INCOME DIFFERENTIALS OF SMALL FARMERS IN THE PUNJAB: A CASE STUDY

Khurshid Ali Qureshi, Muhammad Aslam Chaudhry, Buland Akhtar, Siddique Javed & Pervaiz Kausar
University of Agriculture, Faisalabad

The small farmers occupy a focal position not only in terms of their large number but also from the standpoint of area under their ploughs in the Punjab. For affecting any long-term improvements in the performance of the vast majority of small farmers in the future, both planners and policy makers would essentially require information on key factors responsible for high or low level of farm income. The present study is an attempt at identifying factors causing farm income differentials. The results show that differences in the level of variable component of farm costs and livestock strength at the farm were mainly responsible for farm income variation on small farms.

INTRODUCTION

The structure of farm industry of Pakistan has undergone a visible change overtime. The total number of farms has increased from 3.76 million in 1972 to 4.06 million in 1980, indicating a 7.9% change. As regards the average farm size, it has decreased from 13.04 acres in 1972 to 11.53 acres in 1980 depicting 11.6% decrease. The number of small farms upto 7.5 acres have increased whereas the number of farms of 12.5 acres size and above has also increased overtime (Ahmed, 1990). These farms constitute about 75% of the total farms and operate about 35% of the farm area with an average size of 5.41 acres per farm holding (Anonymous, 1991).

As for the Punjab, the small farmers with less than 12.5 acres of land holdings constitute 74% of the total farms in Pakistan and account for 34% of the total farm area and 36% of the cultivated area. The majority of small farms (60.2%) are located in the Punjab province. According to Pakistan Census of Agriculture, 1972 and 1980, the number of such farms has risen by 17.9% during the period 1972-80.

Since the small farms occupy a focal position not only in terms of their number but also from the standpoint of area. A sustained and broad based economic development of Pakistan thus necessarily calls for effecting improvements in their operational performance and income.

A sound and sustainable long term economic development of the country lies in an efficient and well planned agriculture sector. This, in turn, requires full knowledge of the factors responsible for net farm income variation. Hence there is a great need to go into the depth of the problem so as to furnish an empirical evidence on this burning aspect of farming business.

MATERIALS AND METHODS

The study was conducted in the Sargodha tehsil of district Sargodha in 1991 with a view to identify factors responsible for net income variation on small farms. Three villages namely 88/NB, 111/NB and 97/NB were selected purposively. Twenty respon-

Table 1. Illustration of costs per acre (%)

Items	Profit earning group	Non-profit earning group
a. Farm costs		
Fixed costs		
Family labour	10.07	14.84
Permanent hired labour	3.55	4.36
Farm implements and machinery	20.46	18.48
Bullock cart	3.63	4.45
Farm building	4.15	3.65
Land rent	14.61	17.34
Sub-total	56.47	63.12
Variable costs		
Seed	5.15	5.31
Farm yard manure	4.72	4.11
Fertilizer	8.05	5.95
Plant protection	0.11	0.03
Tractor hiring	1.43	1.12
Fuel charges for tractor	2.73	2.66
Electric and fuel charges for tubewell	7.11	3.50
Casual hired labour	2.96	2.44
Market and transport	0.89	0.89
Payment to artisans	0.48	0.53
Irrigation	2.02	2.36
Fodder	6.07	5.94
Concentrates	0.62	1.16
Miscellaneous on draught animals	0.12	0.13
Others	1.07	0.75
Sub-total	43.53	36.88
Total	100.00	100.00
b. Livestock costs		
Green and dry fodder	25.23	22.13
Concentrates	22.57	18.03
Miscellaneous	1.22	0.96
Labour	26.22	35.31
Interest and depreciation	20.87	19.37
Shed	3.89	4.20
Total	100.00	100.00

dents from each village were subsequently randomly sampled. A total of 60 respondents were subjected to further detailed investigation. The data were collected through interview method using a pretested interview schedule. The data so collected were analysed to arrive at all farm income. The respondents were categorised into two groups, i.e. profit earning and non-profit earning. The two groups were compared with respect to their cost structure and levels of income. For the purpose of isolating factors responsible for net income differential, the data were subjected to discrete economic analysis.

