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THE LYNDON B. JOHNSON AND SENDAYAN SCHEMES:

A STUDY IN THE COMMUNICATION OF INNOVATIONS

IN TWO SETTLEMENT SCHEMES IN

PENINSULAR MALAYSIA

A thesis presented in partial fulfilment
of the requirements for the degree of
Master of Arts in Geography at
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Amriah Bt. Buang

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Illustrations

P R E F A C E

Many developing countries believe in modernising farmers as a strategy to accelerate agricultural development. Most of their national leaders believe this is best accomplished by a body or authority entrusted with the powers necessary to effect rural change with less risk of failure than if modernisation was left largely to the initiative of the farmers themselves.

Frequently, land development has been effected by planned change programmes. Thus, vast areas of virgin jungle have been transformed into orderly agricultural tracts, neatly sown with the crops considered most suited to the needs of the economy. The agency concerned has often tolerated costly expenditure to ensure that land settlement schemes in such areas obtain the necessary inputs; the settlers have been carefully selected, the infrastructure provided, and other facilities and amenities properly cared for. There have been arrangements for the storing, processing and marketing of the produce and reasonable prices have been guaranteed. Reasonably trained personnel, technically capable in various aspects of agricultural and rural development, have been employed in managerial positions, and long range plans set in motion for education and training of the settlers. With these requisites fulfilled it was expected that the settlers would be on the secured road to modernisation and development.

Results, however, have often fallen short of the targets set by planners. Somehow benefits have not met costs, and change has been painfully slow and sporadic. Settlers have not changed their ways of thinking or their practices, and have often appeared unsatisfied with the development scheme.

This has been the experience of the Federal Land Development Authority of Malaysia (FELDA). Yet the terrain, soil and drainage of the areas chosen and the varieties of crops selected appeared excellent. There have been very few cases of delays in supplying fertilisers, insecticides and implements, or in transporting the settlers' produce to the processing centres and markets. Change agents have worked many extra hours to cope with the extra demands of their jobs. Where, then, did things go wrong?

The answer probably lies in one extremely vital element of a planned change programme - communication. (In this study, communication refers to the relationship between the initiator of the programme and the intended receiver.) Land development embodies innovations, the adoption

of which determines the success or failure of the programme. But before innovations can be adopted they must be communicated in the right manner to the receivers. When communication is reasonably efficient, smooth and perfect adoption usually follows suit. In essence and ceteris paribus, it is the mechanism of communication between the innovator or change agent and the receiver that decides the relative success or otherwise of the innovations.

This is the central theme of this thesis. Focusing on two settlement schemes of FELDA in West Malaysia with which country the writer is most familiar, the study seeks to find explanations for the only partial success of these experiments in planned rural development.

The work is a general survey of communication problems. The only point on which it probably differs from other studies of FELDA Schemes¹ is the emphasis it places on socio-psychological factors such as those pertaining to diffusion of message and leadership. The hypothesis is that human factors of communication and leadership play a predominant role vis-a-vis other essentially physical and economic factors, in the implementation of land settlement programmes.

Communication of innovations is a vast subject. To simplify an otherwise unmanageable task, the study borrows heavily from the work of Rogers and Shoemaker². Indeed, the greater part of the questionnaires were based on the generalisations which they list in their Communication of Innovations³ (refer to Appendix A of this thesis).

Three sets of questionnaires were used to obtain data for the empirical part of the analysis. They were for the settlers of the two Schemes (the intended receivers or adopters of the innovations), the management staff (FELDA officers at Scheme level representing the change agents) and the executive members of various settlers' organisations in the Schemes from whom the writer hoped to obtain insight into the settler leadership situation. The writer stayed for five weeks in Scheme

1. See for example Agarwal Singh 1961, Wikkramatelike 1965, Wan Leong Fee, 1969.
2. Rogers E.M. and Shoemaker F.F. 1971 Communication of Innovations.
3. Rogers E.M. and Shoemaker F.F. 1971 Appendix A, 346-385.

settlements, the first week being used to pre-test the settlers' question-schedule.

The settlers interviewed were those who had applied to participate in the Schemes and were heads of the family. For convenience sake, only settlers of Malay ethnic origin were interviewed. The sample populations were basically random, though care was taken to ensure that they were spatially representative of all three phases in each Scheme (see Figs. 3 and 4). Thirty-five settlers were interviewed in the Lyndon B. Johnson Scheme (population 325) and thirty-six in the Sendayan Scheme (population 335). These represented nearly eleven percent of the Malay settlers in the Schemes. Interviews usually had to wait until afternoon when the settlers took a rest after working in their rubber holdings in the morning. The time spent for each interview varied, but normally ranged from between twenty to forty-five minutes. The writer found almost all settlers very co-operative, patient and keen to answer the questions.

Management staff were required to complete their own questionnaires. Thanks to the co-operation of the managers, staff members in each Scheme were assembled in the Schemes' offices for a briefing by the writer on how to answer the questions. Response was satisfactory with 16 out of 22 staff members (72.7%) from the Lyndon B. Johnson Scheme and 14 out of 20 (70%) from the Sendayan Scheme returning completed questionnaires.

The response from executive members, however, was disappointing. This may have been because it did not prove possible to assemble them together for a briefing and the writer only had the opportunity to meet a few of them. The management staff helped by explaining questionnaire procedure to executive members on my behalf and several respondents who were in need of further clarification contacted the writer personally. Response from the two Schemes differed. Twelve answers were received from those who held key positions in the Lyndon B. Johnson Scheme's organisations, but only two were received from similar respondents in Sendayan.

The writer also set a specific question schedule for the village block leaders in the Schemes. (The village area in each Scheme was divided into blocks each consisting of twenty to thirty houses and headed by an appointed leader.) There were 12 block leaders in each Scheme, but only 20, or 83.3%, of them were available for interviews.

Altogether 135 people (71 settlers, 30 management staff members, 14 executive members of settler organisations and 20 block leaders) were formally interviewed and many informal interviews were held with

shopkeepers, school and kindergarten teachers, the clinic midwives and other individuals in the Schemes. During her visits to the primary schools in the Schemes, the writer requested pupils of one of the primary-six classes (average age is 12 years old) to write a short composition on what they thought of the Scheme in general. The purpose was to examine whether there was a discrepancy between the childrens' and the elders' overall view of their Scheme.

This study is only a preliminary survey of leading issues in communication of innovations which characterise, in Malaysia, planned land development programmes. Further research is warranted on the innovation item, the process of innovation diffusion, and the leadership situation.

The thesis is the product of contributions made by many parties and individuals. Nevertheless the opinions and deductions expressed are, of course, the sole responsibility of the writer.

CHAPTER ONEINTRODUCTIONLocation

The Lyndon B. Johnson (the name was given in commemoration of the visit of American President Lyndon B. Johnson to the Scheme on 30 October 1966) and the Sendayan Schemes are situated in the state of Negeri Sembilan on the west coast of Peninsular Malaysia (Fig. 1). Located somewhat southwest of the state, the Schemes are sixteen to eighteen miles away from Seremban, the State Capital, and fifty-eight miles from the Federal Capital, Kuala Lumpur. One can reach the Schemes by following the Seremban-Port Dickson Road, the Kuala Lumpur-Bangi-Sepang Road, or numerous minor internal roads. Thus, location-wise, the Schemes are two of the most accessible FELDA Schemes in West Malaysia.

Physical Characteristics¹

The Schemes are quite fortunate in being situated in the northern half of the gently undulating coastal plain of Negeri Sembilan (Fig. 4) for the soil in this region was mainly derived from igneous rock and sandstone which are superior to the rather lateritic soils of the southern half which derived mainly from shale. The eastern quarters of the Schemes are a part of a narrow piedmont which stands as a boundary zone between the coastal region and the main Malayan Range. This piedmont contains some excellent soil derived from igneous material and is highly suitable for rubber.

The area experiences high and evenly distributed rainfall which, when combined with high, even temperatures characteristic of the region, gives ideal conditions for the year round growth of perennial crops such as rubber. February is the driest month with an average rainfall of slightly over four inches.

The Schemes form part of a "full use region" where the original cover of tropical rainforest has been replaced by rubber. Tropical greenery has been maintained while full accessibility has been achieved.

