



Income and Livelihood Issues of Farmers: A Field Study in Jammu region of Jammu and Kashmir State

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ABSTRACT

The study has been conducted in five districts of Jammu region to discuss the income and livelihood issues of farmers. The overall household income from agriculture has been estimated to be ₹ 56034.24 with highest of ₹ 97876.02 from Kathua district and lowest of ₹34491.78 earned by the farmers in the Doda district. It has been found that the large farmers earn only 33.04 per cent of income from agriculture followed by 29.26 per cent, 25.30 per cent and 25.24 per cent by medium, small and marginal farmers, respectively. Livestock contributes highest of 11.03 per cent in case of marginal farmers followed by 10.86 per cent, 8.51 per cent and 5.63 per cent in case of small, medium and large farmers. The per day per capita income from agriculture has been found to be ₹ 15.43, ₹ 17.77, ₹ 26.42 and ₹ 36.12 for marginal, small, medium and large farmers, respectively, with an overall average of ₹ 20.55. As the poverty line fixed by the government is ₹22.00 which shows that only medium and large farmers fall above the poverty line whereas marginal and small farmers are below poverty line if they depend exclusively on agricultural income. Service sector has been found the important one as it contributes 34.59 per cent of to the total household income of all the farmers. Therefore the farmers of Jammu region have to develop livelihood strategy for their existence.

Keywords: income, livelihood, agriculture, service, business

India accounts for some 2.4 per cent of the world's landmass but is home to about 17.52 per cent of the global population (Anonymous, 2011). The Indian economy is predominantly agrarian and agriculture is a primary source of livelihood providing employment directly or indirectly to 58 per cent of its population (Anonymous, 2012). Due to the rapid increase in the population and the decrease of agricultural land, no single farm enterprise is likely to be able to sustain the small and marginal farmers without resorting to integrated farming systems for generating adequate income and gainful employment year round (Mahapatra, 1994). The declining trend in size of average area operational holding from 2.28 hectares in 1970-71 to 1.33 hectares during 2000-01 and 1.23 hectares in 2005-06 poses a serious challenge to the sustainability and profitability of farming (Anonymous, 2012). In view of the decline

in per capita availability of land from 0.5 ha in 1950-51 to 0.15 ha by the turn of the century and a projected further decline to less than 0.1 ha by 2020, it is imperative to develop strategies and agricultural technologies that enable adequate employment and income generation, especially for small and marginal farmers who constitute more than 80 per cent of the farming community. To meet the multiple objectives of poverty reduction, food security with improved productivity, reduced income imbalance between agricultural labourer and urban factory worker, competiveness and sustainability, several researchers have recommended the farming system approach to research and development. According to National Commission on Farmers (2005) introduction of appropriate farming systems have been proposed as one of the approaches to achieve better growth in agriculture and livelihood.

Table 1. District wise annual household income of farm households by source in Jammu region

| (₹/ annum | I) |
|-----------|----|
|-----------|----|

| District | Agriculture | Livestock/ Fisheries | Business | Service | Others | Total |
|----------|-------------|----------------------|----------|----------|----------|-----------|
| Rajouri | 36708.72 | 6121.11 | 34926.61 | 86268.00 | 11056.00 | 175080.44 |
| Reasi | 43307.57 | 25866.49 | 23922.97 | 71111.00 | 15264.00 | 179472.03 |
| Kathua | 97876.02 | 18037.81 | 41808.22 | 68989.00 | 10237.00 | 236948.05 |
| Jammu | 57348.93 | 28856.67 | 55030.89 | 75187.70 | 18567.00 | 234991.19 |
| Doda | 34491.78 | 1528.77 | 50043.01 | 50161.29 | 9856.00 | 146080.85 |
| Overall | 56034.24 | 18220.43 | 42845.67 | 69145.15 | 13664.76 | 199910.24 |

