

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Vol XV No. 2

APRIL-JUNE

1960

ISSN

0019-5014

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS





INDIAN SOCIETY OF AGRICULTURAL ECONOMICS, BOMBAY

CEILING ON LAND HOLDINGS— A STUDY OF THE PROBLEM WITH PARTICULAR REFERENCE TO TANJORE DISTRICT OF MADRAS STATE

K. Govindan

The object of this paper is to present a method of approach to the problem of ceiling on land holdings and to indicate an appropriate level of ceiling for a relatively small and homogeneous area with the help of this method. Various criteria have been suggested in recent years for arriving at a satisfactory level of ceiling on agricultural land. The most important among them is the concept of a 'family holding' defined as an operational unit which can be managed efficiently with the resources in man-power or bullock-power belonging to the cultivating family. This concept of a family holding, therefore, involves the application of various norms like: (1) The full utilisation of a minimum unit of capital (a plough unit), (2) adequate employment for the cultivating family (a work unit) and (3) physical ability to operate the owned holding. Another important criterion for fixing the level of ceiling is based on the concept of a maximum holding defined in terms of a given annual net income, which will afford a reasonable standard of living to the cultivating family. Finally, one more criterion of national importance may be added to those mentioned above—that of maximising the gross agricultural production per acre.

In the Planning Commission's proposals for fixing the level of ceiling an attempt has been made to link up the concept of the family holding with that of a holding which will yield a given annual net income. Thus the family holding has been defined as an extent of land yielding an annual net income of Rs. 1,200 and the ceiling is to be fixed at three times this family holding. This confusing fusion of the two concepts seems to be rather unjustified since the family holding is essentially an operational unit. These two concepts are not similar, and the size of holding arrived at by applying each one of them need not necessarily be the same even though in some cases they might coincide. Moreover, too much emphasis on the income criterion might in all probability result in the selection of a high level of ceiling which will defeat the most important aim behind the proposal for land ceilings—that of satisfying the land hunger of the landless and the land-poor cultivators. It will be more appropriate if the income criterion is regarded as one of the criteria for fixing the level of ceiling instead of relying on it as the sole criterion.

Therefore, a better method of approach to arrive at a satisfactory level of ceiling will be to reconcile these conflicting criteria to the maximum extent possible. The family holding in a particular area can thus be found out by the application of the three norms already mentioned. While the application of the first two norms will give a minimum size of family holding, the application of the third will give a maximum size of family holding which will be within the operating capacity of a cultivating family with given number of workers. However, the size of such a family holding may not differ much with the variations in the fer-

^{1. &}quot;Evaluating Public Agricultural Programmes by Means of Farm Management Studies" by D. Ghosh in Farm Planning and Management, Ministry of Food and Agriculture, Government of India, Delhi, 1959, p. 107.

tility of land, and a level of ceiling based on the concept of the family holding alone may affect adversely the cultivators of less fertile lands. It is in avoiding such a discriminatory treatment that the criterion of income comes in handy. An attempt is made in this paper to indicate an appropriate level of ceiling for a relatively small and more or less homogeneous geographical area by applying these alternative criteria. This study is based on the data drawn from the survey of three villages conducted by the Agricultural Economics Research Centre of the University of Madras.

A BRIEF DESCRIPTION OF THE AREA SELECTED

The area under study is Tanjore District of Madras State. Tanjore district, popularly known as "the granary of the South" consists of three natural divisions, viz., the new delta, the old delta and the uplands. The greatest agricultural staple of the district is rice, the production of which exceeds the local demand. Most of the lands in Tanjore come under Ryotwari while there are a few under Inam also. Temples and mutts and some rich 'mirasdars' own large extents of land. There are 41 temples owning more than 100 acres each and the average area held per temple is 508.16 acres. Tanjore district was till recently the scene of constant tenant uprisings resulting in a legislation for the protection of the tenants being enforced. Consequently the 'Pannai' system of cultivating the lands with the help of permanent farm servants has become more popular among the big 'pattadars' than 'waram' or lease.