1. Condensed from Donaldson and Liew .Kam Yew 1969 4 - 9

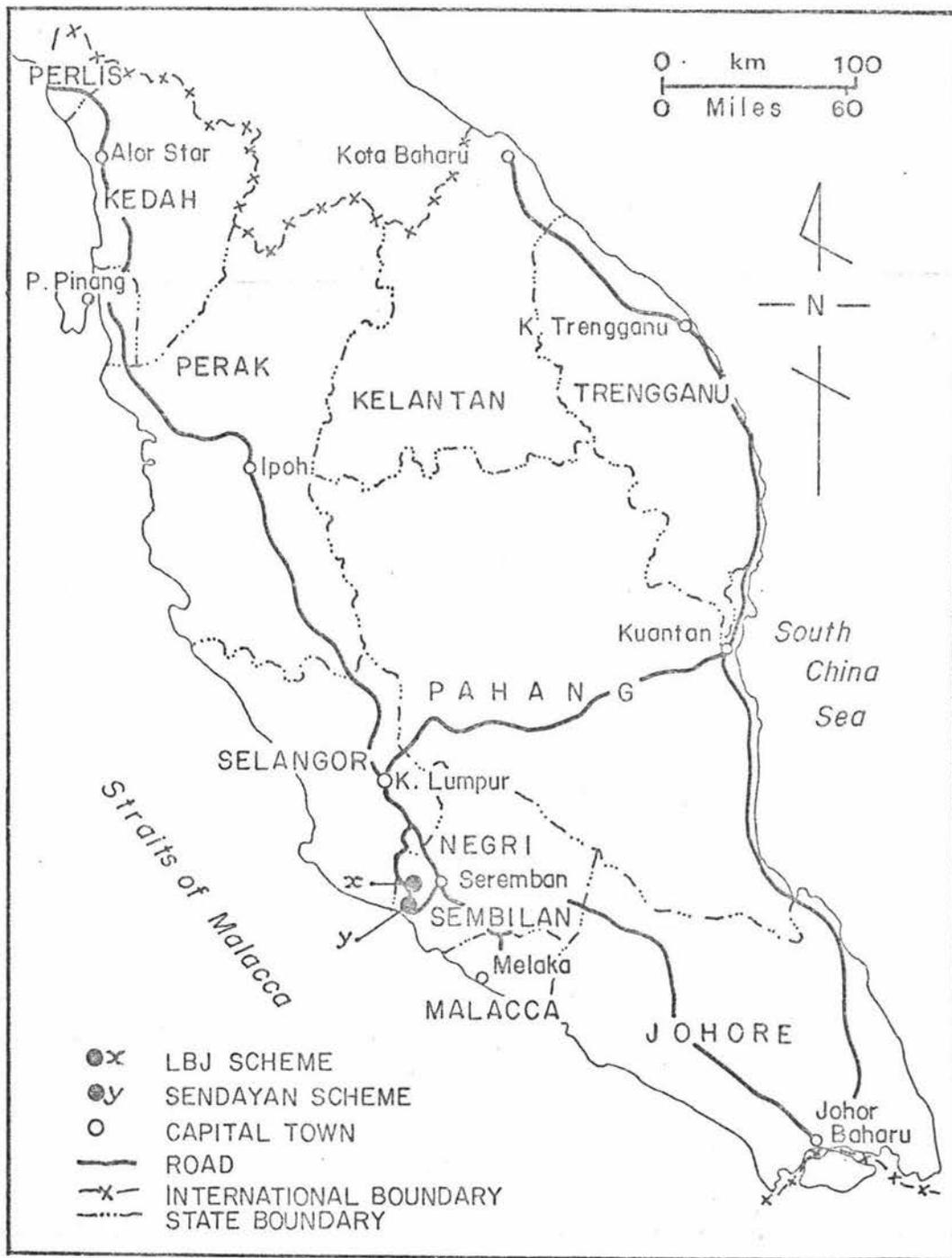


FIG. 1 WEST MALAYSIA : LOCATION OF THE SENDAYAN AND L.B.J. SCHEMES.

Establishment

Both Schemes were established at about the same time. Jungle clearing began at the end of 1960. This was carried out by contractors engaged by FELDA who also carried out land preparation before the planting of rubber. It was the responsibility of the contractors to maintain the planted area until settlers were brought into the projects. It took about fifteen months for these pre-settlement activities to be completed.

The development of the village and other associated infrastructure was a longer process. Initial access to the sites was usually by roads constructed by loggers and the main access roads were only completed in 1963. With the assistance of 10-foot contour form lines derived from areal photographs, village site and design were selected after felling. On completion of the village design, the construction of the internal (village) roads began, and as these were nearing completion, the construction of the settler houses started. Simultaneously, work commenced on a school, a clinic and the piped water supply. As soon as the construction of settler houses was completed, settlers were called in the Schemes.

Schemes' lay out

The Lyndon B. Johnson and Sendayan Schemes were divided into three phases (Figs. 2 and 3). The Schemes total area were as follows (Table I):

Table I: Acreages of Lyndon B. Johnson and Sendayan Schemes

	<u>L.B.J.</u>	<u>SENDAYAN</u>
Phase 1 Rubber	830	890
Phase 2 Rubber	930	1082
Phase 3 Rubber	<u>1503</u>	<u>1387</u>
<u>Total Rubber Area</u>	3263	3359
Village Area	320	284
Reserve	<u>1714</u>	<u>1640</u>
<u>Total Area</u>	<u>5297</u>	<u>5283</u>

Source: Lyndon B. Johnson and Sendayan Schemes' Offices.

