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Reorganization of Agricultural Production Through FELCRA: Participants' Perception Towards Group-Farming Programmes in Peninsular Malaysia

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Abstract: This study was designed to examine the nature of perception of the participants towards the programme with a view to determine to what extent the people understood and internalised all aspects of the programme and hence try to intelligently conjecture possible underlying reasons for any poor performance on part of the participants. Specifically, the study attempted to assess the participants' response towards group farming as a concept and to identify factors related to their perception. Finally it is hoped that socio-economic implications thus derived would allow for some policy guidelines to be drawn. This is important in view of the possible impact of the reorganization of the production system had on the traditional smallholders; with the introduction of a more formally schemes structure management under the FELCRA authority.

Key words: Agricultural Production · Land Development · Group Farming · Malaysia

INTRODUCTION

The endless efforts of the Malaysian Government to develop the agricultural sector and improve the living standard of the farming community since independence have been continuous changes taking place in all dimension of agricultural sector. One of the important strategies adopted to bring about development in the rural areas has been land development [1-6]. While Federal Land Development Authority (FELDA) emerged with land settlement programmes by developing virgin jungles, Federal Land Consolidation and Rehabilitation Authority (FELCRA) later complemented this effort by embarking on *in-situ* developments through organizing two types of land schemes, namely land rehabilitation and land consolidation. This was later extended to include the development of a third programme i.e. youth land schemes. Generally speaking, these programmes were designed as an attempt to reorganize the system of farming of the small holders who contribute significant amounts of primary produce [7, 8]. FELCRA'S efforts have undoubtedly yielded commendable results. By 1987, twenty years later after its inception, FELCRA had benefited more than 50,000 rural families with a total 200,000 hectares of land developed under its rehabilitation and consolidation programmes for rubber, palm and cocoa. By the year 2000 about half a million hectares of land is expected to be developed and about 100,000 families will benefit from the programmes. Such physical development certainly presents a strong concrete testimony of FELCRA'S success. However, little has been done to examine the socio-psychological aspects of the progress that the study on which this report is based and attempts to redress.

METHODOLOGY

The study was conducted on 43 schemes representing the three scheme categories, namely the consolidation, the rehabilitation and youth schemes. The multi-stage sampling technique involving the area sampling method and the systematic list sampling method was employed to select 10% of the 420 schemes under rubber, oil palm, cocoa and padi. Based on 20 participants, or all when the total existing number, in a scheme was less than 20, a final sample size of 743 group farming participants from all categories of schemes and types of crops in the states of Perak, Kedah, Melaka and Terengganu were interviewed. A structured questionnaire was used as an instrument to elicit information from the participants. A questionnaire interview is a data instrument that each respondent fills out as part of participating in a research study [9, 10]. Questionnaire surveys are particularly useful to study participant perception [11].

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Table 1: Breakdown of Schemes by State, Category and Crop Types

	Perak			Terengganu			Melaka			Kedah			
State													
Category	H	C	Y	H	C	Y	H	C	Y	H	C	Y	Total
Crops													
Oil Palm	3	3	2	10	2	3	2	1	-	1	-	-	27
Rubber	1	3	-	-	2	-	1	-	-	2	3	-	12
Padi	-	3	-	-	-	-	-	-	-	-	-	-	3
Cocoa	-	1	-	-	-	-	-	-	-	-	-	-	1
Total	4	10	2	10	4	3	3	1	-	3	3	-	43

H=Rehabilitation C=Consolidation Y=Youth

Table 2: Frequency Distribution of Participants According to Demographic Characteristics

Background	Frequency	Percentage
State		
Perak	311	41.9
Kedah	58	7.8
Melaka	80	10.8
Terengganu	294	39.5
Sex		
Male	647	87.1
Female	96	12.9
Age		
22-35yrs	214	28.8
36-48yrs	216	29.1
49-60yrs	236	31.7
61-93yrs	77	10.4
Education	125	16.8
Nil	482	64.9
Primary	88	11.9
Lower Secondary	38	5.1
College/University	10	1.3
Main occupation before joining the scheme		
Nil	60	8.1
Padi farmer	75	10.1
Rubber taper	312	42.0
Oil palm farmer	85	11.4
Others	211	28.4

Background of Land Schemes and Participants: The 43 schemes drawn into the sample represented 10% of the total number of rubber, oil palm, cocoa and padi schemes in the above-mentioned states. All the schemes were already producing yields. Breakdown of the schemes according to category of schemes and types of crops is presented in Table 1. Before further discussing the perception of the participants, this section attempts to overview their characteristics in relation to their general background and their characteristics related to the scheme. Table 2 reveals the characteristics of the participants involved in this study.