Three villages have been selected from Tanjore district for a detailed study of the structure of land holdings and its implications. The three natural divisions of the district have certain distinct features and so the villages have been selected from all these three regions. The village Madigai is situated in the new delta, Kalyanapuram in the old delta and Sengipatti in the uplands. Madigai is the most fertile area and Sengipatti the least fertile, while Kalyanapuram stands midway between the two former villages in fertility. In Madigai and Kalyanapuram the most important crop is paddy. Sengipatti being a dry village the important crops are cholam, varagu, groundnut, etc., paddy being cultivated only on a negligible extent of land. This wide disparity between the conditions of agricultural production in Madigai and Sengipatti, even though they happen to belong to the same district, clearly shows the inadvisibility of fixing a uniform level of ceiling even for a relatively small geographical area.

OWNERSHIP DISTRIBUTION OF LAND IN THE SELECTED VILLAGES

Table I at the end gives the ownership distribution of land in the three fillages. The inequality in the ownership of land can be clearly seen from this Table. This inequality is the greatest in Kalyanapuram where a vast majority [68.6%] of the households together own only a very negligible portion (17%) of the total land owned while a few households (3.2%) have the greatest coverage (31.7%) of the area owned. It is significant to note that Kalyanapuram belongs to the most fertile part of Tanjore district, the old delta. In Madigai and Sengipatti the inequality in the ownership of land is not so glaring. However, if Kalyanapuram represents the old delta properly, the greater inequality in the ownership

^{2.} Details furnished by the Office of the Commissioner for Hindu Religious Endowments.

ship of land in this village is significant because the old delta forms the larger portion of the Tanjore district.

OPERATIONAL DISTRIBUTION

From the point of view of the agricultural industry, however, the operational holdings are more important than the ownership holdings. Actual productive activity is carried on in these holdings and the way in which the industry is organised can be seen through the size and structure of these operational holdings. In examining the conditions of these holdings, only the holdings of resident cultivators are being taken into account. The operational distribution of land is also given under Table I. It can be seen that an increase in both the number of holdings and the area held in the first two size groups have helped to reduce considerably the inequality in the distribution of land in all the villages including Kalyanapuram. In Kalyanapuram this is mainly due to the leasing out of land by the big landowners. It should be noted that even though there are 5 owners claiming 31.7% of the area owned in the size group of 25 acres and above, there is not even a single operator in this group. In Madigai and Sengipatti the inequality in the distribution of operational holdings is less than that of ownership holdings due to the villages obtaining lease of lands from non-resident owners.

FULL UTILISATION OF CAPITAL CRITERION AND THE PLOUGH UNIT NORM

Under the current techniques of cultivation there is always a holding which a minimum unit of capital can operate. On holdings below this minimum there is an under-utilisation of capital and, as the holdings become smaller and smaller, the maintenance of this unit of capital itself becomes impossible. It is, therefore, essential to find out the minimum size of holding necessary to make a full utilisation of capital possible. The plough and the plough cattle constitute the most important capital equipment of a cultivator without which no agricultural operation can be undertaken. Further, the bullocks can be considered as the most costly implement on the Indian farm. Therefore, the size of holding which will enable the cultivator to fully utilize these minimum units of capital can be used for fixing a floor level below which ceiling on land holdings should not fall.

It is a well known fact of our agricultural economy that the majority of the holdings are much less in size than what can be managed by a pair of work animals. This is borne out by a study of the capital position in the farms of Madigai and Sengipatti. In Madigai the area held per pair of plough cattle is only 2.76 and 3.23 acres respectively in the first two size groups which together account for 91.8% of the total number of holdings. Therefore, the average area cultivated per pair of plough cattle obtained by this method is often an under-estimate. The concept of the plough unit norm is thus basically different from that of average based on the total cultivated area and total number of pairs of work animals in a State or region. As the size of holding increases, more and more holdings will be found to possess more than a pair, till a size is reached when each holding has two or more pairs of plough cattle. Thus two sizes can be noted, one where a large portion of the holdings remains without having even a single pair of plough cattle and the other where every holding has more than one pair. Within these

upper and lower limits, the point at which nearly 50% of the farms possess more than a pair of work animals represents the area which can be managed by a pair of work animals of average conditions.³

