International Journal of Social Science and Economic Research

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

AGRICULTURE TRANSFORMATION AND RURAL DEVELOPMENT IN KASHMIR VALLEY (WITH SPECIAL REFERENCE TO DISTRICT BARAMULLA)

Aadil Altaf Lone

Dept. of Sociology Barkatullah, University Bhopal,
Village Nathipora Sopore, District Baramulla 193201

ABSTRACT

Agriculture is the main occupation for the people of Jammu & Kashmir. About 80% of the people are dependent on agriculture for their livelihood directly or indirectly. The state is basically a mono-cropped with 40% area in Jammu division and 60% in Kashmir division. Due to low production and low income, the agriculture system of the state has gone through a rapid transformation with changes in cropping pattern and land ownership. The farmers have changed the traditional system of cultivation by starting cultivation of cash crops. They have started transforming their irrigated land from crop cultivation to fruit cultivation and transplanting of apple trees on their irrigated land. These crops have the potential of income growth, employment generation, poverty alleviation and export promotion. Since 1980 in the state especially in Kashmir valley, the fruit cultivation has dominated the traditional crop cultivation. Horticulture sector has brought more land under orchards. The area under horticulture has been high during the past three decades i.e. 1980, 1990, 2000. About 4.5 lakh families are engaged directly or indirectly with horticulture activities. The introduction of horticulture has changed the economic scene of the rural population and emerged a class of rural entrepreneurs. The horticulture is not only rich in production but also sound in finance. Due to this transformation, the rural population not only meets their basic desires but also play a decent role in overall socio-economic development which includes all-round development of family like education of children, infrastructure and food to the family. With the rise in production and in income, there is also a great move in the socio-economic living standards of common people.

Keywords: Agriculture, transformation, cultivation, production, horticulture, fruit.

INTRODUCTION

Our main aim in this paper is to explore the impact of Agriculture transformation on the socio-economy improvement of Kashmiri farmers. As we all know that India is a developing country and has a vast population spread in the metropolitan cities, small town and six lakhs forty

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

thousand and eight hundred sixty-seven villages (640867) and agriculture is their main occupation (Census 2011). The majority of our population still resides in villages and agriculture is their main source of income. Agriculture is the backbone of the Indian economy and it holds a great promise for future growth and job creation. Agriculture production and food security are therefore one of the most effective ways to drive complete growth and reduce poverty. Agriculture not only provides food to its rural population but it also generates the employment and food to its urban population. Due to low production and low income, the agricultural farmers change the old age tradition of crops into modern and high yielding varieties. This brings changes in crop cultivation and changes in land use patterns. Due to this process, the agricultural farmers produce more production from the same land. The year 1965 in India is considered as the revolutionary year in the agriculture sector. It was the year which brought tremendous changes in Indian agriculture. The green revolution was started in India in 1965 with the introduction of high yielding varieties of seeds, fertilizers and a simple canal irrigation network throughout India, which made the region less dependent on rainfall. By agricultural transformation we mean the changes which take place in the agriculture sector, changes like the use of hybrid seeds, fertilizers and high yielding varieties of seeds, crop patterns, land use patterns and use of new technologies. These changes help the farmers in producing more crops and production and thus help the farmers in their socio-economic development of their family. Agriculture generates important export earning as well as food for the population. However, states ongoing agricultural transformation is often leading to increasing wealth as well as increasing inequality and social polarization. Agricultural transformation among other things impacted by globalization and related policies have mixed effects in rural household's mobility strategies. Agricultural transformation could be seen as key drivers of the current process of human mobility. Agricultural transformation can roughly be defined as a process by which individual farms shift from highly diversified subsistence-oriented production towards more specified production oriented towards the market or another system of exchanges (staentz, 1998). Agricultural transformation refers to change from one socio-economic status such as access to irrigation, new technologies, infrastructure, education, income, access to market etc. agricultural transformation has greatly contributed to changes in livelihoods of rural households. There are multiple factors influencing rural households to diversify their livelihoods, some examples are increasing the security of productive lands for agriculture, land fragmentation, land concentration and new forms of agricultural production. Many agricultural systems are undergoing multiple and sometimes rapid structural transformations; these structural transformations can occur in different forms which are evident from the great changes taking place in the land tenure systems.

Agriculture Transformation in the State Jammu and Kashmir:

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

Agriculture is the main occupation for the people of Jammu & Kashmir. About 80% of the people are dependent on agriculture for their livelihood. The state is basically a mono-cropped with 40% area in Jammu division and 60% in Kashmir division. The major crops include rice, maize, and wheat. After the independence, the agriculture system of the state has gone through a rapid transformation with changes in cropping pattern and land ownership, after the introduction of various reform movements. The farmers have changed the traditional system of cultivation by starting cultivation of cash crops. They have started transforming their land from crop cultivation to fruit cultivation, live transplanting of apple trees on their irrigated land. Since 1980 in the state especially in the valley of Kashmir, the introduction of fruit cultivation has dominated traditional crop cultivation. Introduction of the horticulture sector has brought more land under orchards. The area under horticulture has been high during the past three decades i.e. 1980, 1990, 2000 out of the total area under orchards in the state was approximately 90% concentrated in the valley of Kashmir. The climate of Kashmir is also favorable for the production of fruits, like apple, pears, cherries, is common in the territory. About 20% of the total cultivation area is under horticulture crops. About 4.5 lakh families are engaged directly or indirectly with horticulture activities (Aarif 2012). The introduction of horticulture has changed the economic scene of rural production and introduced a class of rural entrepreneurs. The horticulture is next only rich in production but also sound in finance, due to this transformation the rural people not only need their basic desires but also play a vital role in rural development in making rural Kashmir a bright Kashmir.

