Agricultural Characteristics of District Anantnag: Jammu and Kashmir

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Abstract: - Agriculture is regarded as the oldest and most basic activity of man. India is mainly an agricultural country. Agriculture is the most important occupation for most of the Indian families. Thus, agriculture is the backbone of Indian economy, as it contributes about 14% of total GDP and 10% of total exports. The state of Jammu and Kashmir has great diversity in geo-ecological conditions, which suit ideally to cultivate agricultural crops like paddy, maize, wheat etc and almost all kinds of temperate and as well as tropical and subtropical fruits. The present research paper reveals the agricultural characteristics of district Anantnag (Jammu and Kashmir). The present study analyzes different aspects of agriculture of Anantnag district, as it is unique district in terms of agriculture.

Key Words:- Agriculture, Land use, Cropping pattern, horticultural crops, land holdings and cultivators.

Introduction

Although contribution of Agriculture towards Gross Domestic **Product** National level has reduced from 30% in 1990-91 to less than 14% in 2011-12, but still it is considered backbone of Indian economy and around 50% work force still dependent on Agriculture for livelihood despite of structural change taking place over the years. Presently Agriculture sector is contributing 14% to the Gross Domestic Product (GDP) at National level, but it is still the main source of livelihood for majority of rural population. Therefore of rapid growth Agriculture is indispensable for faster inclusive and sustainable growth.

Agriculture in J&K

Agriculture also plays a very prominent role for development of economy of J&K State. Around 65% 70% of the population in the State gets livelihood directly or indirectly from the Agriculture and allied Sectors. The State comprises of three regions namely Jammu, Kashmir and Ladakh having distinct geographical outlook and agro climatic zones. Each zone having its own characteristics that largely determines the cropping pattern and productivity of crops. Paddy is the main crop of Kashmir, followed by maize, oilseeds, pulses, vegetables, fodder and wheat. In Jammu region, wheat is the predominant crop followed by maize, paddy, pulses, oilseeds, fodder, vegetables and other crops while in Ladakh, barley is the major cereal crop followed by. The production of three major crops paddy, maize and wheat in J&K state is more than 90% of the total food grain production of all crops and rest is shared by other cereals and pulses.

Around 73% of the population of the State resides in the rural areas and is directly or indirectly depend upon this sector for their livelihood and employability. Despite of importance for ensuring inclusive growth and providing Food security, the contribution of Agriculture towards Gross Domestic **Product** State (GSDP) is

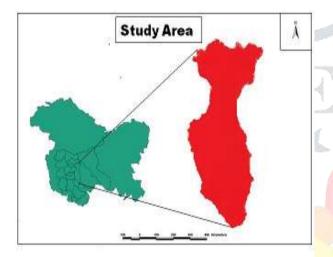
gradually decreasing which is indication of development of the economy.

Methodology and Data Base:- The entire data is used for present study has been obtained from secondary source, collected from district statistical hand book Anantnag. In order to analyze agricultural characteristic of Anantnag district, sophisticated statistical diagrams have been used.

Objectives:- The present study has set to achieve following objectives:-

- (1) To examine the percentage of land different categories under of Anantnag district.
- (2) To examine the agriculture land use pattern of Anantnag district.
- (3) To examine the total area sown under different crops of Anantnag district.

Study Area:- The area selected for the present research work is district Anantnag. Anantnag is situated in the southern region The district of the state. lies the geographical coordinates of 74°-30' to 75°-35' East longitude and 33°-20' to 34°-15' North latitude, at an altitude of 5,300 feet (16,00mts) above mean sea level, at a distance of 33 miles (53kms) from main city Srinagar. It comprises an area of 2917 km2 which includes 1882 km2 of forest area. According to 2011 census it is the third most populous district of state with population of 1,070,144. The district has a population density of 375 inhabitants per sq km.



