

A Study on Agricultural Changes under *Bumiputra* Policies of Malaysia

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Introduction

In this paper I will describe how small-scale farm management has changed under the industrialization policy in Malaysia that was implemented in the 1970s under the New Economic Policies (NEP, 1971 – 90). NEP is also referred to as *Bumiputra* Policy because special preference was given to *Bumiputra* (“son of soil”). NEP have exerted a considerable impact on the Malaysian society as well as the nation’s economic structure. Regarding the policies related to agriculture, emphasis was placed on solving the poverty problems of Malay farmers who account for the major part of *Bumiputra*. In the paper, I will concentrate on the analysis of the rice, rubber, and oil-palm smallholders, and attempt to outline their problems considering as much as possible the relation with the industrialization policy. Before starting the analysis, various aspects and features relating to Malaysian agriculture during the period 1980–87 will be briefly described.

Of the total cultivated acreage, rubber, oil-palm, and rice accounted for more than 85%. The distribution ratios showed a slight decrease for rubber, a 3% decrease for rice, and about a 6.5% increase for oil-palm. For the past five years the ratios have been stable for rubber, while there was a sharp decrease for rice, and a large increase for oil-palm (Table 1). If we analyze these three agricultural products, we can understand the basic characteristics and problems of current small holder farmers in Malaysia.

Table 1. Planted Area of Major Agricultural Crops (Malaysia Peninsula, 1980-87)

	(unit: 1,000 ha)						The Number of Household (1,000)
	1980	1981	1982	1983	1984	1987	
Rubber	1,697 (46.0)	1,696 (45.1)	1,693 (44.8)	1,691 (44.7)	1,685 (44.6)	1,586 (39.9)	426
Oil-palm	907 (24.6)	996 (26.5)	1,048 (27.7)	1,100 (29.1)	1,144 (30.2)	1,380 (34.7)	25
Padi	529 (14.4)	523 (13.9)	493 (13.1)	473 (12.5)	437 (11.5)	451 (11.3)	151
Coconut	245 (6.6)	248 (6.6)	250 (6.6)	232 (6.1)	226 (6.0)	204 (5.1)	34
Cocoa	71 (2.0)	76 (2.0)	82 (2.2)	84 (2.2)	89 (2.4)	123 (3.1)	—
Others	237 (6.4)	221 (5.9)	212 (5.6)	206 (5.4)	201 (5.3)	232 (5.8)	172
Total	3,686 (100.0)	3,760 (100.0)	3,778 (100.0)	3,786 (100.0)	3,782 (100.0)	3,976 (100.0)	—

Source: Ministry of Agriculture, *Malaysia Statistical Handbook, Agriculture, 1984*, p. 34, Table 17.

I. Rice Farming at a Crossroads

The rice farming policies in the 1960s aimed at the increase of the rice-field acreage, the shift to double cropping, and the increase of productivity per unit area, so that 100% self-sufficiency could be achieved. The measures taken to achieve these objectives were as follows:

- (1) Distribution of high-yielding varieties which started in 1965.
- (2) Fertilizer subsidy at 30% of the market price.
- (3) Guaranteed minimum prices for the unhulled rice purchased by the government agency; Lembaga Padi dan Beras Negara (LPN).
- (4) Shift to double cropping with the construction of secondary and tertiary irrigation canals and efficient drainage system.
- (5) Improvements in the marketing system. For instance, the establishment of the Federal Agricultural Marketing Authority (FAMA), the function of which was to reduce the influence of Chinese commercial capital on agricultural marketing activities in the rural communities.
- (6) Establishment of the Farmers' Organization Authority (FOA established in 1967).
- (7) The Padi Cultivators (Control of Rent and Security of Tenure) Ordinance was enacted in 1955 and was revised in 1967.

Though the rice-farming policy in the 1970s basically followed that of the 1960s, its contents were quite different in various aspects in that emphasis was clearly placed on the alleviation of the poverty of the rice farming households. Since rice self-sufficiency reached the rate of 80 – 90% and considerable progress was made in the double-cropping system, the targets set forth for rice production were temporarily achieved. Though the ratio of poor families decreased from 88.1% in 1970 to 55.1% in 1980, still more than half of the rice farming families remained poor.