Table 2. District wise percentage distribution of household income of farmers by source in Jammu region

| District | Agriculture | Livestock/ Fisheries | Business | Service | Others | Total |
|----------|-------------|----------------------|----------|---------|--------|-------|
| Rajouri | 20.97 | 3.50 | 19.95 | 49.27 | 6.31 | 100 |
| Reasi | 24.13 | 14.41 | 13.33 | 39.62 | 8.50 | 100 |
| Kathua | 41.31 | 7.61 | 17.64 | 29.12 | 4.32 | 100 |
| Jammu | 24.40 | 12.28 | 23.42 | 32.00 | 7.90 | 100 |
| Doda | 23.61 | 1.05 | 34.26 | 34.34 | 6.75 | 100 |
| Overall | 28.03 | 9.11 | 21.43 | 34.59 | 6.84 | 100 |

Table 3. Land size wise annual income of farm households by source categories in Jammu region

(₹/annum)

| Source of income | Marginal Farmers | Small farmers | Medium farmers | Large farmers | All farmers |
|-----------------------------------|---------------------|---------------|----------------|---------------|-------------|
| Agriculture | 34968.6 | 44368.72 | 76754.67 | 123934.65 | 56034.2387 |
| Livestock/ Fisheries | 15286.21 | 19045.75 | 22332.54 | 21135.34 | 18220.43 |
| Agriculture and allied activities | 50254.81 | 63414.47 | 99087.21 | 145069.99 | 74254.6687 |
| Business | 32411.44 | 42852.89 | 56869.4 | 60180.67 | 42845.6685 |
| Service | 46019.59 | 56881.52 | 88422.36 | 145902.4 | 69145.15 |
| Others | 9855.59 | 12235.5 | 17946.54 | 23935.75 | 13664.7629 |
| non agriculture | 88286.62 | 111969.91 | 163238.3 | 230018.82 | 125655.586 |
| Total | 138541.43 | 175384.38 | 262325.51 | 375088.81 | 199910.25 |

Table 4. Percentage distribution of annual income of farmers by source and land size categories in Jammu region

| Source of income | Marginal Farmers | Small farmers | Medium farmers | Large farmers | All farmers |
|-----------------------------------|------------------|---------------|----------------|---------------|-------------|
| Agriculture | 25.24 | 25.30 | 29.26 | 33.04 | 28.03 |
| Livestock/Fisheries | 11.03 | 10.86 | 8.51 | 5.63 | 9.11 |
| Agriculture and allied activities | 36.27 | 36.16 | 36.16 37.77 | | 37.14 |
| Business | 23.39 | 24.43 | 21.68 | 16.04 | 21.43 |
| Wage | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Service | 33.22 | 32.43 | 33.71 | 38.90 | 34.59 |
| Others | 7.11 | 6.98 | 6.84 | 6.38 | 6.84 |
| non agriculture | 63.73 | 63.84 | 62.23 | 61.32 | 62.86 |

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| Source of income | Marginal Farmers | Small farmers | Medium farmers | Large farmers | All farmers | | |
|-----------------------------------|---------------------|---------------|----------------|---------------|-------------|--|--|
| Per day household income | | | | | | | |
| Agriculture | 95.80 | 121.56 | 210.29 | 339.55 | 153.52 | | |
| Livestock/ Fisheries | 41.88 | 52.18 | 61.19 | 57.91 | 49.92 | | |
| Agriculture and allied activities | 137.68 | 173.74 | 271.47 | 397.45 | 203.44 | | |
| non agriculture | 241.88 | 306.77 | 447.23 | 630.19 | 344.26 | | |
| Total | 379.57 | 480.51 | 718.70 | 1027.64 | 547.70 | | |
| Per-capita per day income | | | | | | | |
| Agriculture | 15.43 | 17.77 | 26.42 | 36.12 | 20.55 | | |
| Livestock/ Fisheries | 6.74 | 7.63 | 7.69 | 6.16 | 7.06 | | |
| Agriculture and allied activities | 22.17 | 25.40 | 34.10 | 42.28 | 27.61 | | |
| non agriculture | 38.95 | 44.85 | 56.18 | 67.04 | 47.05 | | |
| Total | 61.12 | 70.25 | 90.29 | 109.32 | 74.66 | | |

| Table 5. Per day and per capita income of farm households | s by | y farm size in | Jammu region |
|---|------|----------------|--------------|
|---|------|----------------|--------------|

