

7-Sep-2014, A Dooms Day for Apple Farming in Kashmir

Aijaz Ahmad Bhat

Research Scholar Department of Economics, SGRR (PG), College Dehradun

Dr. Raj Bahadur

Associate Prof., Department of Economics, SGRR (PG), College Dehradun

Abstract

Apple industry is main source of income in Kashmir, especially the people living in rural areas. Apple farming, strengthened the economics states of Kashmir from last two decades and is now economic hub of Kashmir. Directly as well as indirectly about 70% of rural population in Kashmir earn their living through apple farming. On the basis of these beneficiaries, farmers have now changed their mood of production. They (farmers) are now transforming Agricultural land into the Apple farming because Apple farming has comparatively more advantages than other agricultural production. The area under apple production is now increasing rapidly day by day while as area under agriculture is shrinking day by day. Apple industry was functioning with speed and rhythm, but 2014 floods have paralysed it. These floods have destroyed this industry at a large magnitude. Floods have created the problems like soil erosion, siltation, falling of leaves, loss of blossoms, cankers, root rots and complete damage of some areas due to the accumulation of water in orchards for a long time. Damages to fruit production have been reported to the extent of 52.9% , an area 127232 ha have been effected with production loss of 1119738 MTs resulting in to the economic loss of 1565.00 Crore approx. The farmers have taken KCC and CCF loans on behalf of orchard lands to meet the cost of capital used in the production of apple crop. Farmers have to refund these loans to respective banks with interest of 7% and 12% respectively. But unfortunately floods have left farmers paralysed and income less, as their main source of income has damaged. So refunding such loans is big challenge to farmers. The top most demand of flood effected farmers to government is to remit their KCC and CCF loans which they had taken for the production of apple. This could lead to problem of unemployment and restlessness among people if not taken into the consideration. The government should immediately come forward to save this industry and should cooperate with the farmers to resolve their problems.

Keywords: Apple farming, Rural life, Luxury goods, Transforming land, 2014 floods, Soil erosion, root rots, cankers, production loss, KCC and CCF loans.

1 Introduction

Kashmir often known as the paradise on earth is also home to temperate fruits like apple for which the state is very famous across the globe. Kashmir is endowed with ideal agro-climate conditions for growth and development of various crops, fruits and natural resources. Likewise, apple as a temperate fruit requires certain climatic condition along with fertile soil for optimum production. Apples need cold weather and crisp, chilly air to thrive. The regions best suited for these conditions are in the north, and apples in the Kashmir are particularly high quality. In 2011-2012, approximately 80% of India's apple production originated from Jammu and Kashmir, with the region growing nearly 1.8 million tons. Himachal Pradesh is the second largest producer, accounting for 12.5% percent of India's Production at 275000 tons. Trailing at a distant third, Uttarakhand grows 5% of India's apples.

Though apples may not strongly associated with India, 2011 production figures published by the UN's Food and Agriculture Organisation reveal that India as the third largest growers of apple in the world, accounting nearly 4 percent of the global output.

Kashmir has a rich heritage of fruit cultivation. Walter. R Lawrence, who in his book "The Valley of Kashmir" (1895) revealed that "Kashmir is the country of fruits and perhaps no country has greater facilities for horticulture, as the indigenous apples, pear, vine, mulberry, walnut, cherry, peach, apricot, strawberry, can be obtained without any difficulty in most parts of the valley of Kashmir.

Apple farming is the major source of revenue of the state Jammu and Kashmir and is now backbone of the economy of Kashmir. This sector employees nearly 3,00,000 people directly and indirectly. Apple cultivation is increasing rapidly day by day because it has comparatively more advantages than the other agricultural goods.

An official report tabulated by horticultural department Kashmir, shows that from 2012-13 to 2013-14 the apple production in the Kashmir region has witnesses an increase of 3,06,609 metric ton. The total production in 2013-14 has been recorded at 16,33,349 MT against 1326740 MT in 2012-13. Similarly the area under the apple crop has increased by 3378 hectares during this period. In 2012-13 according to the report, the area covered under apple crop was 1,40,156 hectares which has increased to 1,43,534 hectares ended 2013-14. It contributes more than 4000 crore towards the state economy and is considered to be back bone of our economy.