Age and Sex: The majority of the participants (43.2%) were in the middle age group of 31-40 years. The mean age was 48.2 years. There was however a wide range of age with 8.3% who were 30 years old and below and 30 participants (4.0%) who were more than 70 years old. The oldest participant was 93 years of age, while the youngest was only 22 years old. The presence of some young participants was due to the existing of the youth scheme in the sample. These figures represented both male and female participants, where ratio of female to male was 1:7. There were 647 (87.1%) males and 96 (12.9%) females.

Education: Generally, the sample reflected a low level of education among the participants, albeit a small percentage of illiterates. Although 125 participants (17%) were reported as not having any formal education, a fair number of them were not totally illiterate. Some could read a *jawi* script, while a few had basic reading and writing skills acquired through adult classes. The majority of the respondents (64.9%) have had six years of primary education. It is interesting to note that 10 respondents attained college/university education.

Main Occupation Before Joining the Scheme: Majority of the participants (42.0%) worked as rubber tapers before joining the scheme and 10.1% and 11.4% worked as padi farmers and oil palm farmers, respectively. Data in the table also reveals that quite a majority of the participants (28.4%) had other occupations other than agricultural. Those who did not have any occupation (8.1%) were most probably among the old and young (youth) participants.

Participants' Characteristics in Relation to the Scheme: The study involved 743 participants in 43 FELCRA's land schemes. Out of these participants, 43.3% were participants of rehabilitation schemes, while 43.2% of consolidation schemes and the rest 13.3 % were from

Table 3: Frequency Distribution of the participants According To their involvement in the scheme

Background	Frequency	Percentage
Scheme category		
Rehabilitation	322	43.3
Fringe	321	43.2
Youth	100	13.5
Types of Crop		
Oil Palm	476	64.1
Rubber	187	25.2
Padi	60	8.1
Cocoa	20	2.6
Place of Stay		
In the scheme	362	48.7
Outside the scheme	381	51.3
Have occupation in the scheme		
No	278	37.4
Yes	465	62.6
Have occupation outside the scheme		
No	364	49.0
Yes	379	51.0
Land ownership Outside the Scheme		
No	458	61.6
Yes	285	38.4

Table 4: Frequency Distribution of Respondents According To Types of Income

Background	Frequency	Percentage
Scheme category		
Rehabilitation	322	43.3
Fringe	321	43.2
Youth	100	13.5
Types of Crop		
Oil Palm	476	64.1
Rubber	187	25.2
Padi	60	8.1
Cocoa	20	2.6
Place of Stay		
In the scheme	362	48.7
Outside the scheme	381	51.3
Have occupation in the scheme		
No	278	37.4
Yes	465	62.6
Have occupation outside the scheme		
No	364	49.0
Yes	379	51.0
Land ownership Outside the Scheme		
No	458	61.6
Yes	285	38.4

youth schemes. Majority of the respondents (64.1%) were from schemes planted with oil palm, 25.2% from rubber planted schemes, while 8.1% from padi schemes. Meanwhile, majority of the participants (51.3%) were staying outside the schemes. See Table 3. Generally, majority of the participants (62.6%) worked in the schemes, while 37.4% did not. Those who had occupations outside the schemes were 51.0% of the participants. Meanwhile, majority of the participants (61.6%) have no land outside the scheme.

Income: The distribution of income of the participants is revealed in Table 4. Table 4 reveals that majority of the participants (47.9%) have a total income of $149-$461 and quite a number of them (25.0%) received income of $462-$774. These total incomes were contributed from the farm income, farm dividend and other occupation outside the schemes. It seems that income from farm had contributed significantly to the total income. The farm income is referred to the income received from work done in the schemes. This implies that the participants' involvement in the schemes has given them an opportunity not only to received farm dividend but also farm income.

Participants' Perceptions Towards Group Farming: This section attempts to overview the participants' perceptions group farming programme.