Aims and Objectives:

The primary objective of the paper is to study the impact of Agriculture transformation on the socio-economy improvement of Kashmiri farmers and the second objective of the paper is to know what are the main reasons behind the agriculture transformation and how it improves the socio-economic conditions of farmers.

Hypothesis:

1. Agriculture transformation helps the farmers in improving their financial status.

2. Agriculture transformation helps the farmers in improving their quality of life and brings changes in the living standard of farmers.

A brief review of the work already done in the field:

The competence of the study lies with revisiting a bulk of literature available in the form of books, articles, journals, magazines etc. A description of a few books and research papers consulted is as following:

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

Ferroni (2013) observed that the green revolution helped in the process of structural transformation in the agricultural sector. Indian agriculture is diversifying away from the traditional crops and staples foods such as wheat and rice, towards horticulture and animal food products. There share in the value of the output of the agricultural sector including animal husbandry and fisheries is now close to 50% which is 17% points higher than in early 1980.

Madhusudan Ghosh et al. (2014), has carried out a study that Indian agriculture has been diversifying from cereals to high-value crops. Diversification of agriculture also increases farms income and generates additional employment. Diversification of agriculture also assumes significance context of significant agriculture to non-agriculture. It has been reported that diversification of agriculture generates higher income to households and generates greater employment opportunity.

Samir ul Hasan et al. (2014) they carried out a study that the increased productivity in agriculture has been achieved in several parts of the world mainly by modernizing of agriculture. Modernization consists modern forms of machinery such as tractors, harvesters, threshers, chemical fertilizers, and pesticides is an optional combination with water.

Naseer et al. (2013) revealed that the decrease in the growth rates of agricultural outputs, most of the shift it to horticulture. It has been realized that the horticulture plays a vital role in providing livelihood security to the farmers globally. Due to the continuously increasing trend in the production and export of fresh dry fruits, the agricultural land gets diversified into horticultural. Due to this transformation, the farmers not only get satisfactory outcomes but also made good progress in other sectors like education of children and the overall development of a family.

Harmeet Singh et al. (2015) had carried out a study that the high level of agriculture development has witnessed in the district Pulwama and kuthua. Both these regions have favorable geo ecological conditions for crop farming. These districts have vast fertile areas and a long cropping seasons which supports double cropping. In addition to this, the districts have adopted modern methods of crop farming and progressive farmers have diversified their agriculture. The use of improved farming technology, use of high yielding varieties, herbicides, pesticides, chemical fertilizers, assured irrigation facilities, and post-harvesting technology has resulted into a high level of agriculture productivity.

Naseer Hussain Bazaz and Imtiyaz ul Haq (2013) they both study that the crop sector of Jammu and Kashmir agriculture at an aggregate level is gradually diversifying in favor of high-value crops. These crops have the potential for income growth, employment generation, poverty alleviation, and export promotion. It is contended that small farms can be improved through diversification of agriculture into high-value crops mainly in fruits and vegetables. It is clear that

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

at the state level the overall index for all major crop groups has risen from 0.714 in 1980-85 to 0.802 in 2006-10. The fact is that the area under fruits and vegetables have shown substantial increase crop groups like cereals, the area under wheat and maize have shown a marginal increase, whereas, at the same time area under rice, bajra, ragi and other cereals have witnessed a decline.

Huma Naz and Sarita Parihar (2014) both study that banking systems had a positive effect on rural farm and non-farm outputs, income, and employment especially after green revolution. It helped farmers to avail services and credit facilities and a variety of loans for meeting their production needs. The banks played an important role in bringing transformation in agriculture by giving loans and credits in favor of farmers. Due to which they made good progress in agriculture and played an important role in rural upliftment and in fulfilling their basic needs. The banks provide loans to farmers for a short period of 15 months for the propose of cultivation or for meeting their domestic expenses like to buy seeds, fertilizers etc.

Aarif Malik and Ashaq Hussain (2012) studied that agriculture system of state has gone through a rapid transformation. The farmers have changed the old age system of cultivation by starting cultivating of cash crops. They have started transforming their land from crop cultivation to fruit cultivation like transplanting of apple trees on their irrigated land since 1980 in the state especially in the valley of Kashmir. The area under horticulture has been high during the past three decades i.e. 1980,1990,2000. The climate of Kashmir is also favorable for the production of fruits like apples, pears, 'cherries are common in the territory. About 4.5 lakh families are engaged directly or indirectly with horticulture activities. The introduction of horticulture has changed the economic scene of the rural population and emerged a class of rural entrepreneurs.

MATERIAL AND METHODOLOGY

As the approach followed in most social science research present study is based on both primary as well as a secondary source of the data collection. The former represents the primary data which was directly collected from the respondents and the latter represents the secondary data which was collected from textbooks, newspapers, periodicals, publications, websites, Journals etc. The techniques used in this research is based on a sampling method and interview schedule. Interview schedule had taken as a tool for the collection of primary data for the present research.

Sampling procedure:

For the purpose of collecting data and information, the study of a sample of one hundred fifty (150) respondents were selected from the concerned fieldwork area of District Baramulla. We took samples from east, west, north, south and central parts of District Baramulla. We selected two blocks accordingly, in each block we took five villages and in each village we took 10

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

households so that my sample size is around 150. The samples were randomly selected from the blocks of District Baramulla. The technique used in this research is based on the interview schedule.

Study area:

The present study is being made towards the "Agricultural Transformation and Rural Development in Kashmir with Special Reference to District Baramulla of Jammu and Kashmir". The research study is carried out in different blocks of District Baramulla of Jammu and Kashmir.

