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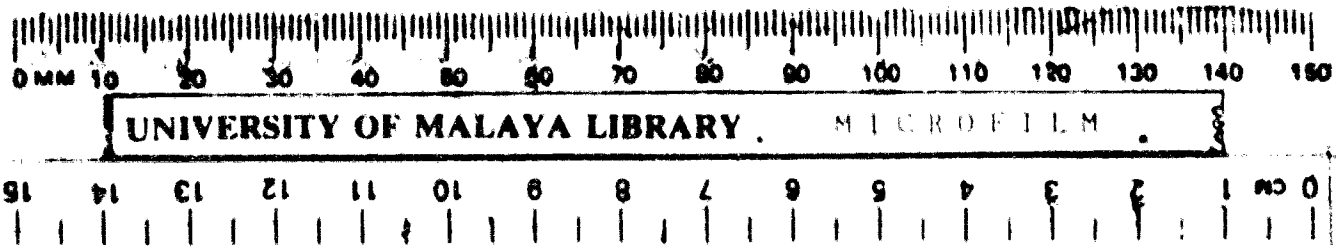

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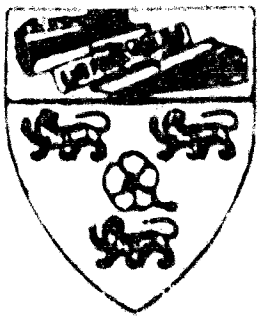

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TANJONG KARANG SURVEY - PHASE III

ECONOMIC SURVEY OF SAWAH SEMPADAN

A STUDY OF BLOCK Q

by

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A Graduation Exercise presented to
the University of Malaya in
part fulfilment towards the
Degree of Bachelor of Arts
with Honours in Economics

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CHAPTER I

INTRODUCTION

Objective of Study

A farm survey of Sawah Sempadan, Tanjong Karang, Selangor, was conducted on the 25th April to the 6th May, 1964 by the Economics Department of the University of Malaya. Every surveyor was given one block to investigate. This exercise relates to Block C. In this block there were 104 Lots. These lots are numbered horisontally. Incidentally, only 95 lots were investigated. It was noted that all the 104 lots had been cultivated with padi in the 1963/64 crop year. Again, of the 104 lots, there were dwellings on 65. The dwellings are either permanent or seasonal.

The purpose of the survey was to examine the relationship of ownership and operation in the blocks in Sawah Sempadan. The questionnaires also sought information about the varieties of padi planted, the yield, the incidence of pests, the water supply and the other crops grown. The survey forms the third phase of a series of surveys in Sawah Sempadan, aimed at making a study of the area from a number of angles.

Definition of Terms

The terms used in connection with land ownership and operation in this discourse is defined in the "Subdivision of Rubber Estates in Malaya, 1951-1960" Volume I (1962) by Ungku Aziz. The definition is found in the following sections: Introduction, Chapter VI and General Appendix VII.

A "piece" of land is defined as one undivided area of any size which is defined or described in a document of ownership or title. This document may be a grant, an Entry in the Mukim Register or a Temporary Occupation Licence. These titles are registered according to State laws. Land Office records designated each piece as a "lot".

In the absence of boundary stones the pieces have landmarks such as fruit trees, bunds or bends in a stream. A padi farmers pieces of land is often well demarcated by the bunds. Every farmer knows his boundaries.

Each piece of land must have an owner, who may or may not be the operator of the piece.

A "holding" is a unit of ownership and it may consist of one to any number of pieces. They may be contiguous or scattered. A holding may be of any size. The owner may be the cultivator of the piece or may not. If he is not then the operator may be (a) a member of the family, (b) a worker who receives a wage from the owner or (c) a tenant paying a rental to the owner.

"Ownership" is a legal term denoting possession of a piece of land. A holding is a unit of ownership.

"Operation" indicates that a person is farming the land to raise an output. It is an economic term. The concept of operation introduces us to the "farm".

A "farm" is any active unit of production based on land and may also be of any size, that is, consist of any number of pieces of land. They may again be scattered or contiguous. The farmer may divide any of his pieces into several fields. The boundaries of the farm are clear in his mind. The farm may be operated by the owner himself, by paid labour, labour paying rent to the landlord, or family labour which may either be paying rent, receiving wages or working free of both. Hence the farmer or operator may or may not own the land he operates. In fact, the farmer may not even farm his own holding; he may rent in the land he works and rent out the land he owns.

The patterns of ownership and operation undergo much change through time. The original holding may be sold wholly or in part to pay a debt, or may be given in part as a gift, or may be inherited by the family on the death of the owner.

"Subdivision" is the physical division of single pieces of land into several pieces, or conversely, it is the process whereby pieces of land become smaller and smaller through time. The first division is "primary subdivision", the next "secondary" and so on. If only a part of a piece is subdivided, it is "partial subdivision". "Pseudo-subdivision" occurs where in truth no real division of the unit of ownership into new ownership units takes place, only legally and in appearance, the appearance is ordinary subdivision. "Concealed subdivision" happens where persons effect a land transfer to themselves as joint owners having undivided shares with intention of subdividing the piece into separate single-name titles at a later date. But generally, boundaries denoting ownership of specific parts of the land will be recognised. Only in the eyes of the Land Office will the ownership be joint with undivided shares.

When there is (de facto) or on the ground subdivision, in which two or more owners share a common title to a piece of land purchased with their names on the title as joint owners but in actual fact operate well demarcated portions of the land, we have the situation of "co-ownership".

When there is no clearly-marked boundary and each person owns an undivided share in the title, it is a case of "joint-ownership". The cost of production and profits are shared proportionately to the share of ownership. Any member may sell part or all of his share but cannot claim any particular area as his own.

When a person effects pseudo-subdivision which gives a legal status of separate existence to a number of pieces which in practice are still operated as a single unit of ownership, we have "complex co-ownership".

Where pieces of land of particular farms are scattered about, we have the situation of "fragmentation". But the pieces must be scattered about in such a manner that, because of distance or impeded mobility or both operation of the pieces becomes uneconomical.

Having defined the terms and concepts that appear in the essay, we can now start our analysis.

CHAPTER II

DISTRIBUTION OF HOLDINGS AND FARMS

In this chapter, we will be looking at the distribution of the holdings and farms in Block Q. We shall observe the distribution from the number of lots and sub-lots which make up the holdings and farms within the block, within Sawah Sempadan and outside Sawah Sempadan. Secondly, we shall tabulate the holdings and farms according to their area in acre-intervals.

Distribution of Holdings by Lots and Sub-lots

The total of 95 lots interviewed in Block Q consists of 99 holdings. The holdings are made up of lots and sub-lots in the block, in Sawah Sempadan and outside Sawah Sempadan. Only Block Q consists of lots and sub-lots. The other two areas comprise only lots. The sub-lots in Block Q are all half-lots and are the result of subdivided ownership which gives rise to co-ownership.

The Table 2.1 tabulates the holdings according to the number of their component pieces in the three areas shown. Approximate percentages are also given having been calculated to two decimal places. It will be seen that of the total of 99 holdings, 26 units are made up of only one lot, in Block Q, 26 of only one sub-lot, in Block Q, and 18 of one lot in Block Q and one lot outside Sawah Sempadan. The remaining 29 holdings are made up of various combinations of non-Sawah Sempadan lots and/or Sawah Sempadan lots with Block Q lots and/or Block Q sub-lots as can be seen in Table 2.1. Sixty holdings or about 60% of the total of 99 holdings consist of only pieces in Block Q, the 39 or about 40% are made up of varying combinations of pieces in the three areas mentioned.

Thus more than half of the total holdings are owned by persons who, as they stated in the interviews, hold no other lands. The rest, that is, 39 owners, hold lands outside Block Q previously, or at least at the time of the interview. However, it has emerged from the survey that not all the owners, or operators for that matter remain the same in some cases. In fact, the survey revealed that the patterns of ownership and operation have undergone some changes since the Sawah Sempadan scheme was just inaugurated. These changes will be seen in subsequent chapters.

Distribution of Holdings by Acre-Intervals

Having studied the distribution of holdings by their

TABLE 2.1

DISTRIBUTION OF HOLDINGS BY LOTS AND SUB-LOTS
1963/1964

In Block Q		In S.S.	Outside S.S	Number of Holdings	% of Total (approx.)
Lots	Sub-lots	Lots	Lots		
1	-	-	-	26	26.06
1	-	-	1	18	18.18
1	-	-	2	1	1.01
1	-	1	-	5	5.05
1	-	1	1	4	4.04
1	-	2	1	1	1.01
1	-	3	-	1	1.01
1	1	-	-	4	4.04
1	1	-	1	1	1.01
2	-	-	-	4	4.04
2	1	-	1	2	2.02
3	1	-	1	1	1.01
-	1	-	-	26	26.06
-	1	-	1	5	5.05
-	-	Total	-	99	100.00

component pieces and the situations of the latter, let us now see the relative areas in acres of the holdings. In Table 2.2, the areas of the units of land owned have been tabulated in intervals of one acre and the frequency of holdings of various sizes set against them. The holding sizes are obtained by adding up the acreages of the component pieces of each holding. The acreage figures are taken from the records in the Land Office. Most of

*Percentage figures in all tables are approximate.

the lots in Block Q and Sawah Sempadan are approximately 3-acre lots. A small number may be four or five acres and these are usually the lots at the corners of the blocks. In Block Q, there is only one 5-acre lot at a corner.