This persistent poverty is attributable to the following factors;

- (a) The uneconomic farming size of small holding
- (b) Stagnant yields per-unit area

Therefore the government shifted its policy from the 1980s to eliminate the poor households by promoting more drastic improvements in the subsidy system. Despite these overall rice-farming policies, however, a variety of problems relating to production, marketing, and labor shortage became more acute after 1980 and in the following years. Thus, it is appropriate to state that rice farming stands at a crossroads.

1. Changes in Farming Techniques: Development of Direct-Sowing Culture

Of the changes that affected rice farming in the 1980s, the most important deals with the improvement of the farming practices. Rice transplanting in paddy fields was a predominant practice in Malaysia. However, the labor shortage in the rural

Table 2. Basic Statistics about Rice Farming (Malaysia Peninsula)

	Total Planted Area (1,000 ha)	Total Production (cleaned rice 1,000 t)	Rate of Self- Sufficiency (%)
1970	533.2	929	78
1971	552.4	1,005	87
1972	573.9	1,018	91
1973	591.4	1,123	88
1974	597.7	1,182	85
1975	595.6	1,116	95
1976	580.4	1,136	91
1977	567.3	1,060	87
1978	445.8	799	74
1979	562.2	1,170	92
1980	530.1	1,145	98
1981	523.0	1,137	90
1982	493.1	1,038	82
1983	473.4	961	87
1984	436.5	847	77
1985	465.5	1,093	84
1986	431.9	1,065	83

Source: This table was prepared from the extracts: Tan Siew Hoey, *Malaysia's Rice Policy: A Critical Analysis*, Institute of Strategic and International Studies (ISIS), Kuala Lumpur, 1987, p. 25, Table 4, p. 26, Table 5, p. 29, Table 10.

areas forced this labor-intensive traditional method to shift to the labor-saving direct-seeding technique. This shift was first adopted by Chinese rice farmers in Tanjang Karang, Selangor during the latter half of the 1970s through the early 1980s. The shortage of manpower as well as a marked wage raise prompted the move toward labor-saving and contributed to the development of the direct seeding practice using machines.¹

The shift to the direct-seeding technique was adopted by the Malay farmers in the Muda Area, Kedah in the early 1980s, and the techniques became gradually systematized. The direct-seeding technique in Muda was practiced by using hand or fertilizer sprayers, and currently it is being implemented over more than 95% of the total rice-farming area (100,000 hectares).² As direct seeding using sprayers became less costly than the use of machines, the farmers in Tanjang Karang have also adopted the technique of direct seeding using sprayers. In the Kemubu area of Kelantan, which is the second largest granary in Malaysia, the same direct-sowing technique has started to become disseminated.

The direct-seeding practice aims saving labor in transplanting as well as in nursery preparation. The fact that the productivity per unit area does not decrease appreciably with this technique is an important reason for the wide dissemination of this technique. Since direct seeding also tends to prevail in other rice-farming areas, it appears that the direct seeding practice is replacing traditional labor-intensive transplanting in Malaysia.

We should also note that the promotion of urban industrialization and the employment priority policy to the *Bumiputra* are the main factors controlling the exodus of the manpower from the farming villages as well its absorption into the cities, which is the major cause of the labor shortage in farming rural areas.

2. Increase of the Acreage of Unused Paddy Fields

In the context of the current rice-farming economy in Malaysia, in addition to the shift to the direct-seeding technique, the following three problems have arisen.

- (1) Increase in the acreage of unused paddy fields (*tanah terbiar*).
- (2) Decline in the rate of self-sufficiency and increase in the amount of rice smuggled into Malaysia.
- (3) Malfunction of the marketing system.

I will concentrate on the first problem, which is particularly related to the industrialization policy. As shown in Table 2, the planted acreage decreased year by year since 1980. We can see that this declining tendency had already begun in or around 1975. The table indicates the major changes that occurred in the planted acreage of paddy in 1975.

The three causes of such a sharp decrease in the planted acreage are as follows: (i) Technical defects in the irrigation and drainage construction: This problem is evident especially at Kemubu in Kelantan. In setting up the irrigation system at the farm level for double cropping, the design of the drainage canal was defective which resulted in a vast expanse of flooded paddy fields that were not suitable for rice cultivation up to the middle 1980s in Kemubu.