Demography:

In Kashmir division, District Baramulla is one of the largest districts with respect to population or area is concerned. The total population of the district as per census 2011 is 1008039 persons. It consists of 534733 males and 473306 females. The rural sector of the district is inhabited by 432399 males and 393140 females. The district constitutes 8 tehsils and 12 community Development blocks. (Census, 2011). Baramulla is as old as the valley of Kashmir. In ancient times called Varamulla, it is situated at a distance of 55 km from the summer capital of Jammu & Kashmir State, in the north, east of Srinagar. It is surrounded by mountains from three sides, which give this town an extraordinary beautiful look. Baramulla being the district headquarters comprises of 8 tehsils. This district has been divided into 12 Community Development Blocks. The total numbers of villages are 518 (Census, 2011).

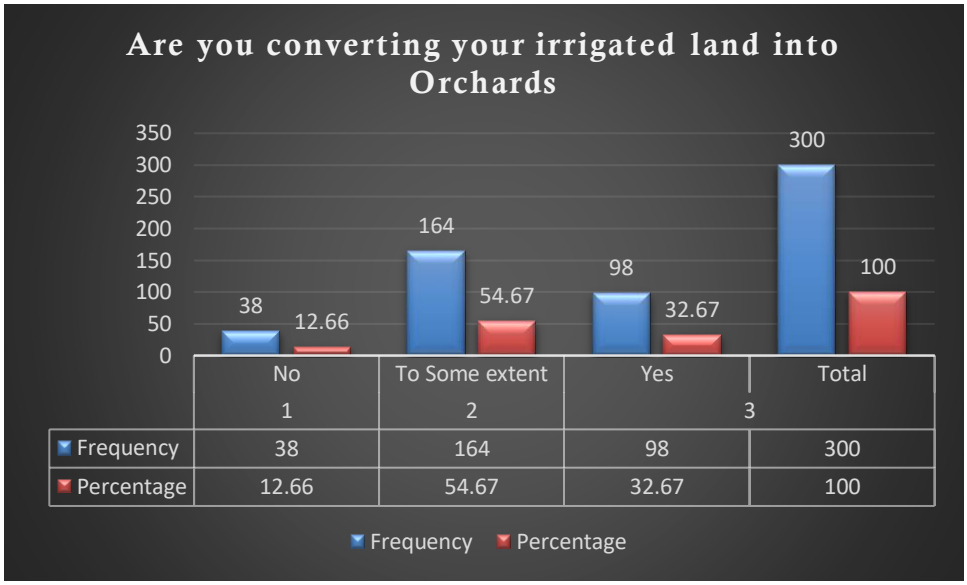
RESULT AND DISCUSSION

Table 1: Are you Converting your Irrigated Land into Orchards

S.No.	Are you converting your irrigated land into orchards	Frequency	Percentage
1	No	38	12.66
2	To Some extent	164	54.67
3	Yes	98	32.67
	Total	300	100.00

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"



Agricultural transformation or conversion of land means when people are converting their agricultural land especially irrigated land into orchards and commercial buildings. In this table, we will see how much percent people are converting their irrigated land into orchards. As it is visibly understood that 12.67 percent people are not converting their land, 54.67 percent families say to some extent and 32.67 percent respondents are converting their irrigated land into orchards. The difference between 54.64 and 32.67 percent is that the land which is nearer to the orchards and farmers are mostly interested to convert all of the lands into orchards and the land that is some haw faraway or proper irrigation facilities are not available so that farmers are converting some of their lands into orchards. In brief, we can say there are some government norms particularly section 133A of land revenue act that not allow the farmers to convert their irrigated land into orchards because the way the population of the state is growing. The next table is the land holdings that farmers have under the horticulture sector.

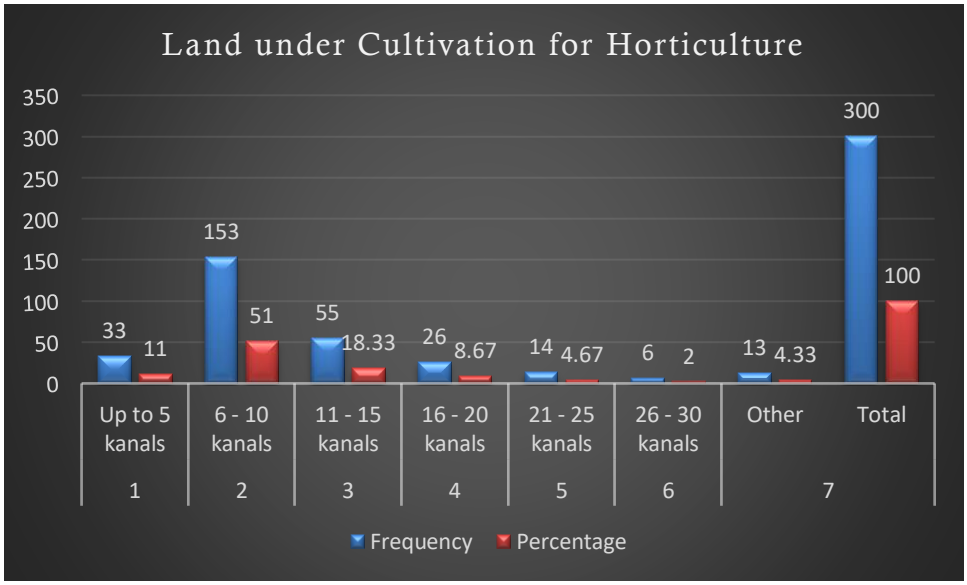
Table 2: Land under Cultivation for Horticulture