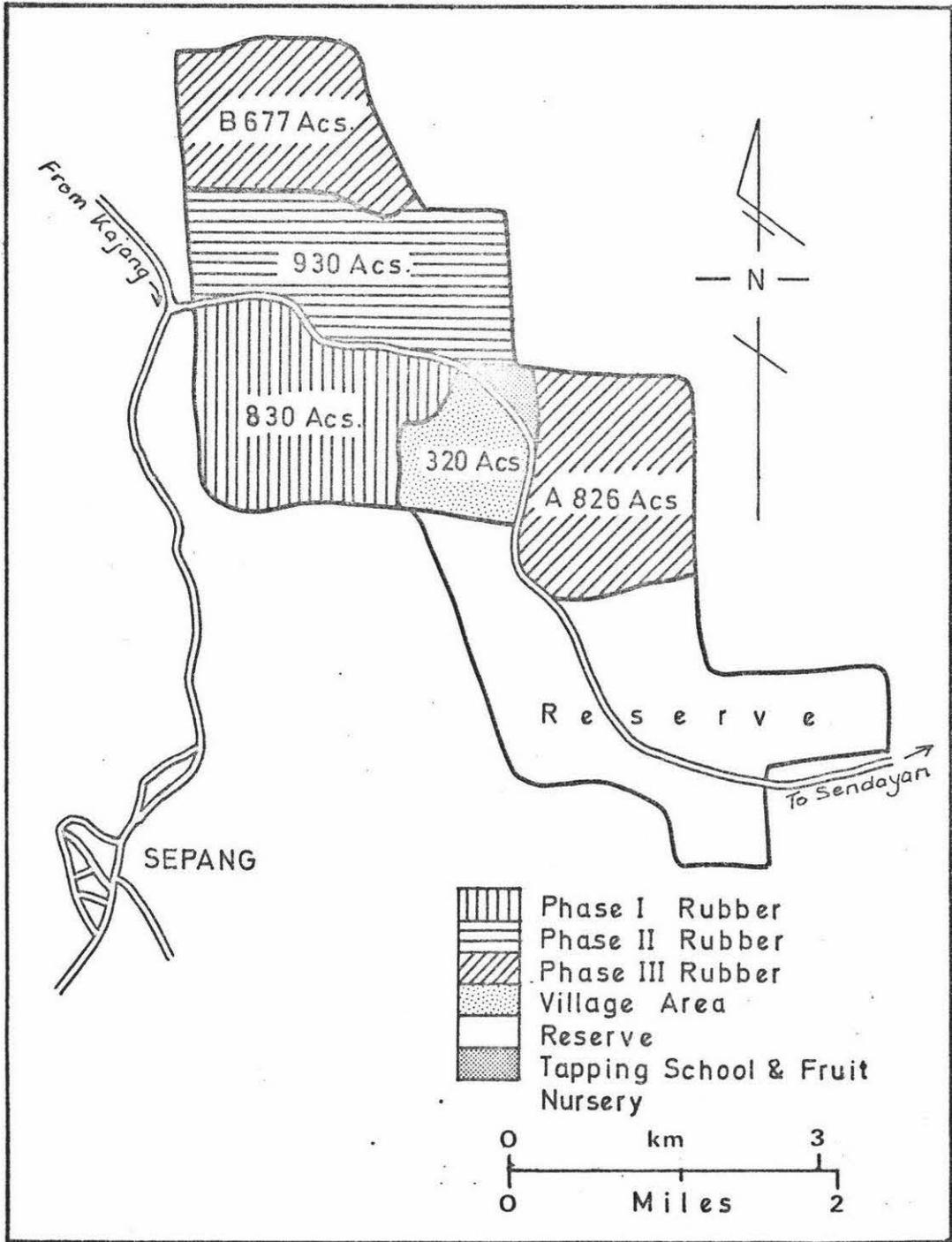


FIG. 2 L.B.J : SCHEME LAY - OUT

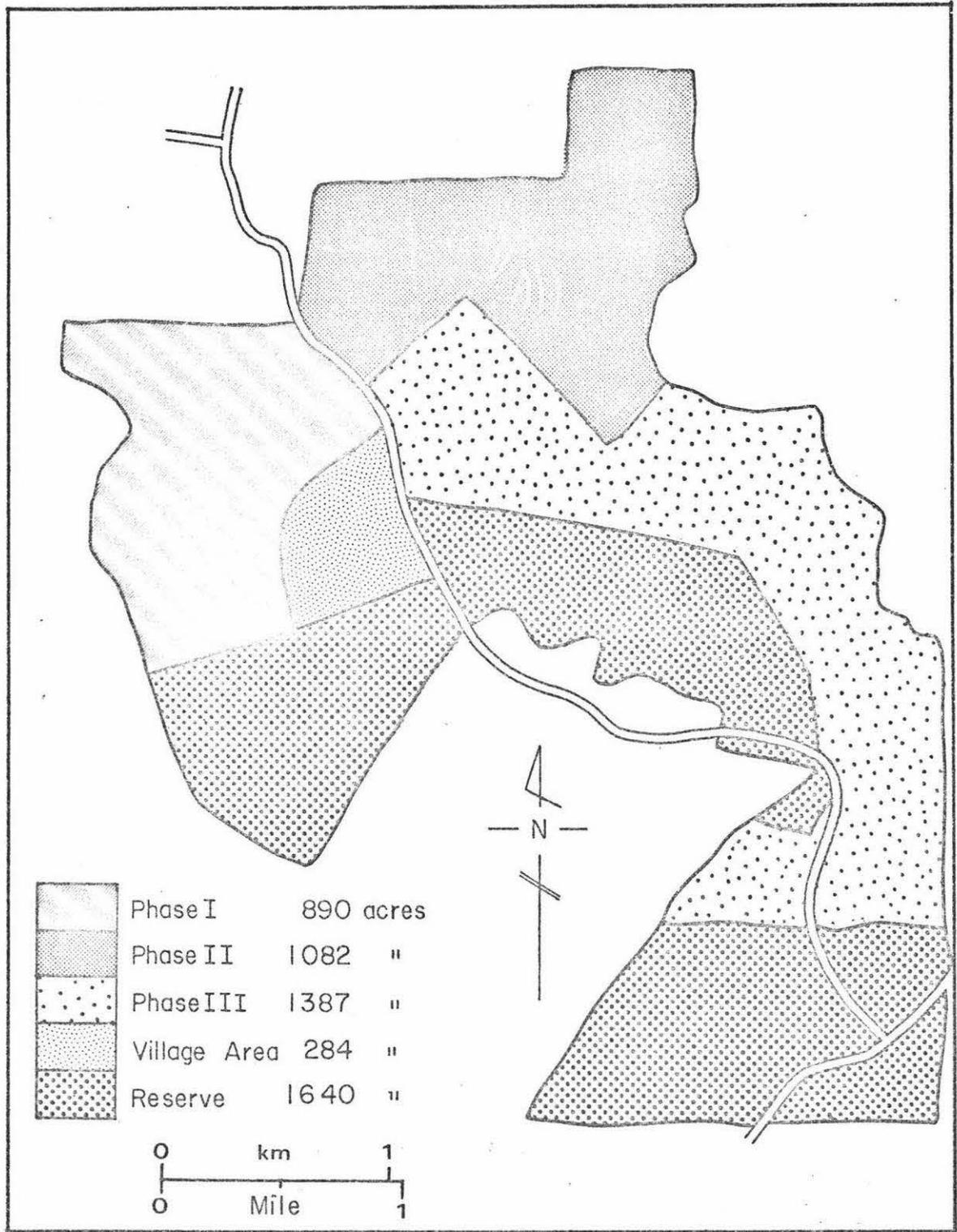
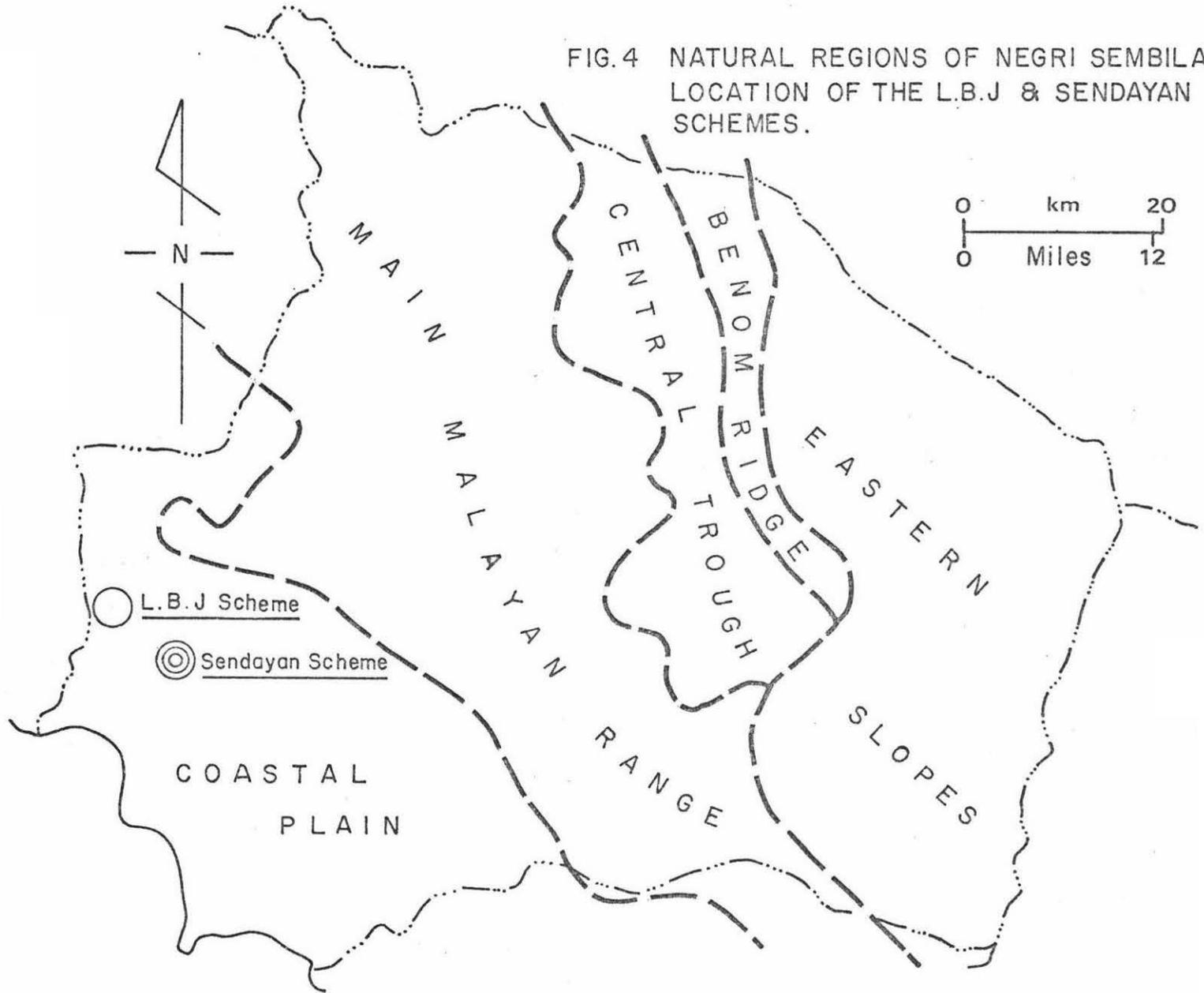


FIG. 3 SENDAYAN : SCHEME LAY - OUT.



FIG. 4 NATURAL REGIONS OF NEGRI SEMBILAN:
LOCATION OF THE L.B.J & SENDAYAN
SCHEMES.



The Village Area

All settlers, FELDA personnel and most other government employees (school teachers, police officers and the clinic midwives together with their respective dependents) reside in the village area. The settlers' house lots are divided into three phases according to the approximate year they entered the Schemes (Figs. 5 and 6).

Each Scheme village area has, besides a school, the clinic and piped water supply mentioned previously, a Co-operative provision shop, and FELDA provision shop, police station, bus service to Seremban and other adjacent villages, a mosque, a community hall, a public telephone and a reading room. Recreational facilities in the form of badminton and soccer areas are also provided (Figs. 7 and 8). Unlike the FELDA officers and other government employees in the Schemes, the settlers were not, at the time of the study, supplied with electricity.

The Management

FELDA Headquarters posted 22 staff members to the Lyndon B. Johnson and 20 to the Sendayan Schemes to organise and manage. Staff members comprise a manager, an assistant manager, supervisors, field assistants, settler development assistants, clerks, tapping supervisors, drivers and an office boy.

The personnel came from a varied educational and occupational background. Their basic education was not especially tailored to equip them for their present technically-biased tasks, but the majority of them had acquired the necessary knowledge and experience from attending specialised training courses. Tables II and III give further information on the educational and occupational background of the management staff in the Lyndon B. Johnson and Sendayan Schemes.