(ii) Second, the sharp increase in the number of young laborers who migrated to the cities caused a shortage of manpower for farming. As a result, many farmers could not afford to continue cultivation and were compelled to stop utilizing their rice fields.

(iii) Thirdly, cyclic damages caused by diseases, insects, and floods occurred.

If we analyse more closely these three causes, the first cause applies mainly to the Kemubu area, and the third cause can be considered only as a transient effect on the decrease of planted acreage. Accordingly, it is reasonable to consider that the major cause of the continuous decrease in the cultivated acreage was the labor shortage associated with the exodus of manpower. Under the *Bumiputra* policy, Malays coming to the cities were given preferential treatment for employment with the governmental as well as industrial sectors, in order to increase their economic standards. As a result, a large number of young laborers migrated from the rice-farming areas to the cities, and labor shortage spread all over the rice-farming villages. Thus the decrease in the planted acreage started with the labor shortage which subsequently resulted in the increase of the acreage of unused rice fields.³ The analysis of the statistical data of unused paddy fields reveals the following (Table 3):

This table shows that such fields were concentrated in the rice-farming areas

Table 3. Areas of Unused Paddy Field by States (1980–1987)

Province	1980			1986 Abandoned Acreage (ha)	Sept., 1987 Redeveloped Acreage (ha)
	Total Planted Acreage (ha)	Unused Acreage (ha)	Unused Farming Households		
Perlis	26,560	1,880	1,757	1,580	1,670
Kedah	124,593	4,646	6,215	7,338	3,201
Penang	18,200	6,473	11,402	4,017	3,922
Perak	50,949	11,771	15,395	13,132	6,631
Selangor	20,663	1,720	2,110	1,720	585
Negeri-Sembilan	14,754	14,426	19,337	10,450	3,247
Malacca	11,498	6,584	4,275	6,584	2,738
Johore	4,239	2,563	1,620	2,898	1,334
Pahang	17,990	11,621	11,177	22,028	977
Trengganu	29,137	17,130	25,331	19,494	2,509
Kelantan	84,429	82,049	121,000	36,012	6,202
Total	403,012	160,863	219,619	125,253	33,016

Source: This table was prepared from the materials that I obtained from an official of the Ministry of Agriculture.

along the east coast, namely the three states of Pahang, Trengganu, and Kelantan, and in the Krian area of Perak along the west coast. In Kelantan, a large number of people left the rural areas and headed for Singapore. It should be noted that the people in the other states, on the contrary, migrated to cities in Malaysia, including Penang, Ipoh, Johore Baru and Kuala Lumpur.⁴

There were a number of reasons why unused rice fields in Kedah did not really seem to be a problem as serious as in other states. In Kedah, there was definitely a labor shortage. The small holder, however, sought employment by large holder farmers and also took up jobs at industrial estates. Large-scale farming was in many cases run by Chinese farmers rather than by local Malay farmers. These farmers engaged in large-scale farming took full advantage of their well mechanized farming process as well as their ample financial resources to produce rice on a commercial basis. It is assumed that large-scale farming and off-farm jobs in multinational firms in industrial estates operated as a buffer by absorbing the flow of people and eventually helped prevent the increase in the number of unused rice fields.

However, the general situation of unused rice fields still remains serious and represents a major loss to the national economy. We have to admit that the promotion of both industrialization and urbanization based on the *Bumiputra* Policy brought about such a large acreage of unused rice fields. As a result a large labor force is now available to various industries due to the migration of people to the cities. However this labor force does not necessarily represent a source of supply of low-wage workers in contrast to what is observed in other ASEAN countries.

In Malaysia, the people heading for the cities were attracted and drawn there

by the higher wages associated with industrialization and the *Bumiputra* employment policies. Therefore, the migration into the cities did not necessarily lead to the availability of cheap labor. In this respect, Malaysia shows a marked contrast with other ASEAN countries like Indonesia and Thailand.

