
13. Babat
14. Keluang
21. Babat
22. Pangkalan Balal
23. Sungai Lili
24. Teluk Tanggulang
31. Palembang
32. Anom Baru
33. Kuala Puntian
34. Muara Talang
41. Hulu Sungai Bayat
42. Peningsulan
43. Bayung Luncir
44. Muara Mandak
51. Bantayan
52. Teluk Kubu
53. Muara Marang
54. Tanah Abang
61. Pangkalan
62. Sungkang
63. S. Sembilang
64. Sungai Bungan

1012 LAHAT :

11. Lahat
12. Tanjung Alim
13. Banjar Sari
14. Muara Caka
21. Gunung Merdikan
22. Pantiawan
23. Sungkan
24. Kota Baru
31. Pating
32. Cahya Maju
33. Muara Kuang
34. Tanjung Lohok
41. Sungai Bering
42. G. Pangang
43. Jarak
44. Teluk Pulang
51. Pantiawan
52. Lemah
53. Air Ilam
54. Sibin
61. Tanjung Batu
62. Kayu Agung
63. Kertipati
64. Pajaj Darat

0913 BANGKO :

11. G. Gohat
12. G. Hiji
13. Tanjung Bering

14. Bopel Belitang
21. Sukaraja
22. Tanjung Beringin
23. Bantak
24. Surlungun
31. Muara Mengay
32. Muara Labitan
33. Bantak Halal
34. Kanan
41. S. Kumpang
42. B. Harilaka
43. Lubuk Bantak
44. Tanah Abang
45. Kota Tengah

0911 MANNA :

14. Tanjung Igan
54. Bantak Panjang
62. Sukaraja
63. Pajaj Pulan
64. Kota Agung

1011 BATURAJA :

12. Bantak Agung
13. Pulau Beringin
14. Teluk Agung
21. Kemat
22. Pajaj Bantak
23. Muara Dur
24. Kesul
41. Tanjung Beringin
42. Bantak
43. Muara Dur
44. Pangkalan
51. Simpang
52. Bantak
53. Bantak
54. Kumpang
63. Bantak
64. Sri Bantak

0912 BENGKULU :

21. Simpang Perigi

22. Tanjung Raya
23. Kumpang
24. Teluk Padang
31. Muara Pinang
32. Air Dingin
33. Tabing Tinggi
34. Muara Mandan
44. Hujung Tanjung
51. Curup
52. Lubuk Linggau
53. Naga Melintang
54. Tanam
61. Muara Tunggal
62. Pangkalan Tarum
63. Muara Kalind
64. Mambang

TOPOGRAPHIC MAPS JANTOP / DITOP , BAKOSURTANAL, 1969 - 1976

- *** printed map
- ** map available in ozalid print form
- * map available in temporary sketch form
- o unavailable map
- lack of information

INDEX : 1014 JAMBI

No	Nama Peta	Tahun	Observation
22	Teluk Sekanak	1976	**
31	Teluk Benuang	1976	**
11	Tempino	1976	**
12	Sungai Mendak	1977	***
21	Sungai Merang	1976	**
24	Benuh Kanan	-	**
33	Sungai Terusan Luar	-	0

INDEX : 1113 PANGKAL PINANG

No	Nama Peta	Tahun	Observation
11	Sebokor	1969	***
12	Simpang Sungai Beyuku	1969	***
13	Karang Anyar	1969	***
14	Dusun Pak Biban	1969	***
21	Sungai Riding	1969	***
23	Tanjung Tiram	1969	***
24	Tanjung Tapah	1969	***
31	Batu Betumpang	1969	***
41	Senang	1969	***
42	Dusun Serdang	1969	***
51	Kuala Sugihan	1969	***

INDEX : 0913 BANGKO

No	Nama Peta	Tahun	Observation
11	G. Seblat	1976	*
12	G. Hijau	1976	**
13	Tanjung Benuang	1976	**
14	Napal Melintang	1976	**
21	Sukaraja	1976	**
22	Tanjung Brngin	1976	**
23	Rantai	1976	**
24	Surulangun	1976	**
31	Muara Megang	1976	**
33	Renah Halai	1976	*
34	Kemang	1976	*
52	S. Klumpang	1976	**
61	B. Hanleko	1976	**
62	Lubuk Bancala	1976	**
63	Tanah Abang	1981	***
64	Kota Tengah	1981	***

INDEX : 0912 BENGKULU

No	Nama Peta	Tahun	Observation
11&12	Bengkulu	1977	***
21	Simpang Pengi	1977	***
22	Tanjung Raya	1977	***
23	Kepahiang	1977	***
24	Talang Padang	1977	***
31	Muara Pinang	1976	*

32	Air Dingin	1976	...
33	Tebing Tinggi	1976	..
34	Muara Mandras	1976	.
44	Ujung Tanjung	1976	..
51	Curup	1977	...
52	Lubuk Linggau	1977	...
53	Nepa Melintang	1976	..
54	Terawas	1976	..
61	Marga Tunggai	1977	...
62	Pangkalan Tarum	1976	.
63	Muara Kelingi	1976	..
64	Mambang	1977	...