S.No.	Land under cultivation for Horticulture	Frequency	Percentage
1	Up to 5 kanals	33	11.00
2	6 - 10 kanals	153	51.00
3	11 - 15 kanals	55	18.33
4	16 - 20 kanals	26	8.67
5	21 - 25 kanals	14	4.67
6	26 - 30 kanals	6	2.00

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

7	Other	13	4.33
	Total	300	100.00



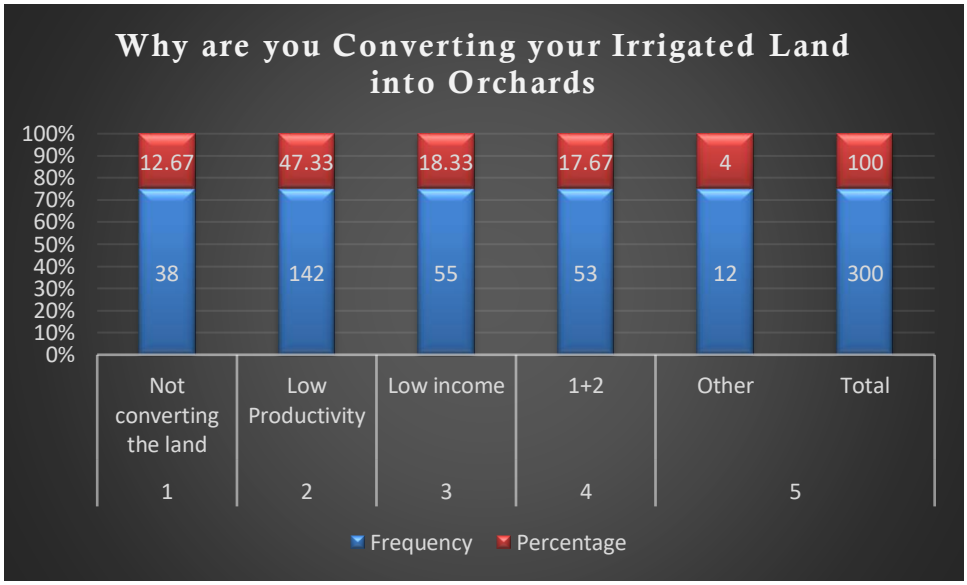
In Kashmir valley, the almost all-horticultural land is under the orchards. We classify the horticultural land into different land groups that help us to get the actual percentage of land under the horticulture sector. In Kashmir valley particularly in north Kashmir, people use Kanal in spite of hectare and Acer. The data indicates that 11 percent growers having up to five kanals of land under horticultural cultivation. The 51 percent of families hold six to ten kanals of land under horticulture. About 18.33 percent people have eleven to fifteen kanals of land under horticulture cultivation. The data shows that 8.67 percent respondents have sixteen to twenty kanals of land under the horticulture sector. About 4.67 percent population have twenty-one to twenty-five kanals of land under orchards. Only 2 percent growers hold twenty-six to thirty kanals of horticultural land and 4.33 percent people holds above thirty kanals of land under horticultural cultivation. The table exposes that in the study area there are small, marginal and big growers and most of the growers are in the category of marginal and big growers. The next shows the important reasons that are responsible for agricultural transformation and against each option the frequency and percentage is respectively mentioned.

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

Table 3: Why are you Converting your Irrigated Land into Orchards

S.No.	Why are you converting your irrigated land into orchards	Frequency	Percentage
1	Not converting the land	38	12.67
2	Low Productivity	142	47.33
3	Low income	55	18.33
4	1+2	53	17.67
5	Other	12	4.00
	Total	300	100.00



The analysis of above-mentioned table shows that there are various reasons that are responsible for the conversion of irrigated land into orchards. The analyzed table indicates that 12.67 percent families are not converting their irrigated land into orchards, 47.33 percent farmer says that due to low productivity we are converting our irrigated land into orchards, 18.33 percent respondent says that due to low-income people are converting their irrigated land into orchards. About 17.67 percent people says that both low productivity and low income are reasons behind the conversion of irrigated land into orchards and 4 percent families say there are also some other reasons responsible for conversion of irrigated land into orchards like poor irrigation facilities, poor infrastructure of roads and lack of interest from younger generation is also one of the important reason. After transforming their agricultural land into other cultivation the important thing is that for which cultivation they would like to convert their irrigated land. The next table is important

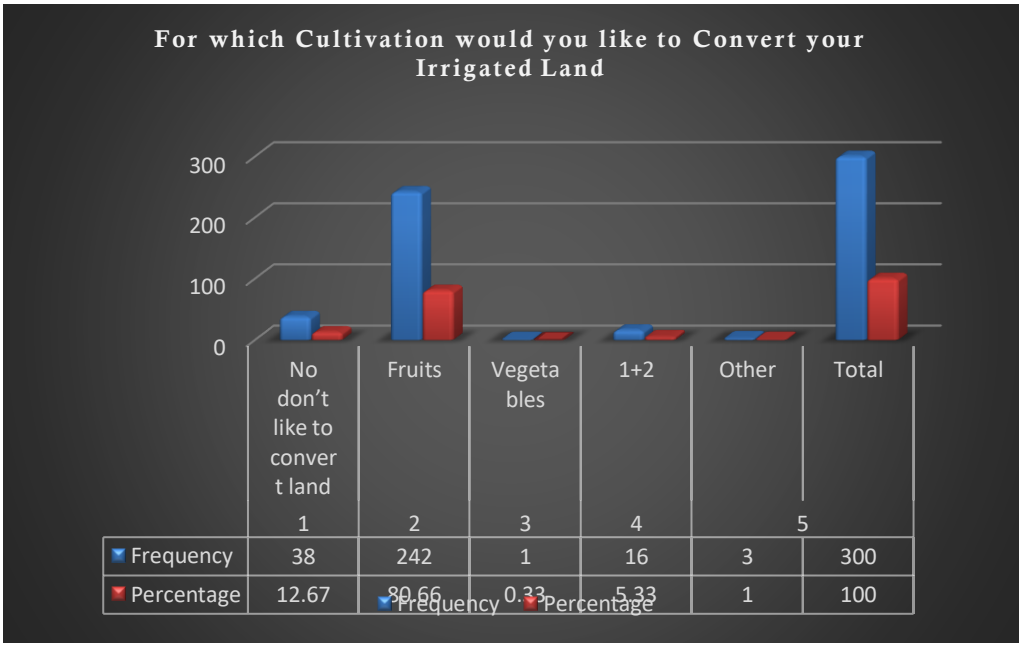
ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