II. Rubber and Oil-palm Cultivation and the Protection Policy for Smallholders

1. Organizations for the Protection of Smallholders

In the years prior to the independence of Malaysia, there were no protection policies taken by the government for small-scale farming in Malaysia, except for rice farming. Smallholders of commercial crops had to operate their holdings through their individual efforts. However, three important government agencies, namely the Federal Land Development Authority (FELDA, 1956), the Rubber Smallholders' Development Authority (RISDA, 1973) and the Federal Land Consolidation and Rehabilitation Authority (FELCRA, 1966) were established. Therefore it is necessary to analyse the changes of the policies adopted by these three organizations, and also the contents of the current projects, in order to understand the problems surrounding current rubber and oil-palm farming.

Table 4 shows the planted acreage of rubber classified according to estates and smallholdings. Smallholdings are divided into areas operated by FELDA, FELCRA, RISDA, and four other categories. We can see from this Table that the ratio of the planted acreage for private estate exhibited a gradual decrease and the area itself also decreased, while the planted acreage for rubber by smallholders increased. It is also characteristic that there was a sharp increase in the ratio of the area operated by the three organizations (FELDA, FELCRA, and RISDA). Small scale farming in Malaysia can be classified under two categories:

- (1) "Organized farmers," who are limited in their land ownership and placed under the control and monitoring of these organizations.
- (2) "Traditional farmers," who manage their farms on their own based on a free market system (See Table 5).

As seen from Table 5, a comparison of the figure in 1960 with that in 1980 shows that the area operated by the organized farmers increased by about forty times. As explained in the note, it is difficult to determine which other organizations controlling farmers have been involved in the category of organized farmers besides those under the FELDA control, but it is assumed that most of the FELCRA farmers and part of the RISDA belonged to the category of organized farmers.

The case of oil-palm smallholders will be considered (See Table 6). Most of the areas operated by the states and those by RISDA and ESPEK that employ the same management system as that of private estates have been excluded from category of "organized farmers." The areas operated by FELDA and FELCRA, therefore, would be equivalent to the planted acreage by the organized farmers.

Table 4. Cultivated Area of Rubber in the Estate and Small-Scale Farming
(unit: 1,000 ha)

	1975		1980		1984	
	area	%	area	%	area	%
Private estate	563.3	33.3	491.6	29.0	443.6	26.3
Small-scale Farming	1,131.6	66.7	1,205.7	71.0	1,241.0	73.7
FELDA	105.1	6.2	168.9	9.9	187.5	11.1
FELCRA	26.1	1.6	41.8	2.5	56.8	3.3
RISDA	554.0	32.7	605.0	35.6	653.3	38.7
Others	446.4	26.3	390.0	23.0	343.4	20.6
Total	1,694.9	100.0	1,697.3	100.0	1,684.6	100.0

Table 5. Small-Scale Rubber Farming Areas according to Production Systems in Malaysia
(unit: 1,000 ha)

Production Systems	Planted Area		Change in (%)
	1960	1980	
Estates	782.9	491.6	- 37.2
Traditional Farmer	753.8	805.9	+ 6.9
Organized Farmer	11.8	399.8	+ 3,388.0
Total	1,548.5	1,697.3	+ 9.6

Source: Lim Sow Lin, "Marketing Malaysian Rubber: An Approach by Sector," "Rubber Research Institute of Malaysia. Malaysia Proceeding of the International Rubber Marketing Conference, Kuala Lumpur, 1983, p. 348.

Note: It is unknown which project areas by the government other than FELDA's were involved in the number of organized farmers.

Table 6. Planted Areas of Small Oil-Palm Farming by Private Estates, Governmental Organizations, and Individual Small Farmers (Malaysia Peninsula)

Production Systems and Governmental Organizations	1980 (%)	1984 (%)	1985 (%)
Private Estates	494,461 (53.5)	613,965 (51.3)	644,522 (50.0)
Governmental Organizations	351,045 (38.0)	430,028 (36.0)	475,210 (36.8)
FELDA	306,593 (33.2)	375,159 (31.4)	397,722 (30.8)
FELCRA	20,311 (2.2)	29,329 (2.5)	49,814 (3.8)
RISDA/ESPEK	24,141 (2.6)	25,540 (2.1)	27,674 (2.1)
State Areas	35,898 (3.9)	54,942 (4.6)	60,370 (4.7)
Small Farming Plantations	42,625 (4.6)	97,065 (8.1)	111,806 (8.6)
Total	924,029 (100.0)	1,196,000 (100.0)	1,291,908 (100.0)

Source: Palm-Oil Registration and Licensing Authority, Malaysia, Palm Oil Statistical Handbook. Supplement, Kuala Lumpur, 1985, pp. 2, 3. The figures in 1980, however, were from *Ibid.*, 1980, p. 5.