Table II: Lyndon B. Johnson and Sendayan: Educational Background of the Management Staff.

		<u>L.B.J.</u>	<u>SENDAYAN</u>
Stream:	Malay	11	6
	English	5	8
Highest Qualification:			
	Below primary 6	1	1
	L.C.E. ¹	3	1
	M.C.E. ² /S.P.M. ³	8	8
	Not stated	4	4
Total Respondents:		16	14

1. Lower Certificate of Education
2. Malaysian Certificate of Education
3. Siilil Pelajaran Malaysia - the Malay equivalent of M.C.E.

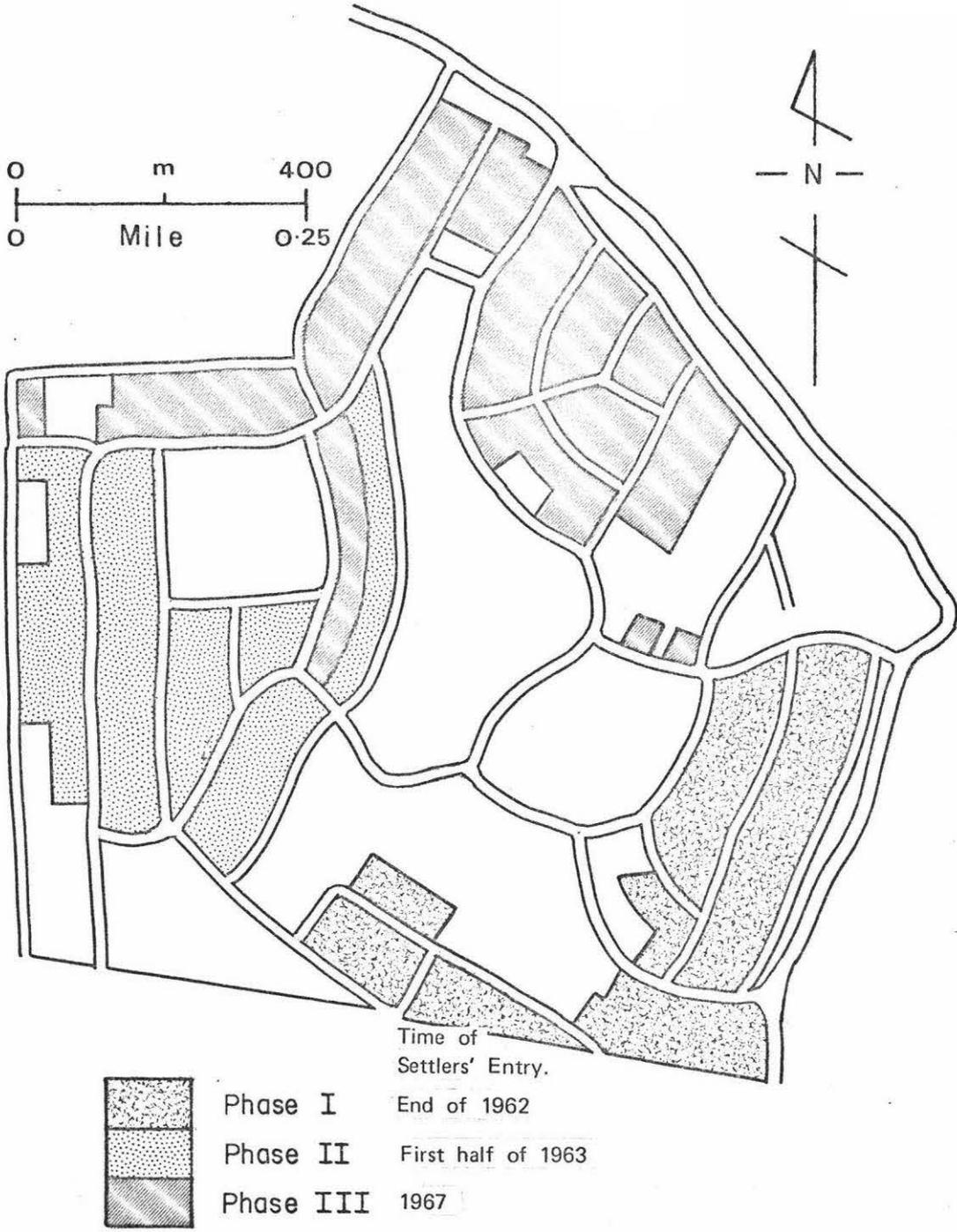


FIG. 5 L.B.J : DIVISION OF THE VILLAGE AREA



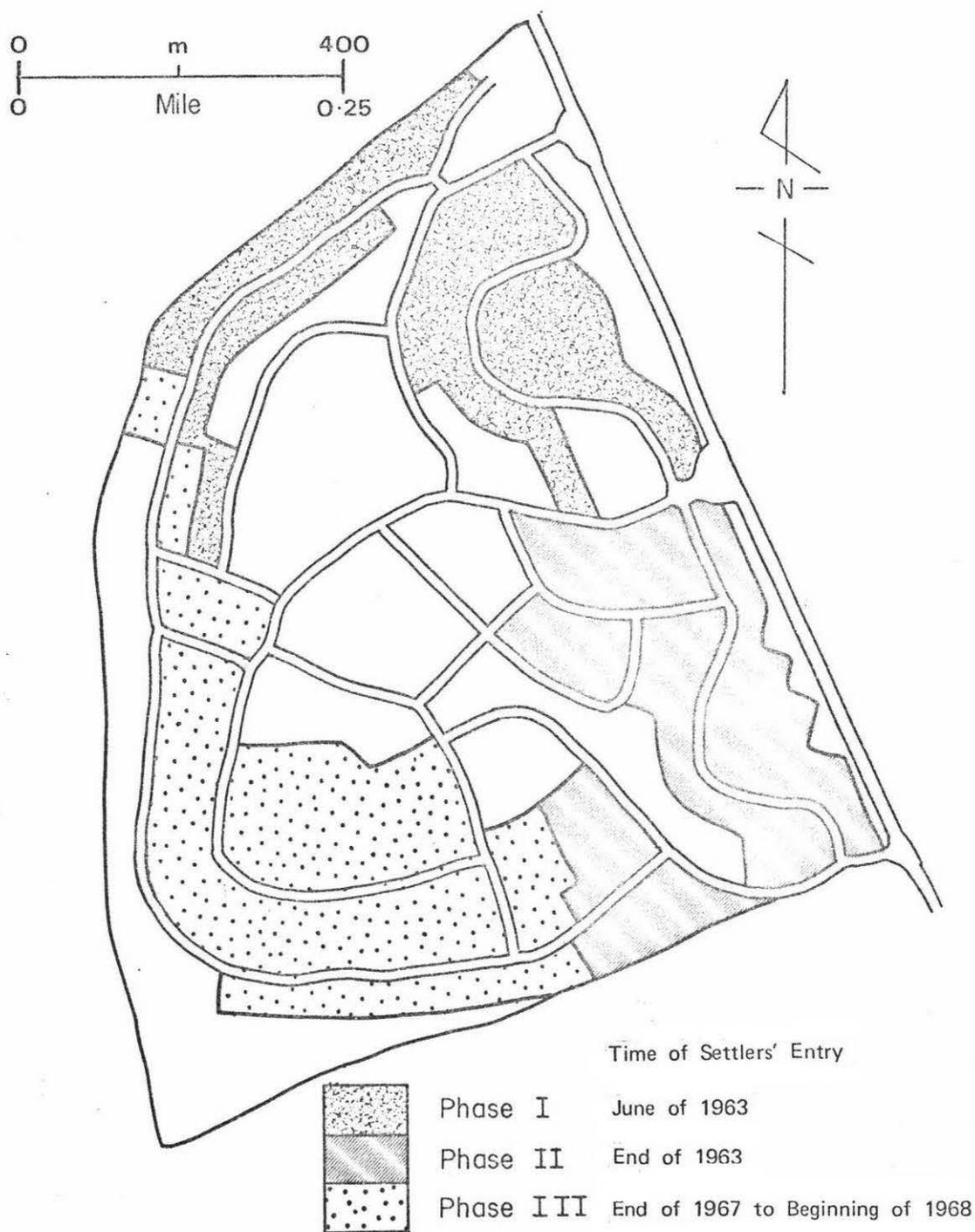


FIG. 6 SENDAYAN : DIVISION OF THE VILLAGE AREA.