Perception Towards Programme Implementation: The perception of participants was measured using five-point Likert-Scaling statements Dong-Wan and William [12] and Maddox [13], recommended the use of a Likert type scale in development research due to its high validity [11]. The respondents were asked to response to thirteen statements reflecting some feelings towards various aspects of programme implementation. The statements included such aspects as crop suitability; work scheduling and scheme inception; basic facilities; farm acreage; method of repayment; and clarity of programme objectives. It was found that almost all the thirteen statements received positive responses from the participants. Only two statements were somewhat unfavourable responded by majority of participants. One of these was about financial support. Nearly 80% of the respondents felt that scheme participants should be given financial assistance in the form of loan until their holdings began production. The dependency syndrome may be expected and might even be considered unreasonable since most of the participants did not have any other source of income. A related statement was on repayment of loans. As high as 40% agreed that the method of repayment was complex and not easily understood. Only 21% viewed it was not complex. As earlier stated, the percentage of positive responses towards most of the statements was high. The highest percentage of positive responses was towards a statement about suitability of

Table 5: Distribution of Respondents' Agreement with Specific Statements For Programme Implementation Dimension According to Selected Variables

	Percentage of Respondents Agreeing			
Variables (n)	Opportunity to learn management	Size of group suitable	Acreage suitable	Repayment scheme easily understood
State				
Perak (311)	53.7	55.6	53.7	24.4
Kedah (58)	65.5	41.4	65.5	20.7
Melaka (80	52.5	68.8	52.5	17.5
Terengganu (294)	54.4	52.4	54.4	18.7
Scheme category				
Rehabilitation (322)	46.6	51.6	58.1	14.3
Fringe (321)	78.8	48.9	46.7	23.1
Youth (100)	94.0	83.0	70.0	37.0
Type of Crop				
Oil Palm (476)	60.1	58.8	56.5	23.1
Rubber (187)	80.7	52.9	63.6	21.9
Padi (60)	70.0	40.0	26.7	1.7
Cocoa (20)	90.0	15.0	15.0	25.0
Place of Stay				
In the Scheme (362)	80.1	40.1	41.7	20.7
Outside (381)	54.3	43.2	67.2	21.5
Sex				
Male (647)	75.5	38.0	45.3	30.1
Female (96)	30.5	45.6	48.5	28.3
Education				
Nil (125)	40.0	44.8	50.4	13.6
Primary (482)	70.3	52.7	53.5	21.8
Low Secondary (38)	83.0	65.9	54.5	21.6
Secondary 938)	81.6	81.6	76.3	36.8
College/University (10)	40.0	70.1	90.0	20.0
Age				
22-35 years(214)	90.9	68.2	54.5	26.5
36-48 years(216)	76.6	50.2	54.1	24.7
49-61 years(236)	58.7	54.9	57.6	18.2
61-93 yeas(77)	38.8	47.4	50.0	14.7
Farm Dividend				
Nil (380)	85.2	69.3	55.3	19.5
$60-$178 (251)	75.3	54.2	54.3	28.3
$179-$374 (66)	60.3	45.4	46.4	30.5
$375-$827 (46)	45.0	56.3	50.9	39.1
Farm Income				
Nil (395)	78.5	59.3	56.4	26.1
$60-$211 (64)	79.9	60.4	55.2	33.2
$212-$317 (140)	70.4	71.2	49.3	34.1
$318-$423 (94)	60.3	55.3	49.2	36.2
$424-$800 (50)	67.0	54.5	50.2	16.7
Total Income				
$10-148 (50)	30.0	52.0	44.0	10.0
$149-$461 (356)	59.3	56.5	55.9	21.3
$462-$774 (191)	82.2	56.5	53.9	20.3
$775-$2500 (76)	78.9	64.5	69.7	22.4

