

Resource Utilization in Farm Production by Different Categories of Farmers

(Published in 1993)

a) Researchers' Identity

1. Dr. A. Hossain, Additional Director General
B.Ag. (Hons.), Dhaka University; M.Ag. (Agronomy), Dhaka University
Ph.D (Agronomy), University of the Philippines at Los Banos
2. A. Hamid Chowdhury, Deputy Director
MSW, Tata Institute of Social Science, Bombay
3. S.M. Kamrul Hassan, Deputy Director
B.Sc. (Agriculture Economics),
M.Sc. (Agriculture Economics), BAU, Mymensingh
4. M.A. Khaleque, Deputy Director
B.Sc. (Hons.), M.Sc. (Statistics), Rajshahi University
M.A. (Applied Population Research), University of Exeter, U.K

b) Objectives

In conformity with the aforesaid problems the main objectives of the study are to:

- i. examine the socio-economic condition of different farm size groups and their positions;
- ii. make an estimate of resources, especially land, labour, draft power, capital and technology available by different categories of farm families for farm production.
- iii. examine the utilization of various resources for agricultural production and input - output relationship for different enterprises with farm size groups; and
- iv. find out the differences of actual use of family resources for farm production and income by different categories of farm size groups.

c) Executive summary

The economy of Bangladesh is largely depending on agriculture but the development in this sector is still lacking behind in comparison with neighbouring country. To make a surplus in this sector, it requires invest more. The study helps us to find out the present situation of using resource in the agriculture sector. The study had been conducted in Sherpur Thana of Bogra District taking two villages from Barind area and two villages from Alluvial one. A stratified random sampling technique was used in selecting the respondents. Data had been collected for one year period, twice in a week. These were analyzed by zone-wise (Barind/Alluvial) and farm category-wise (large farm group, medium farm group, small farm group and landless farm group).

The large, medium, small and landless farm groups were found to have 17%, 13%, 3% and 21% respectively more cultivable areas in Barind area than that in Alluvial area. The cropping intensity of large, medium and small farms of Barind area was higher than those of Alluvial area but in case of landless group the situation was found reverse. In utilizing the family labours it was found that the farmers of Alluvial area had used almost double of their family labours than the Barind area did. It was also found that as farm size decreased, the use of family labours increased in both the areas.

The farmers of both Barind and Alluvial area had deficit of family draught power compared to their need. The intensity of shortage was directly related to the farm size i.e. the farmers with larger farm size, having more shortage of draft power than the farmers with smaller farm size.

The farmers of Barind area used more family supplied seeds and seedlings than Alluvial area did. There was a decreasing tendency of using the family supplied inputs like seeds and seedlings with the decrease of farm size.

The farmers of Barind area was found using more family supplied manures than those of Alluvial area. The trend shows that with the decrease of farm size the use of family supplied manures also decreased.

The farmers of both Barind and Alluvial areas were very much motivated in using fertilizers in rice cultivation but not in other crops. The large farm group in Barind area was observed to have used more quantity of fertilizers than the recommended dose in rice field. However, in Alluvial area the use of fertilizers was less than the recommended dose in the same field. The landless group of Barind area used nearly recommended dose of fertilizers in rice field while those of Alluvial area used higher dose of fertilizers.

In analyzing the per acre cost of production it was found that in both the areas-one third to one half of the total cost was possible to be met by the farmers from the family sources.

However, the scope of sharing the cost from the family sources was higher in the large farm group in both the areas.

In case of per acre return it was found that medium farm group of Barind area got the highest yield in HYV Boro rice among all the farm size groups irrespective of areas, Barind or Alluvial. However, yield per acre of HYV Boro in Alluvial area was found to be higher than those of Barind area. In Aman cultivation it was found that large farm group of Barind area received the highest yield among all the groups of both areas. However yield per acre of HYV Aman was comparatively higher in Barind area than that of Alluvial area.

Gross margin analysis showed that the highest per acre gross margin was received by the large farm group of both Barind and Alluvial areas. However, large farmers group received the highest gross margin among all the groups of both areas.

d) Conclusion

National plan has duly emphasized the reduction of poverty and set objectives on the basis of attaining through employment opportunities and in increasing production in general. In agriculture, the most important target is to attain self sufficiency in foodgrain as early as possible.

However, Bangladesh villages with limited resources and with vast population, majority of which are landless or near landless having no education or training are facing enormous problems for increasing agriculture production on the one hand and expanding employment opportunities on the other hand.

Further the skewed distribution of land ownership as has been mentioned earlier aggravated poverty for majority of rural people. Although poverty is an epidemic, this is why tremendous potential of growth has to be tapped.

To make development plans, careful assessment of the resources of rural communities is a top priority. Further, Bangladesh agriculture is undergoing a transformation and it is poised to break-through the vicious circle

constraining traditional agriculture through introduction of improved seed, fertilizer and irrigation technologies together almost in a preventive manner. In such a challenging situation, it is likely that there can be improper adjustments of resources both in allocation and utilization at farm level and are the factors constraining agriculture growth and production.

The present study is a sort of inventory in nature on the resources available by the different categories of farmers and their use in different farm operations. A study considering all the farm operations including income and expenditure of the farmers as a single unit can provide more clear idea about the resources of different categories of farmers and their use in a comprehensive manner. Therefore, a follow-up study with this idea, which is suggested, may help the policy makers and planners.