From Table 2.2, it can be seen that 26 or 26.6% of holdings are from 1.0 to 1.9 acres large, 39 or 39.39% from 3.0 to 4.9 acres in area, and 11 or 11.11% from 6.0 to 6.9 acres in size. The remainder, about 24% of the 99 holdings, are of the various other sizes given in the Table.

TABLE 2.2

DISTRIBUTION OF HOLDINGS BY AREA IN ACRES
1963/1964

Acres	Frequency	% of Total (approx.)
0.1 - 0.9	-	-
1.0 - 1.9	26	26.06
2.0 - 2.9	3	3.03
3.0 - 3.9	25	25.25
4.0 - 4.9	14	14.14
5.0 - 5.9	6	6.06
6.0 - 6.9	11	11.11
7.0 - 7.9	2	2.02
8.0 - 8.9	4	4.04
9.0 - 9.9	2	2.02
10.0 - 10.9	-	-
11.0 - 11.9	1	1.01
12.0 - 12.9	2	2.02
13.0 - 13.9	-	-
14.0 - 14.9	2	2.02
15.0 - 15.9	1	1.01
Total	99	100.00

Distribution of Farms by Lots and Sub-lots

The 95 lots investigated in Block Q consist of 99 holdings, as we saw previously, but comprise a total of 102 farms. The farms, again, are made up of lots and sub-lots, but as in the case of the holdings, the sub-lots are only in Block Q. Table 2.3 shows the distribution of farms by their number of pieces in lots and sub-lots within Block Q and lots within and outside Kampung Sempadan. Again, approximate percentage figures calculated to two places of decimals are given.

TABLE 2.3

DISTRIBUTION OF FARMS BY LOTS AND SUB-LOTS

In Block Q		In K.S.	Outside K.S	Number of Farms	% of Total (approx.)
Lots	Sub-lots	Lots	Lots		
1	-	-	-	31	30.39
1	-	-	1	16	15.69
1	-	-	2	1	0.98
1	-	1	-	6	5.88
1	-	1	1	5	4.80
1	1	-	-	4	3.82
1	1	-	1	1	0.98
2	-	-	-	3	2.94
2	1	-	1	1	0.98
3	1	-	1	1	0.98
-	1	-	-	30	29.42
-	1	-	1	2	1.96
-	1	2	1	1	0.98
Total				102	100.00

Of the total of 102 farms, 68 units or about 67% are made up of only pieces in Block Q, the pieces being either lots or sub-lots. In fact, 30 of these 68 farms consisted of only a sub-lot in Block Q or in percentage, about 29.42%. The remaining 33% or 34 farms consist of pieces of land in all or two of the three areas referred to in the essay and the tables.

Of the 102 farmers of the Block Q study, 68 are operators of only pieces of land in the block, or were at the time of the interview at least. The other 34 were operating other farms in Sawah Sempadan and/or the non-Sawah Sempadan area, certainly at the period of the survey at least.

Although there are 99 owners of Block Q, Sawah Sempadan and non-Sawah Sempadan, there are 102 operators of the same number of holdings. This directly contravenes the clause in the various land titles which reads "The land hereby alienated shall not be transferred or leased unless such transfer or lease is to a single individual person who relates to the whole of both Lot No.(.....) and Lot No. (.....)". However, this is a situation which is found not only in Sawah Sempadan but is also quite widespread in the land situation throughout the country. It is only one among many such-like contraventions of land-title conditions.

Distribution of Farms by Acre-Intervals

In Table 2.4, the farms are tabulated according to their area, in one-acre intervals. As in Table 2.2, the areas of each farm's component pieces have been aggregated and set accordingly against the first column. Percentages are also given.

It will be noticed that 31 or 30.38% of the 102 farms are from 1.0 to 1.9 acres in size, 30 or 29.40% from 3.0 to 3.9 acres, 13 or 12.74% from 4.0 to 4.9 acres and 14 farms or 13.72% from 6.0 to 6.9 acres. Most of the farms, 92 units or about 90.16%, are below 6.9 acres in area.

Moreover, we can see that while 26 holdings are from 1.0 to 1.9 acres, there are 31 farms of this size. Similarly, we have 30 farms against 25 holdings from 3.0 to 3.9 acres, and 14 farms as compared with 11 holdings from 6.0 to 6.9 acres. Conversely, we have two farms as against four holdings from 8.0 to 8.9 acres and three farms against six holdings from 5.0 to 5.9 acres. All these instances show up the actual situation as contrasted with that set out by the conditions in the titles, and more important still, the different pattern of operation as compared with the pattern of ownership.

TABLE 2.4

DISTRIBUTION OF FARMS BY AREA 1963/64

Acres	Frequency	% of Total (approx.)
0.1 - 0.9	-	-
1.0 - 1.9	31	30.38
2.0 - 2.9	1	0.98
3.0 - 3.9	30	29.40
4.0 - 4.9	13	12.74
5.0 - 5.9	3	2.94
6.0 - 6.9	14	13.72
7.0 - 7.9	1	0.98
8.0 - 8.9	2	1.96
9.0 - 9.9	1	0.98
10.0 - 10.9	-	-
11.0 - 11.9	2	1.96
12.0 - 12.9	1	0.98
13.0 - 13.9	-	-
14.0 - 14.9	2	1.96
15.0 - 15.9	1	0.98
Total	102	100.00

CHAPTER III

RESIDENCE OF OWNERS AND OPERATORS AND TYPES OF OPERATORS

Residence of Block Q, Sawah Sempadan and Non-Sawah Sempadan Owners

In the previous chapter we examined the distribution of owners and operators by the number and area of pieces they own and operate. In this chapter we shall see where these owners and operators reside. Table 3.1 below gives the number of owners for those who are staying either in Block Q, in Sawah Sempadan or outside Sawah Sempadan. The three areas are considered each in turn.

TABLE 3.1

DISTRIBUTION OF OWNERS BY PLACE OF RESIDENCE
1963/1964

Land Owned	Residence			
	Block Q	S.S.	Outside S.S.	Total
In Block Q	51	4	44	99
% of Total (99)	51.1	4.04	44.44	100.00
In S.S.	3	12 2	6	11
% of Total (12)	27.27	18.18	54.54	100.00
Outside S.S.	15	1	17	33
Approx. % of Total (33)	45.45	3.03	51.51	100.00

Of the total of 99 owners in Block Q, 51 or 51.1% reside in the block itself, 44 or 44.44% reside in the non-Sawah Sempadan area and 4 or 4.04 in the blocks other than Block Q in Sawah Sem-

padan. In Sawah Sempadan six of the 11 owners of pieces there reside outside Sawah Sempadan. In the area outside the Sawah 17 out of a total of 33 owners stay in the non-Sawah but a high proportion, 15 owners or 45.45%, reside in Block Q. Most of the owners in the two areas outside Block Q are also owners of Block Q pieces.

Residence of Block Q, Sawah Sempadan and Non-Sawah Sempadan Operators

In the next table, Table 3.2, we have the distribution by place of residence of the operators or farmers in the three areas. As we can see, the pattern of residence is different from that of the owners.

TABLE 3.2

DISTRIBUTION OF OPERATORS BY PLACE OF RESIDENCE
1963/1964

Land Operated	Residence			
	Block Q	S.S.	Outside S.S.	Total
In Block Q	58	7	37	102
% of Total (102)	56.84	6.86	36.26	100.00
In S.S.	3	3	6	12
% of Total (12)	25.00	25.00	50.00	100.00
Outside S.S.	13	1	14	28
Approx. % of Total (28)	46.41	3.57	~~58.00~~ 50.00	100.00

Of the 102 operators in Block Q, 58 or 56.84% reside in the block itself while 37 or 36.26% have their homes outside Sawah Sempadan. In Sawah Sempadan, six of the 12 operators of lots there stay in the blocks outside Block Q. In the non-Sawah area, 14 out of 28 farmers stay outside Sawah Sempadan, but as in the case of the owners of pieces in this area, a high proportion, 46.41% or 13 operators reside in Block Q.

Types of Operators in Block Q in Sawah Sempadan and outside Sawah Sempadan

Next, let us, after seeing where the operators of the Block Q, Sawah Sempadan and non-Sawah Sempadan areas live, examine

how many of them own the farms they operate, how many operate but do not own them and how many are employed and paid farmers. There are three kinds of operators in the areas under study namely, owner-operators who are the main type in all areas, tenant-operators and paid-labour. The second type of farmer accounts for about one-sixth the total number of farmers in Block Q and in Sawah Sempadan and is negligible in the non-Sawah area. The third type is negligible in all three areas. In Table 3.3 we can see the situation in greater detail.

TABLE 3.3

TYPES OF OPERATORS 1963/64

Types	Block Q		S...		Outside S.S.	
	No.	% of Total (approx.)	No.	% of Total (approx.)	No.	% of Total (approx.)
Owner-Operator	82	80.40	10	83.33	26	92.86
Tenant-Operator	17	16.51	2	16.67	1	3.57
Paid-Operator	3	3.00	-	-	1	3.57
Total	102	100.00	12	100.00	28	100.00

Eighty-two of the 102 operators in Block Q own the farms they operate and likewise 10 of the 12 operators in Sawah Sempadan and 26 of the 28 in the non-Sawah Sempadan lands. In Block Q, there are 17 tenant-farmers and three farmers who are employed to work the farm and paid a share of the harvest. The high percentage of owners who operate their own farms (80.40% in Block Q, 83.33% in Sawah Sempadan and 92.86% outside Sawah Sempadan), is perhaps partly due to the fact that a high proportion of them (60%) do not own other lands, at the time of the survey at least, thus they are able to work their lots by themselves. Another reason is probably that even among those who own and operate other lots elsewhere, not many of these lots are larger than they can farm themselves. In the case of operators being tenant-farmers, the prevalent system of rent is the "bagi-dua" or equal sharing of harvest between the tenant and the landlord.