From a study of the capital position of the farmers in the selected villages it is found that a large portion of the holdings below 5 acres in size does not own even a single pair of plough cattle. In Madigai and Kalyanapuram all the holdings having an area of 10 to 15 acres have on an average two pairs of plough cattle each. In Madigai more than 50% of the holdings between 5 to 10 acres own on an average more than one pair of plough cattle each, while in Kalyanapuram also the tendency to own more than a pair is great in this size group. The mean of this particular size group, i.e., 7.50 acres, can therefore be considered as a floor level consistent with the full utilisation of a minimum unit of capital as far as the irrigated areas of Tanjore are concerned. It should, however, be noted that the plough unit norms have to be worked out separately for irrigated and unirrigated areas of a single region. In the case of Sengipatti, which is a dry village, it is found that even among holdings between 5 to 10 acres in size all the holdings do not have a pair of plough cattle each. In holdings between 15 to 20 acres three out of eight households have more than a pair of work animals. But even the four holdings above 20 acres in size do not have two pairs each. The maximum area held per pair of plough cattle is also very high in Sengipatti—i.e., about 30 acres. But it is found that there have been a few sales of cattle in holdings above 20 acres and so this cannot be taken as a correct reflection of the maximum area operated per pair of work animals in dry areas. But, even this high acreage per pair of plough cattle cannot be considered as in any way abnormal. For instance, it has been stated that the area tilled per pair of plough cattle in Tanjore averages 9 acres, but varies greatly according to the soil, class of cultivation, etc., some black soil areas returning 30 to 40 acres per pair and some irrigated tracts returning an average of about 6 acres.4 It is interesting to note that this estimate is borne out by the data available for Madigai and Sengipatti. In Madigai the maximum area held per pair of plough cattle is 6 acres while it is about 30 acres in Sengipatti. Taking into consideration all these facts it can be suggested that a floor size of 7.50 standard acres will be consistent with the efficient and economic utilisation of a minimum unit of capital.

THE CRITERION OF ADEQUATE EMPLOYMENT

A family holding, however, should give maximum employment not only for the capital invested but also for the labour available. The holding should, therefore, give adequate employment per worker within the family. This criterion of adequate employment can be applied with the help of two tests. If the holding decreases below a particular level, a large part of the family labour will have to remain idle or be wasted. Therefore, whenever the holding fails to provide adequate employment for the family workers, they will either supplement their hold-

^{3. &}quot;Determining the Plough Unit Norm," G. D. Agrawal, *The Indian Journal of Agricultural Economics*, Vol. XXII, No. 4, October-December, 1957, p. 57.

d. Imperial Gazetteer of India, Provincial Series, Madras, Vol. I.

^{5.} One standard acre has been taken as equivalent to one acre of wet land or three acres of dry land since the gross value of produce as well as the net income per acre for wet lands is found to be roughly three times that of dry lands. This ratio had been adopted by the Tamil Nad Congress Committee also in January, 1955.

ing by leasing in some land or seek non-farm labour. From a study of the composition of operational holdings in Madigai it has been found that 15% of the total area held in holdings below 5 acres in size, is lands leased in while only 1.6% of the total area held in holdings between 10 to 15 acres has been taken on lease. In Sengipatti lands taken on lease form 17.6% of the total area held in holdings below 5 acres in size while lands leased in form only 5.8% of the total area held in holdings between 15 to 20 acres in size.

A study of the data regarding cultivators seeking non-farm labour in Madigai and Sengipatti is found to yield better results. It is seen that 52.7% of the cultivators having holdings below 5 acres seek non-farm labour in Madigai. Among cultivators having holdings between 5 to 7.50 acres in size, 14.3% seek non-farm labour while none of the cultivators having holdings of 7.50 acres and above goes in for non-farm labour. In Sengipatti the percentage of those seeking non-farm labour in the first two size groups is much higher (80.1 and 63.6) than in the case of Madigai. This is probably due to the extremely low income per acre in Sengipatti forcing most of the small cultivators to take up non-farm labour to supplement their meagre income from cultivation. However, in Sengipatti also none of the cultivators having holdings above 7.50 acres seeks non-farm labour. From this it can be inferred that both in wet areas and in dry areas a minimum size of 7.50 acres is required if the holding is to provide adequate employment to a cultivating family. A holding of 7.50 acres can, therefore, be taken as representing a family holding utilising its own man-power or bullockpower reasonably well and a ceiling on holdings should not fall below this level.