crops. Eighty nine percent agreed and strongly agreed that the crops in their schemes were suitable. The next most favoured statements were regarding basic facilities and the soundness of the clone being planted (where in each case, 76% of the respondents belonged to agree and strongly agree categories). Two other statements with more than 70% favourable responses were: "Work on group farms was efficiently done" (73%) and "FELCRA succeeded in modernising farmers" (71%). There was a fair level of favourableness in the perception of participants towards the aspects of the scheme implementation, where 50% to 69% of the respondents showed positive responses on the following issues: modernization of farming, basic facilities and the seriousness of the authorities to help the farming community. The analysis of data also looked at the percentage distribution of the response on the agree-disagree scale in terms of 7 selected variables. The variables were state, category of scheme, crop types, place of residence, education, age and total income. The results of the cross tabulation process are summed up in Table 5. It is evident from the table that the overall perception towards the selected statements by specific variables was generally favourable. In terms of distribution by state, the data shows that all states had more than half of the respondents agreeing to three of the four dimensions i.e. (i) enabling learning to manage, (ii) number not too big and (iii) group farming did not involve too big a group. The only exception is the case of Kedah in response to second statement (number of participants not too big) where 41.4% of the respondents agreed with the statement. The fourth statement (method of repayment not easily understood) had negative responses with all the states (17.5% to 24.4%) agreed with the statement. A closer look at the table reveals a number of interesting outcomes in response to the statement in relation to the variables' categories. Some of these are:

- Based on scheme category, the youth group farming scheme participants had the most favourable perception toward all the four stimuli statements.
- Cocoa was considered the crop that gave the most opportunities for farm management experience. This could be attributed to the fact that the cropping system required actual skills and demanded specific routines.
- A higher percentage of participants who stayed within the schemes, compared with participants who stayed outside the scheme, agreed that they learned about scheme management through the group farming method.
- Those who stayed outside the schemes were more inclined to think that the schemes were not too large.
- In terms of education, those with secondary education formed a bigger group that agreed that the program of group farming provided the opportunity to learn about management. Education level seems to be positively related with perception about scheme size; the highest education and the highest percentage that felt the scheme was not too large.
- Age of respondents is also universally related with the response towards the first statement It seems that the older the group the smaller the percentage agreeing to the statement.
- There is a general correlation between income and degree of favourableness on perception in terms of the percentage of respondents agreeing to all the four stimulus statements. In other words the highest income, the highest percentage of respondents agreeing to the statements. This perceptual response pattern implies the influence of income and the resulting satisfaction on the respondents' level of confidence about the programme in general and these specific statements in particular (Table 5).

Perception Towards Management and Administration: The perception of the participants toward management and administration of the mini-estate project was also measured using the Likert scale. A total of eight statements were put forward to the respondents for their reaction. These statements covered aspects of appropriateness of the scheme's committee membership and effectiveness of their functioning and hasty in doing their job. It was found that in general, the majority of the respondents had positive views with regard to who should comprised the scheme's committee and (77 and) whether they were active or otherwise (75%). Most of them also felt that the manager and supervisor of the scheme were efficient (70%) that the supervisor was often giving the participants advice. As far as scheme management is concerned, the majority of the respondents (72%) were of the opinion that, generally, it was satisfactory. The majority felt that the management was fast in overcoming problems (72%), the management was trustworthy (66%) and that the management was sincere in their efforts to make the scheme a success (73%). Despite this, it was also noted that on the question of whether the scheme committee members were active, whether the supervisor and manager were efficient, whether the overall administration of farm was satisfactory and whether the management was efficient in handling problems, trustworthy and sincerely in making

Table 6: Distribution of Agreement Respondents' with Specific Statements For Management and Administration Dimension According to Selected Variables