CHAPTER IV

FRAGMENTATION OF HOLDINGS AND FRAGMENTATION OF FARMS

This chapter will study the situation of fragmentation of the farms and holdings in the block and the relevant areas outside it. A farm or holding may consist of one or several pieces of land which may be contiguous or scattered. The farm or holding would be in a fragmented state if its component pieces were not contiguous and sufficiently separated to render their operation uneconomic to the resources, time and energy of the farmer. Fragmentation may arise from distance or impeded movement from one to another piece.

Distribution of Fragmented Holdings

The holdings and farms related to the study ar[illegible] a fairly high state of fragmentation. From Table 4.1, 44.44% or a[illegible]t half the total of 99 holdings are fragmented. The fragmented holdings, comprising pieces within and without Block Q, are tabulated according to their size aggregated in pieces of lots and sub-lots.

Twenty-six holdings consist of one sub-lot each and 26 holdings of one lot each and both types have no other lots elsewhere. These 52 pieces, or approximately 52% of the total holdings, are non-fragmented. Three other holdings of two lots each, comprising 3.03%, are also not fragmented, making the total of non-fragmented holdings → Fifty-five or about 55% of the total number of 99 holdings. The remaining 44 holdings or roughly 45% of the total of 99 are the fragmented units; the largest proportion of fragmented holdings are those with an aggregate of two lots, out of a total of 27 units of which 24 or roughly 24% of the 99 holdings are in a fragmented state. Most of these holdings consist of one lot in Block Q and one lot outside Sawah Sempadan. The three non-fragmented holdings of this size consist of two adjoining lots in Block Q.

Although the Tanjong Karang padi-growing area is a relatively [illegible]scheme, there is already a fairly high degree of fragmentation. This is because the land policy of the government in granting lots for padi cultivation in Sawah Sempadan and kampong land for coconuts outside Sawah Sempadan, usually one acre, produced an initial state of fragmented holdings. Fragmentation is a function of distance and impeded mobility. The fact that the owners and/or operators of Block Q lots or other Sawah blocks have access to their lots by bicycles if they live in the Kampong does not remove

TABLE 4.1

DISTRIBUTION OF FRAGMENTED HOLDINGS 1963/1964

Size in Pieces		Total	Fragmented	% of Total (99) (approx.)
Lots	Sub-Lots			
-	1	26	-	26 26
1	-	26	-	26.26
1	1	9	9	9.09
2	-	27	24	24.24
2	1	1	1	1.01
3	-	5	5	5.05
3	1	2	2	2.02
4	-	2	2	2.02
4	1	1	1	1.01
Total		99	44	-

the phenomenon of fragmentation as the separated pieces they own and/or operate incur a waste of time and energy in moving from one to the other. Within the block itself, fragmentation would arise if lots were not contiguous. Even lots separated by a mere lot may be fragmented as the farmers or owner's way from one to the next is obstructed and during the growth of the crop,, the full care of the seedlings and young plants that is required may not be possible, resulting in a lower output.

Notwithstanding the land policy of the government, one more cause of fragmentation of holdings and farms would arise if the owners and operators owned or farmed other pieces of land elsewhere while at the same time having a piece in the block. One more minor cause of fragmentation in the area is the subdivision of lots.

Breakdown of Fragmented Holdings

Table 4.2 gives a breakdown of the fragmented holdings according to their composition of pieces within Block Q alone,

TABLE 4.2

BREAKDOWN OF FRAGMENTED HOLDINGS

Location of Pieces	Frequency	% of Total (approx.)
Block Q	5	11.36
Block Q and S.S.	6	13.64
Block Q & outside S.S.	28	65.04
Block Q & outside S.S.	5	11.36
Total	44	100.00

within Block Q and in Sawah Sempadan, within Block Q and outside Sawah Sempadan or within the block, within Sawah Sempadan and without Sawah Sempadan. The greatest number resulted from the fact that 28 or about 65% of the fragmented holdings comprised pieces in the block and outside Sawah Sempadan. Six units or about 14% of the fragmented holdings are fragmented because pieces were agglomerated in Block Q and the other Sawah Sempadan blocks. Within Block Q, five holdings or about 11% are in a fragmented state because of "scattered purchases" of land.

Distribution of ~~Fragmentation~~ Fragmented Farms

Of a total of 102 farms, 38 or roughly 37% are in a state of fragmentation as shown in Table 4.3. The greatest number is found among the farms consisting of two lots each, as in the case of the holdings. Twenty-two of the total of 25 units of this size are fragmented. In percentage figures, about 22% of the total of 102 farms are fragmented. Again, this is mainly due to farmers operating one lot each in Block Q and outside Sawah Sempadan. As can be readily seen, the farms are comparatively not as highly fragmented as the holdings. The reason is quite obvious, as farmers would try as far as possible to operate land adjoining or at least economically near enough.

Breakdown of Fragmented Farms

Like the holdings, a breakdown of fragmented farms by location in pieces is shown, in Table 4.4 below. The highest frequency of fragmented farms is among the farms comprising pieces located within Block Q and outside Sawah. Of the total of 38 fragmented farms, 22 refer to the above location. This amounts to about 58% of the total of 38 fragmented farms.

TABLE 4.3

DISTRIBUTION OF FRAGMENTED FARMS 1963/64

Size in Pieces		Total	Fragmented	% of Total (102) (approx.)
Lots	Sub-Lots			
-	1	30	-	29.40
1	-	31	-	30.38
1	1	6	6	5.88
2	-	25	22	21.57
2	1	1	1	0.98
3	-	6	6	5.88
3	1	2	2	1.96
4	-	-	-	-
4	1	1	1	0.98
Total		102	38	-

TABLE 4.4

BREAKDOWN OF FRAGMENTED FARMS 1963/64

Location of Pieces	Frequency	% of Total (approx.)
Block Q	4	10.53
Block Q and S.S.	6	15.79
Block Q & outside S.S.	22	57.90
Block Q, S.S. and outside S.S.	6	15.79
Total	38	100.00

CHAPTER V

CASES OF CO-OWNERSHIP

"Co-ownership" as Applied to Block Q

There appears to be a discrepancy in the use of "Co-ownership" in this essay. As we have seen when two or more persons hold a common title as joint-owners of a piece of land and in fact operate or have others operate, well-marked portions of the land, this is "Co-ownership". It is, however, because of the common title held, only "Joint-ownership" in the eyes of the Land Office. Joint-ownership will be present where the same situation of common-title ownership exists but without the clearly demarcated portions of the land. The shares are only undivided with no individual claim to specific parts of the land.

In Block Q and the Sawah Sempadan area, while "de facto" subdivision of land owned by two or more persons exists, there is no situation of common titles with joint owners holding undivided shares. The barring of co-ownership is explicit in the condition laid down on the various land titles (AA, TOL, EMR). "The land hereby alienated shall not be subdivided provided in Section 50 or Section 101 of the Land Code nor shall Lot No..v.....(Bendang) be held by separate Entry in the Hukim Register from Lot No. ..... (Kampong)". However, we are approaching this study of ownership and operation from a factual point of view and seeing the situations as they exist on the ground and not in the eyes of the Land Office. Hence, it might be quite appropriate to regard the instances of subdivided pieces as "co-ownership" cases.

Cases of Co-ownership

The interviews revealed that there are co-owned pieces only in Block Q. Secondly, all the instances are those of pieces of land divided between two owners only, each piece being one lot subdivided into two sub-lots, each with a co-owner. In Table 5.1, we see the distribution of the cases of co-ownership among the various sizes of holdings consisting of lots and sub-lots. It should be noted that only those holdings with sub-lots contain co-owned land, the co-owned units being the sub-lot.

Thirty-nine or 39.39% of all the 99 holdings contain a piece of land that is co-owned. The greatest number is in the holdings made up of one sub-lot only, where all of the 31 sub-lots are co-owned land. This is equivalent to 31.31% of all the 99 ownership units.

Co-ownership is a function of subdivision. In Block Q, it is the result of a lack of enough money on the part of the co-owners to buy the whole piece, the result of old age setting in and the result of the (persons') inability to operate alone the whole piece of land.

TABLE 5.1

CASES OF CO-OWNERSHIP 1963/64

Size in Pieces		Number	Co-ownership	% of Total (approx.)
Lots	Sub-Lots			
-	1	31	31	31.31
1	-	56	-	56.56
1	1	5	5	5.05
2	-	4	-	4.04
2	1	2	2	2.02
3	-	-	-	-
3	1	1	1	1.01
Total		99	39	100.00

Types of Operators of Co-owned Land

The fact that insufficient cash prevents co-owners from purchasing more than subdivisions of a piece of land is also shown up by the fact that of the 39 co-owned units of land, 37 or 94.87% of the total co-ownership units are operated by the owners themselves. This can be observed in Table 5.2. However, not all of the 39 owner-operated pieces of land that is, one sub-lot, are the purchases of people too poor to buy up more pieces. In fact, some of the 39 sub-divided pieces comprising one sub-lot each are, in fact, the fragmented holdings and farms of Block Q. They were purchased as subdivided pieces due to the lack of time or labour to operate them. The remaining two cases of co-ownership or 5.13% are operated by tenant-farmers paying a bagi-dua rent at the end of the harvest.