as it will expose the type of crop cultivation that people are going to cultivate on their irrigated land.

Table 4: For which Cultivation would you like to Convert your Irrigated Land

S.No.	For which cultivation would you like to convert your irrigated land	Frequency	Percentage
1	No don't like to convert land	38	12.67
2	Fruits	242	80.66
3	Vegetables	1	0.33
4	1+2	16	5.33
5	Other	3	1.00
	Total	300	100.00



The analysis of the above-mentioned table reveals that 12.67 percent families are not interested to convert their land into other cultivation, 80.66 percent farmers are converting their irrigated land into fruit cultivation. About 0.33 percent people are converting their irrigated land into vegetables, 5.33 percent people are converting their land into both fruits and vegetables and only one percent respond says that they are converting their irrigated land into other cultivation like green veg. garden, apricot and peach cultivation that are mostly found in village Bomai. It is noteworthy to mention here that majority of the farmers are interested in fruit cultivation and

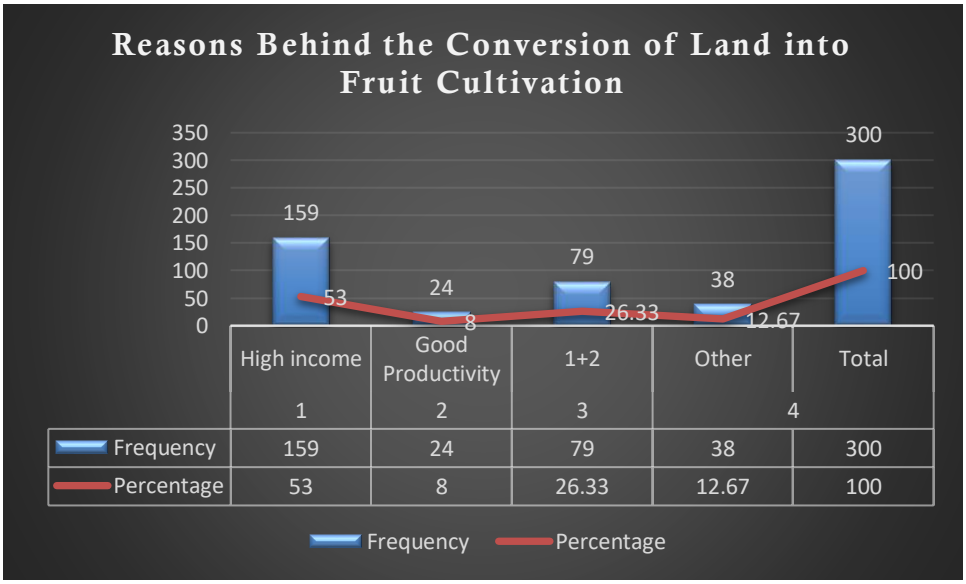
ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

they are converting their irrigated land from crop cultivation to fruit cultivation. In the next table, we will see what are the reasons and why people are converting their irrigated land into fruit cultivation.

Table 5: Reasons Behind the Conversion of Land into Fruit Cultivation

S.No.	Reasons behind the conversion of land into fruit cultivation	Frequency	Percentage
1	High income	159	53.00
2	Good Productivity	24	8.00
3	1+2	79	26.33
4	Other	38	12.67
	Total	300	100.00



In the previous table, we mention that the majority of the people are transforming their land from crop cultivation to fruit cultivation. In this table, we will see what the reasons and why people of Kashmir and the farmers of the study area are converting their irrigated land into orchards. The table shows that 53 percent of farmers say that high income is the main reason behind the conversion of irrigated land into orchards, 8 percent says that good production is another reason behind conversion of land, 26.33 percent families say that both high income and good productivity are equally responsible reasons behind the conversion of irrigated land into orchards. About 12.67 percent respondent says there are also some others reasons responsible for agricultural transformation or conversion of land from crop cultivation to fruit cultivation like