2) Objectives

- I) To study the magnitude of destruction caused by 2014 floods in apple farming.
- II) To study the problems and difficulties of farmers facing after floods.

3) Research methodology

This Research is based on Descriptive and analytical research methodology. The study carries both primary and secondary data and the sample has been collected from the flood effected districts of Kashmir.

4) Impacts of Apple Farming on Rural life of Kashmir

Apple farming has completely changed the life of people in Kashmir especially the people lived in rural areas for last two decades. Apple farming made them economically sound and added taste in their life style and has increased their standard. Directly as well as indirectly, about 70% of rural population in Kashmir earn their living through apple farming. People in rural areas of Kashmir were once living in Kuccha houses but apple farming has allotted them special and concrete houses. About 60% people in Kashmir has build now Pucca houses only on the bases of apple farming. People are using now luxury goods to compete with the life style of urban people. About 30% of rural people are now using luxury goods like cars, bikes, refrigerates, washing machines etc. It was a time when rural people were unaware about technology and were far away from its uses and benefits, but now people could not live a second without the uses of technology.

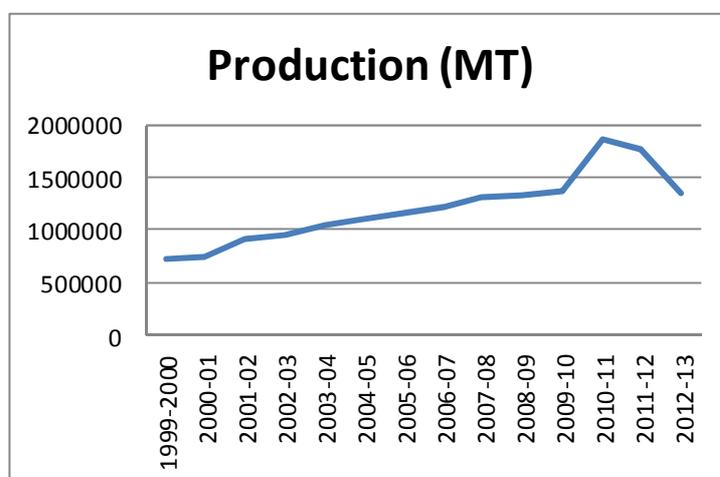
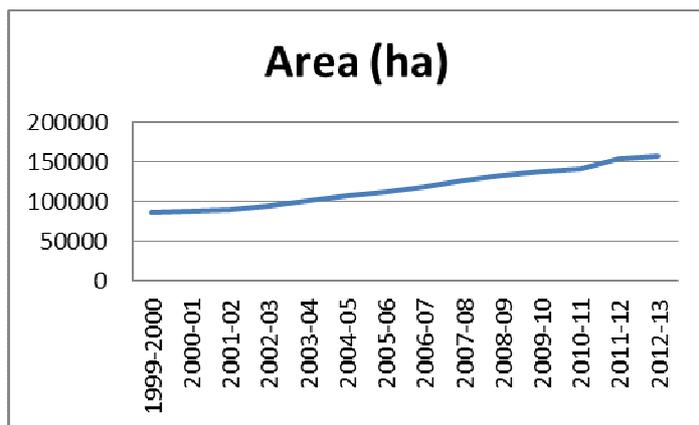
Apple farming has increased the income level and consumption pattern of rural people and is playing a key role for their employment. It has also increased the education of the rural population and now rural people send their children different cities of India and even abroad for their higher and quality education and can meet their education expenses only through source of Apple farming. Apple farming has brightened the rural life and converted it into the paradise.

On the basis of these beneficiaries, farmers have now changed their mood of production. They (farmers) are now transforming Agricultural land into the Apple farming because Apple farming has comparatively more advantages than other agricultural production. Apple production is now increasing rapidly day by day while as agricultural goods are shrinking day by day. The area under apple crop in Kashmir has witnessed fair upward trend.