TABLE 5.2

TYPES OF OPERATORS OF CO-OWNED LAND

1963/1964

Type	Frequency	% of all Co-owned Prices (Approx.)
Owner-Operator	37	94.87
Tenant-Operator	2	5.13
Total	39	100.00

CHAPTER VI

ANALYSIS OF THE LOCATION OF PIECES

Location of Component Pieces of Holdings and Farms

As we have seen earlier, the holdings and farms of Block Q are made up of pieces in three areas - in the block itself, where the pieces are in lots and sub-lots, outside the block but in Sawah Sempadan, that is, in the other Sawah Sempadan blocks, and thirdly, outside Sawah Sempadan, that is, in the Kampong lands. The pieces in the latter two areas are in lots only and the lots and sub-lots in all three areas are of various sizes. Most of the lots in Block Q and the other blocks are three acres and the sub-lots 1.5 acres. The kampong lots are mainly one acre, although there are some more than one acre as for instance, two acres or 5 acres.

Table 6.1 analyses the component pieces of the holdings and farms according to their location firstly in Block Q, then in the blocks within Sawah Sempadan and lastly, outside Sawah Sempadan. Percentages are also calculated and are approximate and to two places of decimals, as in all the other tables and chapters. The 99 holdings are made up of 163 pieces of which 115 or 70.15% are in Block Q, 14 or 8.54% in Sawah Sempadan and 34 or 21.31% in the non-Sawah area. On the other hand, the greater number of farms, that is 102, are made up of only 157 pieces. Of these, 115 or 73.60% are in Block Q, 13 or 8.32% in Sawah Sempadan and 29 or 18.08% outside Sawah Sempadan.

TABLE 6.1

LOCATION OF COMPONENT PIECES OF HOLDINGS AND FARMS, 1963/64

Area	Holdings	Approx. % of Total	Farms	% of Total Approx.
Block Q	115	70.15	115	73.60
S. Sempadan	14	8.54	13	8.32
Non-S.S.	34	21.31	29	18.08
Total	163	100.00	157	100.00

This analysis also helps to show up the different pictures of the operation and ownership patterns, even if they are not very marked in the study of Block Q. There are lesser component pieces (157) for farms than for holdings (163 pieces), but more farms (102) than holdings (99). In other words, there are 102 farmers operating 157 pieces in the various areas and 99 owners holding 163 pieces in the same areas.

Distribution of Holdings and Farms by Location of Component Pieces

We shall now examine with the help of Table 6.2, how the component pieces of land relating to both the farms and holdings are combined to form the 99 holdings and the 102 farms. The Table shows the distribution of the holdings and farms as to their composition with pieces within the block alone, within the block, Sawah Sempadan and outside Sawah Sempadan, and so on as can be seen in the Table.

Of the 99 holdings, 60 or 60.60% have pieces of land only in Block Q, 28 or 28.28% in Block Q and outside Sawah Sempadan and only five or 5.05% in all, the three areas. There are six holdings or 6.06% having pieces in the Block Q and in Sawah Sempadan. Among the farms, totalling 102, there are 68 units or 66.64% with only Block Q pieces and only 22 farms or 21.56% of all farms with Block Q and non-Sawah Sempadan pieces. Six farms have pieces in the three areas and six also in the block and (outside) Sawah Sempadan.

TABLE 6.2

HOLDINGS AND FARMS BY LOCATION OF COMPONENT PIECES, 1963/64

	Holdings		Farms	
	Number	Approx.% of Total	Number	% of Total (Approx.)
Block Q	60	60.60	68	66.64
Block Q, S.S. & Non-S.S.	5	5.05	6	5.90
Block Q & S.S.	6	6.06	6	5.90
Block Q & Non-S.S.	28	28.28	22	21.56
Total	99	100.00	102	100.00

CHAPTER VII

OWNERS IN THE LAND OFFICE RECORDS AND OWNERS ON THE GROUND

Legal and Actual Owners

The study of the ownership situation in Block Q in the May, 1964 survey also revealed that there exists a very different picture of land ownership in the records of the Land Office and land ownership in the block itself. The findings are tabulated below according to the types of land title held, or no title held.

TABLE 7.1

LEGAL OWNERS AND ACTUAL OWNERS IN BLOCK Q, 1963/64

Title	Number	Different De Facto Owners
A.A.	28	16
TOL.	-	-
EMR	1	1
No Title	66	43
Total	95	59
Approx. % of Land Office Total (95)		61.36
Approx. % of Actual Total (99)		59.59

Of the 95 lots in Block Q which were investigated, we have already seen that there are 99 holdings or in other words, 99 owners instead of 95, which latter there should legally be. In addition, some of the 99 holdings are subdivided into co-ownership holdings owned by two people (in the case of Block Q) and/or operated by them. Now we see from Table 7.1 that of those owners

holding Approved Application titles (A.A.) 16 of the total of 28 owners are not the owners#, as recorded in the Land Office. Of the sole instance of an Entry in the Mukim Register (MR) title, the actual owner also differs. Of the 66 owners having no titles, 43 are owners who do not exist in the Office records. In all, 59 or 61% of the total of 95 names of owners as they exist in the Land Office are actually different owners. As a percentage of the actual number of owners in Block Q, about 60% of the owners are actually not the owners as recorded in the Land Office. In other words, only about 40% of the owners of the lots in Block Q are the owners in the Land Office at Kuala Selangor.

There are a number of reasons for this situation of Ownership in Block Q. In the conditions laid down in the various land titles, it is stated that "Transfer shall mean and include a transfer between parties or by operation of Law or transmission by operation of Law." Furthermore, "The Land hereby alienated shall not be transferred or charged or leased without the written consent of the Ruler in Council." The main reasons for such a high proportion of different owners on the ground from owners in the Office records is that there has been much transference of land without the knowledge of the Land Office, and much subdivision of land to be co-owned and/or co-operated by two persons. The changing of ownership has been by death and subsequent inheritance according to custom and tradition, by sale of the land or transference by gift. Most of the people interviewed stated that they were about to make the transfers in the Land Office, or that they had already notified the Office but that the Office had not made the changes yet. The subdivision of the lots into co-ownership units is, of course, illegal.

Another reason for the large number of different names of owners in the Office and on the ground is the slowness of the Land Office machinery itself in entering the transfers of ownership in their books. A minor reason is also the changing of names by some of the owners who return from pilgrimage from Mecca.

CHAPTER VIII

PADI OUTPUT AND PRODUCTION IN BLOCK Q

In this chapter, we will study the output of padi in Block Q in the crop years 1962/63 and 1963/64. We will approach from three angles, namely, padi output by types of operators, by variety of padi and by location of the farms in the Block. The yield is given per acre and in gantangs.

Padi Output by Types of Operators

Table 8.1 gets out the yield per acre by the types of operators. The largest number of farmers is the owner-operator type, which number 82 or about 80% of the total of 102 farmers. There are 17 or 16.66% tenant-operators and three paid operators.

The yields for all types of operators were in general lower in 1963/64 than in 1962/63. In 1963/64, 62 owner-operators, 16 tenant-operators and two paid operators obtained below 400 gantangs an acre. In 1962/63. only 41 owner-operators, 10 tenant-operators and one paid-operator got the same amount. In both seasons, the remainder of the farmers of all three types obtained 400 gantangs per acre and above, thereby showing that a greater proportion of operators obtained a yield higher than 400 gantangs an acre in 1962/1963.

Padi Output by Variety of Padi

Table 8.2 gives the average output per acre of padi by variety of padi. Two main types, Padi Radin Puteh and Padi Sri Raja, were grown in the two crop years. Radin Puteh occupied 76 farms or about 75% of the total and 14 farms with Sri Raja. Sri Raja alone was planted on nine farms. Radin Puteh and Radin Kuning took up three farms.

Again, there was a generally lower yield per acre for all varieties in 1963/1964, as can be observed from Table 8.1. In 1963/1964 18 farms out of 76 growing Radin Puteh, none of the nine growing Sri Raja, three of the fourteen sowing Radin Puteh and Sri Raja and one of the three sowing Radin Puteh and Radin Kuning obtained a yield of 400 gantangs per acre and over. Compared with this, 41 with Radin Puteh, three with Sri Raja, five with the two varieties combined, and one with Radin Puteh and Radin Kuning obtained 400 gantangs an acre and over in 1962/1963.

TABLE 8.1

PADI OUTPUT PER ACRE IN BLOCK Q BY TYPES OF OPERATORS

Gantangs Per Acre	Owner-Operator		Tenant-Operator		Paid-Operator	
	1963/64	1962/63	1963/64	1962/63	1963/64	1962/63
0 and under 50	-	-	-	-	-	-
50 " " 100	1	-	-	-	-	-
100 " " 150	4	2	1	-	1	-
150 " " 200	9	3	1	-	-	-
200 " " 250	15	1	3	-	-	-
250 " " 300	13	10	3	3	-	1
300 " " 350	12	18	3	4	1	-
350 " " 400	8	7	5	3	-	1
400 " " 450	9	12	-	-	-	1
450 " " 500	5	8	-	1	-	-
500 " " 550	1	8	1	3	1	-
550 " " 600	-	-	-	-	-	1
600 " " 650	2	2	-	1	-	-
650 " " 700	2	-	-	1	-	-
700 " " 750	-	4	-	-	-	-
750 " " 800	-	1	-	-	-	-
800 " " 850	-	4	-	1	-	-
850 " " 900	1	-	-	-	-	-
900 " " 950	-	-	-	-	-9	-
950 " " 1,000	-	-	-	-	-	-
1,000 " " 1,050	-	2	-	-	-	-
Total	82	82	17	17	3	3
Approx. % of All Farms (102)	80.36		16.66		2.94	

Padi Output by Location in Block

To analyse the output of padi by the location of the farms in Block Q, we will divide the block into four rows, Row One to Four each of which we subdivide into an upper, a middle and a lower section. This is shown by a simple diagram below.

