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Production and Marketing Problems of Small Farmers

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A study to investigate the problems of production and marketing of small farmers in Madural district revealed that fragmentation of lands, tenancy and cropping pattern are the main factors to decide the income of farmers. Regarding credit, 60% of credit needs is met by cooperative levels the rest of 30% are borrowed from the private sources with heavy interest. The small farmers augement their low income by going for hire with their carts for haulage or hiring their bullocks during ploughing season or earning wages as labourers in other farms or maintaing dairy animals and selling milk. Of the total sample 48% was found to be viable. Majority of the farmers dispose the first crop of paddy, main produce, in the case of double crop wet land immediately after harvest, due to rainy season, want of money commitment to lending agencies and want of storage facilities. If co-operative take up the integrated credit system the small farmers can benefit. Besides, their income also be increased by encouraging and organising milk cooperative in these villages.

The marginal farmers and small farmers constitute 70 per cent of the total farmers in India and the percentage of area operated however, accounts for nearly 21 per cent. The condition of small farmers in regions of irrigated area s slightly better than those cultivate under rainfed conditions. The plight of small and marginal farmers in such areas s indeed pitiable as their meagre income rom land is dependent on rainfall. further, these weaker sections have ailed to avail the advantages of existng credit facilities and input facilities hey being economically poor and sociilly handicapped. Even the new techlology like introdution of high yielding 'arieties could not benefit on a large cale these sections of farmers. With a view to study the problems of production and marketing of small farmers in Madural district a study was undertaken by the Department of Agricultural Economics of the Agricultural College and Research Institute, Madural in 1975-76 and the results are presented in this paper.

MATERIAL AND METHODS

Two Panchayat Unions, Madurai East and Madurai West, pre-dominantly paddy growing area were selected for study. Ten villages in each Panchayat Union were selected at random and two size groups of farmers were identified. Sixtyfour farmers operating between 0.8 to 1.41 ha (2 to 3.50 acres) and fifty six farmers operating from

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1.42 to 2.00 ha (3.51 to 5 acres) were covered under Group-I and Group-II respectively. Thus, the sample consisted of 120 farmers. The study covered costs and returns, credit, cropping pattern, livestock investment, family members expenditure and marketing procedure.

RESULTS AND DISCUSSION

Farm holdings: It was found that out of 120 small farmers in two size groups, only one holding was compact while the rest were fragmented. The extent of fragmentation of holding is presented in Table I.

TABLE 1. Frequency distribution of selected holdings according to number of fragments

	No. of farms					
No. of fragments	I-Group	II-Group	Total			
1.	1:		1			
2.	37	6	43			
3.	23	35	58			
4.	3	14	17			
5.	-		1			
Total	64	56	120			

Average size of fragment 0.45 0.57 ha 0.52 ha

This high degree of fragmentation, even in small farms presented a number of problems. The incentive to sink a well was lacking as it was not economical. Fragmentation also involved time in passing from one fragment to another for the cultivator and labourers and the problem of watch and ward.

There were three categories of farmers-owners, owner-cum-tenants and purely tenants, cultivating 46, 35 and 19 per cent of the total area. There were sixty four tenants out of 120 farmers. Regarding the payment of lease by these tenants, though there is a Fair Rent Act stipulating 40:60 between owner and tenant, in the case of wet lands irrigated by Government canals,they shared the produce equally and in most of the cases, it was also reported that the owners received a quantity of 9 to 12 bags of paddy of 65 Kg each per acre for single crop wet lands and 16 to 22 bags of paddy per acre for double crop wet lands. Another feature was that most of the tenancy was based on oral agreements. Thus, the problem of small size was solved to some extent by leasing additional area and thus, making the farms a little more viable.

Among the I-size group,63 per cent in each of owner and owner-cum-tenant classess were cultivating double crops while tenants cultivated only 50 per cent. In the case of II-size group, the percentage of double crop wet lands constituted 42 to 44 per cent among owners and owner-cum-tenants and it was as low as 27 per cent in the case of tenants. The difficulty of converting the entire area into double crop wet lands is due to scarcity of water. The canal water reaches late for sing's crop wet lands and hence only one crop could be raised. If irrigation could be supplemented by wells, there is scope to raise two crops but due to fragmented nature of holdings and financial constraint, this is not possible.

The cropping intensity and the percentage under high yielding varieties are given in Table II.

TABLE II. Cropping intensity and percentage coverage under High Yielding Varieties.