In Jammu and Kashmir State, the share of agriculture and allied sectors in the Gross State Domestic Product stands at 25.81 per cent. On the other hand nearly 70 per cent of the population in the state derives its livelihood directly or indirectly from the agriculture sector (Anonymous, 2013). The predominant cropping systems in Jammu region of J&K State are rice-wheat (59.92 per cent) and maize-wheat (73.09 per cent) in irrigated and rain fed areas, respectively. Other farming activities may comprise any one or combination of mono or multiple cropping, horticultural crops, agro-forestry, livestock, poultry, fishery, goat/sheep rearing etc. So far studies conducted on farming systems in the Jammu division of Jammu and Kashmir State are negligible. As farming system approach is gaining lot of importance in recent years, a need was felt to work out the predominant farming systems, their economics and resource productivity of crop and non-crop enterprises in this region of Jammu and Kashmir State so that, it enables the academicians and policy makers to make policies instead of blanket recommendations, a region specific, appropriate and tailor-made recommendations.

Methodology

A multi stage random sampling was adopted for the selection of samples, with districts, blocks, villages and farmers as the first, second, third and fourth stage sampling units. Out of 10 districts of Jammu

region, five districts namely Doda, Rajouri, Jammu, Kathua and Reasi (50 per cent of total number of districts) were randomly selected. Then three blocks from each district were selected and from each block three villages were selected. The ultimate units, that is, farmers were selected randomly from each village so as to constitute a total sample of 450 (10 from each village) farmers from the whole area under study. The required information was collected through personal interview method, using well-designed and pre-tested schedules. The farmers were divided into four groups: marginal (0.01-2.50 acres), small (2.51-5.00 acres), medium (5.01-7.50 acres) and large (above 7.50 acres). The data for the year 2008-09 was collected and farming systems were identified based on the major contribution to income of farm enterprises. Agricultural income was calculated by deducting the operational cost of cultivation from the gross value of agricultural output. The items covered in operational cost of cultivation were preparation of land, hired labour, machinery cost, irrigation cost, expenditure spent on seed, fertilizers, interest on capital etc. Non agricultural sources of income included service, business etc.

Results and Discussion

The district wise annual income of farm households from different sources during 2011-12 has been shown in Table 1. The total household income for the sample household in Jammu region came to be ₹199910.24. It varied from

(in ₹)

₹ 175080.44 in Rajouri district to ₹236948.05 in Reasi district. In terms of annual household income, farmers of Kathuaand Jammu district are richest, followed by farmers of Reasi district. The farmers in other districts have relatively low household income.

The overall household income from agriculture has been estimated to be ₹ 56034.24 with highest of ₹ 97876.02 from Kathua district and lowest of ₹ 34491.78 earned by the farmers in the Doda district. It indicates large variations in terms of income from agriculture in all the districts. As far as income from other sources is concerned, service sector leads with overall household income of ₹ 69145.15 followed by Agriculture (₹ 56034.24) and business (₹ 42845.67).

District wise percentage distribution of household income of farmers in Jammu region by source is represented in Table 2. It was found that the share of income from agriculture was only 20.97 per cent in Rajouri district which was lowest among all the districts. In all the districts agriculture contributes less than half of family income. On the other hand, agriculture contributed 41.31 per cent to household income in Kathua district which is found to be highest among all the districts followed by 24.40 per cent in Jammu district and 24.13 per cent in Reasi district. Livestock contributed more than 9.0 per cent to household income on the overall basis. The share of livestock income was found to be highest (14.41 per cent) in Reasi district followed by 12.28 per cent in Jammu district. Services is also the most important source of income of farmers contributing in total 34.59 per cent to their household income. Rajouri district leads by contributing 49.27 per cent of services to the income of farmers followed by Reasi (39.62 per cent) Doda (34.34 per cent), Jammu (32.00 per cent) and Kathua (29.12 per cent). As far as other sectors are concerned, it was found that the contribution of business to household income in Jammu region overall is 21.43 per cent and 6.84 per cent is from other sources