General land use

Land is the basic natural resource of mankind. Over the span of human history, man has drawn most of his sustenance and

S. no	Type of land Use		Area (hectts)	Percenta ge
1	R	eporting land	72149	100 %
2	Forests		253	0.35 %
3	Area not	Land put to non- agricultural use	2712	3.75 %
	availab le for	Barren & uncultivable land	6129	8.49 %
	cultivat ion	Land under still waters	3138	4.35 %
_300	W	Social forestry	28	0.03 %
	Other cultiva ble	Permanent pastures & other grazing land	6905	9.57 %
4	land excludi ng fallow	Land under misc. tree-crops not included in area sown	2093	2.90 %
V		Cultivable waste	2768	3.83 %
5	Fallow land	Fallow land other than current fallow	262	0.36 %
8.40		Current fallow	0	0
6	Net sown area		47861	66.34 %

much of his fuel, clothing and shelter from the land. Man fulfills his needs by putting the available land to different uses. Nature has provided human beings with abundant resources where he benefits himself from it with minimum efforts. Land use is the use of the land by man. In other words, land use simply means the use to which the land is being put or the utilization of land devoted to human activities. Sekliziots (1980) defines land use as the human function of a given area while land cover is the physical surface of the land.

Land utilization statistics provide the area figures, showing the distribution of the total geographical area/reporting area of a region/ country into various uses. The general land use picture and the proportion of area under different categories of district Anantnag have been given in table 5.1:-

Table 5.1 General Land use pattern Anantnag district (2012-13)

Source: F.C's Office, Srinagar

General land Use Pttern 2012-13 ■ Forests ■ Land put to non-agricultural use ■ Barren & uncultivable land Land under still waters ■ Social forestry Permanent pastures & other grazing land Land under misc. tree-crops not included in ■ Cultivable waste land Fallow land other than current fallow ■ Net sown area

Land Use Analysis

The total reporting area of the Anantnag district is 72149 Hectts, out of total reporting area only 0.35 % Of the district is under forests which is very below from state, as state has 27.24 % of the total reporting area under forests which is below 33 %, recommended by the Government under the National Forest Policy 1988. The substantial decrease in the forest category is attributed to rapid increase in croplands, horticulture, built-up area etc. Area not available

for cultivation occupy 16.60 % (11979) hectts) of the total reporting area, out of total area not available for cultivation, 22.63 % is land put to non-agricultural % is barren land use.51.16 uncultivable land and 26.19 % is land under still waters. If the figure is compared with total reporting area, land put to nonagricultural use is 3.75 %, 8.49 % is barren land and uncultivable land and 4.35 % is land under still waters. While 16.35 % (11794) is under other cultivable land excluding fallow with compared to total reporting land of the district, out of this 0.24 % is under social forestry, 58.55 % is permanent pastures and other grazing land, 17.75 % is land under miscellaneous treecrops and groves not included in the net area sown and 23.46 % is under cultivable waste land. If the percentage is compared with the total reporting area, social forestry occupy 0.03 %, permanent pastures and other grazing land occupy 9.57 %, land under miscellaneous tree-crops is 2.90 % and 3.83 % is under cultivable waste land. The proportion of permanent pastures and other grazing land is high as compared to forests due to account of the substantial decrease in the precious green gold (forests) of the district Anantnag. The

proportion of fallow land with compared to total reporting area is 0.36 %. Out of fallow land whole percentage is under fallow land other than current fallow while current fallow is totally absent in Anantnag district. The Net Sown Area occupies 66.34 % of the total reporting area of the distinct.

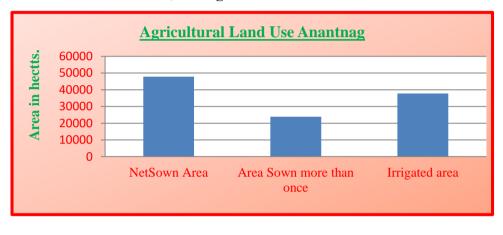
Agricultural land use

Land is the most vital resource of a country. It is fixed asset and cannot be expanded to meet the needs of an increasing population. Therefore, it must be used carefully and in the best possible manner. The study of land utilization is very essential to judge the economic and social structure of a country. Land utilization in India is dominated by agriculture. Agriculture accounts for 14.6 % crore ha or 48 % of the total reported area of the country. In terms of area under agriculture, India ranks first in the world. There is still more scope for bringing an additional area of about 4 crore ha under agriculture as this land is lying waste and as fallow. Latest scientific techniques can surely increases area under crops. The agricultural land use picture of district Anantnag has been given in table 5.2:-