Table 7. The Areas Settled and Developed by FELDA Project Classified according to States and Crop (as of 1987)

(unit: ha, family)

Province	Number of Projects	Oil-Palm	Rubber	Others	Total (%)	Number of Settlements Completed	Number of Families that Settled (%)
Pahan	164	225,450	50,608	8,416	284,474 (39.8)	109	35,586 (40.5)
Johor	80	108,908	28,203	3,480	140,591 (19.7)	65	20,507 (23.3)
Segeri-Sembilan	51	23,307	68,588		91,895 (12.8)	48	13,587 (15.4)
Torengas	26	35,717	5,660		41,377 (5.8)	20	5,554 (6.3)
Kelantan	22	29,188	2,499		31,687 (4.5)	16	1,725 (2.0)
Perak	17	19,041	12,324		31,365 (4.4)	10	4,161 (4.6)
Kedah	11	283	12,463	1,123	13,869 (1.9)	7	2,689 (3.1)
Selangor	7	9,010	3,483		12,493 (1.7)	47	2,097 (2.4)
Perlis	3	—	1,985		5,980 (0.8)	5	712 (0.8)
Malacca	5	119	4,746	3,995	4,865 (0.7)	3	1,328 (1.5)
Sabah	35	46,882	—	9,133	56,015 (7.8)	3	—
Sarawak	1	594	—		594 (0.1)	—	—
Total	422	498,499	190,559	26,147	715,205 (100.0)	333	87,946 (100.0)
(%)		(69.7)	(26.7)	(3.6)	(100.0)		

Source: Prepared from FELDA's Annual Report 1987, p.10, Table 6, p. 12. The number of settled families, however, was taken from FELDA Annual Report 1984.

Note: Three crops of cocoa, coffee, and sugar cane

The planted acreage of oil-palm operated by the estates increased by 1.3 in Peninsular Malaysia from 1980 through 1985 while the acreage operated by "organized" and "traditional" smallholders increased by about 1.51. The planted acreage operated by public enterprises, including the areas operated by the states and also by RISDA/ESPEK, increased by about 1.47. Though the ratio of the acreage operated by the organized farmers in the total oil-palm planted acreage slightly decreased from 35.4% in 1980 to 34.6% in 1985, the acreage operated by traditional smallholders, however, the area of mini-estates operated by RISDA is included.

Generally speaking, organized farmers played an increasingly important role in rubber and oil-palm cultivation after 1985, and it is estimated that the acreage they operate is now accounting for more than 35% of the total area being planted by all of the smallholders. In view of the important role played by these organized farmers, what is their relationship with FELDA, RISDA, and FELCRA, and how could it be compared with that of the traditional smallholders? The relationship between the "organized farmers" and FELDA and its characteristics will be described.

2. Role of FELDA and New Developments

The economic objectives of FELDA were to eliminate landless farmers in rural areas and increase the income of the farmers along with preventing the dissemina-

Table 8. Average Income Levels of Settled Families
(unit: ringgit)

	Rubber	Oil-Palm
1983	484	765
1984	505	1,231
1985	421	886
1986	405	376
1987	530	522

Source: From yearly versions of FELDA, Malaysia *Annual Report*.
 Note: We notice some differences in the acreage given to FELDA settlers in the range of 8 to 14 acres, depending on project areas where they steeled. In this table, it is also possible that rubber and oil-palm farming were mixed and operated at the same time. The average acreage cultivated by most settler in rubber and oil-palm farming was typically about 10 acres per settler.

tion of communist ideology by settling farmers in 10 to 12 acres of reclaimed land.⁵ FELDA underwent the following three major stages of development:

The first stage covered the period of 1956–60, when FELDA's functions were limited to the supply of funds for land development projects that the State Development Corporations had planed in each state. In this first stage, the settlement projects were not successful because they depended too much on individual efforts of the settlers to open land.