	Percentage Agreeing			
Variables (n)	Scheme Committee Is active	Supervisor and Manager Are capable	Overall Scheme Management Is satisfactory	Management Is efficient In solving problems
State				
Perak (311)	81.7	77.8	82.0	74.0
Kedah (58)	74.1	89.7	82.8	82.8
Melaka (80	82.5	51.3	48.8	47.5
Terengganu (294)	65.0	64.6	66.0	59.2
Scheme category				
Rehabilitation (322)	63.0	63.4	65.8	57.5
Fringe (321)	87.9	83.5	83.5	80.1
Youth (100)	69.0	53.0	56.0	48.0
Type of Crop				
Oil Palm (476)	68.3	63.4	65.1	59.0
Rubber (187)	89.8	86.1	84.5	78.6
Padi (60)	81.7	78.3	85.0	75.0
Cocoa (20)	60.0	75.0	85.0	85.0
Place of Stay				
In the Scheme (362)	75.7	66.9	70.7	65.2
Outside (381)	73.5	74.3	73.5	66.7
Sex				
Male (647)	77.6	73.3	73.7	67.9
Female (96)	54.2	53.1	61.5	53.1
Education				
Nil (125)	58.4	53.4	13.6	60.0
Primary (482)	80.9	76.6	15.4	70.3
Low Secondary (38)	71.6	69.3	31.8	59.1
Secondary 938)	60.5	50.0	34.2	55.3
College/University (10)	50.0	30.0	30.0	30.0
Age				
22.35 (214)	74.2	62.9	65.9	62.9
36-48 (216)	82.3	77.9	77.1	69.7
49-61 (236)	72.3	75.8	74.6	70.8
61-93 (77)	64.7	53.4	63.8	50.9
Farm Dividend				
Nil (380)	71.8	65.0	67.4	60.0
$60-$178 (251)	72.1	71.3	71.3	64.5
$179-$374 (66)	92.4	92.4	93.9	90.9
$375-$827 (46)	84.8	82.6	84.8	87.0
Farm Income				
Nil (395)	67.8	65.3	67.6	60.5
$60-$211 (64)	73.4	68.8	68.8	67.2
$212-$317 (140)	85.7	80.0	82.1	77.1
$318-$423 (94)	79.8	72.3	70.2	66.0
$424-$800 (50)	88.0	86.0	88.0	76.0
Total Income				
$10-148 (50)	62.0	50.0	56.0	46.0
$149-$461 (356)	71.9	67.4	68.8	61.2
$462-$774 (191)	85.3	79.6	81.2	75.9
$775-$2500 (76)	68.4	69.7	69.7	67.0

the scheme a success, quite a number (more than 25%) indicated uncertainty or disagreement. This indicates, quite substantial members of the mini-estate schemes did not think positively of the way in which the scheme was run and administered. In terms of hierarchical distribution of response according to the various statements, it was observed that the highest number of positive response was towards appropriateness of the scheme's committee membership (77%), followed by "the committee members are active" (75%); "the management is sincere in its effort to develop the scheme (73%); "overall administration of scheme is satisfactory" (72%); "the scheme supervisor and manager are efficient" (71%); "the management is trustworthy" (69%); "the supervisor often provides advisory services to participants" (68%); and "the administrators are efficient in overcoming problems" (66%). In the following, the distribution of responses in percentages towards specific statements discussed earlier according to ten selected factors will be reported. The selected factors were state and respondent's scheme category, crop type, place of stay, sex, level of education, age, dividend from farm and income from farm and total income. The findings are presented in Table 6.

Perception Towards Economic Returns: A total of seven positive and five negative statements were posed to the respondents. Their reaction to the statements provided some insight into their assessment of the economic benefits of the scheme and the potentials of the scheme as a project to uplift the socio-economic level of living of the participants. It was found that, generally most of the respondent perceived FELCRA scheme as promising. More than 95% of them were of the opinion that the scheme had successfully revived formerly uncultivated land. Some 82% agreed that FELCRA'S group farming had become an important source of income even for the non-participants of the scheme. A larger proportion also agreed that the scheme had increased their farm yield (80%) that the yield of group-farms had been satisfactory (59%); that future yield would increase (56%); that the scheme also benefited neighbouring villagers (56%); and that their flight was attended to by the scheme (70%). On the contrary, a larger proportion of the respondents viewed negatively the statement "Group farming is not a good way for the government o help the people" (79%); "Group farming is not suitable project to uplift the economy of the rural people" (80%); and the statement "not certain if group farming can guarantee the future farm families" (51%). It is interesting however to note that the number of respondents who disagreed with the statement "Farm income from group farming is not satisfactory" was only 41% and the statement "I do not expect the future will bring more profits", only 36%. This indicates, as far as real economic reward is concerned the participants were not too pleased yet (Table 7).

Participants' Perception Towards Social Relationship: The perception of participants towards the social relationship dimension of the group-farming programme was generally favourable. It was a strong positive feeling about the relationship between various groups and levels. Participants agreed that the group-farming programme not only encouraged cooperation but also fostered a closer relationship among themselves with more than 80% of the respondents expressing so. The majority (80.7%) also agreed that the programme had also developed a good relationship between participants and the management personnel.