THE CRITERION OF PHYSICAL ABILITY TO OPERATE THE OWNED HOLDING

This study has so far been confined to the selection of a minimum size of family holding below which the ceiling should never be fixed. It is now essential to find out the maximum size beyond which the ceiling should not go. It is clear that in any agricultural region with given techniques of cultivation there will always be a holding which a family with given number of workers can operate with the necessary assistance of casual labour. Therefore, if a family for any reason holds more than what it can operate, either the family has to lease out the excess land or it has to hire permanent farm servants to enable the family to operate the holding. In both cases, under the present conditions of land hunger, the family derives a surplus either in the form of land rent or in the form of an excess of income over wages paid to hired labour. From a study of the structure of ownership holdings in Madigai and Sengipatti it has been found that only a negligible portion of the total land owned is being leased out and that the percentage of area leased out to total area owned does not show any remarkable change from one size group to another. It should be noted here that in Tanjore district as a whole the pannai system of cultivation is more popular than the leasing out of land. This might be largely due to the greater advantage derived by the landowner under pannai system than under waram or lease, where a large portion of the produce goes to the tenant, particularly after the enforcement of progressive legislations protecting the tenants of this district. The employment of permanent farm servants by a family, therefore, can generally be taken as an indication of the holding being too big for the workers within the family to cultivate by themselves. The relevant data for Madigai and Sengipatti are given under Table II at the end. For Kalyanapuram these details are not available.

Family workers engaged in cultivation and permanent farm servants employed by the family are expressed in terms of man units. Employment of a permanent farm servant for the duration of a year, as is found in Tanjore, can be considered to be adding one man unit to the family. The use of casual labour can, for the time being, be ignored because even on the smallest holdings, which do not provide maximum employment to the workers within the family, casual labour is being employed. Moreover, the use of casual labour on the farm is only seasonal and, as the big farmer in this area, though he uses more casual labour, does not effectively substitute permanent farm servants by casual labourers, the omission of casual labour in determining the upper limit that can be operated by a worker will not result in any exaggeration of that area.

In determining the upper limit for a holding that can be operated by a family with given man units of workers, the data for Madigai and Sengipatti should be studied separately as they show widely differing characteristics. The lack of required data for Kalyanapuram will not create much difficulty since this village has characteristics which stand midway between the two extremes shown by Madigai and Sengipatti. Madigai is a wet village having extremely fertile land and is double cropped. The yield per acre is very high and in 1955 it was almost double that of the district as a whole. From a study of Table II it can be seen that the number of workers within the family increases with the increase in the size of holdings upto the "15 acres to 20 acres" group, remains stationary in the next size group and then declines. This initial increase in the number of workers per family is due to the general increase in the size of family along with the increase in the size of holding and the relatively smaller number of family workers in the last two size groups is largely due to a withdrawal of women from farm work in these families having big holdings.

The size of the area operated per worker and how this size changes with the change in the average size of holding of the family are significant for the present analysis. In Madigai the area operated per worker starts with a low extent of 1.18 acres and arrives at a maximum of 9.98 acres. It is clear that a family which has a very big holding should necessarily have a large number of workers to operate the holding. Therefore, if the family does not have sufficient number of workers within, it has to hire permanent farm servants to enable it to operate the holding. for the maximum area that a worker can operate is limited and is around 10 acres in the case of Madigai village. From Table II it can be seen that in holdings above 20 acres in size the area held by a family worker exceeds the area that can be operated by him. It is also in these holdings above 20 acres that there is an extensive use of permanent farm servants, all the households employing more than one, and the percentage of permanent farm servants to the total number of workers is also very high — i.e., 66.7 per cent. The average number of family workers per household is found to be 1.5 man units in this village. The maximum area that can be operated by a worker being around 10 acres, an upper limit of 15 acres will, therefore, satisfy the criterion of physical ability to operate the owned holding.

From a study of the employment of casual labour in Madigai it is found that the man-days employment of casual labour per acre does not show any great change from one size group to another. However, there is a gradual increase in the average man-days employment per holding as the size of holding becomes

larger and this increase is more marked in holdings above 15 acres in size. It is significant that this enlargement of the employment of casual labour per holding coincides with the greater percentage of permanent farm servants to total number of workers in these holdings above 15 acres in size.