In the second stage, FELDA was reorganized under the Ministry of National and Rural Development in 1961 to implement these settlement projects. From 1961 until 1972, FELDA's scope of activities expanded and involved not only the cultivation of rubber and oil-palm, but even the processing, marketing and trade of the products. FELDA operations expanded so much that FELDA became the most influential organization for Malaysian farmers.

During the third stage (the years after 1972). FELDA diversified its operations into agro-business including transportation, processing, refining, strage, and trading of the products, in addition to the development of rubber and oil-palm plantations. In the following paragraphs, the achievements realized through FELDA's activities after the second stage are based on statistical data in order to analyse the scale of its influence on Malaysian farmers as well as on agriculture in general.

Table 7 shows the number of projects, the settlement acreage, and the number of settlers' families in each state. The table clearly shows that the State of Pahang had the largest settlement area, followed by Johore and Negeri-Sembilan. Considering that the total area of Negeri-Sembilan state is smaller than that of Perak and Selangor it is obvious that the level of development of the FELDA schemes in Negeri-Sembilan was extremely high compared with that of other states. If we examine the crops listed in the table, oil-palm accounted for almost 70% of the acreage and exceeded that of rubber, approximately in 1970 since the planted acreage of rubber used to be higher previously.

Table 9. Population Movement in and between States (Statistics by FELDA) (1957-1976)

State	Total Families that Settled	Families that Moved Inside States		Families that Moved between States	
		(unit: family)	(%)	(unit: family)	(%)
Johor	8,783	8,384	95.5	399	4.5
Kedah	1,506	1,451	96.3	55	3.7
Malacca	1,084	982	90.6	102	9.4
Negeri-Sembilan	4,591	3,627	79.0	964	21.0
Pahang	13,380	4,428	33.1	8,952	66.9
Perak	2,441	2,210	90.5	231	9.5
Selangor	1,774	1,368	77.1	406	22.9
Trengganu	1,830	1,625	88.8	205	11.2
Total	35,389	24,075	68.0	11,314	32.0

Source: FELDA, Settlers Census 1976 and additional information obtained from FELDA (1978).

The number of households involved in the settlement projects sponsored by FELDA, was about 88,000 households as of 1984. This figure, however, represented the number of families involved in the 289 schemes where settlement had already been completed. If we take into account the 133 schemes where settlement had not yet been completed, it appears that the number of families may exceed 100,000. According to the Annual Report issued by FELDA in 1987, the total number of settlers' families was 106,510. In the state of Pahang, where the largest number of families settled, the number accounted for 40.5% of the total settlements. The percentage was proportionate with the scale of the developed areas so that a larger number of families settled in the large areas.

The income of these settlers' families will be explained (See Table 8).

The income fluctuated each year along with the fluctuations of the price of rubber and oil-palm. When the income did not reach the level guaranteed by FELDA sometimes during 1985 and 1986, FELDA had to make up for the deficit. However, the prices have recovered and the farmers are now earning a high income. As seen from Table 8, oil-palm more than rubber is supplying a high income. The average income reached 765 ringgit in 1983 and increased to 1231 in 1984. The farmers producing oil-palm are earning a much higher income than farmers in general, and their income is comparable to that of factory workers in the cities or ordinary office workers.

The influence of the FELDA schemes on migration will be examined. As described earlier, FELDA mainly aimed at absorbing the excess of population in the rural areas. Tables 9 and 10 show the nationwide trend of migration. The statistical data for the years 1957 through 1976 showed that 32% of the families had moved from one state to another, of which 70% were relocated in the settlements of Pahang. This inflow of people was due to the fact that since the state of Pahang had the lowest population density it accepted settlers from other states

Table 10. Population Movement in and between States (Statistics by FELDA) (1977 – 1983)

State	Total Families that Settled	Families that Moved Inside States		Families that Moved between States	
		(unit: family)	(%)	(unit: family)	(%)
Johor	10,837	10,811	99.8	26	0.2
Kedah	687	687	100.0	0	0
Kelantan	748	748	100.0	0	0
Malacca	241	205	85.0	36	15.0
Negeri-Sembilan	8,006	7,294	91.1	712	8.9
Pahang	18,503	12,883	69.6	5,620	30.4
Perak	456	456	100.0	0	0
Perlis	454	454	100.0	0	0
Selangor	315	315	100.0	0	0
Trengganu	2,800	2,792	99.7	8	0.3
Total	43,047	36,645	85.1	6,402	14.9

Source: From Zaabah Hj. Mohamad and Addnan Din. "Internal Migration and the (FELDA Experience)," Land Development Digest, Vol. 6, No. 2, 1984, FELDA Institute of Land Development, p. 32.

in response to the request of the central government. The states of Selangor and Negeri-Sembilan, were also accepting these settlers to a considerable extent.