Tenure Size		Cropping intens	ity	Percentage coverage under High Yielding Varioties				
Brono	Owner	Owner-cum tenant	Tenant	Owner	Owner com- tenant	Tenant		
I Size group	166.43	163.43	152.66.	62.37	50 39	50.85		
Il size group	146.94	142.24	127.39	59.40	48,75	33.14		
Average	154.54	148.81	142.22	60.65	49.11	44.31		

The owner operated farms raised high yielding varieties in more area compared to owner-cum-tenants and tenants in both the size groups. The intensity of cropping varied from 127 in tenant operated farms in size group-II to 166 in owner-operated farms in size group-I. The problem of low intensity is due to mainly non-availability of water which is available for six months from August to February in single crop wet land areas and in certain areas even for lesser period depending on the availability of water in the periyar Dam. The raising of a pulse crop is also ruled out by the farmers due to the risk of being grazed by cattle if raised in isolated patches without proper fencing and further the holdings being fragmented.

Livestock: Out of 120 farmers. five farmers did not have any animal at all and hired them when required. There were 148 pairs of work animals, kept by 91 farmers for agricultural operations and hiring out for haulage purposes. Of these 38 owners, 24 owner-cum-tenants and 12 tenants maintained carts for their own use and also for hiring for haulage purposes. Fifty one farmers mostly owners owned milch cows and 20 farmers maintained 47 milch buffalloes. Thus, many of the small farmers supplemented their crop income either by hiring carts or going on hire with their pair and plough for ploughing or selling milk. Another feature noted was that 51 farmers in all categories maintainted 130 dry cows of which 75 per cent was used for ploughing during busy season.

TABLE III. Percentage distribution of credit - sourcewise

4.	Owner			. 0	 Owner-cum-tenant 			Tenant			
Source	I size	II size	Average	1 size	II size	Average	I size	II size ' A	verage	average	
Co-operative	1.		**				+1	- 111	- 15.	- 1	
sector	57.95	73,34	67.53	38.87	59.84	52.30	45.24	59.00	50.5	51 61	
Commercial bank	10.33	9.91	10.07	17.73	7.40	11.11	9.53	11-50	10.2	8 10	
Private	31.72	16.75	22.40	43.40	32.76	36.59	45.23	29.50	39.2	1 29	
	100.00	100,00	100	100.00	.100,00	100.00	100.00	100,00	100.0	0 100	

TABLE IV. Cost of cultivation and net income per hectare of paddy

Tenure & variety	Total cost of cultivation	Yield Grain	(in Kg.) Straw	Gross Grain	income Straw	Net income
4 - 2 . 2 . 2	Rs.	kg/ha.		Rs.	Rs.	Rs.
OWNERS:						
Karuna	2722	5303	5336	5078	320	2672
I.R. 20	2773	5409	5051	5455	303	2985
Improved varieties	1975	3819	7308	3789	438	2252
OWNERS-CUM-TEN	ANTS					
Karuna	2616	5031	4969	4814	298	2496
IR.20	2719	5143	5064	5192	304	2777
Improved varieties	1915	3628	6853	3525	411	2021
TENANTS						
Karuna	2446	4888	4738	4732	284	2570
IR.20	2540	5160	5113	5193	304	2957
Improved varieties	1887	3603	6536	3615	392	2120

TABLE V. Cost of production of paddy per quintal

Tenure and size group	Cost of production per quintal on the basis of 898							
	Cost	Cost	Cost	Cost				
	A1	A2	В	C				
Owner .		1 17/11/2						
I Group	46.14	-	76.88	80.99				
Il Group	48.28		80.04	81.39				
Owner-cum-	tenants			7				
I Group	40.26	62.05	75.10	81,24				
II Group	42.88	62.68	77.63	81.88				
Tenants								
1 Group	37.77	73.39	73.61	80.52				
II Group	43.06	81.05	85.91	85.91				

^{**} Cost A1: Value of hires human bullock Cost A2: labour, machinery charges owned Cost B: and purchased, seeds, fertillisers, Cost C: manures, irrigation charges depreciation on buildings, implements, land revenue, taxes, interest on working capital wages paid to others.

Cost A1+rent paid on leased on land A2+Interest on owned and borrowed capital and interest on own land B+value of family labour Credit: The per farm and per hectare credit availed progressively decresed in both the size groups in the order of owners, owner-cum-tenants and tenants.