Even in the case of dry areas, where the lands are the least fertile, the maximum area that can be operated by a worker is limited and it will not show much difference from that found in the wet areas. This is because in dry areas work on the farm is much heavier on account of poor soils and also more evenly distributed throughout the year. In wet areas where work is concentrated in certain seasons, the family gets the work done by casual labour. It is, therefore, not very surprising to find that in Sengipatti also the maximum area operated per worker is about 9 acres, which is very near the area for Madigai. The percentage of permanent farm servants to the total number of workers suddenly goes up as the area held per worker exceeds the area that can be operated by him, and in the case of Sengipatti also this takes place in holdings above 20 acres in size.

THE CRITERION OF MAXIMISING GROSS PRODUCTION PER ACRE

A study of the data presented in Table III will reveal that in Madigai the maximum gross value of agricultural produce per acre is found in the holdings between 15 to 20 acres in size. The gross value of agricultural produce per acre falls considerably for holdings above 20 acres. In Sengipatti also the gross value of agricultural produce per acre is the maximum in holdings between 15 to 20 acres in size and it falls thereafter. The average size of holding in the size group in which gross value of produce per acre is maximised being 17.36 acres, an extent of about 17.50 acres can, therefore, be considered as consistent with the criterion of maximising gross agricultural production per acre.

It should, however, be noted that whereas in Madigai the maximum gross value of agricultural produce per acre is Rs. 301.33, in Sengipatti it is only Rs. 118.30. This is because in dry areas like Sengipatti the important crops are groundnut, cholam, varagu, etc., which do not fetch as high a price in the market as rice or wheat. Dry crops grown in the relatively small area of about 17.50 acres will yield only a negligible income to the cultivator and a poor cultivator having no other occupation will not be able to make both ends meet with the meagre income that he receives from cultivation. It is in this context that the criterion of income becomes important in fixing the level of ceiling.

A REASONABLE LIVING STANDARD FOR THE CULTIVATOR

The proposal for land ceilings, based as it is on the egalitarian consideration of social justice, cannot be justified in perpetuating the glaring differences that at present exist in the standards of living of different sections of the agricultural population. It will thus be necessary to fix a higher level of ceiling for the cultivators in dry areas so that their living standard will be equal to that of the cultivators having more fertile lands. It is, therefore, essential to find out as to what can be considered as a reasonable standard of living and also to suggest a method of ensuring it while fixing the upper limit on land holdings.

Comparing the consumption pattern of foodstuffs found among the landowners of Madigai with the requirements for a balanced diet put down by the Nutrition Advisory Committee of the Planning Commission⁶ it is seen that the average diet of a landowner in Madigai is not only unbalanced, but the consumption of certain items of food is far below the requirements. For instance, the consumption of cereals is exceptionally high while the consumption of milk, vegetables, fruits, vegetable oils, etc., is far below the requirements of a balanced diet. From a study of the average annual per adult expenditure of landowners in Madigai it is found that out of a total expenditure of Rs. 395.25, food takes up Ps. 212.28. However, it has already been pointed out that the consumption pattern of food resulting from this average per adult annual expenditure of Rs. 212.28 is far from satisfactory. It has been calculated that only an annual expenditure on food of about Rs. 324 per adult will enable the landowners to balance their diets in accordance with the Nutrition Advisory Committee's suggestions. This increased expenditure on food will result in raising the average total annual expenditure per adult to Rs. 501.97. Assuming that the expenditure on other items is more or less adequate, an annual income of about Rs. 500 per adult can, therefore, be considered as the minimum required to provide the cultivator with a reasonable standard of living.

NET INCOME FROM CULTIVATION

The data regarding the net income from cultivation, given under Table III, may now be studied for finding out the size of holding that will give the minimum income necessary to afford the cultivator a reasonable living standard. From a study of the average size of family in different size groups it has been found that only in holdings between 15 to 20 acres in size does the per adult income become adequate to afford a reasonable standard of living in the case of Madigai. Net income per acre is also the maximum in holdings between 15 to 20 acres in size. It is also interesting to note that in this size group the net income per holding approximates the level suggested by the Planning Commission for fixing land ceilings—i.e., Rs. 3,600. In the case of Sengipatti even in holdings above 20 acres in size the net income per holding is found to be only Rs. 1,640.