The above data relates with the earlier finding about the respondents' feeling that the group-farming programme provided them with the opportunity to learn about management. This was possible because FELCRA to some extent, do involve the participants in the decision-making process through their representatives, in the committee. It is obvious that this mechanism had developed the channel for fostering a good rapport between the management and the people. This positive view was reinforced by 78.2% of the respondents who agreed that the programme encouraged cooperation between participants and the management. While it was heartening to note that the presence of good relationship between the participants committee and the management, it was also apparent that the committee members "over-associated" themselves with the management to the extent that they were seen to be drifting away form their own farming community. More than two-third (77.0%) of the respondents said that the relationship between the committee members and the participants was not too cordial. It is also heartening to note that while participants found the group farming activities a continuous channel for interaction among themselves, they were not totally cut of from the non-participating villagers. To a statement that their work in the scheme causes them having no time to mix with the villagers, a strong 76.9% disagreed. Only 22.3% agreed that they were too busy to mix with "orang-orang kampung." (Table 8).

It is evident that participants were happy with the overall interrelationship at all levels. The new work pattern, now formalised under a modern bureaucracy had created avenues for new patterns of relationship within

Table 7: Distribution of Respondents' Agreement with Specific Statements for Dimension according to The Economic Returns Selected Variables

	Percentage Agreeing			
Variables (n)	Yield of group Farming is very satisfactory	Group farming can guarantee future of the families	Farm income is satisfactory	Future will bring more profit
State				
Perak (311)	79.1	66.6	57.2	49.8
Kedah (58)	63.8	74.1	50.0	62.1
Melaka (80	42.5	47.5	45.0	30.0
Terengganu (294)	40.5	10.0	21.8	18.0
Scheme category				
Rehabilitation (322)	50.0	43.8	29.2	32.0
Fringe (321)	72.9	60.1	53.0	44.9
Youth (100)	41.0	45.0	43.0	21.0
Type of Crop				
Oil Palm (476)	48.9	43.7	32.8	30.0
Rubber (187)	70.1	61.3	51.9	48.1
Padi (60)	98.3	75.0	65.0	55.0
Cocoa (20)	65.0	55.0	75.0	10.0
Place of Stay				
In the Scheme (362)	61.0	70.3	46.1	29.6
Outside (381)	56.4	58.4	36.7	42.3
Sex				
Male (647)	59.2	55.2	45.5	37.6
Female (96)	55.2	60.3	49.9	26.0
Education				
Nil (125)	44.8	34.4	27.2	20.8
Primary (482)	64.3	56.0	45.4	41.1
Low Secondary (38)	61.3	50.0	39.8	33.0
Secondary 938)	34.2	44.7	42.1	28.9
College/University (10)	30.0	50.0	30.0	40.0
Age				
22.35 (214)	48.5	39.4	34.8	18.2
36-48 (216)	71.4	58.0	51.5	39.2
49-61 (236)	61.0	59.1	41.7	45.1
61-93 (77)	39.7	31.9	27.6	30.2
Farm Dividend				
Nil (380)	46.8	47.4	31.3	30.0
$60-$178 (251)	65.3	49.8	44.6	39.8
$179-$374 (66)	86.4	72.7	74.2	57.6
$375-$827 (46)	80.4	56.5	58.7	34.8
Farm Income				
Nil (395)	49.6	44.8	33.2	34.9
$60-$211 (64)	59.4	56.3	43.8	35.9
$212-$317 (140)	66.4	55.0	48.6	37.1
$318-$423 (94)	68.1	56.4	46.8	37.2
$424-$800 (50)	90.0	72.0	72.0	40.0
Total Income				
$10-148 (50)	36.0	36.0	18.0	28.0
$149-$461 (356)	51.4	44.7	32.0	26.7
$462-$774 (191)	74.9	61.8	56.0	47.6
$775-$2500 (76)	56.6	59.2	51.3	44.7

Table 8: Distribution of Respondents' Agreement with Specific Statements for Dimension according to The Social relationship Selected Variables