Table 5.2 Agricultural Land Use Anantnag district (2012-13)

S.no	Type of Land Use	Area (hectts)
1	Net Sown Area	47861
2	Area Sown more than once	23571
3	Gross Irrigated Area	37760

Source: F.C's Office, Srinagar



Analysis

From the above table 5.2 it reveals that, Net Sown Area (NSA) occupy 67 % out of the total cropped area of Anantnag district while as the Area sown more than once (DCA) occupy 32.99 % out of total NSA Anantnag district and the Gross Irrigated Area of the district Anantnag is 52.86 %. The high proportion of NSA in Anantnag district as compared to other category is due to

availability of plain fertile area with irrigation facilities in the form of canals.

Cropping Pattern:- The cropping pattern of a region reveals the proportion of area of land under different crops at a point of time, the rotation of crops and the area under double cropping. The cropping space and time. pattern changes in Characterized by mountainous and undulating terrain, the state of Jammu and Kashmir has micro-level variations in the agro-climatic conditions. Consequently, the cropping patterns and crop combinations differ significantly at the meso and micro levels. Despite the fact

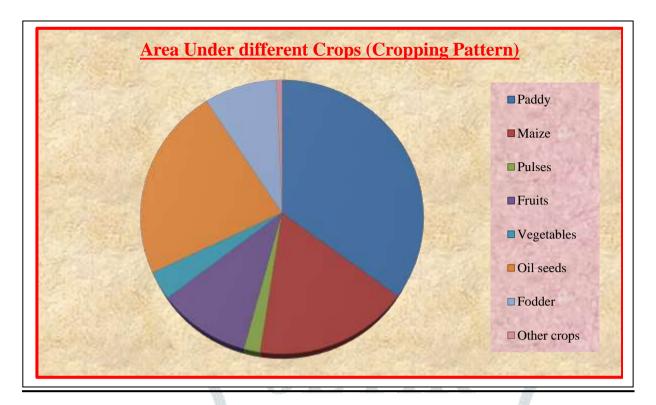
that the agro-climatic variations supported different types of cropping patterns in the state, however, it was the availability or unavailability of irrigation facilities

Table 5.5 Total area sown under different crops Anantnag

S.no	Crop	Area (in hectts)	Percentage
1	Paddy	25147	35.20 %
2	Maize	12279	17.18 %
3	Pulses	1289	1.80 %
4	Fruits	7374	10.33 %
5	Vegetables	2408	3.37 %
6	Oil seeds	16329	22.85 %
7	Fodder	6160	8.63 %
8	Other crops	446	0.63 %
9	Total	71432	100 %

Source: F. C's Office, Srinagar.

which played a key role in determining the cropping structure in the state. Not surprisingly, therefore, the cropping pattern of the state had been dominated by paddy- the staple food of the majority of the people- in those areas which had adequate irrigation facilities and by other food crops like maize in the rain fed zones. The table 5.5 given below shows the cropping pattern of the Anantnag district as:-



Analysis:

An examination of table 5.5 shows that Paddy (rice) is the first ranking crop in the Anantnag district, occupying about onethird (35.20 %) of the total cropped area. Thus, paddy is the most staple food crop of Anantnag district. Oil-seed (Mustard) with 22.85 % of the gross cropped area is the second most important crop. In Anantnag district out of various varieties of oil-seeds, Mustard is mostly sown as a Rabi crop. The proportion of Maize is 17.18 % to the total cropped area, followed by fruits to which cover 10.33 % of the total cropped area is devoted, fodder with 8.63 %, vegetables 3.37 %, pulses 1.80 % and other crops 0.63 % of the total cropped

area of the district Anantnag of Kashmir valley.