ALTERNATIVE LEVELS OF CEILING AND THE EXTENT OF SURPLUS LAND

The practical possibilities and the implications of fixing a ceiling on land holdings in Tanjore district can now be studied. An attempt has been made to get a rough idea of the ownership distribution of holdings in Tanjore district on the basis of the statement showing the number of *Pattas* of different values in Tanjore during *Fasli* 1366 (1956-57). This reveals the same tendency found in the distribution of ownership holdings in three selected villages. However, it has a remarkable similarity to that of Kalyanapuram in particular. This is only natural since the old delta to which Kalyanapuram belongs, forms the larger portion of the total area in Tanjore district.

As it has already been found that the ceiling in this area should not fall below 7.50 standard acres, the extent of surplus land available may first be assessed by imposing a ceiling at this level in the selected villages as well as in the district as

^{6.} An Approach to Agricultural Development in the Third Five-Year Plan, Ministry of Food and Agriculture, Government of India.

a whole. It is found that in Kalyanapuram the extent of surplus land will be 45.3 per cent of the total land owned, while it will be only 22.4 per cent of the total area owned in Madigai. For Tanjore district the surplus land will be about 25.5 per cent of the total area owned. However, a ceiling at such a low level will not afford a reasonable standard of living for the cultivating family. If this criterion is also to be satisfied a higher upper limit of about 17.50 standard acres will have to be fixed. A ceiling at this level will also ensure maximum gross agricultural production per acre. It will be within the operating capacity of the cultivating family provided the average number of workers per family is somewhere between 1.5-2.0 man units. However, the extent of surplus land will be much less at this higher level of ceiling and it will be only 25.4 per cent of the total area owned in Kalyanapuram while it will be as low as 4.3 per cent of the total land owned in Madigai. For Tanjore district the surplus available at this level of ceiling will be about 15 per cent of the total area owned. It is interesting to note in this connection that there has been a gradual decrease in the area under the biggest size groups in recent years. A comparison of the distribution of pattas in 1956-57 with that of 1953-54 shows that, while in the latter period the area in holdings above 40 acres in size was 29 per cent of the total area owned, in 1956-57 it was only 21.9 per cent of the total area owned. This might in all probability be due to the disposal of land by big landlords for fear of the impending land reforms.

This study has made it clear that a judicious combination of alternative criteria alone will result in the selection of a satisfactory level of ceiling on land holdings. If the concept of family holding alone is taken into account in fixing the level of ceiling, its impact will be highly discriminatory since it will adversely affect the cultivators having less fertile lands. The Planning Commission's contention seems to be that it is to avoid such discrimination that they have proposed the income criterion as the basis of fixing land ceilings. This will, however, introduce an element of uniformity which ignores the varying positions of land distribution in different regions and thus results in a type of discriminatory treatment towards the landless and land-poor cultivators in some regions. If, for instance, a uniform level of ceiling is adopted taking the net income of Rs. 3,600 as the sole criterion, the cultivators of certain areas with a high concentration of holdings below that representing Rs. 3600 and also with a low general level of living will not be benefited by this measure. The only method of arriving at a satisfactory level of ceiling is, therefore, to reconcile the different criteria to the maximum extent possible.

TABLE I-DISTRIBUTION OF HOLDINGS

Village: Madigai

	Size of Holding		O	wnership I	Distributio	n	Operational Distribution			
			No. of owners	per cent	Area owned	per cent	No. of cultivators	per cent	Area held	per cent
	<	5	 148	77.1	253.76	35.1	148	76.0	274.47	35.9
5	<	10	 28	14.6	186.54	25.8	31	15.8	207.05	27.1
0	<	15	 5	2.6	59.86	8.3	4	2.1	47.61	6.2
5	<	20	7	3.7	121.04	16.8	9	4.6	156.21	20.4
0	<	25	 2	1.0	41.31	5.7	1	0.5	20.15	2.6
•	25		2	1.0	59.86	8.3	2	1.0	59.86	7.8
•		otal	 192	100.0	722.37	100.0	195	100.0	765.35	100.0