RESULTS AND DISCUSSION

The study revealed that the profit earning group received a gross income of Rs. 6460.91 and the non-profit earning group Rs. 4365.76 on per acre basis. The total cost (fixed and variable) turned out to be high on the profit earning group due to relatively more use of tubewell, tractor and other farm machinery, fertilizer, seed, farm yard manure, while the non-profit earning group spent relatively more on family labour, tubewell hiring, etc. Comparative figures are given in Table 1. Profit earning group reaped higher incomes by practising intensive cropping with 33.44% higher cropping intensity as compared to the non-profit earning group. Similar results were found by Lak (1968) and Ajmal (1976) who also found that high income had higher cropping intensity as compared to the low income group.

In the present study, it was found that the profit earning group realized higher yields of main crops (wheat and sugarcane) as compared to the non-profit group. Comparative figures are given in Table 2. Chaudhry (1982) reported that small farmers enjoyed higher productivity than big farmers. Higher income from the livestock sector was mainly due to keeping of more number of milch animal units by the profit earning group as compared to non-profit group. On per acre basis, the profit earning group got 35.16% and 47.98% higher income from the livestock and crop sector as compared to the non-profit earning group. The result was similar to Khan (1979)

Table 2. Comparison of profit earning and non-profit groups in respect of land utilization, cropping pattern and average yield of major crops

Items	Profit earning group	Non-profit earning group
a. Land utilization (%)		
Cultivated area	95.45	93.65
Net sown area	96.67	94.45
Area sown more than once	86.39	40.14
Total cropped area	183.06	134.59
Cropping intensity	191.78	143.72
b. Cropping pattern		
Sugarcane	25.64	15.94
Maize	9.43	9.23
Cotton	7.22	8.10
Kharif fodders	13.10	16.26
Others	1.77	1.25
Wheat	31.69	35.85
Rabi fodders	8.18	10.45
Others	2.97	2.92
Total	100.00	100.00
c. Average yield of major crops (kg/acre)		
Wheat	1386.40	1090.50
Maize	687.20	566.40
Sugarcane	16200.00	12400.00
Cotton	425.40	390.20

who found that high income group realized 36.06% more income from the livestock sector as compared to the low income group on small farms.

Factors affecting gross income: The profit earning group enjoyed advantage over the non-profit earning group in all respects having bearing on gross income. For example, the profit earning group had 33.44% higher cropping intensity, realized higher yields to the tune of 25.28% from the major crops like wheat and sugarcane.

Factors varying expenditure: Difference in expenditure on the fixed and variable items of cost was another source of income variation on the farms under study. It was observed that expenditure on fixed items of the profit earning group and non-profit group was 56.47% and 63.12% of the total farm cost respectively. The items leading to high fixed cost in respect of non-profit group included family labour. Expenditure on variable items of cost of the profit earning group was 43.53%, whereas in case of non-profit earning group, it was 36.88% of the total cost. High variable cost incurred on purchased farm inputs was mainly responsible for high profit.

Livestock sector: The profit earning group realized 36.16% higher gross income on per acre basis as compared to the non-profit earning group. This was due to the fact that the profit earning group had more adult animal units as compared to the non-profit group on per acre basis. The former spent 54.28% more on concentrates, 40.54% more on fodder, 13.94% more on maintenance of animals as compared to the latter.

REFERENCES

Ahmad, B. 1990. Economics of various enterprises on small farms. Proc. Natl. Seminar on Economic Revival of Small Farmers. Faculty of Agri. Economics and Rural Sociol., Punjab Agri. Res. Coordination Board, Univ. of Agri., Faisalabad.

Ajmal, M. 1976. An economic investigation into causes of income differentials. M.Sc. Thesis, Farm Management, Univ. of Agri., Faisalabad.

Anonymous. 1991. Economic Survey. Govt. of Pakistan, Finance Div., Economic Advisor's Wing, Islamabad.

Chaudhry, M.G. 1982. Green revolution and redistribution of rural incomes: Pakistan's experience. Pak. Dev. Rev. 21: .

Khan, R.N. 1979. Farm size and land productivity in Pakistan. Pak. Dev. Rev. 18: 979.

Lak, R.N. 1968. Study of the factors responsible for net income differential of similar farms in Chiniot. M.Sc. Thesis, Dept. Farm Management, West Pak. Agri. Univ., Lyallpur.