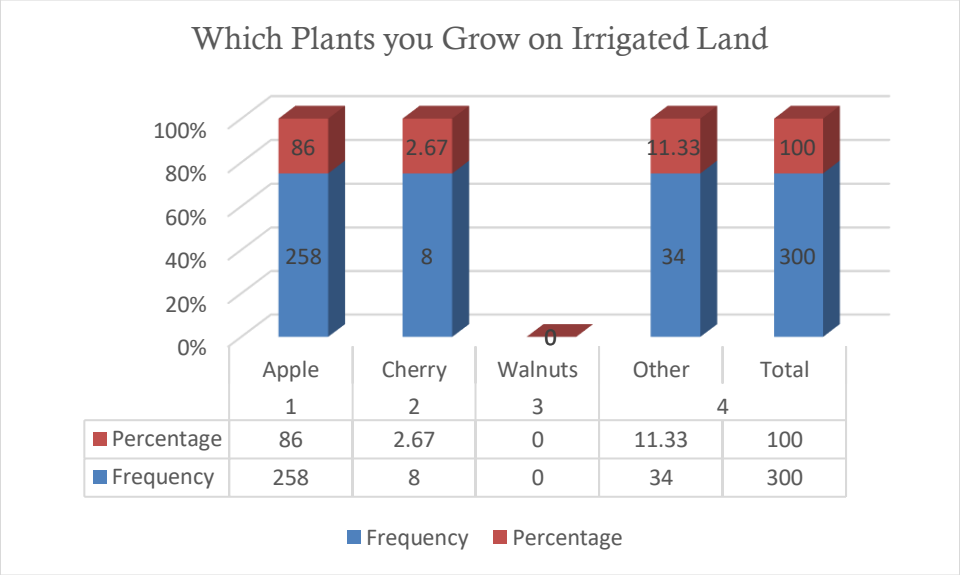
ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

proper facilities like spray pumps, tractors, tillers etc. and good roads to the orchards. In brief, we can say that the majority of the population in the study are dependent on fruit cultivation for their basic needs and that is also the main source of income to its vast population. After the conversion of irrigated land into fruit cultivation. The necessary thing is that which plants people are growing on irrigated land is mentioned in the next table.

Table 6: Which Plants You Grow on Irrigated Land

S.No.	Which plants you grow on irrigated land	Frequency	Percentage
1	Apple	258	86.00
2	Cherry	8	2.67
3	Walnuts	0	0.00
4	Other	34	11.33
	Total	300	100.00



The State Jammu and Kashmir are known for its fruits, especially for apple cultivation. In Kashmir valley, the majority of the population grow apple trees on irrigated land because of favorable climate, having a vast experience, good income, good production, and people are very much interested in fruit cultivation. About 86 percent people are growing apple trees on their irrigated land, 2.67 families are growing cherry, zero percent of respondents are growing walnuts and 11.33 percent families are growing other plants on irrigated land which includes pear trees,

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

apricot trees, and peach trees but these plants are not being planted for commercial purposes but for taste and for a gift and they are also not planted in numbers but in a limit. To conclude we can say that the orchardists are growing apple trees on their irrigated land only for commercial purposes in order to meet the overall needs of the family and play an important role in countries overall development. In the next table, we will study how far agricultural transformation was responsible for commercialization of horticulture.

Table 7: Was Agricultural Transformation Responsible for Commercialization of Horticulture.

S.No.	Was agricultural transformation responsible for commercialization of horticulture.	Frequency	Percentage
1	No	34	11.33
2	Can't say	72	24.00
3	Yes	194	64.67
	Total	300	100.00

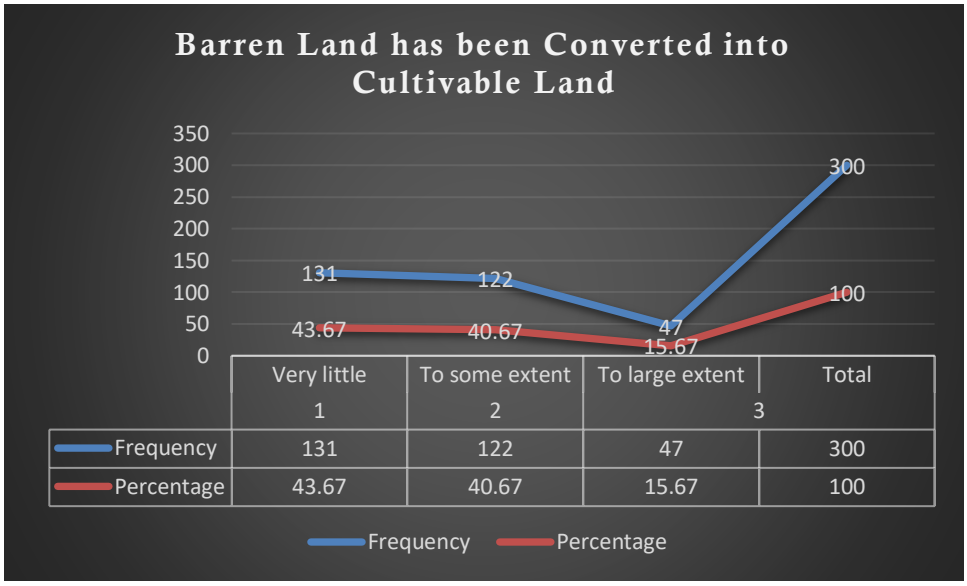
The analysis of above table reveals that only 11.33 percent respondents say that agricultural transformation was not responsible for commercialization of agriculture and horticulture, 24 percent families says can't say and 64.67 percent families says that agricultural transformation was responsible for commercialization of agricultural and horticultural outputs. The transformation plays an important role in the horticulture sector. It not only brought more land into horticulture sector but there was a great increase in production as well as it also enhances the economic status of the people that is one of the responsible factors for commercialization of horticulture outputs. The agriculture transformation not only brings socio-economic changes in the people but the barren land has also been converted into cultivated land. In the next table, we will see how much barren land has been converted into cultivable land.

