



E-ISSN: 2278-4136  
P-ISSN: 2349-8234  
JPP 2019; SP2: 226-229

**Dhirendra Kumar**  
Ph.D., Scholar, Agricultural  
Economics, IGKV Raipur,  
Chhattisgarh, India

**Dwarikadhish Churpal**  
Ph.D., Scholar, Agricultural  
Economics, IGKV Raipur,  
Chhattisgarh, India

**Neeta Yadav**  
M.Sc. Agricultural Economics,  
GBPUAT, Pantnagar, U S  
Nagar Uttarakhand, India

## Socio-economic condition of wheat growers in Udham Singh Nagar district of Uttarakhand

**Dhirendra Kumar, Dwarikadhish Churpal and Neeta Yadav**

### Abstract

The study was conducted in Udham Singh Nagar district of Uttarakhand was based on data collected from 60 farmers (26 marginal & small, 18 medium and 16 large) for the agricultural year 2011-12. Various socio economic variables were analyzed using simple descriptive statistical tools like average, percentage to examine the socio economic status. Average size of land holding was 2.62 ha. In Rabi season wheat was grown as main crop. The per hectare total cost of production of wheat at aggregate level was Rs. 57392.26. Large farms incurred highest total cost (Rs. 59628.99/ha) and marginal & small the lowest (Rs. 55783.41/ha). Study suggests that efforts should be made for timely supply of quality inputs at reasonable price and in adequate quantity to farmers.

**Keywords:** Socio-economic status, wheat, Uttarakhand

### Introduction

Rural India is real India. No doubt development of rural India largely depends on development of agriculture. Agriculture is a broad term encompassing all aspects of crop production, livestock farming, orchard, fisheries, forestry etc. Development of agriculture is an important precondition for the overall development of an economy. Agriculture throughout the world is still single most important human activity. Agriculture is still the only reliable source of food, fibre and other products, whose synthetic substitutes are not as good as the natural products and are even more costly to produce. In many third world countries, it is the main source of livelihood for over 50 per cent of population and contributes roughly the same proportion to the national income (Uttarakhand at a glance 2010-11) [5].

Wheat is the important food crop in world farming. It is specially main food crop of temperate zone. It is also extended to warm regions of temperate and sub-tropics to tropical low lands. It is one of the most ancient crops of the world. Its cultivation began in the Neolithic period. Bread wheat is known to have been grown in the Nile valley by 5000 B.C., and its apparently later cultivation in other regions (e.g., the Indus and Euphrates valleys by 4000 B.C., China by 2500 B.C., and England by 2000 B.C.) indicate that it spread from Mediterranean centers of domestication. The civilizations of W Asia and of the European peoples have been largely based on wheat, while rice has been more important in E Asia. Since agriculture began, wheat has been the chief source of bread for Europe and the Middle East. It was introduced into Mexico by the Spaniards\* around 1520 and into Virginia by English colonists early in the 17th century. Wheat is one of the major crops of the Uttarakhand and grown in an area of about 0.38 million hectare (2010-11) accounting for over 42% of total area of cereals. The state having total production 0.88 million tonnes and average productivity of wheat in the state is around 2316 kg per ha.

Uttarakhand is one of the wheat producing states in India where wheat accounts 47% of total food grains produced in the state. In Uttarakhand, Udham Singh Nagar district is having highest area under wheat crop i.e., 104.46 thousand hectare (Table 1. 5). Further, it can be seen from Table 1.5, in Udham Singh Nagar district, the productivity of wheat was fluctuating throughout the years. This may be due to higher price of inputs, lack of credit, lack of quality inputs, pest and disease attack and natural calamity etc. Further, as the soils of Udham Singh Nagar are very productive and by using the proper technology we can increase the average productivity of district from 40 to 45 quintal per hectare. As the land frontier has already been exhausted, it is the adoption of modern technology that can take the wheat productivity to the desired level against the backdrop of land and labour which is a future challenge ahead. Keeping all the facts in mind the following major concerns were identified in study area.

### Methodology

The present study was conducted in Udham Singh Nagar district of state Uttarakhand for the

**Correspondence**  
**Dhirendra Kumar**  
Ph.D., Scholar, Agricultural  
Economics, IGKV Raipur,  
Chhattisgarh, India

agriculture year 2011-12. Udham Singh Nagar district was purposively selected as wheat is intensively grown in the district and it was convenient to procure authentic data required for the study.

### Sampling Design

The sampling was carried out in three stages. Firstly, the list of all blocks of the district was prepared and two blocks, Rudrapur and Gadarpur were selected purposively and in the second Stage of sampling from Rudrapur block one village named Kachi Khamaria and from Gadarpur block one village named Gadarpur were selected purposively due to proximity of the area and convenience in the data collection. Then, a

complete list of farmers along with their land holding size of each selected village was prepared with the help of respective village Pradhans and Panchayat members. A total population of 123 wheat growing farmers was obtained. The farmers of selected villages were categorized into marginal & small, medium and large farmers on the basis of their operational land holdings and a sample of 30 farmers were selected randomly by using the method of probability proportion to size from each village with a restriction that from each village, a minimum number of 5 farmers were selected from each size groups and thereby the total sample size of 60 farmers was obtained.