According to the statistics of 1977 – 83, the ratio of the population moving between states was very low compared with the years 1957 – 76. The statistics also indicate that the number of states which refused to accept settlers from other states increased to five, and the number of people who left these five states and settled into the states of Pahang and Negeri-Sembilan more than doubled. It appears that it became increasingly difficult for these states to accommodate any further inflow of settlers due to the decrease of the available land area.

As mentioned previously, the achievement of FELDA were as follows:

- (1) Increase of the planted acreage for oil-palm.
- (2) Promotion of a new type of farmers who earned a high income.
- (3) Migration of the labor force between rural communities.

Though Tables 9 and 10 contain only numerical data concerning the settlers' movements in and between the states, there are some indications of the orientation of the industrialization policies. If such large FELDA settlement schemes had not been implemented, in spite of the industrial development, there would have been a large number of unemployed people in the cities. In this sense, the large scale of migration in the rural sector promoted by FELDA was instrumental in absorbing the potential or nominal unemployment, and contributed to the development of manufacturing industries in the urban sector.

The changes in the land ownership of FELDA settlers will be examined.

In the beginning, FELDA drafted a contract to allow the settlers to operate a definite area of rubber land and kampung land, and to guarantee that they would

Table 11. The Number of the Project by the FELDA Classified according to the Type of Land Ownership, Crops. The Number of Families Settled and Planted Acreage (as of 1987)
(unit: family, ha)

Crops	Project Pattern Based on Land Ownership		Total (%)
	Private Ownership or Cooperative Ownership	Profit Sharing Method (FELDA ownership)	
Oil-Palm			
the number of projects	136	142	278
families settled	60,643	4,632	65,275
planted acreage	290,992	207,507	498,499 (69.7)
Rubber			
the number of projects	100	28	128
families settled	38,284	2,444	40,728
planted acreage	139,734	50,825	190,559 (26.6)
Cacao			
the number of projects	1	13	14
families settled	—	447	447
planted acreage	187	20,091	20,278 (2.8)
Sugar cane			
the number of projects	—	2	2
families settled	—	447	447
planted acreage	—	5,118	5,118 (0.7)
Coffee			
planted acreage	—	751	751 (0.1)
Total			
the number of projects	237	185	422
families settled	—	—	—
planted acreage	—	—	715,205 (100.0)

Source: From FELDA, Annual Report, 1987, Table 5, Table 8.

be entitled to land ownership at the time when paid back the expenses incurred for development. In this way FELDA exerted a benevolent control. However in the case of ownership, equal inheritance, that was guaranteed in the Islamic or customary laws, was not recognized. Thus the contents of the land ownership and the inheritance rights of the FELDA schemes were essentially different from the rights that were granted to the traditional smallholders. Under a FELDA contract, only one of the settler's children inherited the ownership. The settlers required the permission from the state government of FELDA to buy or sell their own land. When they settled, they were forced to sign the contract and accept the contents concerning the land ownership and its inheritance.

When FELDA introduced the "block system" in to oil-palm settlements in 1975,⁶ at the same time, private land ownership was denied to the settlers and only the land ownership granted by the cooperative (Hak Milik Tanah Koperasi) was recognized. In the "block system," the control of the settlers was reinforced and egalitarian income distribution to the settlers was implemented.

FELDA introduced a sharing system in 1985, which was modeled after that of FELCRA. With this system, the control of the settlers was reinforced and was closer to the management system of private estates. The characteristics of FELDA's sharing system will be examined.

- (1) Each scheme had to be registered in accordance with company laws (Companies Act).
- (2) A settler was now called a "participant." He was allowed to own 10 shares of stock in proportion to the area operated based on one share per acre. No other private ownership than that for the kampong land where he currently lived was recognized.
- (3) A participant was paid a wage, dividend, and bonus.
- (4) The FELDA's project became a business undertaking run on a self-paying system basis.

