

Study on the Impact of Tenurial Pattern on the Factor Use Efficiency in Wetland Paddy Farms - A Conventional Approach

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ABSTRACT

Farming efficiency is considered to be influenced by tenurial status of farmers. The present empirical study in rice farms of Chidambaram taluk reveals owner operated farms are relatively more efficient than tenant or partly owned farms because of their locational advantage. Further the small farms are highly efficient than medium or large farms.

INTRODUCTION

The infusion of modern technology in agriculture warrants a dynamic change in creating a progressive rural base. The land tenure pattern, being the corner stone of the rural progress, influences the use of modern technology in agriculture to a great degree. In order to study the effectiveness, with which the input resources are used under different tenurial classes, this investigation was undertaken in wetland rice farms.

MATERIALS AND METHODS

A random sample of 60 farms to represent each of the three tenurial classes, viz., fully owned, fully leased and partly leased farms were drawn from 10 sample villages in Keeralpalayam block, a typical wetland paddy tract in Chidambaram taluk. Under

each tenurial class, three size groups of holdings - small (below 2.00 acres), medium (2.01-4.00 acres) and large (above 4.00 acres) were considered. The farming efficiency was measured by computing gross income, net profit, farm business income, input-output ratio and intensity of cropping.

RESULTS AND DISCUSSION

The results of different efficiency measures computed by conventional tools of analysis are discussed below.

Intensity of cropping: It refers to the proportion of the area cropped to net area of the farm expressed as percentage. The cropping intensity was the highest in owner-operated farms, (147.00 per cent) followed by owner-cum-tenant operated farms (139.00 per cent) and tenant operated farms

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(128.00 per cent). On the contrary, Narasimhan (1965) has observed that tenant farms were most intensively cultivated than others. The plausible reason may be the relative advantageous location of the owner operated farms near main canal which facilitates raising two crops of paddy due to early arrival of water. The tenants could normally secure only inferior lands getting late supply of water which delays growing the first crop and thereby restricts double cropping.

Gross Income: The relative gross income in different farms computed in terms of per farm, per acre of farm and per acre of cropped area are presented in Table I. Maximum gross income per farm is observed in owner farms followed by partly owned and fully leased in farms. This is naturally due to decrease in size of holdings in the same order under three classes of tenure. The gross income per acre held and per acre cropped is comparatively a useful measure of farming efficiency. The gross income per acre held is maximum in owner operated farms with

Rs. 1013.57, followed by partly owned and fully leased farms. Narasimhan (1965) observed different trend among the different tenurial status.

The gross income per acre cropped is the highest in owner-farms Rs. 698.49 followed by tenant farms with Rs. 675.11 and by partly owned farms with Rs. 671.96. However there is no marked variation between the latter two classes.

As regards the size groups, the gross income per acre held as well as per acre cropped is the highest in small holdings followed by medium and large holdings in almost all the tenure classifications. This is in line with the findings of Narasimhan (1965) who concluded that as the size of holding increased the gross income decreased.

Net profit : It often happens that different farms under similar conditions realise varying profits and therefore net profit is one of the best possible measures of comparative efficiency between different classes of tenancy.

Table II reveals that the net profit

TABLE I. Gross income of sample paddy farms (in rupees)

Size of holding	Per farm			Per acre hold			Per acre cropped		
	Owner	Tenant	Owner cum tenant	Owner	Tenant	Owner cum tenant	Owner	Tenant	Owner cum tenant
Small	1586.18	1349.62	1470.36	1193.45	988.82	1032.47	797.04	764.66	745.67
Medium	3714.45	2516.03	2927.28	1123.38	849.02	924.02	721.81	666.41	641.60
Large	11388.90	4888.38	7599.15	962.67	831.44	916.39	679.63	658.26	671.36
Overall	5563.00	2918.17	3998.94	1013.57	857.78	930.99	698.49	675.11	671.36

TABLE II. Net profit in sample paddy farms.

Size of holding	Per farm			Per acre held			Per acre cropped		
	Owner	Tenant	Part Owner	Owner	Tenant	Part Owner	Owner	Tenant	Owner cum tenant
	Small	445.61	283.77	303.84	335.30	203.12	213.14	223.92	160.78
Medium	921.02	250.06	417.01	278.55	34.41	131.63	178.98	66.23	91.40
Large	2632.29	352.75	1115.08	222.50	59.99	134.47	157.08	47.50	53.51
Overall	1332.96	295.53	611.08	242.86	86.67	142.47	167.35	68.37	102.83

per acre held as well as cropped is the highest in owner-operated farms and it is followed by partly owned and fully leased in farms in that order. This observation is in contradiction to the findings of Narasimhan (1965). High rental value, low productivity and absence of incentive to work in the farm in view of uncertain tenure have all cumulatively contributed for the inefficiency in tenant farms.

The net profit per acre exhibits significant difference among the size groups in each class of tenancy. The small farms in owner and tenant classes realise maximum net profit per acre held, followed by medium and big holdings. In partly owned farms, even though the small holding is having the maximum profit, the big holding and then medium holdings follow in order. These results are similar to that observed by Narasimhan (1975). The relatively higher gross income and more income from live-stock enterprise could have contributed for higher net profit in small farms.

Output-input Ratio: The relation between the money value of output and inputs could also be taken as a measure of efficiency. It is generally held that greater the input-output ratio of a given farm, the greater is its efficiency.

The ratio per farm is the highest in fully owned farms and it is the lowest in tenant farms, as can be noted from Table III. The partly owned farms are in midway. These findings are in conformity with the results of the studies on the economics of farm management in Bombay (1955-56) and is contrary to the conclusions drawn by Narasimhan (1962). The low cost of cultivation

TABLE III. Output per unit input in sample paddy farms

Size groups	Owner farms	Tenant farms	Owner-cum tenant farms
Small	1.40	1.20	1.22
Medium	1.35	1.80	1.15
Large	1.30	1.04	1.12
Overall	1.32	1.07	1.14

and high gross income in owner farms might have influenced the ratio.

It is also seen from Table III, that as the size of holding increases, the ratio per farm decreases. This is however marked in owner farms than in the other two tenancy classes. This is also partially confirmed by the studies on the economics of Farm Management in Andhra Pradesh (1959-60).

Farm business income: Farm business income is considered as one of the measures of farming efficiency. The farm business income is obtained by deducting the net cost from the gross income. The net cost is obtained after having deducted the retained cost from the total cost. The retained cost includes all the costs of farm produced inputs, such as costs of family labour, owned bullock labour, farms raised farm yard manure, seeds, besides rent paid as its equivalent.

Table IV indicates that the owner-operated farms have the highest farm business income followed by tenant and the partly owned farms respectively. However, there is no marked difference between the owner operated

TABLE IV. Farm business income per acre held (in rupees)

Size groups	Owner farms	Tenant farms	Owner-cum-tenant farms
Small	761.12	703.12	689.43
Medium	660.58	611.18	585.54
Large	534.92	519.73	494.63
Over all	579.22	576.87	527.39

and tenant operated farms. This may be due to use of more family labour and owned bullock labour in tenant farms and use of more farm produced inputs in owner farms. This is also due to comparatively more income from the livestock enterprises in tenant farms. The studies on the economics of Farm Management in Andhra Pradesh (1957-58) concluded that the farm business income was higher in fully owned farms than in others. The results of the present study also confirm, to a considerable extent, the above findings.

Table IV also reveals that as the size of holding increases the farm business income per acre held significantly decreases in all the tenure classes and and this is in conformity with the findings of Khusro (1964). The plausible explanation may be the use of more family labour in small farms.

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