The annual income of farm households from different sources by farm-size categories is represented in Table 3. The annual income from agriculture and allied activities was found to be ₹ 50254.81 for marginal farmers, ₹ 63414.47 for small farmers ₹ 99087.21 for medium farmers and ₹ 145069.99 for large farmers with an overall average of ₹ 74254.67. The total annual income per farm household from all sources was worked out to be ₹ 138541.63, ₹ 175384.38, ₹262325.51 and ₹ 375088.81 for marginal, small, medium and large farmers respectively

with an overall average of ₹ 199910.25.

Percentage distribution of annual income of farmers by source and land size categories is shown in table 4. The large farmers have been found to earn only 33.04 per cent of income from agriculture followed by 29.26 per cent, 25.30 per cent and 25.24 per cent by medium, small and marginal farmers, respectively. Livestock contributes highest of 11.03 per cent in case of marginal farmers followed by 10.86 per cent, 8.51 per cent and 5.63 per cent in case of small, medium and large farmers. The result above shows that agriculture income increases with the increase in land size whereas livestock income decreases with the increase in land size. Non-agricultural sources contribute more than half to the income of farmers of all categories. It is around 63.73 per cent for marginal farmers, 63.84 per cent, 62.23 per cent and 61.32 per cent for small, medium and large farmers, respectively, with an overall average of 62.86 per cent. The share of income from services is highest (38.90 per cent) for large farmers and lowest (32.43 per cent) for small farmers.

The per day and per capita household income by farm size from agriculture and non-agricultural sources has been depicted in Table 5. The per day household income from all sources varied from ₹ 379.57 for marginal farmers to ₹ 1027.64 for large farmers with an overall average of ₹ 547.70.The per day per capita income from all sources was found to be ₹ 61.12 for marginal farmers, ₹ 70.25 for small farmers, ₹90.29 for medium farmers and ₹ 109.32 for large farmers with an overall average of ₹74.66. It has also been found that per day household income and per capita peer day income earned by all the farmers from non-agricultural sources is more than from agricultural sources.

Conclusion

It has concluded that service sector is topmost important source of income contributing (34.59 per cent) which is also more than agriculture income to the household income of the farmers of all the districts. Income from agriculture sector also increases with the increase in land size from marginal to large farmers. The large farmers have been found to earn only 33.04 per cent of income from agriculture followed by 29.26 per cent, 25.30 per cent and 25.24 per cent by medium, small and marginal farmers, respectively. Livestock contributes highest of 11.03 per cent in case of marginal farmers followed by 10.86 per cent, 8.51 per cent and 5.63 per cent in case of small, medium and large farmers. The per day per capita income from all sources was found to be ₹ 61.12 for marginal farmers, ₹ 70.25 for small farmers, ₹90.29 for medium farmers and ₹ 109.32 for large farmers with an overall average of ₹ 74.66.It has also been found that per day household income and per capita per day income earned by all the farmers from non-agricultural sources is more than from agricultural sources. Therefore the farmers of Jammu region have to develop livelihood strategy for their existence.

Suggestions

As the land holding size is decreasing day by day, therefore, government has to take initiative for high agricultural growth and livelihood to farmers especially for marginal one. The livelihood strategies have to be identified in consultation with government departments and people of the concerned area. These strategies should be made on the basis of local resources available as well as topography and climate of the area. Scientific management of natural resources is essential for ensuring sustainable development of farm and non-farm activities in the rural areas (Singh, 2010). Given below are some of the suggestions for promoting livelihood for farmers of the study area: Improve the quality of life of the rural poor by strengthening their existing livelihood programs, initiative new activities to diversify and increase their income.

□ Awareness and training is very much necessary to the farmers for promoting

livelihood security and for that matter there is a need of well trained and highly capable local service providers to provide timely support to the farmers.

- Development of community based models for natural resource management in order to protect and use the resources for sustainable development.
- □ The problems that constrain the development of rural sector have to be addressed properly to exploit the potential of this sector (Hiremath, 2007).

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