As a result of the introduction of the sharing system, there were three different types of land ownership, namely private ownership, cooperative ownership, and FELDA ownership, in the FELDA projects (Table 11). Though it is difficult to distinguish between the private and cooperative ownership in this table, all of the 136 oil-palm schemes belonged to the cooperative ownership system while the rubber settlements belonged to the private ownership system. To sum up, the private ownership system accounted for 90 schemes (21.3%), the cooperative ownership system for 147 (34.8%), and the FELDA ownership for 185 (43.8%).

In the process of change of land ownership, that is: private ownership or cooperative ownership (block system) → FELDA ownership (profit sharing system), the Islamic fundamentalist movement (dakwah movement) became popular among the settlers in the early part of the 1980s and exerted a strong impact on them. As a result they protested and requested the right to private ownership for the land where they settled. To avoid that this movement develops into a political problem, the government decided to grant the same private ownership right as that for the settlers in the rubber schemes for all the settlements, and decided to leave all the areas that had not yet been settled for private management. This decision implied that as of 190 all the schemes under the control of FELDA fell into two types as follows: in one type limited private ownership was allowed, while in the other type the schemes were run by private companies employing the settlers who worked just for wages.

With the introduction of the "block system," the "profit-sharing system," and other related systems by FELDA, the rights of smallholders to own their own land as well as their independence in farm management were being curtailed. The smallholders and settlers became mere farming workers. Against this background, the estate-type management system was beginning to take hold.

In the "National Agricultural Policy" (NAP) enacted in 1984, it was stated that the introduction of either the estate system or the cooperative joint management system would be desirable for rubber, oil-palm, and even rice farming. However, NAP reconfirmed the government policies which had so far supported the small-

holders under FELDA, RISDA and FELCRA. It is also worth noting that the basic tenet of the Malaysian Agricultural Policy is the promotion of a state-operated farming system, followed by the transfer to the private factor.

The recent structural changes in the FELDA schemes where by the settlers became wage laborers, are similar to the absorption of the farmers who abandoned their villages and migrated to the cities.

NOTES

1. As for the direct-sowing using machines in Tanjong Karang area, please refer to: My writing: "Rice Farming Techniques in Malaysia; field research reports of Tanjong Karang" compiled by Tsutomu Takigawa "Developments of Agricultural Technology and Farming Societies in Southeast Asia" (Tonanajia no Nogyogijutsu-henkaku to Noson-shakai) Ajia-keizai-kenkyujo (Institute of Developing Economies) 1987.
2. On hearing with Mr. Jagatheasan, research manager of Muda Agricultural Development Authority in August 1988, he mentioned this fact in an total explanation of the remarkable changes going on in that time Kedah rice farming.
3. Detailed explanations on the increase and background of the unused rice fields are given in the following books:
Akimi Fujimoto "Agricultural Policy Outline and the Development of Rice Farming" compiled by Kenzo Horii and Nobuyuki Hagiwara "Socio-Economic Changes in Contemporary Malaysia" (Gendai-mareisia no Shakai: Keizai-henyo) Ajia-keizai-kenkyujo (Institute of Developing Economies) 1988.
4. The relationship between the abandoned rice fields in Kelantan and the outflow of people to Singapore are detailed in my writing:
"The Developments of Rice Farming and Village Communities in the years 1970 – 80 in Malaysia" edited by Research Organization for the third World (Daisanseikai-nogyo-kenkyukai) "Changes of Agriculture in the third World" (Daisanseikai no Nogyohen-bo) Keiso-shobo 1984.
5. The history of FELDA is explained in my writing:
"Agricultural Policies in Malaysia; from the point of land settlement policies" [Study on the Problems of Agricultural Structure] ([Nogyokozo-mondai-kenkyu]) No. 113, April 1977.
6. Please refer to my writing for detailed analysis of the block system: "Income Distribution and Cultivation System in a FELDA oil-palm Scheme in Malaysian; field research reports on the block system" (FELDA Oiru-pamunyushokuchi ni okeru Saibai-soshiki to Shotoku-bunpai; Burokku-sisutemu no jittaichosa-jirei) [AJIA KEIZAI] Vol. XXIV, No. 8, August 1983.