On the whole 61 per cent of the credit requirements was met by cooperative while commercial banks had catered to upto 10 per cent. The remaining 29 per cent of the credit had been met by private sources. Farmers who had borrowed from private sources from fellow agricultuturists or local money lenders paid interest in kind, the quantity being 5 to 6 bags of paddy (325 Kg. to 390 Kg.) per Rs. 1000 per year which worked out to 30 to 36 per cent per thousand, and exhorbitant rate.

Cost and returns: The cost of cultivation and net income for paddy in different types of farms are furnished in Table IV.

Among the high yielding varieties of paddy, Karuna and IR.20 were very popular and IR.20 was found to be fetch-

TABLE VI. Pattern of disposable income of small farmers in Ruppes.

Tenure and size group		me from Livestock	Agricul- tural wages	Total in- come	
Owner			. 4		
l size group	4749	619	61	5429	
II size group	7226 241		14	7481	
Owner-cum-t	enant				
l size group	2696	745	207	3638	
II size group	4170	1038	123	5331	
Tenant					
1 size group	1446	104	359	1909	
Il size group	1876	784	127	2790	

ing maximum net income per hectare followed by Karuna variety. But correspondingly the cost of cultivation was also high for high yielding varieties, compared to improved varieties of CO.19, CO.25 and ASD.5. The inputs, particularly fertilizers and plant protection were applied more involving increased cost.

When cost of production of paddy per quintal was considered it was found to vary from Rs. 81 for owner and owner-cum-tenant to Rs. 86 to tenants under Group-II.

TABLE VII. Pattern of family expenditure in small farmers.

Size group and tenure		Expenditure	on			_
	Food	Cloth	Fuel & light	Others	Total	٠
Owner					14	_
1 size group	2596	360	166	393	3515	
II size group	(73.85) 3241	(10.25) 506	(4.72) 226	(11.18) 604	(100.00) 4577	
Owner-cum-tenant	(70.81)	(11.05)	(4.95)	(13.19)	(100,00)	
I size group	2464	307	144	254	3139	
II size groug	(78.50) 3391	(9.78) 481	(3.63) 144	(8.09) 530	(100.00) 4546	
Tenant	(74.59)	(10.57)	(3.17)	(11.67)	(100.00)	
I sîze group	2385 (81.50)	267 (9.10)	98 (3.36)	177 (6.04)	2927 (100.00)	
11 size group	2802 (75.94)	359 (9.63)	146 (3.92)	421 (11.51)	3728	

As regards input-output ration this has been worked out for all types of farmers under Group-I and II. Based on Cost C the ratio ranged from 1.15 to 1.22.

Disposable income: When the pattern of disposable income of small farmers is considered they have been derived from several sources. Crop husbandry contributes the major share followed by livestock in several cases. The owner-cum-tenants get more income from livestock than others. The tenants under group-I get nearly 25 per cent of their income from wages received by working in other farms. Among the 120 farm families, seven owners, six owner-

TABLE VIII. Marketing agencies

		l sia	e grou	p	II size	group	j.	Total		
	No. of farmers sold to No.				of farmers	sold to	No.	No. of farmers sold to		
	Village merchant	Commis- sion agent	Both	Village merchant	Commis- sion agent		Village merchant	Commis- sion agent	Both	
Owner ,	7	4	18	4	8	15	11	12	33	
Owner-cum-tenant	14	1	2	10	5	7	24	6	9	
Tenant	12	3	3	3 -	3	1	15	4	4	

cum-tenants and three tenants get income from non-agricultural operations, one from each family being employed in outside jobs and contribute their income to the family. Table-VI gives the details of disposable income of small farmers.

Family expenditure: The major item of expenditure was found to be on food, constituting 70 to 80 per cent in classes of families in both the groups. Expenditure on clothing constitutes 9 to 10 per cent and fuel and lighting 3 to 5 per cent which showed not of much variation among the 120 families on these items. For other items, except owners, the owner-cum-tenant and tenant classes spent less.

However, when viability of farms based on income and expenditure is considered only 58 farms are viable. The condition of tenants is relatively more precarious.

Marketing of paddy: It was reported by the farmers that marketing was not a serious problem for them. In double crop wet lands, the first crop is disposed off in 15 to 30 days of harvest. This is due to rainy season, want of storage facilities and non-preference for consumption needs. The Table-VIII gives an idea of agencies through which the farmers disposed their produce. Village merchants played a greater role in the movement of produce from farms, Owners availed the services of commission agents more than other types of farmers.