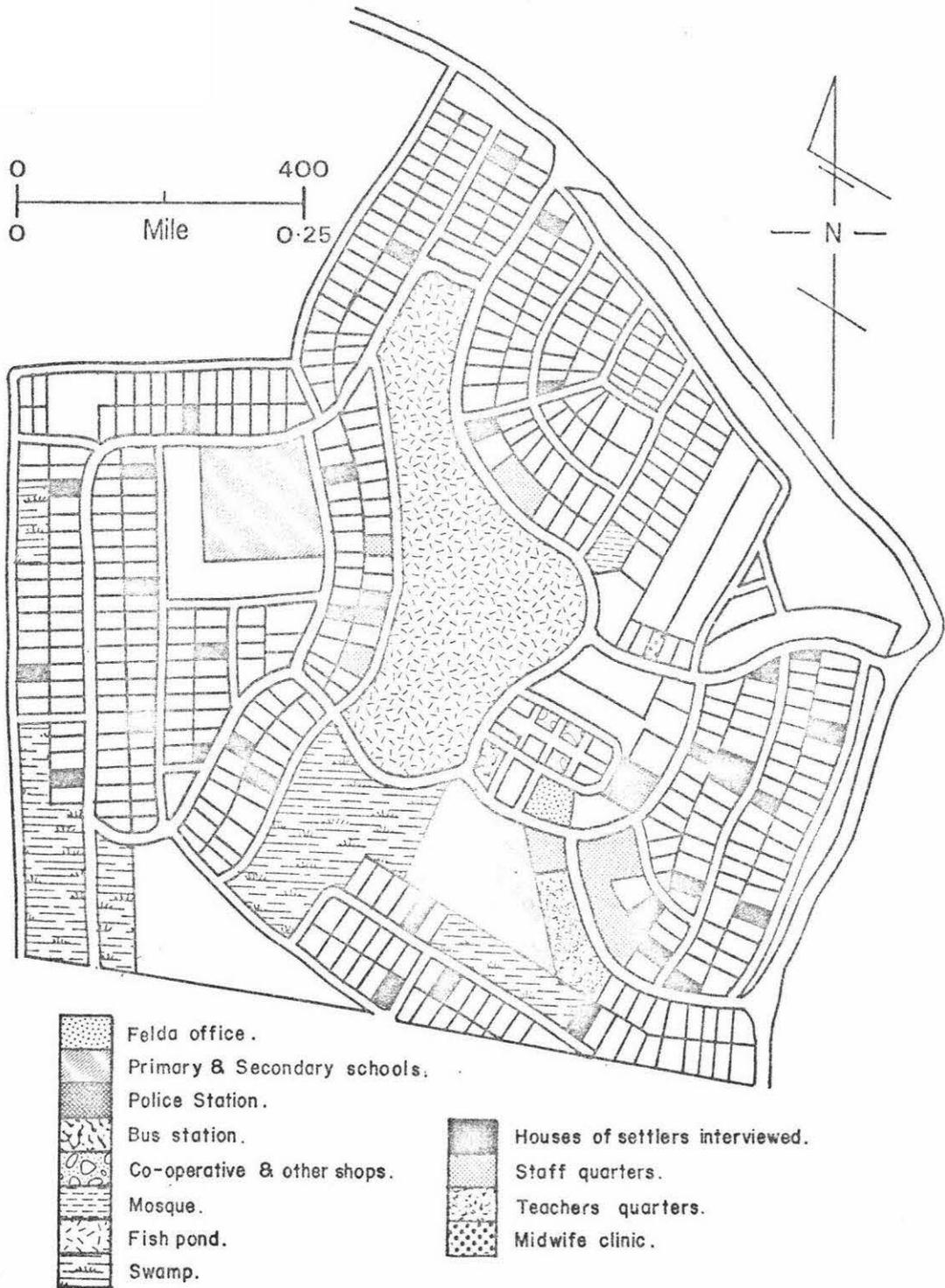


FIG. 7 L.B.J: THE VILLAGE AREA.



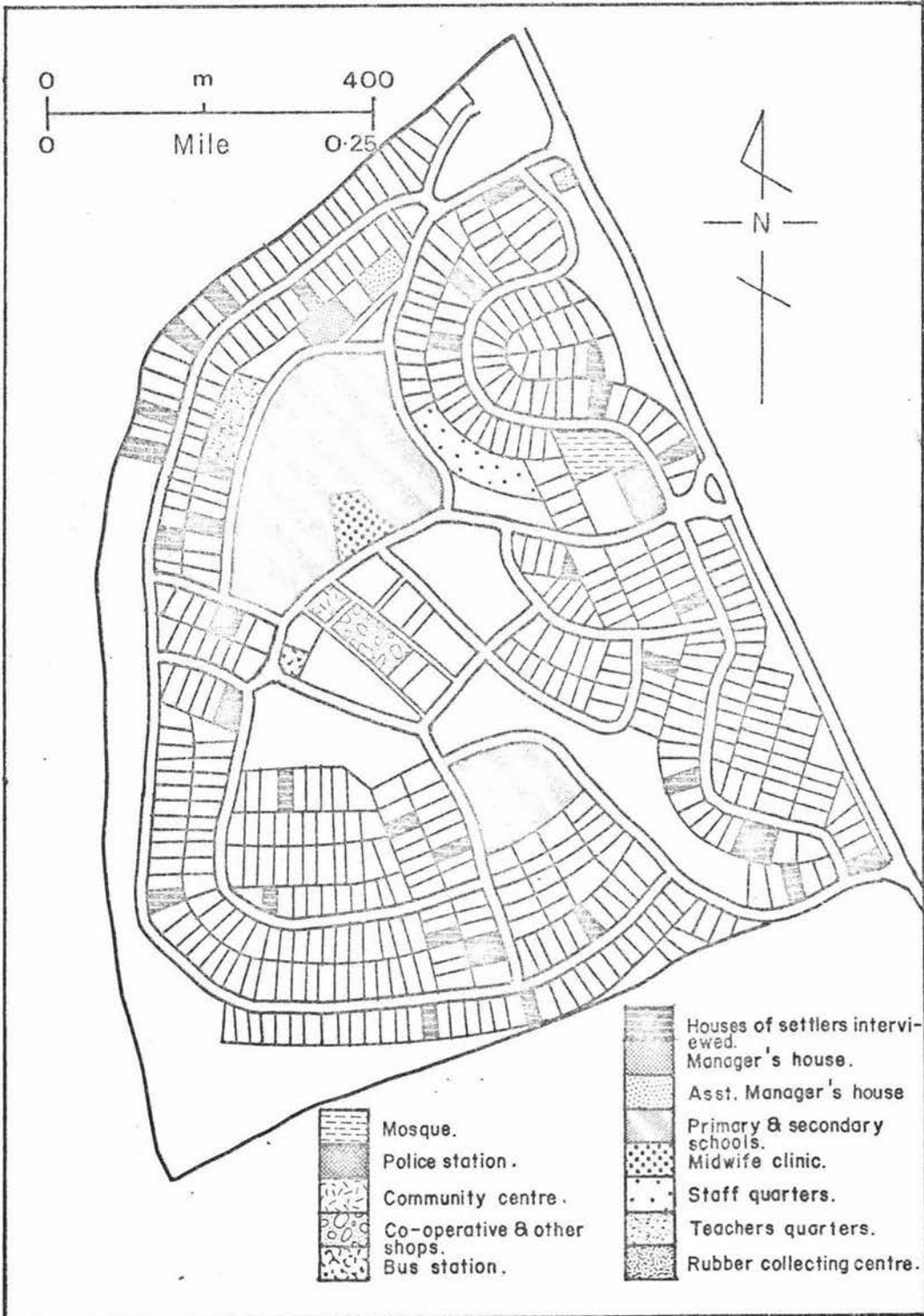


FIG. 8 SENDAYAN : THE VILLAGE AREA.

Table III: Lyndon B. Johnson and Sendayan: Occupational
Background of Management Staff.

	<u>L.B.J.</u>	<u>SENDAYAN</u>
School teacher	2	
Clerk	4	
<u>Activities related to rubber:</u>		
Tapper	1	
Advisor	1	
Estate photographer	1	
<u>Activities related to military:</u>		
Air traffic controller		1
British soldier		1
Royal Malay Regiment		1
<u>Commercial:</u>		
Salesman	1	
Insurance assistant		1
Domestic instructor	1	
Farmer	1	
No previous occupation	<u>4</u>	<u>10</u>
TOTAL RESPONDENTS	<u>16</u>	<u>14</u>

Table IV: Lyndon B. Johnson and Sendayan: Courses Followed by
Management Staff.

<u>NATURE OF COURSES</u>	<u>L.B.J.</u>	<u>SENDAYAN</u>
Social development	1	2
Rubber processing ^x	4	3
Oil palm processing		2
General agriculture	1	1
Market gardening	1	1
Basic courses for field assistant	1	
Settler development	2	
Book keeping	1	
Youth leadership	2	
Clerical	1	
Home economics ^{xx}	1	
Respondents who did not follow any course	<u>1</u>	<u>5</u>
TOTAL RESPONDENTS	<u>16</u>	<u>14</u>

Duration of courses: ^x 6 months to one year ^{xx} 2 years

Note: All courses were local

Each member of the staff functions according to his profession, although the work of some, such as the manager and the development assistants, could overlap due to the demand of the existing situation.

The tapping supervisors specialise in teaching, advising and demonstrating to the settlers the correct methods of tapping the rubber trees according to FELDA rules.