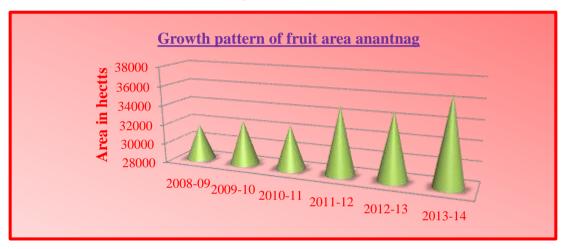
Horticultural crops

The cultivation of fruits, vegetables and flowers is known as Horticulture. The word "Horticulture" has been derived from the Latin word "Hourtus" meaning garden "Colere" and cultivate. meaning Horticulture is traditionally divided into: (i) Pomology, (food crops, nuts, vines, and (ii) Floriculture, e.g, edible roots, edible stems, edible leaf, edible seeds and flowers. The state of Jammu and Kashmir has great diversity in the geo- ecological conditions, which suit ideally to the cultivation of almost all kinds of temperate and most of the varieties of tropical and sub-tropical fruits. As the

Table 5.3 Growth Pattern of Fruit Area (hectts) Anantnag

S.no	Year	Area under Fruits as per ASR (Hectts)
1	2008-09	31714.24
2	2009-10	32560.9
3	2010-11	32560.9
4	2011-12	34881.7
5	2012-13	34881.7
6	2013-14	36868.2

Source: Chief horticultural office Anantnag.



Anantnag is one of the districts of Jammu and Kashmir has almost same geoecological conditions, also suit ideally to the cultivation of almost all kinds of temperate fruits.

At present about 36868.2 hectares of area under fruits in Anantnag district. The temporal growth of fruit area has been given in table 5.3.

Analysis:

The total area under fruits in 2008-09 was 31714.24 hectares which rose to 32560.9 hectares in 2009-10. Consequently, area under fruits remained same in 2010-11 with 32560.9 hectares. The area further went to 34881.7 hectares in 2011-12 and remains same in 2012-13, while area rose to 36868.2 hectares in 2013-14. Thus, registering 5153.96 hectares from 2008-09 2013-14. Horticulture assures the priority as it's

Table 5.4 Area under Horticultural Crops Anantnag (2013-14)

S.no	Varieties of fruits	Area (000 ha)	Percentage
1	Apple	13.207	35.82 %
2	Pear	0.815	2.22 %
3	Apricot	0.234	0.64 %
4	Peach	0.176	0.47 %
5	Plum	0.306	0.82 %
6	Cherry	0.113	0.31 %
7	Walnut	14.329	38.86 %
8	Almonds	0.685	1.85 %
9	Others	7.003	18.99 %
10	Total	36.868	100 %

Source: Chief Horticultural office Anantnag.

returns are more than of agriculture (Paddy) as well as low irrigation facilities required for horticultural land.

Among the various varieties of fruits grown in Anantnag district, the most demanded variety is apple (Delicious) and thus other fruit area of the Anantnag is shrinking day bay day. The area under of various horticultural crops in Anantnag is given below in table 5.4.

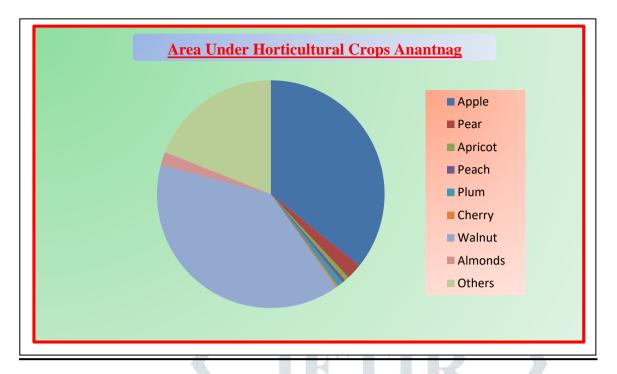


Fig.5.4

Analysis:

Apple, the most demanded variety of all fresh fruits occupies about 35.82 % of the fruits. area under because apple (Delicious) has high market price as compared to other fresh fruits. Pears occupy about 2.22 % of the total area under fruits, followed by apricot covering 0.64 %, peach 0.47 %, plum 0.82 %, cherry 0.82 %, almonds 1.85 %. Walnut, the most demanded variety of dry fruits covering area of about 38.86 %, as walnut is known by past times and is world famous. While other varieties occupy about 7.003 % of the total area of fruits in Anantnag district of Kashmir valley.