INDEX : 1011 BATURAJA

No	Nama Peta	Tahun	Observation
11	Tanjung Sakti	1976	...
12	Banding Agung	1969	...
13	Pulau Beringin	1976	...
14	Teluk Agung	1969	...
21	Kenali	1969	...
22	Pasar Banjir	-	0
23	Muara Dua	1969	...
24	Kasui	1969	...
31	Bukit Kemuning	1969	...
32	Kota Bumi	1969	...
33	Baradatu	1969	...
34	Pakuan Agung	1969	...
41	Tanjung Beringin	1976	...
42	Blambangan	1976	.
43	Muara Dua	1976	...
44	Pengandonan	1969	...
51	Simpang	1969	...
52	Martapura	1969	...
53	Baturaja	1969	...
54	Kurungan Nyawa	1969	...
61	Pakuan Ratu	1969	...
62	Negeri Besar	1969	...
63	Gumawang	1969	...
64	Sribantolo	1969	...

INDEX : 1013 PALEMBANG

No	Nama Peta	Tahun	Observation
11	Mangun Jaya	1977	...
12	Sekayu	1977	...
13	Babat	-	0
14	Keluang	1977	...
21	Babat	1976	.
22	Pangkalan Balai	1976	.
23	Sungai Lilin	1976	.
24	Teluk Tenggulang	1976	.
31	Palembang	1969	...
32	Boom Baru	1969	...
33	Kuala Puntian	1969	...
34	Muara Telang	1969	...
41	Hulu Sungai Bayat	-	0
42	Peninggalan	1976	..
43	Bayung Lencir	1976	..
44	Muara Mendak	1976	..
51	Bentayan	1976	.
52	Teluk Kubu	1976	..
53	Muara Merang	1976	..
54	Tanah Abang	1977	...
61	Penuguan	1977	...
62	Sungsang	1969	...
63	Sungai Sembilang	1977	...
64	Sungai Bingin	1977	...

INDEX : 1010 KOTA AGUNG

No	Nama Peta	Tahun	Observation
43	Krui	1969	***
53	Liwa	1976	.
54	Sumber Jaya	1976	.
63	Air Naningan	1976	.
64	Padang Ratu	1969	***
22	Kembangbanan	-	-
23	U. Sigin	-	-
24	Bengkunat	-	-
31	Tampang	-	-
32	P. Tabuan	-	-
33	Kagungan	-	-
34	Putihdoh	-	-
42	Ujung Tapuan	-	-
51	Banjarnegara	-	-
52	Sanggi	-	-
61	Kota Agung	-	-
62	Pringsewu	-	-

INDEX : 1012 LAHAT

No	Nama Peta	Tahun	Observation
11	Lahat	1976	***
12	Tanjung Enim	1976	***
13	Banjarsari	1976	.
14	Muara Enim	1976	.
21	Gunung Meraksa	1976	***
22	Peninjauan	1969	***
23	Sugihan	1976	.
24	Kota Baru	1976	.
31	Betung	1969	***
32	Cahaya Maju	1969	***
33	Muara Kuang	1969	***
34	Tanjung Lubuk	1969	***
41	Sungai Baung	1976	.
42	Gunung Megang	1976	.
43	Jirak	1976	.
44	Tebing Bulang	1976	.
51	Prabumulih	1976	.
52	Lembak	1969	***
53	Air Hitam	1976	.
54	Siban	1976	.
61	Tanjung Batu	1969	***
62	Kayu Agung	1969	***
63	Kertapati	1969	***
64	Plaju Darat	1969	***

INDEX : 1111 MENGGALA

No	Nama Peta	Tahun	Observation
11	Bandar Jaya	1969	***
12	Seputih Raman	1969	***
13	Gunung Batin	1969	***
14	Darma Agung	1969	***
21	Rumbia	1969	***
22	Tanjung Pulau Sekopong	1969	***
23	Seputih Surabaya	1969	***
24	Cabang	1969	***
41	Panaragan	1969	***
42	Bakung Udik	1969	***
43	Labuan Batin	1969	***
44	Talang Batu	1969	***
51	Gunung Besar	1969	***

52	Kuala Tulang Bawang	1969	***
53	Sungai Sidang	1969	***
54	Bagan Kuala Mesuji	1969	***

INDEX : 1112 TULUNG SELAPAN

No	Nama Peta	Tahun	Observation
11	Pematang Panggang	1969	***
12	Wiralaga	1969	***
13	Pulau Geronggang	1969	***
14	Sungai Menang	1969	***
21	Gajah Mati	1969	***
22	Tanjung Lumut	1976	*
23	Sungai Jeruju	1969	***
24	Bagan Kuala Sungai P.	1969	***
41	Sungai Bungin	1969	***
42	Simpang Tiga	1969	***
43	Pampangan	1969	***
44	Tulung Selapan	1969	***
51	Muara Tangkalesa	1969	***
52	Sungai Lumpur	1976	*
53	Buntuan	1969	***
54	Bagan Tengah	1969	***
63	Tg. Jatigombol	1969	***

INDEX : 0911 MANNA

No	Nama Peta	Tahun	Observations
32	Bintuhan	1976	***
34	Tanjung Iman	1976	*
63	Pajar Bulan	1976	*
64	Kota Agung	1976	*
62	Sukarami	-	0

INDEX : 1110 TANJUNG KARANG

No	Nama Peta	Tahun	Observation
*11	Kiluan		-
13	Padang Cermin		-
12	Pulau Legundi	1969	***
14	Tanjung Agung	1969	***
21	Penengahan	1969	***
22	Bakauheni	1969	***
23	Kalianda	1969	***
24	Ketapang	1969	***
41	Gedongtataan	1969	***
42	Tanjung Karang	1969	***
43	Bangunrejo	1969	***
44	Metr	1969	***
51	Jabung	1969	***
52	Labuhan Maringga	1969	***
53	Sukadana	1969	***
54	Brajaluhur	1969	***