	Percentage Agreeing			
Variables (n)	Close relationship among participants	Close relationship between participants and administrators	Good cooperation among participants	Good cooperation between participants and administrators
State				
Perak (311)	83.1	80.1	83.2	79.1
Kedah (58)	82.1	82.3	80.1	82.1
Melaka (80	75.2	78.3	79.2	68.2
Terengganu (294)	73.2	75.1	74.3	63.2
Scheme category				
Rehabilitation (322)	82.2	80.2	82.1	80.2
Fringe (321)	84.2	81.3	81.5	82.3
Youth (100)	73.2	76.9	71.0	75.2
Type of Crop				
Oil Palm (476)	78.4	79.2	79.4	78.2
Rubber (187)	84.1	82.3	81.5	83.2
Padi (60)	85.1	84.1	82.3	81.4
Cocoa (20)	79.0	80.1	79.3	78.2
Place of Stay				
In the Scheme (362)	81.0	82.1	82.1	80.1
Outside (381)	78.0	75.0	73.2	72.0
Sex				
Male (647)	82.3	83.4	81.2	84.1
Female (96)	79.0	78.5	80.0	79.1
Education				
Nil (125)	73.1	74.5	79.1	72.5
Primary (482)	80.1	82.8	81.9	81.4
Low Secondary (38)	81.2	81.4	82.3	83.2
Secondary 938)	82.3	82.5	83.1	82.1
College/University (10)	71.2	70.3	74.1	72.5
Age				
22-35 (214)	78.2	75.2	78.2	73.1
36-48 (216)	82.1	83.3	82.3	84.2
49-61 (236)	81.3	82.1	83.5	81.3
61-93 (77)	70.3	75.3	78.2	73.2
Farm Dividend				
Nil (380)	80.6	82.8	81.7	81.2
$60-$178 (251)	79.9	80.9	81.2	78.3
$179-$374 (66)	81.5	82.0	83.3	84.2
$375-$827 (46)	83.2	83.9	81.4	85.2
Farm Income				
Nil (395)	72.8	75.1	78.2	78.3
$60-$211 (64)	79.3	80.7	80.8	81.1
$212-$317 (140)	79.4	81.2	80.3	84.3
$318-$423 (94)	80.1	83.2	82.4	85.4
$424-$800 (50)	81.9	85.2	84.3	83.1
Total Income				
$10-148 (50)	80.3	80.1	79.2	79.3
$149-$461 (356)	80.2	81.2	80.3	82.0
$462-$774 (191)	82.1	82.0	89.0	83.0
$775-$2500 (76)	79.0	79.5	79.2	78.4

Table 9: Average Score of the Perception of the Respondents Towards Project Dimensions

Project Dimension	Mean	Highest Score	Mean Percentage
Administration	30	40	75
Economy	44	60	73
Social	47	65	72
Implementation	35	50	70

Table 10: Chi-square Test between Perception Dimension and Determinant Factor Variables

Variables	Economic Return	Management/Administration	Programme Implementation	Social Relation
State	107.76***	36.53***	46.55***	82.28***
Scheme Category	33.64***	60.10***	18.79***	84.20***
Type of Crop	39.90***	36.14***	39.85***	47.87***
Income from Farm Dividend	65.29***	40.94***	33.91**	59.92***
Age	22.77**	51.65***	31.34***	63.39***
Education	25.66**	56.53***	27.43***	46.87***
Involvement in Farm Work	22.09**	28.69***	21.31***	76.77***
Place of Stay	4.6 (N.S.)	15.08***	21.77***	22.85***
Sex	3.89 (N.S.)	9.78**	19.07***	21.65***
Total Income	10.49*	12.67*	16.09***	31.04***

***=0.001 *=0.05 **=0.01 N.S=Not Significant

the community and between the participants and the management as well as the ordinary village people. Despite all these, however, the scheme or the group farming programme in general was still not attractive enough to the rural folks who had left the villages poor to the coming of this new production system. Only 31.0% of the respondents agreed that the programme succeeded in retracting those villages when had left the villages. Generally the respondents demonstrated a positive perception towards group farming, specifically in the form of the mini estate. Based on their responses towards statements regarding the four dimensions of group farming it was found that the average score was 73.0%. This showed a rather high level of acceptance towards this programme. The distribution of their response showing a positive perception is as follows: response towards the management dimension (75%); towards economic return (73%); towards social relations of management, participants and members of local community (72%); and project implementation (70%) (Table 5). It is fair to say that the high score for economic returns demonstrated the participants' confidence on FELCRA's mini-estate project from the point of view of economics. From the administrative aspect of the programme participants seemed more satisfied with management rather than implementation of the project. However, as the question of implementation is more of a process that has occurred while management involves current process (including administration) it could be said that participants had a positive view and supported the programme. Furthermore, the management aspect was close related to social relationship, which was the aspect that the participants had the most confidence in (Table 9)