**Table 1:** Categorization of wheat growing farmers

S. No.	Category of farmers	Average operational land holding (ha)	Selected Sample farmers (Kachi Khamaria)	Selected sample farmers (Gadarpur)	Total selected sample farmers
1.	Marginal & Small farmers (< 2 ha)	0.93	12	14	26
2.	Medium farmers (2 to 4 ha)	2.38	10	8	18
3.	Large farmers (> 4 ha)	5.64	8	8	16
	Total (Overall)	2.62	30	30	60

The study was mainly based on primary data. The required primary data were collected from selected farmers for the agricultural year 2011-12. Most of the required secondary data were obtained through websites. Information was also collected from offices like Vikash Bhawan Rudrapur (District Udham Singh Nagar), Block Development Offices (BDO) etc. Besides some basic information were also collected from different journals and publications. A brief description is given below of the type of data collected and used in the study.

**(a) General Information:** Data regarding age of farmers and family members, their educational level, family size, sources of income were collected from each sample farmer.

**(b) Land Holding, irrigation sources and cropping pattern:** From each sample farmer data regarding area, cropping pattern, sources of irrigation were obtained for the year 2011-12.

**(c) Assets Position and Livestock Inventory:** Data regarding current asset position including livestock, their purchase values, year of purchase, expected period of life and present value were also collected.

**(d) Physical Input-Output Data:** Input data includes land holding, human labour, tractor hours, manure and fertilizers, seeds, irrigations, plant protection chemicals etc related to crop production and output data cover yield of main and by-product.

**(e) Price of Input and Output:** For the price of input mentioned above, prevailing market price has been taken. In order to obtain the value of the output (both main and by-product) their prevailing market price was considered. The family labour, own tractor and other machinery used also valued at prevailing hiring charges.

### Analytical procedure

A brief description of the analytical procedure to achieve the objectives has been presented in the following sub section.

### Socio- economic status

Under socio-economic aspects data on various variables like age, family size, educational status, size of land holding, farm income and its sources were analyzed using simple descriptive statistical tools like average, percentage etc.

### Results and Discussion

#### Socio- Economic Analysis

The socio-economic characteristics of the farmers affect the organization and management of the farm as well as the production and disposal of the produce. An analysis of the socio-economic characteristics of any area may furnish a base for further planning and development of agriculture. Under socio- economic aspects, age, educational profile, operational size of holdings, family size and income of the sample wheat growers were assessed and have been presented in the following sub-sections.

#### Age of respondent farmers

Table 2 reveals the age-wise distribution of sample wheat growers. The overall average age of the marginal & small, medium and large farmers was found to be 46.15, 42.89 and 50.13 years respectively. Average age of all farmers was estimated to be 46.23 years. It can be seen from the table that majority of the marginal & small farmers i.e., 42.31 per cent belonged to old age (above 50) years. Similarly majority of medium and large farmers belonged to middle age group (36-50 years) constituting 66.67 and 50.00 per cent respectively. In case of all farms, 48.33 per cent farmers belonged to middle age group followed by old age group constituting 33.33 per cent and young group (up to 35 years) constituted 18.33 per cent of the total sample.

**Table 2:** Age-wise distribution of sample wheat growers

S. No.	Age	Category of farms (Number)			All Farms
		Marginal & Small	Medium	Large	
1	Young (Upto 35)	6 (23.08)	4 (22.22)	1 (6.25)	11 (18.33)
2	Middle (36 to 50)	9 (34.62)	12 (66.67)	8 (50.00)	29 (48.33)
3	Old (Above 50)	11 (42.31)	2 (11.11)	7 (43.75)	20 (33.33)
4	Total	26 (100)	18 (100)	16 (100)	60 (100)
5	Overall average age of sample farmers (years)	46.15	42.89	50.13	46.23

**Note:** Figures in parentheses indicate the percentage of respective total.

### Educational Status

Distribution of sample farmers according to the educational level is given in Table 3. In case of marginal & small, medium and large farmers, percentage of illiterates was found to be 53.85, 61.11 and 43.75 per cent respectively. For all sample farmers, 53.33% of farmers belonged to illiterate

group followed by primary to class VIII (20.00 per cent), Class IX to XII (15.00 per cent) and graduate and above (11.67 per cent). The literacy rate was found to be 46.15, 38.90 and 56.25 per cent for marginal & small, medium and large farmers respectively. The literacy rate for all farmers was found to be 46.67 per cent.

**Table 3:** Educational status of wheat growers

S. No.	Level of education	Category of farms (Number)			All Farms
		Marginal & Small	Medium	Large	
1	Illiterate	14 (53.85)	11 (61.11)	7 (43.75)	32 (53.33)
2	Primary to class VIII	8 (30.77)	1 (5.56)	3 (18.75)	12 (20.00)
3	Class IX to XII	2 (7.69)	5 (27.78)	2 (12.50)	9 (15.00)
4	Graduate and above	2 (7.69)	1 (5.56)	4 (25.00)	7 (11.67)
5	Total	26 (100)	18 (100)	16 (100)	60 (100)
6	Literacy level (%)	46.15	38.90	56.25	46.67

**Note:** Figures in parentheses indicate the percentage of respective total.

### Operational land holdings

The operational land holdings of all sample farmers were recorded and presented in Table 4. The marginal & small farmers possessed operational holding of an average size of

0.93 hectare where as it was 2.38 hectare and 5.64 hectare in case of medium and large farmers respectively. Average size of land holdings for all farmers was estimated to be 2.62 hectare.