Table 8: After Agricultural Transformation Your More Barren Land has been Converted into Cultivable Land

S.No.	After agricultural transformation your more barren land has been converted into cultivable land	Frequency	Percentage
1	Very little	131	43.67
2	To some extent	122	40.67
3	To large extent	47	15.67
	Total	300	100.00

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"



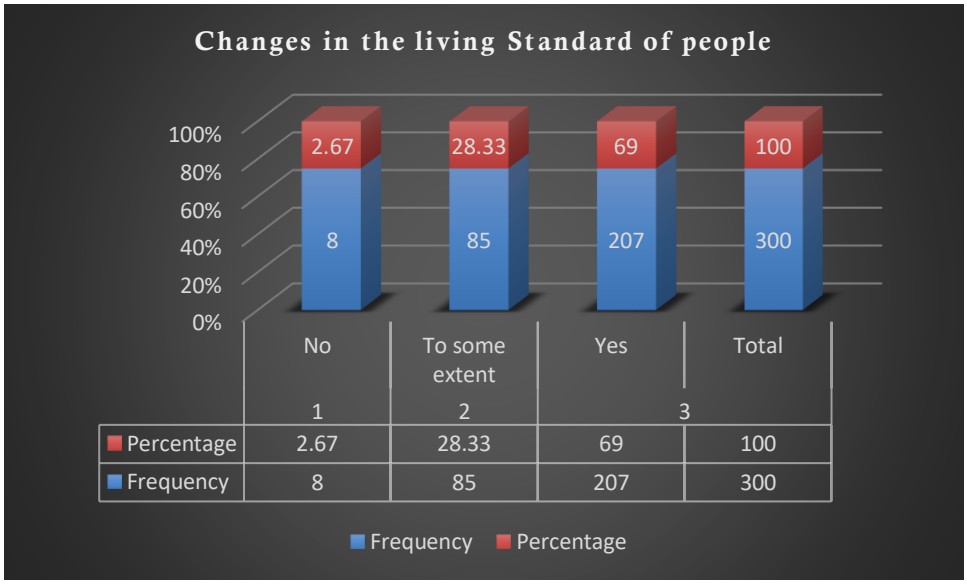
Before agricultural transformation he barren land was not in such conditions to make it cultivable land because of poor machinery, lack of awareness, lack of government support, lack of education and most important is lack of awareness regarding actual use of agricultural and horticulture land for cultivation. After commercialization of agricultural and horticultural outputs, the farmers and fruit growers are now able to buy new machineries, modern fertilizers, modern pesticides, availability of agricultural scientist, educationists and the important one is awareness among the farmers that helps the farmers and growers to get actual use of land for cultivation. The table indicates that 43.67 percent farmers converted there very little barren land into the cultivable land, 40.67 percent families agreed with to some extent and 15.67 percent respondents agreed with yes that both agricultural transformation and commercialization of agriculture and horticulture helps in diversifying the barren land into cultivable land. It is even important to mention here that in villages the forestland that is also made cultivable land by the farmers and growers where apple plants are mostly grown. The next table is important as it is informative regarding changes in the living standard of people after conversion of land.

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

Table 9: Is there any Changes in your living Standard after the Agriculture Transformation

S.No.	Is there any changes in your living standard after the agriculture transformation	Frequency	Percentage
1	No	8	2.67
2	To some extent	85	28.33
3	Yes	207	69.00
	Total	300	100.00



As it is visibly, understand from the analyzed table that only 2.67 percent respondent says (No) that the changes not taken place in the living standards of people. About 28.33 percent people say to some extent there were changes in the living standards of people and 69 percent people says that great changes were taken place in the living standards of people after conversion of land from crop cultivation to fruit cultivation. The changes took place in the education, infrastructure, employment, quality of life, thoughts, economy, health, business, car facilities, tractors, tillers, and other basic facilities. Before agricultural transformation, the people were not able to give the best education to their wards and mostly they send their wards to the government schools but now the whole system is changed people now prefer to send their wards to the private schools. The infrastructure was also not good but now people are living in smart homes

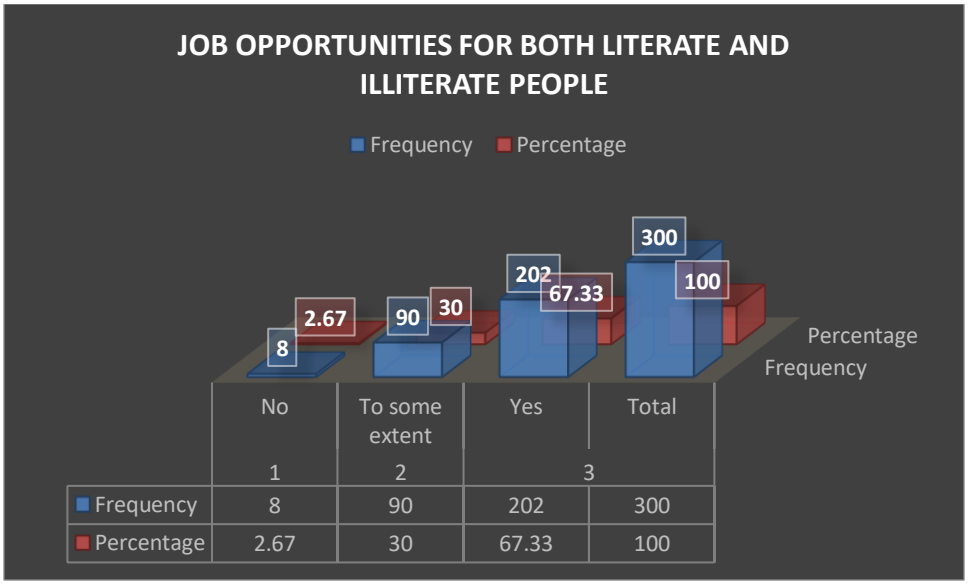
ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

with all the basic facilities like washing machine, refrigerator, television, geezer, induction cooker, and well-maintained homes. There were changes in the dress codes people are wearing different and branded clothes in the parties or daily basis, in simple words the people change their lifestyles on daily basis. The important thing is that the thoughts of the people also changed now they are thinking broadly like there should be expanded in business, best education particularly women education and the important one is women taking part in family decision-making. There was a great increase in income, the deceased family members are now treating in private hospitals and car facilities are available to the family. For agriculture and horticulture fields facilities like tractors and tillers are also available to the farmers that help the farmers and growers to transfer their outputs from to another place without any problem and as per his choice and interest.