Land Holdings and Cultivators

The number of holdings and different categories of land holders of Anantnag district has been given in table 5.6.

Table 5.6 Land Holdings and Category of Cultivators (Anantnag)

	No. of Operational		Area Operated	
Size class	Holdings	Percentage	(hectts.)	Percentage
Marginal	113331	80.41 %	36007.76	50.41 %
Small	5608	3.97 %	7606.29	10.65 %
Semi-Medium	991	0.70 %	2568.17	3.59 %
Medium	60	0.04 %	375.43	0.54 %
Large	08	0.005 %	119.60	0.16 %
Land less cultivators	20959	14.86 %	24754.75	34.65 %
Total	140957	100%	71432	100 %

Source: Agricultural census. 2010-11





Analysis:

An examination of table 5.6 shows that about 80.41 % of the total holdings in the district Anantnag are Marginal farmers and the area operated by marginal farmers are about 50.41 %. The proportion of small farmers is about 3.97 % and the area operated by small farmers is about 10.65 %. While the percentage of Semi-Medium farmers are about 0.70 % with area operated 3.59 %, followed by Medium farmers 0.04 % with the area operated 0.54 % and Large farmers 0.005 % with area operated 0.16 %. The Land less farmers constitute remaining 14.86 % of the total holdings in the Anantnag district of Kashmir valley, with land operated by them is about 34.65 % out of total cropped area of the district Anantnag. Thus, from the above discussion it is analyzed that 4/5th of the farmers are marginal and operated half (50.41%) of the cropped area in the district Anantnag.

Conclusion: The analysis of agricultural characteristics of district Anantnag reveals following points as under:-

1) The total reporting area of the Anantnag district is 72149 Hectts, out of total reporting area only 0.35

- % Of the district is under forests which is very below from state.
- 2) Net Sown Area (NSA) occupies 67 % out of the total cropped area of district. The Anantnag high proportion of NSA in Anantnag district as compared other category is due to availability of plain fertile area with irrigation facilities in the form of canals.
- 3) Paddy (rice) is the first ranking crop in the Anantnag district, occupying about one-third (35.20 %) of the total cropped area. Thus, paddy is the most staple food crop of Anantnag district.
- 4) The total area under fruits in 2008-09 was 31714.24 hectares which rose to 32560.9 hectares in 2009-10. Consequently, area under fruits remained same in 2010-11 with 32560.9 hectares. The area further went to 34881.7 hectares in 2011-12 and remains same in 2012-13, while area rose to 36868.2 hectares in 2013-14. Thus, registering 5153.96 hectares from 2008-09 to 2013-14. Horticulture assures the priority as it's returns are more than of agriculture (Paddy) as well as low

- irrigation facilities required for horticultural land.
- 5) Apple, the most demanded variety of all fresh fruits occupies about 35.82 % of the area under fruits. because apple (Delicious) has high market price as compared to other fresh fruits.
- 6) About 80.41 % of the total holdings in the district Anantnag Marginal farmers and the area operated by marginal farmers are about 50.41 %.
- 7) The proportion of small farmers is about 3.97 % and the area operated by small farmers is about 10.65 %.
- 8) The percentage of Semi-Medium farmers are about 0.70 % with area %, followed by operated 3.59 Medium farmers 0.04 % with the area operated 0.54 % and Large farmers 0.005 % with area operated 0.16 %.
- 9) Thus, from the above discussion it is analyzed that 4/5th of the farmers are marginal and operated half (50.41%) of the cropped area in the district Anantnag.

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