DIAGRAM 1

DIVISION AND SUBDIVISION OF BLOCK Q FOR ANALYSIS BY LOCATION OF PIECES

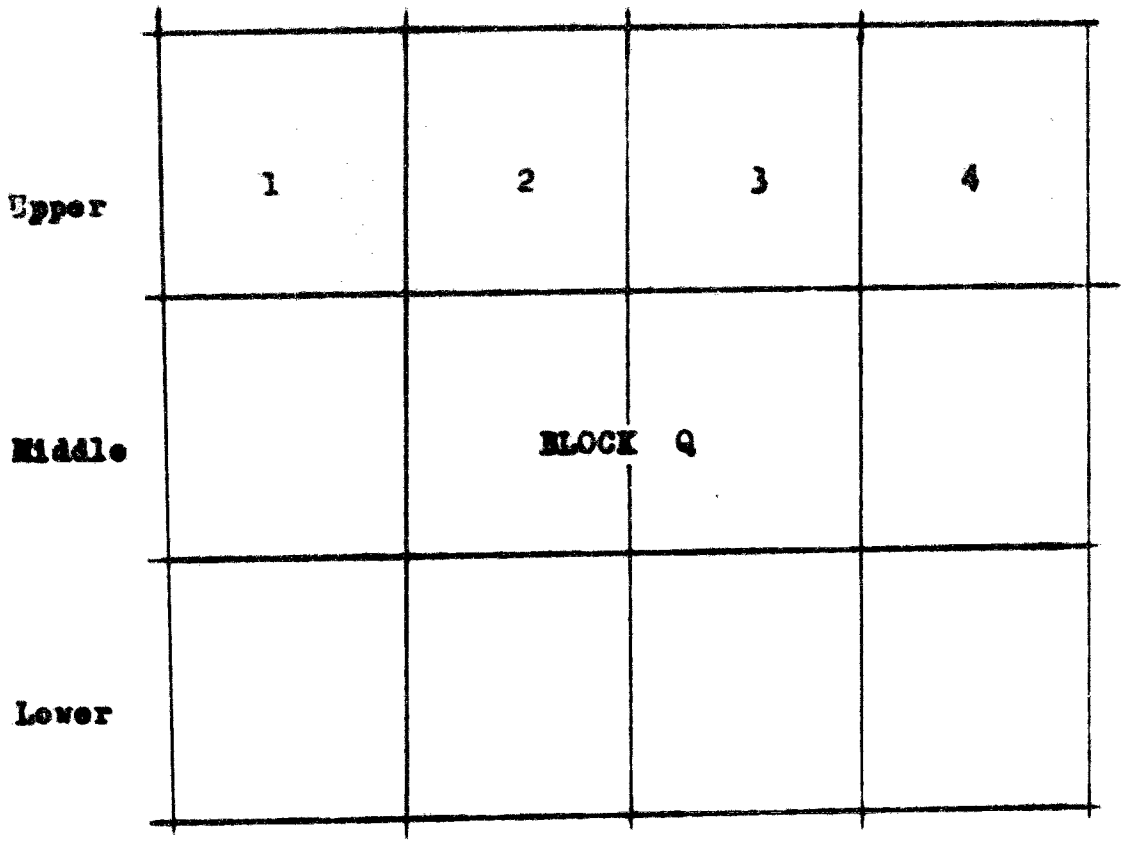

Table 8.3 shows the output of padi by location in the block as defined above. Total and average yields for both crop years are given for each row. The average yields of each row and for all four rows is approximate. We again notice that the yields for 1962/1963 are higher than for 1963/1964. The average for all rows in 1962/1963 is 419 gantangs per acre compared with 300 gantangs per acre for 1963/1964. The row with the lowest average yield for 1962/63 is Row Four with 380 gantangs an acre but the row with the lowest in 1963/1964 is Row One which obtained only 265 gantangs per acre. The reason is not explained by the fact that only 19 farms were investigated in Row One since the same row gave the highest

TABLE 8.2

PADI OUTPUT PER ACRE IN BLOCK Q BY VARIETY OF PADI

Gantangs Per Acre	Radin Putah		Sri Raja		Radin Putah & Sri Raja		Radin Putah & Radin Kuning	
	1963/64	1962/63	1962/64	1962/63	1963/64	1962/63	1963/64	1962/63
0 and under 50	-	-	-	-	-	-	-	-
50 " " 100	-	-	-	-	1	-	-	-
100 " " 150	4	1	-	-	1	1	1	-
150 " " 200	8	1	2	1	-	-	-	1
200 " " 250	11	1	3	-	4	-	1	-
250 " " 300	10	12	1	2	5	1	-	-
300 " " 350	15	14	-	2	1	4	-	1
350 " " 400	10	6	3	1	-	4	-	-
400 " " 450	8	12	-	1	1	-	-	-
450 " " 500	3	7	-	1	1	1	1	-
500 " " 550	2	10	-	-	1	1	-	-
550 " " 600	-	1	-	-	-	-	-	-
600 " " 650	2	1	-	-	-	1	-	1
650 " " 700	2	1	-	-	-	-	-	-
700 " " 750	-	3	-	1	-	-	-	-
750 " " 800	-	-	-	-	-	1	-	-
800 " " 850	-	5	-	-	-	-	-	-
850 " " 900	1	-	-	-	-	-	-	-
900 " " 950	-	-	-	-	-	-	-	-
950 " " 1,000	-	-	-	-	-	-	-	-
1,000 " " 1,050	-	1	-	-	-	1	-	-
Total	76	76	9	9	14	14	3	3
Approx. % of All Farms (102)	74.48		8.82		13.72		2.94	

yield in 1962/1963 of 467 gantangs per acre. Neither was the water-supply in Row One in the 1963/1964 crop year defective enough to explain the low yield.

TABLE 8.3

PADI OUTPUT PER ACRE IN BLOCK Q BY LOCATION IN BLOCK

Rows (Upper, Middle, Lower)	Total Yield		Total Acreage	Approx. Yield Per Acre	
	1963/64	1962/63	Both Years	1963/64	1962/63
1	5,043	8,879	19	265	467
2	8,238	11,378	27	305	421
3	8,138	11,085	26	313	426
4	9,226	11,407	30	308	380
All Rows	30,645	42,749	102	300	419

The general decrease in padi output in 1963/64 is due mainly to the widespread attack of a species of rice worm or "penyakit ulat" which proved more destructive to the crops than any other menace in the 1963/1964 crop year. The rice worms differed in their effect from padi field rats in that while the latter did no permanent damage to the seedlings, in the sense that they could rise again after being attacked, the former either killed the plants at growth or caused them to produce only partially-filled ears of grain if they survived. Hence the very large overall average drop of 119 gantangs per acre for Block Q in 1963/1964.

CHAPTER IX

PEST INCIDENCE IN BLOCK Q

No plurality of factors brought about the large decline in padi ouput in 1963/1964 referred to in the previous chapter. It was the result of a widespread and destructive attack by a kind of worm which produced a high proportion of empty or half-empty grain or simply killed the seedling off at growth. The amount and time of arrival of the water were satisfactory and the rats did negligible damage. In this chapter we shall study the incidence of the pest by the number of farmers, the area of farms and the variety of padi affected.

Pest Incidence by Farmers Affected

The number of farmers whose harvest were affected by the worm is given in Table 9.1 according to the type of operator they come under. No farmer escaped the effects of the invasion by the padi worm and suffered damage to his crop to a greater or lesser extent.

TABLE 9.1

PEST INCIDENCE IN BLOCK Q BY FARMERS AFFECTED, 1963/64

Type of Operator	Number	Number Affected	Approx. % of All Operators
Owner-Operator	82	82	80.40
Tenant-Operator	17	17	16.51
Paid Operator	3	3	3.00
Total	102	102	100.00

Pest Incidence by Area Affected

Table 9.2 examines the damage caused by the worm pest by

the acreage affected. The area is given in terms of specific acres against which are placed the number of farms affected and the total acreage affected calculated therefrom by multiplying the number of farms with the specific acre size. Approximate percentages are also provided, calculated to two decimals as of the total block acreage of 285 acres. The result obtained is the same as in the previous analysis, that is, all the areas were affected to one extent or another.

TABLE 9.2

PEST INCIDENCE IN BLOCK Q BY AREA AFFECTED
1963/1964

Farms in Specific Sizes	Number	Area Affected	Approx. % of Total Area
1.5	33	49.5	17.32
3.0	59	177.0	61.95
4.5	5	22.5	7.87
6.0	3	18.0	6.30
7.5	1	7.5	2.62
10.5	1	10.5	3.67
Total	102	285.0	100.00

One thing, though, should be noted. The tables in this chapter tell us of the farmers, the farm area and the varieties of padi affected by the worms. But they make no attempt to analyse the actual extent of damage suffered, as this would not be possible, and certainly do not mean total damage suffered. Indeed if this were the case, there would be no harvests in the 1963/1964 season.