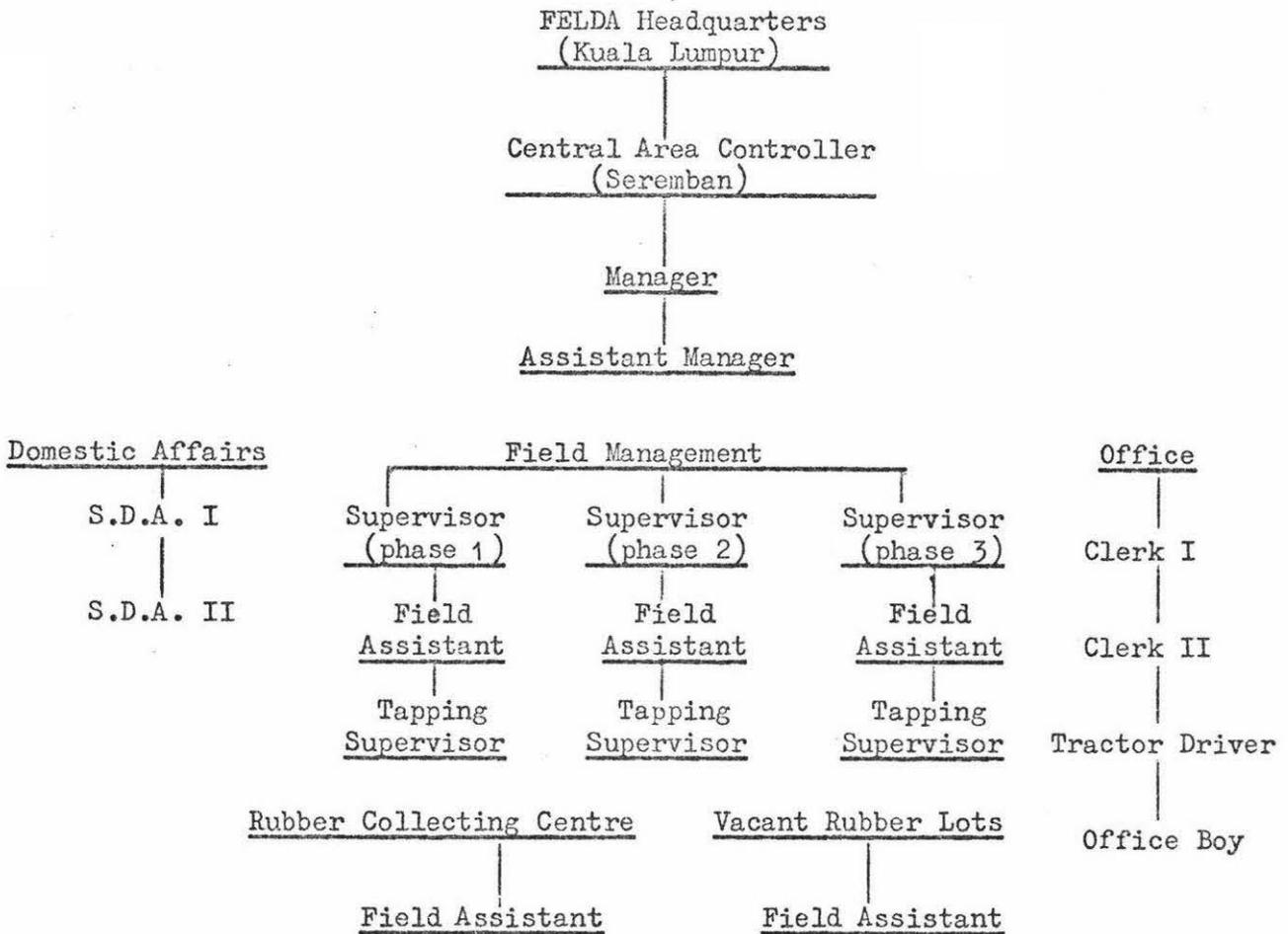
The scope of the field assistants' work is wider than that of the tapping supervisors. They assist in all matters relating to the maintenance of rubber holdings.

Supervising the work of the tapping supervisors and the field assistants is part of the responsibility of the supervisors of each phase. They have, in addition, to attend to the general upkeep of the dusun area (part of the reserve area which is allocated for the cultivation of fruit crops and vegetables).

Assisting the domestic affairs of the settler families is the job of the settler development assistants. These women S.D.A.s are responsible for advising the senior female members of the settler families on matters relating to home improvement, balanced dieting, family planning, hygiene and child caring. In essence, their role is to "brainwash" the housewives regarding the disadvantages of certain traditional values and practices.

Every Scheme has a rubber collecting centre - a factory-like place where settlers send their rubber latex daily for weighing, storing and marketing purposes. All these activities are in the charge of a field assistant.

The responsibilities of the manager obviously are the heaviest. All aspects pertaining to the Scheme management and development fall on his shoulders. Table V illustrates the structure of administration in the Lyndon B. Johnson Scheme, which is also representative of the one obtained in Sendayan.

Table V: Administrative Structure of the Lyndon B. Johnson SchemeThe Settlers

Almost all settlers in the two Schemes came from various districts of Negeri Sembilan itself, namely, from Rembau, Kuala Pilah, Lengguing, Labu, Salak, Rantau, Port Dickson and Nilai. In Lyndon B. Johnson there are 426 settlers of different ethnic origin. In Sendayan there are 433. The ethnic composition of the two Schemes is presented in Table VI.

Table VI: Lyndon B. Johnson and Sendayan: Settlers' Ethnic Composition

Scheme	Phase	Malay	%	Chinese	%	Indian	%	Total
L.B.J.	1	78	18.3	24	5.6	14	3.3	116
	2	102	23.9	5	1.2	17	4.0	124
	3	145	34.0	8	1.9	33	7.7	186
	Total	325	76.3	37	8.7	64	15.0	426
SENDAYAN	1	85	19.6	19	4.5	17	3.9	121
	2	119	27.5	8	1.8	16	3.7	143
	3	131	30.3	14	3.2	24	5.5	169
	Total	335	77.4	41	9.5	57	13.1	433

Source: Lyndon B. Johnson and Sendayan Scheme Offices.

(All percentages were separately computed.)

It is clear from the above Table that the predominance of Malays over the other major ethnic groups is characteristic of population composition in both Lyndon B. Johnson and Sendayan Schemes. The main reason is that rural Malays form the overwhelming majority of the "have-nots", and of the total rural population in West Malaysia.

Selection of Settlers

Settlers' entry into the Schemes was by selection. Suitability and need were the bases for selection of settlers as well as age, skills, family size, education and land ownership which were the criteria of assessment. The settlers' eligibility thus depended on the total points he scored from the Point Selection System shown in Table VII.

Table VII: Settler Point Selection System1. AGE: Total Points = 10

<u>Age</u>	<u>Points</u>	<u>Age</u>	<u>Points</u>
18	5	27	9
19	6	28	8
20	7	29	7
21	8	30	6
22	9	31	5
23	10	32	4
24	10	33	3
25	10	34	2
26	10	35	1
<u>Applicable only to ex-servicemen:</u>		36	1
		37	1
		38	1
		39	1
		40	1

2. FAMILY SIZE: Total Points = 5

<u>Number of children</u>	<u>Points</u>
5 and above	5
4	4
3	3
2	2
1	1

3. SKILLS: Total Points = 6

<u>Types of skill</u>	<u>Points</u>
Community participation	1
Experience in rubber	3
Other agricultural experience (e.g. rice farming)	1
Special skills (e.g. carpentry)	1

4. LAND OWNERSHIP: Total Points = 5

<u>Acres</u>	<u>Points</u>
0	5
1/2	4
1	3
1.1/2	2
2	1

Table VII: Settler Point Selection System (continued)5. EDUCATIONAL QUALIFICATIONS: Total Points = 4

<u>Qualification</u>	<u>Points</u>
Lower Certificate of Education and above	4
Form I - III	3
Standard I - VI	2
Adult Education Classes	1

Note: Those who own land above 2 acres are disqualified.

Maximum Points = 30

Source: FELDA Headquarters

Settlers' Age

Findings from the field showed that 18 (51.4%) of the 35 settler-respondents in the Lyndon B. Johnson Scheme fell within the 41 to 50 years age group; 7 (20%) were in the 51 - 55 years age group and 5 (14.3%) belonged to the 36 - 40 years age group. The corresponding figures for Sendayan were: 19 (52.8%) of a total 36 respondents, 5 (13.9%) and 7 (19.4%) respectively. The settlers' years of entry in the Lyndon B. Johnson Scheme were: 1962 for phase 1, 1963 for phase 2, and 1967 for phase 3. For the Sendayan Scheme the corresponding years were: early 1963, late 1963 and late 1967. This means that the majority of settlers in both Schemes who presently fell in the 41 - 50 years age group and 39 - 43 years age group were in the 29 - 28 years age group and 39 - 43 years age group about twelve years ago (the Schemes started in 1962). This also means that the majority of the settlers, upon selection, had scored from five to seven points out of the maximum 10. Figure 9 further illustrates the age structure of the settlers.