Respondents' Agreement Towards Project Dimensions and Selected Variables: Based on cross-tabulations it was found that there was a significant difference (p.0.001-p<0.05) in the perception of the participants towards all the four dimensions in relation to all ten selected factors of state, scheme category, type of crop, participant's income, age, sex, level of education, involvement in mini-estate work, dividends from mini-estate and participant's residential area (Table 10).From all those factor, 75.0% showed the most significant relationship (p<0.001) and 20.0% had a moderate relationship (p<0.01 and p<0.05). Only 5.0% of those cases did not show any significant relationship in relation to those factors. This analysis also had identified three variables i.e. state, type of scheme and type of crop, as factors, which had the most significant relationship with the perception towards all the four project dimensions (p<0.001). In term of the most significant perception (which had the most positive relationship) this study found that social relation dimension showed the most significant different in all the ten aspects studied (p<0.001).

Factors Related to Participants' Perception: Further analysis was done in attempt to determine which categories in every variable (determinant factor), which has the most significant influence on the development of

Table 11: Category of Variable, Which Have the Highest Ranking In Duncan's Test Towards Every Dimension

Variables	Economic Return	Administration Management	Programme Implementation	Social Relation
State	Perak (47.6)	Kedah (31.7)	Perak (35.5)	Perak (48.4)
Category of Scheme	Peripheral (46.5)	Peripheral (32.2)	Peripheral (35.6)	Peripheral (48.9)
Type of Crop	Padi (49.1)	Rubber (32.2)	Rubber (36.3)	Rubber (49.4)
Place of Stay	Outside Scheme (44.3)	Outside Scheme(30.2)	Inside Scheme (34.5)	Inside Scheme (48.1)
Age	41-50 years (45.7)	31-40 years (31.5)	31-40 years (35.8)	31-40 years (50.2)
Education	Primary (45.3)	Primary (30.8)	Lower Secondary (35.6)	Lower Secondary (48.2)
Farm Income	High >$424 (45.3)	High >$424 (31.9)	High >$424 (37.0)	Medium $212-$423 (49.8)
Total Income	High >$758 (45.3)	Medium $152-$757 (30.5)	High >$758 (35.6)	Medium $152-$757 (47.4)
Farm Dividend	Medium $179-$374 (51.1)	Medium $179-$374 (34.5)	Medium $179-$374 (37.6)	Medium $179-$374 (52.8)

participants' perception. Using mean ranking of Duncan's test it was found that in general the same category for each factor played an important role in influencing the perception of the participants. The category of rubber for example was significant in influencing participants' perception towards three out of the four projects dimensions namely management, implementation and social relationship (Table 11).

This is true may be due to the fact that in terms of management, implementation and social relation, both administrator-managers and participants were familiar with the rubber crop in such a way that they could play their roles significantly every time.

In term of economic return dimension, padi crop became the most influential. This might be due to the stable price of the crop compared to the price of other crops. Moreover, padi has a built-in security because there was a subsidy and minimum price guarantee from the government. In contrary, for the other crops, whether the farmers did not really understand about the price structure of the crops (such as the price of cocoa which was much depended on the quality) or because the price was too low during this study was carried out (as shown that oil palm was place number four in the Duncan's ranking).

In terms of scheme category, fringe land development scheme was in the highest category in Duncan's ranking. Whereas in terms of state Perak place in the highest ranking in terms of its influence on perception of economic return, implementation of the programme and social relation. The state of Kedah placed in the highest ranking in terms of its influence on perception of management/administration, which implies that the state of Kedah was the most positive in terms of management.

CONCLUSION

From the study it is obvious that in group farming such as mini-estate, there are certain factors which could influence the perception of their participants, which consequently may influence the participants' involvement in the related projects. For example, factors such as state, scheme category and types of crop and age of participants are important in terms of their influence on the total perception of the participants and also their perception towards specific project dimensions, that is economic return, management administration, programme implementation and social relation. It is also obvious that in the project planning and implementation of group farming, project dimensions should be stressed, besides other factors, which influence the perception of the participants. For example, it is wise to study whether the real economic return, administration management, project implementation and social relation in each state or in certain schemes, or in certain crops really satisfactorily. Thus, the findings of this study could be used by the administrators-managers of these schemes in order to improve the performance of group-farming.

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