**Table 4:** Distribution of operational land holdings

S. No.	Particulars	Category of farms			All farms
		Marginal & Small (< 2ha)	Medium (2-4 ha)	Large (> 4 ha)	
1	No. of farms	26	18	16	60
2	Average of operational land holding (ha)	0.93	2.38	5.64	2.62

### Family size of sample farmers

Particulars about the average size of family of farmers have been presented in Table 5. From the table it is evident that the average family size for all sample farmers was 5.97 consisting 43.22 per cent male and 28.91 per cent female. But in case of marginal & small farmers, it was 6.31 and 6.11, 5.25 for medium and large farmers respectively. The percentage of

male in every category of farmers varies from 39 to 52 per cent and it was 24 to 32 per cent for female which reflects quite low sex ratio in the study area. The average number of children was 1.73, 2.22 and 1.00 for marginal & small, medium and large category of farms respectively and it was 1.68 for all sample farmers.

**Table 5:** Average family size of sample farmers

S. No.	Particulars	Category of farms (Average)			All Farms
		Marginal & Small	Medium	Large	
1.	Adult				
	Male	2.61(41.36)	2.39 (39.12)	2.75 (52.38)	2.58 (43.22)
	Female	1.96 (31.87)	1.50 (24.54)	1.50 (28.90)	1.70 (28.91)
2.	Children	1.73 (28.13)	2.22 (36.33)	1.00 (19.27)	1.68 (28.57)
3.	Total family size	6.31(100)	6.11 (100)	5.25 (100)	5.97 (100)

**Note:** Figures in parentheses indicate the percentage of respective total.

### Income

The distribution of the respondent farmers according to their annual income (from all sources) is given in the Table 6. The table reveals that majority of all sample farmers (65 per cent) had an annual income between 1 lakh to 5 lakh rupees. While 15 per cent had an annual income between 5 lakh to 10 lakh rupees. An equal proportion of farmers, 10 per cent each had

an annual income i.e., less than 1 lakh and more than 10 lakh rupees. But in case of marginal & small farmers, majority of farmers (57.69 per cent) had an annual income between 1 lakh to 5 lakh rupees and 94.44, 43.75 per cent for medium and large farmers respectively. The percentage of an annual income between 5 lakh to 10 lakh for all categories varies from 6 to 25 per cent and it was 4 to 31 per cent for annual

income more than 10 lakh. Table 5 reflects that only 23 percent of marginal & small farmers had an annual income of less than 1 lakh and in case of medium and large category, no farmers had income less than 1 lakh. The average annual

income from all sources was found to be Rs. 440233.30 for all farms. Large farms have highest average income Rs. 805750 followed by medium (Rs. 324333.30) and marginal & small (Rs. 295539.50) farms.

**Table 6:** Distribution of the respondent farmers according to their annual income (from all sources)

S. No.	Annual income (Rs.)	Category of farms (Number)			All Farms
		Marginal & Small	Medium	Large	
1.	Less than 100000	6 (23.08)	0 (0.00)	0 (0.00)	6 (10.00)
2.	100000- 500000	15 (57.69)	17 (94.44)	7 (43.75)	39 (65.00)
3.	500000- 1000000	4 (15.38)	1 (5.56)	4 (25.00)	9 (15.00)
4.	More than 1000000	1 (3.85)	0 (0.00)	5 (31.25)	6 (10.00)
5.	Total	26 (100)	18 (100)	16 (100)	60 (100)
6.	Average annual income	295539.50	324333.30	805750	440233.30

**Note:** Figures in parentheses indicate the percentage of respective total.

### Summary and Conclusion

Wheat is the leading food crop in world farming. It is main food crop of temperate zone. It is also extended to warm regions of temperate and sub-tropics to tropical low lands. It was observed that marginal & small, medium and large farmers respectively which shows financial condition of different category of farms are not same. The size of the family quite large and educational status of all farmers not satisfactory because majority of farmers are illiterate.

### Reference

1. Agricultural Statistics at a Glance, Department of Agriculture and Co-operation, Ministry of Agriculture, Govt. of India, 2012.
2. Al-Feel MA, AL-Basheer AAR. Economic efficiency of wheat production in Gezira scheme, Sudan, Journal of the Saudi Society of Agricultural Sciences, 2011; 11:1-5.
3. Economic Survey of Uttarakhand, Directorate of Economics and Statistics, Govt. of Uttarakhand, 2010-11.
4. Singh A. Economic analysis of wheat production across cropping systems in north - west India, Indian Journal of Agricultural Research, 2006; 40(3):171-177.
5. Uttarakhand at a glance, Directorate of Economics and Statistics, Govt. of Uttarakhand, 2010-11.