Settlers' Educational and Skill Background

Education-wise, all respondents from the Lyndon B. Johnson Scheme except one who studied Arabic, were Malay educated. The majority of them (28%) terminated at primary five and six levels. In the Sendayan Scheme two respondents obtained the Lower Certificate of Education while one held a School Certificate which is equivalent to the present Malaysian Certificate of Education. Further details are presented in Table VIII.

FIG. 9 SETTLERS AGE STRUCTURE FOR THE L.B.J. & SENDAYAN SCHEMES

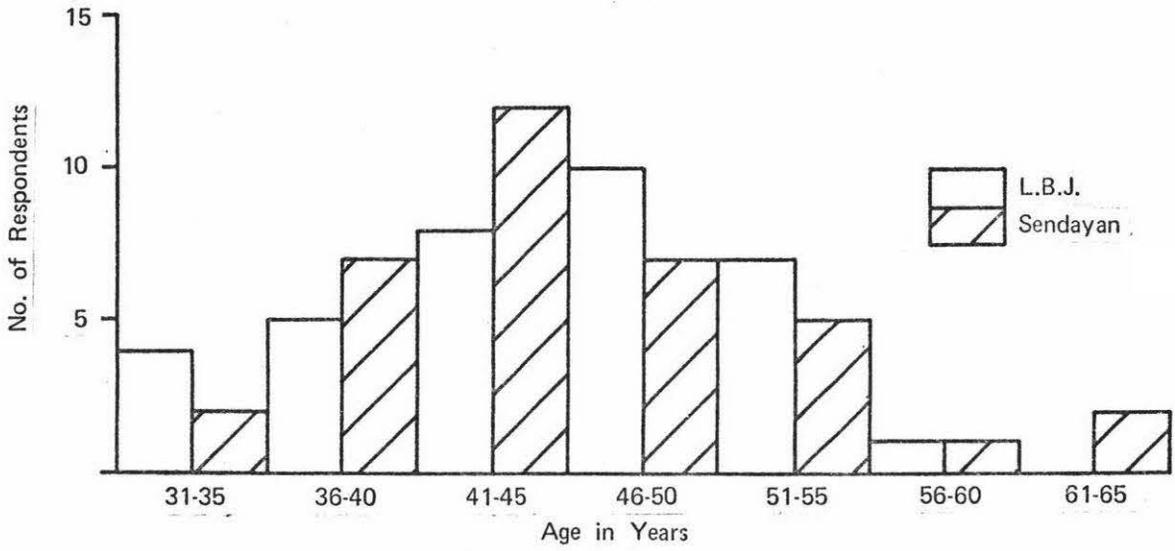


FIG. 10 L.B.J. & SENDAYAN SCHEMES: NO. OF CHILDREN PER SETTLER FAMILY

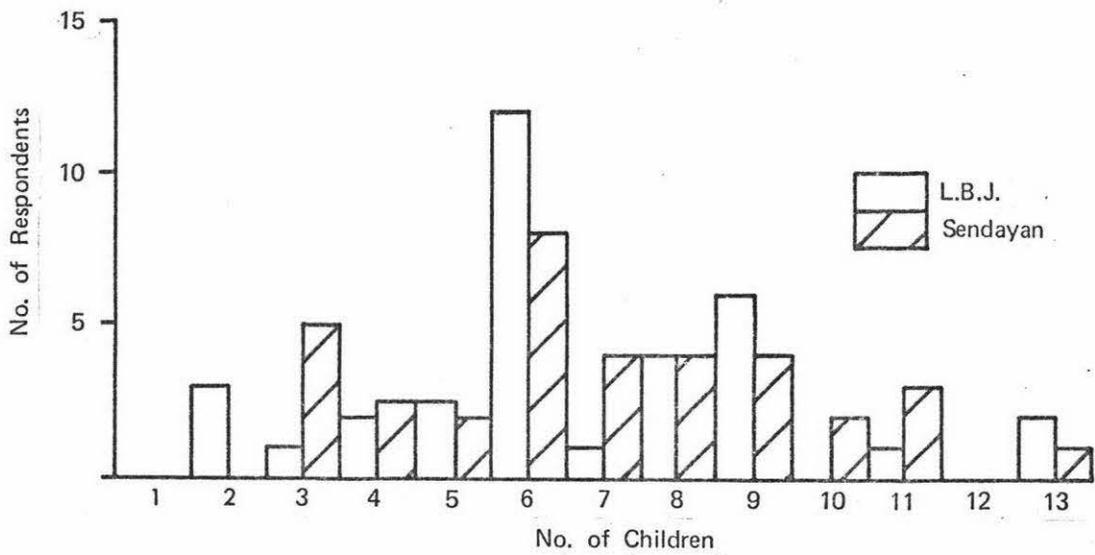


FIG 11.a SENDAYAN: AGE & SEX STRUCTURE OF SETTLERS CHILDREN

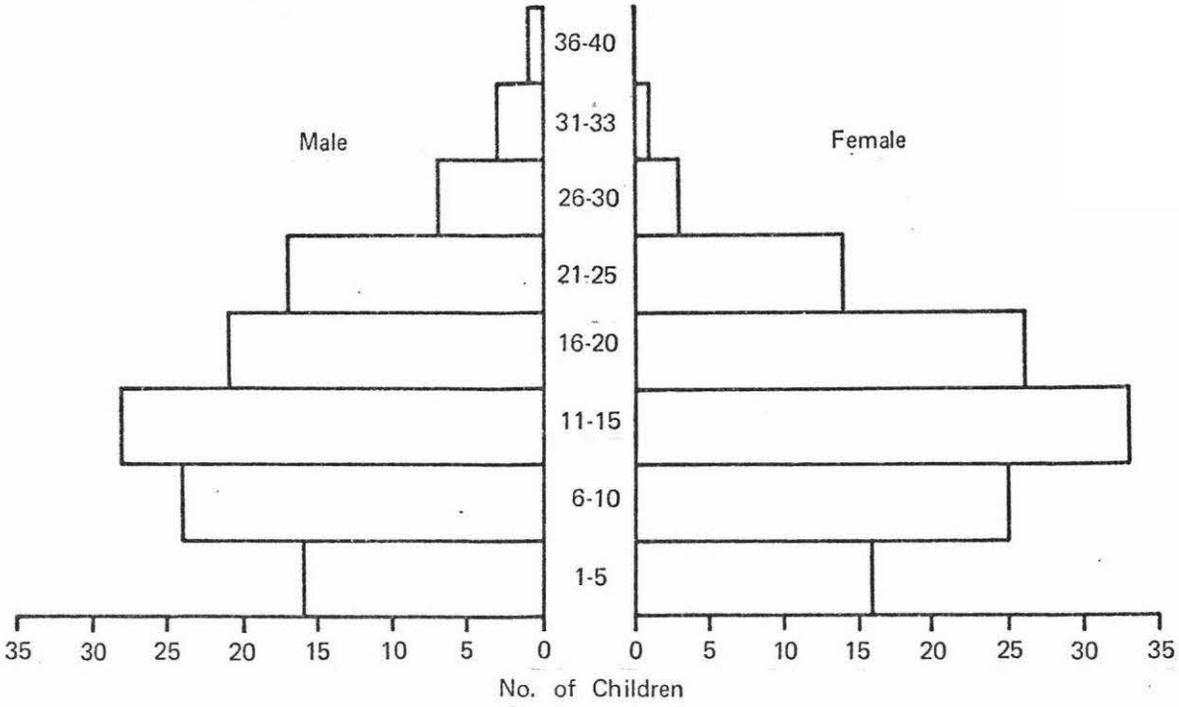


FIG.11 b L.B.J.: AGE & SEX STRUCTURE OF SETTLERS CHILDREN

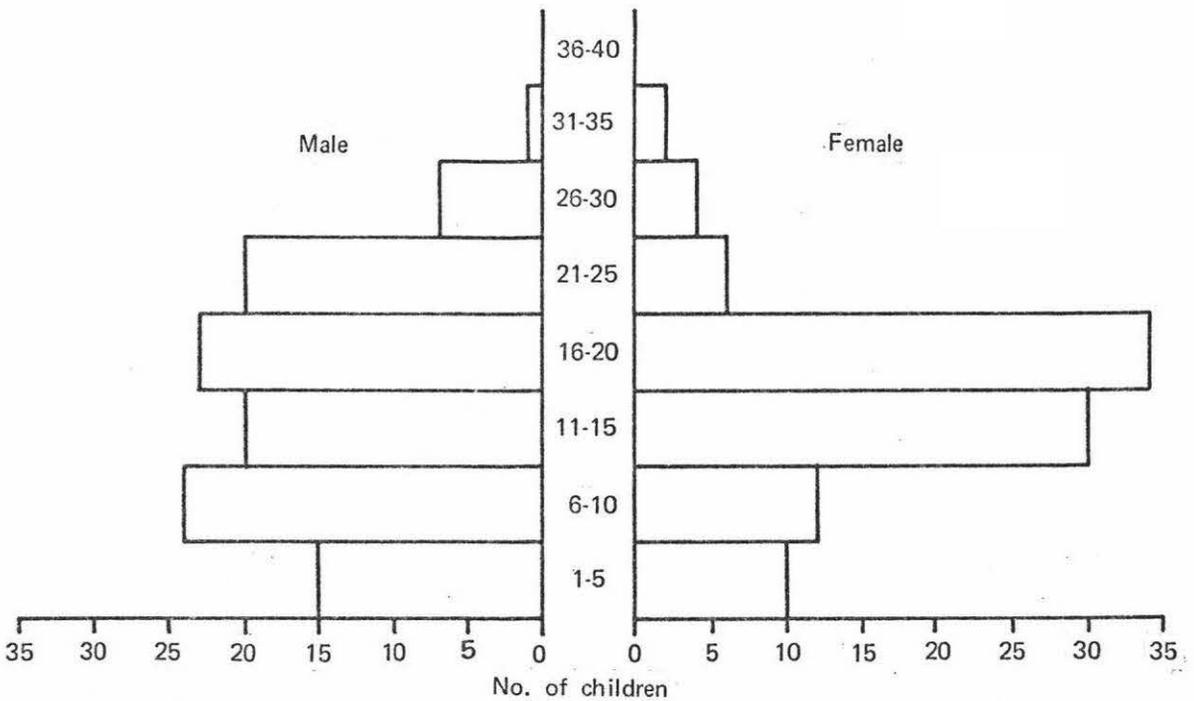


Table VIII: Lyndon B. Johnson and Sendayan: Educational Background of Settlers

		<u>L.B.J.</u>		<u>SENDAYAN</u>	
		Number	%	Number	%
<u>Stream:</u>	Malay	34	97.1	33	91.7
	English	-	-	-	-
	Arabic	1	2.9	-	-
	Malay + English	-	-	2	5.5
	Indonesian	-	-	1	2.8
<u>Highest Qualification:</u>					
	School Certificate (= M.C.E.)	-	-	1	2.8
	Lower Certificate of Education	-	-	2	5.5
	Primary 6	15	42.9	8	22.2
	" 5	16	45.7	20	55.6
	" 4	2	5.7	1	2.8
	" 3	2	5.7	3	8.3
	" 2	-	-	1	2.8
Total Respondents		35	100	36	100

In terms of occupational background, data obtained from field research indicates that the majority of Lyndon B. Johnson and Sendayan settlers had army training and therefore lack agricultural skills. Eleven (31.4%) of the Lyndon B. Johnson respondents and sixteen (44.4%) in Sendayan fell into this army category. Only ten (28.6%) in Lyndon B. Johnson and five (13.9%) in Sendayan had ever been full time rubber tappers. Details of the occupational background of the settlers in both Schemes are presented in Table IX.

Table IX: Lyndon B. Johnson and Sendayan: Settler Occupational Background

Types of Occupation	L.B.J.		SENDAYAN	
	Number	%	Number	%
<u>Agricultural:</u>				
Rubber tapper	10	28.6	5	13.9
Padi planter	3	8.6	4	11.1
Rubber tapper + padi planter	5	14.3	8	22.2
Fisherman	1	2.8	-	-
<u>Military/Police</u>	11	31.4	16	44.4
<u>Other Non-Agricultural:</u>				
Carpenter	1	2.8	1	2.8
Retailer	1	2.8	1	2.8
Salesman	1	2.8	-	-
Tailor	1	2.8	-	-
School teacher	-	-	1	2.8
<u>No Previous Occupation:</u>	1	2.8	-	-
Total Respondents	35	99.7	36	100.0

Many of the settlers, however, had additional occupational experience or had attended training courses. Sixteen (45.7%) of Lyndon B. Johnson respondents claimed they had additional occupational experience of which eight were agricultural, two carpentry and five military. In Sendayan the figures were twenty-seven (75.0%), nine, eight and four respectively. Seventeen (48.6%) respondents from Lyndon B. Johnson had, at one time or another, attended training or followed specialised courses, six of which were agricultural and five military. Sendayan's respective figures were seventeen (47.2%), five and seven. It is probably worth noting that for many settlers, experience from additional occupations, training and courses on one hand, and the main occupational background on the other, had compensated one another and made them, at least, reasonably eligible candidates for the Schemes.

Settlers' Dependants

The average settler in Lyndon B. Johnson and Sendayan had one wife and six children usually ranging from 6 to 20 years in age. The ratio of females to males was 1:1.05. Two of the children attended primary or secondary school, one was employed outside the Scheme, one was below five

and two were school dropouts. The settler also provided for one additional person, usually his mother or his wife's mother. Further details on the number of children, their age, sex structure and occupation are presented in Figures 10, 11, 12a and 12b and Table X.

Table X: Lyndon B. Johnson and Sendayan: Occupational Particulars of Settlers' Children

	<u>L.B.J.</u>		<u>SENDAYAN</u>	
	Number	%	Number	%
<u>Students:</u> Primary	42	19.0	59	25.1
Secondary	51	23.1	49	20.8
Higher	1	0.5	4	1.7
<u>Employed:</u>				
Helping parents tapping in the Scheme	14	6.3	14	6.0