Table 10: Job Opportunities for both Literate and Illiterate People

S.No.	Are there job opportunities for both literate and illiterate people in the process of commercialization of horticulture	Frequency	Percentage
1	No	8	2.67
2	To some extent	90	30.00
3	Yes	202	67.33
	Total	300	100.00



ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

The analysis of above table reveals that only 2.67 percent people say that there are no job opportunities for both literate and illiterate people, 30 percent respondent says that to some extent there are job opportunities for both literate and illiterate people and 67.33 percent people say there are job opportunities for both literate and illiterate people. The table and during the fieldwork, it was observed that literate people are doing their jobs in mandies, merchandisers office, pesticides shops and at transport agencies. They get jobs like clerks, accountants, salesman, computer operators, and transport operator. They are doing their job mostly in fruit Mandi sopore, some are doing their jobs in villages, and they are doing their jobs yearly. The illiterate people are doing jobs in mandies as well as in villages also and they get jobs like drivers, loaders, security guards, gatekeepers, sweepers, Mandi protectors, and transporter maintainer. The whole table indicates that there are great employment opportunities and people are getting jobs easily but the need of the hour is that government should play its role to develop more commercial hubs (fads and sheds) particularly in fruit Mandi Sopore so that more population will adjust and they will get their livelihood and fulfill their basic needs.

CONCLUSION

The significant factor responsible for the switch over to apple cultivation was its high income. The net returns from the fruit crops of the valley, worked out by various agencies (scholars/Govt.) had shown that apple cultivation gave the highest returns as compared to paddy– Rs 7515.38 per acre as against Rs, 1390 in case of paddy. It may be mentioned that the net returns vary across and depend upon the size of orchard holdings. The large apple orchards of the size of 7.5 acres and above yields higher returns in comparison to the marginal and small size. Though the productivity of the apple increased all through the years since the 1950s and was highest in India and well in comparison to the world average of 10.82 tones, however, in comparison to the countries like Belgium, Austria, Netherlands and Brazil were very less. By the end of the 8th five-year plan more than 60% of the total land under apple in Kashmir valley was planted with Delicious variety and 20% with Maharajee variety. Most of the apple produced in the state was exported to many states of India. Of the total production of apple in the state only a small fraction was processed. The volume of export from the state was directly related to the production of the fruit, therefore whenever there was a fall in the production of the fruit the exportable quantity decreased. The other important findings of this paper is that article 133A that does not allow the farmers to convert their agricultural land into horticultural land. After the completion of the thesis we will be able to present the more findings of the related topic and this piece of research be can be further studied for research work.

ISSN: 2455-8834

Volume: 04, Issue:03 "March 2019"

REFERENCES

1. Ferroni Muro, (2013), "Transforming Indian Agriculture India 2040: Productivity, Market and Institutions", sage publications India Pvt. Ltd. New Delhi.

2. Ghosh Madhusudan Sarkar Debashis and Roy Bidhun Chandra, (2014), "Diversification of Agriculture in Eastern India", Springer, New Delhi.

3. Hassan Samir-ul, Ahiya Kanhaya and Hussain Munasti, (20l4), "Growth and Modernization of Agriculture in Kashmir", International Journal of Research, Vol.1.

4. Sangral Chinky, (2015), "Changes in Cropping Pattern and Crop Diversification in J&k", Journal of Humanities and Social Science, Vol.20, No 4.

5. Rather Naseer Ahmad, Lone Parvaze Ahmad, Rashi Aijaz Ahmad and Mir Muzaffar Manzoor, (2013), "An Analytical Study of Production and Export of Fresh and Dry Fruits in J&k", International Journal of Scientific and Research Publication, Vol.3.

6. Sharma Rakesh, Peshin Rajinder, Kher Sanjay and lshar Arvind K (2014), "Agriculture Innovation Systems approach for Sustainable Agriculture development", An International Journal of Agro Economist, Vol.01, No.1.

7. Singh Harmeet and Andrabi Rafiq Hussain (2015), "Spatial Differentiation in Agriculture development in J&k", International Journal of Scientific and Research Publication, Vol.5.

8. Tripathi Amarnath and Prasad A.R (2009), "Agriculture Development in India since Independence: A Study on Progress, Performance and Determinant", Journal of Emerging Knowledge on Emerging Markets, Vol.1.

9. Shanna Vijay Paul, (2012). "Accelerating Agricultural Development for inclusive Growth: strategic issues, policy option", VIKALPA, Vol.37, No.1.

10. Bazaz Naseer Hussain and Haq. lmtiyazul, (20l3), "Crop Diversification in J&K: pace, pattern and determinants", Journal of Humanities and Social Science, Vol. 11.

11. Naz Huma and Parihar Sarita, (2Ol4), "Role of Regional Rural Banks in J&K ". International Journal of Humanities and Social Science Invention, Vol. 3.

12. Malik Aarif and Hussain Ashaq, (2012), "Agrarian Transformation in J&K: A Case Study of Village", International Journal of social science tomorrow, Vol. No. 2

13. Ellen Hillbom and Svensson Patrick (2013), "Agricultural Transformation in a Global History Perspective", Routledge Taylor and Francis Group London and New York.