Pest Incidence by Variety of Padi Affected

Three varieties were planted in the 102 farms of Block Q, the predominant variety being Radin Puteh. Seventy-six farms planted only Radin Puteh and another 17 planted it with either Sri Raja (14) or Radin Kuning (3). Sri Raja was planted as the sole variety on nine farms. However, as Table 9.3 shows, the worms made no distinction between the varieties and caused damage to a greater or lesser extent to all types.

TABLE 9.3

PEST INCIDENCE IN BLOCK Q BY PADI VARIETY AFFECTED
1963/1964

Variety	Farms	Affected	Approx. % of Total
Radin Puteh	76	76	74.51
Radin Puteh & Sri Raja	14	14	13.53
Sri Raja	9	9	8.82
Radin Puteh & Radin Kuning	3	3	2.94
Total	102	102	100.00

CHAPTER X

VIEWS REGARDING WATER SUPPLY IN BLOCK Q

Water Supply by Farms and Location of Farms

It was mentioned earlier that the supply of water in the 1963/1964 crop year was in most instances adequate and at the right time. The water supply was not a major factor in the great drop in padi output in 1963/1964 in other words. However, there was a certain, if small, percentage of farms not receiving the best supply. The drop in output may have been partly due to the unsatisfactory water condition on these few farms. But the farmers themselves claim that the main cause was the attack by the worms.

The defective water supply on the eight farms (concerned) was due to either too little or too much being supplied, and not because of incorrect time of arrival. Table 10.1 shows that three farms received too much water and five farms too little. The farms which had too much water are located at a bend of the block where the land dips slightly and becomes flooded every year. The five farms receiving insufficient supplies are slightly higher than the others according to the farmers and to personal observation.

On the other hand, 94 farms of the 102 received enough water at the right time. This is 92.16% of the total number of farms.

TABLE 10.1

SUPPLY OF WATER BY FARMS AND LOCATION IN BLOCK
1963/1964

Water Supply	Number of Farms					% of All Farms (Approx.)
	Row 1	Row 2	Row 3	Row 4	Total	
Right Time & Amount	17	27	24	26	94	92.16
Right Time/ Not Enough	-	-	2	3	5	4.90
Right Time/ Too Much	2	-	-	1	3	2.94
Total	19	27	26	30	102	100.00

The table analyses the water supply by the number of farms in the various rows (upper, middle and lower). In Row One, 17 farms, in Row Two, 27 farms, Row Three, 24 farms and in Row Four, 26 farms all received enough water at the right time. But two farms in Row Three and three farms in Row Four had too little. On the other hand, two farms in Row One and one farm in Row Four had too much.

Water Supply by Area Supplied

Table 10.2 shows us the different conditions of the water supply in 1963/1964 according to the areas receiving the supplies and their respective percentages. Of the total of 285 acres in Block Q, 259 acres or 90.65% had enough water at the correct time, 15 acres or 5.25% had too little and 11 acres or 3.85% had too much.

TABLE 10.2

SUPPLY OF WATER IN BLOCK Q BY AREA SUPPLIED
1963/1964

Water Supply	Area	% of Total (Approx.)
Right Time & Amount	259.0	90.65
Right Time/Not Enough	15.0	5.25
Right Time/Too Much	11.0	3.85
Total	285.0	100.00

CHAPTER XI

OTHER CROPS IN BLOCK Q

Crops other than Padi in Block Q

In the conditions on the land titles it is clearly stated that "Lot No..... (Bendang) hereby alienated shall be used wholly for the cultivation of wet rice" and again "No plant or tree of the species Hevea Brailliensis or any other rubber-producing plants or trees shall be planted or cultivated or permitted to grow on the land hereby alienated." While the latter condition has been strictly observed in Block Q, many of the 102 farms there have cultivated a variety of crops other than padi. They are bananas, jagong, fruits, coconuts, keladi, keledek, sugar-cane, mengkuang and kapas in that order of importance. The number of farms cultivating these crops and their percentage as of the total farms (102) are set out in Table 11.1.

TABLE 11.1

OTHER CROPS THAN PADI IN BLOCK Q
1963/1964

Crops	Farms	Approx. % of All Farms (102)
Bananas	77	75.49
Jagong	68	66.67
Fruits	52	50.98
Coconuts	51	50.00
Keladi	38	37.02
Keledek	19	18.63
Sugar-Cane	14	13.72
Mengkuang	14	13.72
Kapas	3	2.94

Of the 102 farms in the block, 77 or about 75% grow bananas, 52 farms grow fruits, 51 coconuts and so on as given in the table. The bananas, fruits, coconuts, keladi, keledek, sugar-cane, kapas and mangkuang are all grown in the compound just around the farmer's dwelling and may also (line) the path leading up to the house. The maize or jagong and the keladi also are usually found in parts of the padi field which has already been harvested, burnt and prepared for the cultivation of these subsidiary crops. Jagong and keladi are always grown in the period after the harvest and before the next sowing if cultivated in the padi field or sawah. But they may be grown, with the other plants as well, at any time of the year around the house or along the path to the house.

The fruits mentioned above include pineapples, jack fruit, nangka, bread-fruit and mango. The fruit trees in the block are the short species supplied by the government to the farmers.

All the lots with dwellings have some or all of the subsidiary crops mentioned. On the other hand, most of those without dwellings have very few or none of these crops, for obvious reasons.

In the padi lots of the blocks, however, the coconut trees are very few compared to the "fringe coconuts". They are not produced for wholesale purposes and in fact are consumed mainly within the block and the surrounding blocks. The coconut trees and other tall and spreading fruit trees give shade and protection against the strong winds in the open padi fields which might otherwise knock the dwellings down. A few scattered trees not bearing fruits also help to do this. Besides the coconuts in the block lots, the fruits, maize and sugar-cane are also mainly consumed by the farmers and their families. A small proportion of all this agricultural produce, plus their little poultry, is either taken to the nearby towns like Tanjong Karang by the farmers or, in the main, by middlemen who collect them from centres in Sawah Sempadan in lorries and vans. The prices they get from the middlemen for their produce are of course like all rural produce ~~poor~~ great elsewhere, very low as they are at a sale price minus transport and other costs. For example, a 100 ears of maize cost $2.50 or 2.5¢ each and a kati of "keladi" about 3¢. In the towns and town areas a single ear of cooked maize would fetch about 10¢ to 15¢ and if it is of a very large size, 20¢. But the wide variety of supplementary crops grown by the farmer does supply a large part if not the whole, of his needs for personal consumption.

CHAPTER XII

GENERAL OBSERVATIONS OF BLOCK Q

The immediate impression which any interviewer will have of the block and of the other blocks in Sawah Sempadan is that the padi farmers here are economically and socially better off than their counterparts in many padi-growing areas elsewhere. This is only to be expected as these farmers are the beneficiaries of the first rice-producing area in Malaysia planned and implemented on a modern system. Hence all the farmers started off with the inception of the "Rice Bowl" project with about three acres of padi farm each and some with an average of one acre of kampong land a piece while others were promised the same when it could be available. These pieces of padi farm were well arranged in a pattern of alphabetic blocks averaging about a 100 lots in each complete rectangle and less in the blocks along the borders of the Sawah Sempadan area. Each block is subdivided as it were by three paths or bunds running vertically down the blocks, the central bund being the largest. These three provide the farmers with earth paths for travel to their fields and links them to the other blocks, to the main laterite roads (also running vertically down Sawah Sempadan) and so to the world outside Sawah Sempadan. Communication within the sawah and without the sawah is free on foot, by bicycle, motorcycle, cars and even lorries, the latter two being on the main laterite roads only.

Also running vertically along the length of the whole area are the main irrigation feeder channels, which draw their water from a substantial major source running in an east-west direction in the north of the Sawah Sempadan rice-area. The water is controlled by sluice-gates. Thus, apart from convenient communication and transport facilities, the farmers in Block Q and the rest of the blocks benefit from a well-planned and very good system of irrigation and drainage.

Another consideration which puts the farmers in a position of great advantage is the fact that, being, the participants in a modern rice-growing scheme, they have greatly increased their yield of padi by using the best-suited strains (Radin Putch and Sri Raja being the prevalent ones in Block Q as we saw earlier) and in addition fertilisers and mechanised farming to aid them. This, plus the fact of natural soil fertility and an almost excellent drainage and irrigation scheme, has given the farmers in Block Q the substantial yield of averages per acre of 250 to 550 gantangs in the main and in some cases over 700 gantangs. This is in normal years. A single overall average would be around 419 gantangs

an acre in normal crop years. In an abnormal year like 1963/1964, the overall average was however about 300 gantangs per acre.

The rather widespread cultivation of a variety of other crops than padi, namely, maize, sugar-cane, vegetables and fruits (like pineapple, mango and jack-fruit) and the rearing of poultry in some farmsteads also indicate the better economic position of the Block Q farmers, who are in fact a fair representation of the farmers in the other blocks. These are supplementary, if minor, sources of income while at the same time providing a wider diet to them.

In earlier chapters we examined the situations of co-ownership and then that of fragmented farms and holdings. Our findings were that there were fairly high percentages of co-ownership and of fragmentation.

It might perhaps be very advisable not to permit subdivisions of primarily subdivided lots into secondary subdivisions of co-ownership units. Assuming that the average farmer and his family can survive fairly well on half a lot of padi and supplementary cultivation, there should be strict legislation that no lots once co-owned by two persons may be subdivided a second time. If a family needed more land than that, government or co-operative help could perhaps help two or more co-owners of each lot with new and larger lots. On the other hand, where farmers had sufficient funds and initiative to purchase more lands and thereby increase the amount of fragmented farms and holdings, this form of agglomeration and fragmentation should be allowed. But there should also be some system of regulating the amount, or at least the locality, of new lots agglomerated.