Outside the Scheme	28	12.7	30	12.7
In non-agricultural activities outside Scheme	8	3.6	3	1.3
<u>Unemployed:</u>				
School dropouts (mainly L.C.E. and primary six failures)	31	14.0	34	14.5
<u>Below Six Years Old:</u> (including Kindergarten pupils)	35	15.8	35	14.9
<u>Housewives:</u>	11	5.0	7	3.0
Total number of children	221	100	235	100
Total Respondents	35		36	

The Working System

Each settler, on entering the Scheme, was supposed to be provided with 10 acres of land for rubber cultivation and a house on a 1/4 acre lot. However, according to information obtained during the field work, the settlers' actual rubber lots ranged from 6.5 to 8 acres only.

At the pre-harvest stage the settlers did not know the exact location of their rubber holdings. They maintained the crops on a collective basis with fifteen to twenty settlers allocated to a particular block of land.

They carried out work such as weeding, fertilising and pest and disease control under the supervision of FELDA field staff. At about the fourth year after planting, surveys of individual lots were completed and allocated to each settler by balloting. The settler's name was entered into the Register of Holdings but only in anticipation of a title. For maintenance during this pre-harvest stage each settler was provided with subsistence credits, the maximum amount of which was M\$2.90 per working day with a guaranteed minimum of M\$69.60 per working month. At this stage the settler's work consisted of tapping, collecting and delivering the rubber to the collecting centre in the Scheme, and general maintenance of the rubber holding, secondary crop areas and house lots.

At the harvesting stage the subsistence credits ceased and the settler began to make loan repayments for the credit FELDA had extended to him, which included:

- a. Cost of clearing the land and the planting of rubber, inclusive of maintenance by a contractor until settler entry
- b. Cost of fertilisers, chemicals, tools and implements provided during the immature period of the crop
- c. Cash subsistence credits extended to the settler prior to harvesting
- d. Cost of constructing the settler's house and the development of the site.

On average, for all the items mentioned, each settler had to repay a loan amounting to about M\$16,402.00 (for particulars see Appendix B), together with a compound interest charge of 6.1/4% per annum over a period of 15 years. In addition the settler also had to pay land rent and premium which had been deferred from the crop immaturity period. On completion of the repayment of the loan the land was to be reverted to the state government who was to issue the settler with a title for the land.

Processing and Marketing

All produce from the rubber holdings of the settlers were purchased by FELDA who would then either process the raw material on a non-profit basis or sell it to commercial processors with the proceeds accruing

directly to the settlers themselves. Recently, however, the Lyndon B. Johnson and Sendayan Schemes seem to have differed in policies relating to the processing and marketing of their rubber produce. The former saw no necessity to change from selling to FELDA while the latter preferred to manage things their way. This will be further elucidated in Chapter Five.

Settler Obligations and Responsibilities to FELDA

On entering the Schemes, settlers signed agreement documents which stated that they must abide by FELDA's rules and regulations. This signified that among other things the settlers agreed:

- a. not to sell their rubber produce to unauthorised dealers,
- b. to complete planting of approved crops and to ensure good husbandry of rubber holdings,
- c. to maintain a tapping plane of not more than $3/4$ inches per month,
- d. to reside permanently inside the Scheme,
- e. not to set up private retail shops within the Scheme, and
- f. not to use violence against FELDA staff in the Scheme.

If it was found that the settler was guilty of breaching any of the set rules, he was liable to penalties which could be as serious as to be evicted from the Scheme, and which automatically denied him future entry into any of the FELDA Schemes.