Village: Sengipatti

			O	:- D: ::-	_,,			-1 D'	
Size of		Ownership Distribution				Operational Distribution			
Holding		No. of owners	per cent	Area owned	per cent	No. of cultivators	per ce	nt Area held	per cen
5 < 10 10 < 15 15 < 20 20 < 25 25 Total		195 65 20 11 1 3 295	66.1 22.0 6.8 3.7 0.4 1.0	315.17 465.84 247.95 178.33 24.35 170.49 1402.13	22.5 33.2 17.7 12.8 1.7 12.1 100.0	226 54 26 8 1 3 318	71.2 16.9 8.2 2.5 0.3 0.9 100.0	377.16 380.89 311.53 131.98 24.35 149.39 1375.30	27.4 27.7 22.7 9.6 1.8 10.8 100.0
Village: K	alyana	puram					200		
 ≤ 5 5 ≤ 10 10 ≤ 15 15 ≤ 20 20 ≤ 25 ≥ 25 Total 		107 23 11 4 - 6 5 156	68.6 14.7 7.1 2.5 3.9 3.2 100.0	155.90 152.82 125.52 61.00 133.27 293.00 921.51	17.0 16.6 13.6 6.6 14.5 31.7	199 23 8 5 2	84.0 9.7 3.4 2.1 0.8 —	228.59 155.26 95.71 82.74 42.36 	37.8 25.7 15.8 13.7 7.0

TABLE II—EMPLOYMENT ON THE FARM

Size of -	N	umber of Work	ers	Percentage of	Size of	Area	
Holding	Family Permanent workers farm servants (in man units)		Total	farm servants to total no. of workers	holding per worker within the family	operated per worker including permanent farm	
					(in açı	es) servants	
Village: Madigai							
 5 10 15 20 20 25 Total 	215.7 46.4 7.0 16.0 1.0 2.0 288.1	17.5 20.0 6.0 17.5 2.0 4.0 67.0	233.2 66.4 13.0 33.5 3.0 6.0 355.1	7.5 30.1 46.2 52.2 66.7 66.7	1.27 4.46 6.80 9.76 20.15 29.93 2.66	1.18 3.12 3.66 4.66 6.72 9.98 2.16	
Village: Sengipatti	i		48			And the Market of Market of States o	
5 < 10 10 < 15 15 < 20 20 < 25 25 Total	427.6 99.2 64.7 23.0 1.5 9.0 625.0	6.0 28.5 22.0 8.0 2.5 8.0 75.0	433.6 127.7 86.7 31.0 4.0 17.0 700.0	1.4 22.3 25.4 25.8 62.5 47.1	0.88 3.84 4.81 5.74 16.23 16.59 2.20	0.87 2.98 3.59 4.26 6.09 8.79 1.96	

THE INDIAN JOURNAL OF AGRICULTURAL ECONOMICS

TABLE III—GROSS VALUE OF PRODUCE AND NET INCOME FROM CULTIVATION

Size Group	Average size of holding (in acres)	Gross value of agrl. produce (in Rs.)	Gross value of agrl. produce per acre (in Rs.)	Total net income from cultivation (in Rs.)	Net income per acre (in Rs.)	Net income per holding (in Rs.)
Village: Madigai						
5	1.85 6.06 7.98 11.90 17.36 26.67 3.92	56,130 25,845 18,254 11,624 47,070 20,697 179,620	204.50 203.22 228.55 244.15 301.33 258.68 234.69	33,849 16,475 13,167 8,143 32,299 13,885 117,818	123.32 129.54 164.86 171.04 206.77 173.54 153.94	228.71 784.52 1,316.70 2,035.75 3,588.78 4,628.33 604.19
Village: Sengipatt. < 5.00 5.00 < 7.50 7.50 < 10.00 10.00 < 15.00 5.00 < 20.00 20.00 Total	1.66 5.79 9.03 11.98 16.49 43.43	37,439 18,832 16,843 29,121 15,611 14,881 132,727	99.3 98.5 88.8 93.5 118.3 85.7 96.5	29,554.76 10,492.75 9,122.75 15,790.00 7,937.00 6,560.00 79,457.26	78.36 54.87 48.09 50.68 60.14 37.76 57.77	130.8 327.9 434.4 607.3 992.1 1,640.0 249.9