It was also learnt from the interview that the main, if not sole, rental arrangement in Block Q was the "bagi-dua", i.e., the tenant paying his rent as a half-share of his harvest to the landlord. There should also be a means of controlling the rent rates in the block and in Sawah Sempadan so that they remain equitable to both sides. There is no effective control of the very high and unfair bagi-dua or 50% rent in Block Q, and the other blocks as well, although there is a law which limits rent to 30% of the harvest.

2525	H1	2526	H20	2527	H47	2528	H73
2529	H2	2530	H21	2531	H48	2532	H73 H74
2533	H2	2534	H22	2535	H49 H50	2536	H75 H76
2537	X	2538	H23	2539	H51	2540	H77
2541	X	2542	H24 H25	2543	H52	2544	H78
2545	X	2546	H26	2547	H53	2548	H79 H80
2549	H3	2550	H27 H27	2551	H54	2552	H80
2553	H4	2554	H28	2555	H40	2556	H80
2557	H5	2558	H29	2559	H55 H56	2560	H81 H82
2561	H6	2562	H30	2563	H57 H58	2564	H83
2565	H7	2566	H31	2567	H59	2568	H84
2569	H8	2570	H32 H33	2571	H31 H60	2572	H85
2573	H8	2574	H34	2575	H61	2576	H86
2577	H9	2578	H35	2579	X	2580	X
2581	X	2582	H36 H37	2583	H62	2584	H87
2585	H10	2586	H38 H39	2587	H63 H64	2588	H88
2589	H11 H12	2590	H39	2591	X	2592	H85 H89
2593	H13	2594	H39	2595	H27	2596	H90 H91
2597	H14	2598	H40	2599	H27	2600	H92 H93
2601	X	2602	H41	2603	H65	2604	H94
2605	X	2606	H42	2607	H66	2608	H69
2609	H15	2610	H43	26..1	H67	2612	H95
2613	H16	2614	H27	2615	H68	2616	H96 H97
2617	H17	2618	H44	2619	H69 H70	2620	H98
2621	H18	2622	H45	2623	H45	2624	H94
2625	H19	2626	H46	2627	H71	2628	H99

HOLDING LIST

No.	Owner's Name	Lots in Q	Lots outside Q
H1	Rahayah b. Min	2525	-
H2	Hj. Rayah bt. Hj. Nawi	2533,2529	-
H3	Jamin b. Akir	2549	-
H4	Mat Ajib b. Abdul Rejab	2553	1 Lot (K)
H5	Sant b. Hj. Shuker	2557	-
H6	Hashim b. Hj. Nawi	2561	-
H7	Long b. Jalil	2565	-
H8	Hj. Esan b. Hj. Ali	2569	E 2478
H9	Kamaruddin b. Hj. Sidek	2573,2577	-
H10	Mahmud b. Dollah	2585	Bt. Klingbling (5ac.)
H11	Abdul Rahni b. Hussein	2589	-
H12	Mintain bt. Hussein	2589	-
H13	Hj. Abdul Amin b. Tahir	2593	-
H14	Sarei b. Jamikal	2597	Sg. Sireh (4 ac.)
H15	Rupi b. Kassim	2609	-
H16	Hj. Ismail b. Jafar	2613	Ujong Permatang (1ac.)
H17	Enchu bt. Osman	2617	Sg. Kajang(1ac.) Batu 7 (2ac.)
H18	Abu Kassim b. Ismail	2621	-
H19	Nordin b. Hj. Idris	2625	Sg. Kajang (1ac.)
H20	Sirat b. Kromomojo	2526	1 Lot (T) Tiram Buroh(5ac.)
H21	Samingan b. Kusin	2530,2550	Tiram Buroh(1ac.)
H22	Sekak b. Hj. Ibrahim	2534	Tiram Buroh(1ac.)
H23	Surif b. Hj. Mirad alias Poyowirjo	2538	-
H24	Ismail b. Manyirino	2542	Tiram Buroh(1ac.)
H25	Saari b. Hj. Hasan	2542	-

No.	Owner's Name	Lots In Q	Lots Outside Q
H26	Mat Junah b. Hj. Abdul	2546	-
H27	Usali b. Tok Karloh	2550,2595	Batu 7 (5ac.)
H28	Sukirman b. Abdul	2554	-
H29	Mumh b. Dipo Kadir	2558	1 Lot (K) Bt.Changan (8ac.)
H30	Asmat Kasni b. Yasin	2562	-
H31	Hj.Daud b. Kasan Ketad	2566,2571	-
H32	Hj. Rahman b. Asnu alias Sanyip	2570	-
H33	Mahidin b. Koyak	2570	-
H34	Hasmiran b. Harto	2574	Tiram Buroh(1ac.)
H35	Hj. Abdul Hanan b. Hj. Abdullah	2578	E 2422
H36	Jamon b. Mahmud	2582	-
H37	Harun b. Zainon	2582	-
H38	Mohd. b. Abu Bakar	2586	Bt. Blingbling (2.5 ac.)
H39	Latif b. Samad	2586,2590 2594	Bt. Blingbling (3.5 ac.)
H40	Suhur b. Karim	2598	Bt. Blingbling (3 ac.)
H41	Kamarudin b. Hanab	2602	Bt. Blingbling (2 ac.)
H42	Kasim b. Adam	2606	-
H43	Abdul Rajab b. Ahmad	2610	U. Permatang (1 ac.)
H44	Samien b. Taikromo	2618	S 2667/2664 J2347
H45	Ibrahim b. Hanab	2622,2623	-
H46	Karon b. Kamil	2626	-
H47	Abdul Basar (Hj. Said)	2527	U. Permatang (1 ac.)
H48	Ahmad b. Mohsin	2531	-
H49	Pirman b. Pegorjo	2535,2555	-
H50	Mohd.Yunid b. Sahlan	2535	-
H51	Abdul Majid b. Mat Said	2539	-
H52	Parman b. Korojo	2543	-
H53	Yusof b. Mahidin	2547	-

No.	Owner's Name	Lots in Q	Lots Outside Q
H54	Suwad b. Hj. Salleh	2551	E 2519, Kg. Bantag (8 ac.)
H55	Salimin b. Karmojo	2559	-
H56	Karimah b. Kariyoh	2559	-
H57	Pardi b. Chachuli alias Diman	2563	-
H58	Hj. Bakri b. Mustafa	2563	-
H59	Saikon b. Hj. Bakar	2567	Asean Jawa(2.75 ac.)
H60	Jemiah	2571	-
H61	Marjuki b. Samad	2575	-
H62	Ponem b. Joyosintoso	2583	-
H63	Saikun b. Puncheh	2587	-
H64	Mohd. Sarib b. Nuah	2587	-
H65	Ramli b. Biroha	2603	-
H66	Jamian b. Ahmad	2607	-
H67	Hj. Turahim b. Osman	2611	S 2632
H68	Sakun	2615	-
H69	Hj. Basir	2619	-
H70	Hj. Rahman	2619	-
H71	Daran b. Romanawi	2627	Kg. Kelapa (1 ac.)
H72	Mariman b. Paviroh	2528	Tiram Buroh (1.5 ac.)
H73	Tukardji b. Yunus	2532	-
H74	Saikon	2532	-
H75	Siwar	2536	Tiram Buroh(1 ac.)
H76	Rakiman	2536	Tiram Buroh(1 ac.)
H77	Ahmad Osman b. Kasan	2540	Kg. Baharu (1 ac.)
H78	Hj. Alang	2544	-
H79	Emanati b. Karto	2548	-
H80	Jayus b. Biriyoo	2548,2552 2556	Bt. Changan(2 ac.)
H81	Salmiah bt. Idris	2560	-
H82	Sekat	2560	-
H83	Bra. b. Martoobo	2564	Bt. Changan(2 ac.)
H84	Ahmad Sopie b. Ahmad	2568	Tiram Buroh(1 ac.)

No.	Owner's Name	Lots in Q	Lots outside Q
H85	Rahman b. Hj. Sol Alias	2572,2592	Sg. Kelambu (1 ac.)
H86	Salimin b. Sol	2576	-
H87	Hj. Abdul Rakhim	2584	Tiram Buroh(1 ac.)
H88	Hj. Abdul Basir b. Martokario	2588	Batu 5 (5 ac.)
H89	Abdul Manan b. Jaya	2592,2608	-
H90	Selamat b. Samad	2596	-
H91	Hj. Ahmad b. Marto	2596	-
H92	Hj. Abdul Hamid	2600	2 Lots (R), Tiram Buroh (4.5 ac.)
H93	Mohd. Tahir b. Hj. Lias	2600	-
H94	Abas b. Hj. Esan	2604,2624	-
H95	Kasiah bt. Mat Taib	2612	R 2218
H96	Sulaiman b. Burawi	2616	-
H97	Hj. Sopiee	2616	Batu 5 (12.5 ac.)
H98	Siti Isa bt. Samat	2620	-
H99	Hj. Hamzah b. Hj. Salleh	2628	T. 2324 Batu 5 (1.5 ac.)

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2529	F2	2530	F21 F22	2531	F48	2532	F74 F75
2533	F2	2534	F23	2535	F49 F50	2536	F76 F77
2537	X	2538	F24	2539	F51	2540	F78
2541	X	2542	F25 F26	2543	F52	2544	F79
2545	X	2546	F27	2547	F53	2548	F80 F81
2549	F3	2550	F21	2551	F54	2552	F81
2553	F4	2554	F28	2555	F49	2556	F82
2557	F5	2558	F29	2559	F55 F56	2560	F83 F84
2561	F6	2562	F30	2563	F57 F58	2564	F85
2565	F7	2566	F31	2567	F59	2568	F86
2569	F8	2570	F32 F33	2571	F60 F61	2572	F87
2573	F9	2574	F34	2575	F62	2576	F88
2577	F9	2578	F35	2579	X	2580	X
2581	X	2582	F36 F37	2583	F63	2584	F89
2585	F10	2586	F38 F39	2587	F64 F65	2588	F90
2589	F11 F12	2590	F39	2591	X	2592	F87 F91
2593	F13	2594	F39	2595	F22	2596	F92 F93
2597	F14	2598	F40	2599	F22	2600	F94 F95
2601	X	2602	F41	2603	F66	2604	F96
2605	X	2606	F42	2607	F67	2608	F97
2609	F15	2610	F43	2611	F68	2612	F98
2613	F16	2614	F22	2615	F69	2616	F99 F100
2617	F17	2618	F44	2619	F70 F71	2620	F101
2621	F18	2622	F45	2623	F45	2624	F35
2625	F19	2626	F46	2627	F72	2628	F102

FARM LIST

No.	Farmer's Name	Lots in Q	Lots outside Q
F1	Rahayuh bin Din	2525	-
F2	Hj. Rayah bt. Hj. Hami	2529,2533	-
F3	Jamil b. Akir	2549	-
F4	Mat Ajir b. Abdul Rajab	2553	11 or (K)
F5	Saat b. K. Shukor	2557	-
F6	Hashim b. Hj. Ravi	2561	-
F7	Long b. Jalil	2565	-
F8	Hj. Esam b. Hj. Ali	2569	E2478
F9	Kamaruddin b. Hj. Sidek	2573,2577	-
F10	Jamon b. Mahmud	2585	Bt.Blingbling (5ac.)
F11	Abdul Rahim b. Hussain	2589	-
F12	Mintan bt. Hussain	2589	-
F13	Jaafar b. Idris	2593	-
F14	Siran b. Jamikul	2597	-
F15	Hj. Ahmad b. Hj. Noor	2609	-
F16	Hj. Ismail b. Jaafar	2613	U. Permatang (1 ac.)
F17	Rachu bt. Osman	2617	Batu 7 (2 ac.) Sg. Kajang (1 ac.)
F18	Abu Kassim b. Ismail	2621	-
F19	Hj. Idris b. Hj. Noah	2625	S 2689 Batu 7 (3 ac.)
F20	Sirat b. Kromomojo	2526	1 Lot (T) Tiram Buroh (5 ac.)
F21	Semingan b. Kusin	2530,2550	Tiram Buroh (1 ac.)
F22	Usali b. Tonkarioh	2550,2595 2599,2614	Batu 7 (5 ac.)
F23	Sekak b. Hj. Ibrahim	2534	Tiram Buroh (1 ac.)
F24	Surif b. Hj. Hirad alias Payowirjo	2538	-

No.	Farmer's Name	Lots in Q	Lots outside Q
F25	Ismail b. Mariyorono	2542	Tiram Buroh (1 ac.)
F26	Sanari b. Hj. Kasan	2542	-
F27	Mat Yunoh b. Hj. Abdul Tahir	2546	-
F28	Sukiman b. Abdul Kadir	2554	-
F29	Nuah b. Dipo	2558	1 Lot (T) Tiram Buroh (1 ac.)
F30	Asmat Kasmi b. Yasin	2562	-
F31	Hj. Daud b. Kasan Estad	2566	-
F32	Hj. Rodman b. Asma @ Sunyip	2570	-
F33	Mahidein b. Koyak	2570	-
F34	Hasmiran b. Marto	2574	Tiram Buroh (1 ac.)
F35	Dadul b. Hj. Abdul Hanan	2578	E 2422
F36	Jamon b. Mahmud	2582	-
F37	Haron b. Saimon	2582	-
F38	Mohd. B. Abu Bakar	2586	Bt. Blingbling (2.5ac.)
F39	Latif b. Sanad	2586,2590 2594	Bt. Blingbling (3.5 ac.)
F40	Suhur b. Karim	2598	Bt. Blingbling (3 ac.)
F41	Samdin b. Ismail	2602	-
F42	Kassim b. Adam	2606	-
F43	Abdul Rajak b. Ahmad	2610	U. Permatang (1 ac.)
F44	Sarman b. Taikromo	2618	S2667/2664, T2347
F45	Ibrahim b. Manab	2622,2623	-
F46	Sanari b. Hj. Kasan	2626	-
F47	Abdul Basar (Hj. Said)	2527	U. Permatang (1 ac.)
F48	Ahmad b. Mohsin	2531	-
F49	Piraman b. Payorjo	2535,2555	-
F50	Mohd. Yunid b. Sahlan	2535	-
F51	Abdul Majid b. Mat Said	2539	-
F52	Parman b. Korojo	2543	-
F53	Yusof b. Mahidin	2547	-
F54	Suwad b. Hj. Salleh	2551	E 2519, Kg. Banting (8 ac.)
F55	Salimin b. Karmojo	2559	-
F56	Karimah b. Kariyah	2559	-

No.	Farmer's Name	Lots in Q	Lots outside Q
F57	Pardi b. Chachuli @ Diman	2563	-
F58	Hj. Bakri b. Mustafa	2563	-
F59	Saikun b. Hj. Bakar	2567	Assam Jawa (2.75 ac.)
F60	Jeniah	2571	-
F61	Sarib b. Pukil	2571	-
F62	Marzuki b. Samad	2575	-
F63	Sairan b. Timan	2583	Kg. Kelapa (3 ac.)
F64	Sakiman b. Punekoh	2587	-
F65	Mohd. Sarib b. Muah	2587	-
F66	Ramli b. Bircha	2603	-
F67	Jamian b. Ahmad	2607	-
F68	Hj. Turalim b. Osman	2611	S2632
F69	Norahim b. Muraidi	2615	-
F70	Hj. Basir	2619	-
F71	Hj. Rahman	2619	-
F72	Dawam b. Romanawi	2627	Kg. Kelapa (1 ac.)
F73	Mariman b. Paviroh	2528	Tiram Buroh (1.5 ac.)
F74	Tukardji b. Yunus	2532	-
F75	Saikon	2532	-
F76	Siwar	2536	-
F77	Rakiman	2536	-
F78	Ahmad Osman b. Kasan	2540	Kg. Bahru (1 ac.)
F79	Asma bt. Mohd.	2544	-
F80	Emanati b. Karto	2548	-
F81	Jayus b. Biriyoo	2548,2552	Bt. Changan (2 ac.)
F82	Abdullah Hamidi	2556	-
F83	Salniriah bt. Idris	2560	-
F84	Jokat	2560	-
F85	Bro b. Martorko	2564	Bt. Changan (2 ac.)
F86	Sarman b. Wong Sagawira	2568	-

No.	Farmer's Name	Lots in Q	Lots outside Q
F87	Abdul Rahman b. Jaya	2592,2572	-
F88	Salimin b. Sel	2576	-
F89	Hj. Abdul Rahhim	2584	Tiram Buroh (1 ac.)
F90	Suleiman b. Burawi	2588	-
F91	Rahman b. Hj. Alias	2592	-
F92	Selamat b. Samad	2596	-
F93	Hj. Ahmad b. Harto	2596	-
F94	Saliah bt. Kasimin	2600	2 Lots (K) Tiram Buroh(4.5 ac.)
F95	Mohd. Taha	2600	-
F96	Aba b. Hj. Eman	2604,2624	-
F97	Said b. Palil	2608	Asnam Jawa (0.75 ac.)
F98	Said b. Mat Taib	2612	R 2218
F99	Suleiman b. Burawi	2616,2588	-
F100	Hj. Sopiee	2616	-
F101	Abu Bakar b. Samat	2620	S 2668
F102	Hj. Hamzah b. Hj. Salleh	2628	T 2324, Batu 5 (1.5 ac.)

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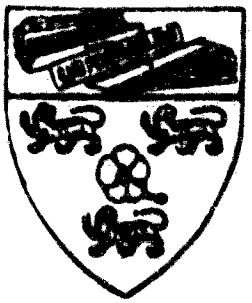
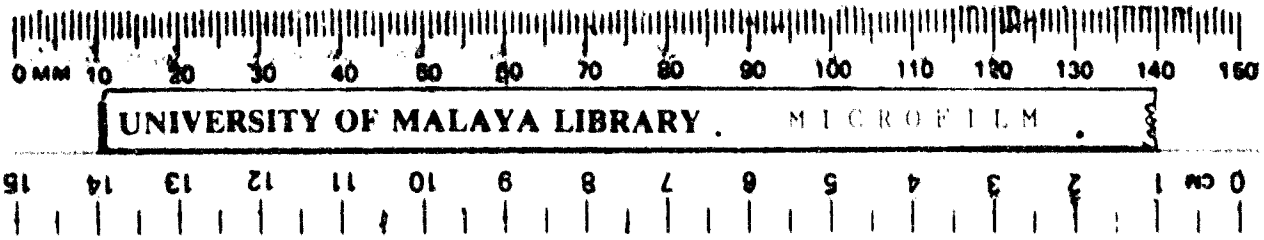


TAMAT



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