Table: 4.1 , Area and Production of Apple from 1999-2000 to 2012-2013 in J&K

S. No	Year	Area (ha)	Production (MT)
1	1999-2000	86651	729022
2	2000-01	88149	751310
3	2001-02	90080	909583
4	2002-03	94874	953946
5	2003-04	100702	1041538
6	2004-05	107925	1093275
7	2005-06	111881	1151712
8	2006-07	119041	1222176
9	2007-08	127795	1311845
10	2008-09	133102	1332812
11	2009-10	138191	1372973
12	2010-11	141717	1852412
13	2011-12	154720	1756192
14	2012-13	157280	1348149

Source: Department of Horticulture Kashmir



The above graph clearly shows the attitude of farmers towards the apple farming and the attraction of apple crop for few years.

Apple farming contributes more than Rs 4000 crore towards the state economy and is considered to be backbone of our economy.

5) Damages caused to Apple Industry by devastating floods in Kashmir

Though apple farming has bestowed the life of farmers with happiness and pleasure and lifted them on the peak, farmers were enjoying a life of the paradise and they kept thousands of dreams which were to be filled through the source of apple farming, but unfortunately their dreams couldn't come true, as the floods washed away all their dreams and left them hopeless and helpless. It is like a dooms day has come in their life and they are now in bitter part of the life.

The various damages caused to apple industry can be summarised as:

- Falling of leaves /fruits due to floods.
- Accumulation of water in and around orchard areas
- Erosion of orchard land .
- Siltation in the orchard areas .
- Loss of Areas and Production

5.1) Falling of leaves /fruits due to floods

One of the main damage caused by 2014 floods was falling of leaves and fruits because the excessive moisture situation in the field has resulted into stress like condition in the apple fruit plants causing severe leaf fall and simultaneously inducing enormous and premature fruit drop. In addition to this almost entire pear crop could not reach to maturity under the influence of premature leaf fall due to continuous/heavy rains during the period and crop was not harvested as it was uneconomic to harvest. Due to such physiological stress an area of about 107472 hectares remained most affected.



5.2) Erosion of orchard land

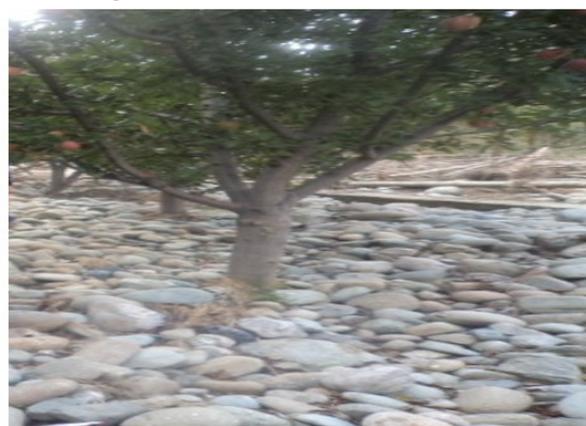
Erosion of orchard land was also a devastating damage to apple orchards caused by the floods. The continuous heavy and excessive rains resulted into flash floods in various streams of Kashmir Valley which caused Stream-bank Erosion in many orchards in various districts especially Shopian, Bandipora, Anantnag, Kulgam, Pulwama, Baramulla, Kupwara, Budgam thereby causing capital loss to the Horticulture sector. An area of 401 hectares approximately has reportedly been damaged due to such erosion and the damage is irretrievable.



5.3) Siltation in the orchard areas

At some places due to deposition of boulders, stones and river bed material, the orchards have been converted into barren land and require huge capital for its restoration/ reclamations.

An area of about 70 hectares approximately has been damaged due to such siltation.



5.4) Accumulation of water in and around orchard areas

In some districts a huge orchard area remained submerged in water for a pretty long time. Due to continuous rains/floods situation prompting fruit drop more than 50% on one hand and choking the respiratory system of plants causing desiccation of plants/wilting on the other hand. As per reports an area of 7758 hectares has remained inundated in various districts of valley.

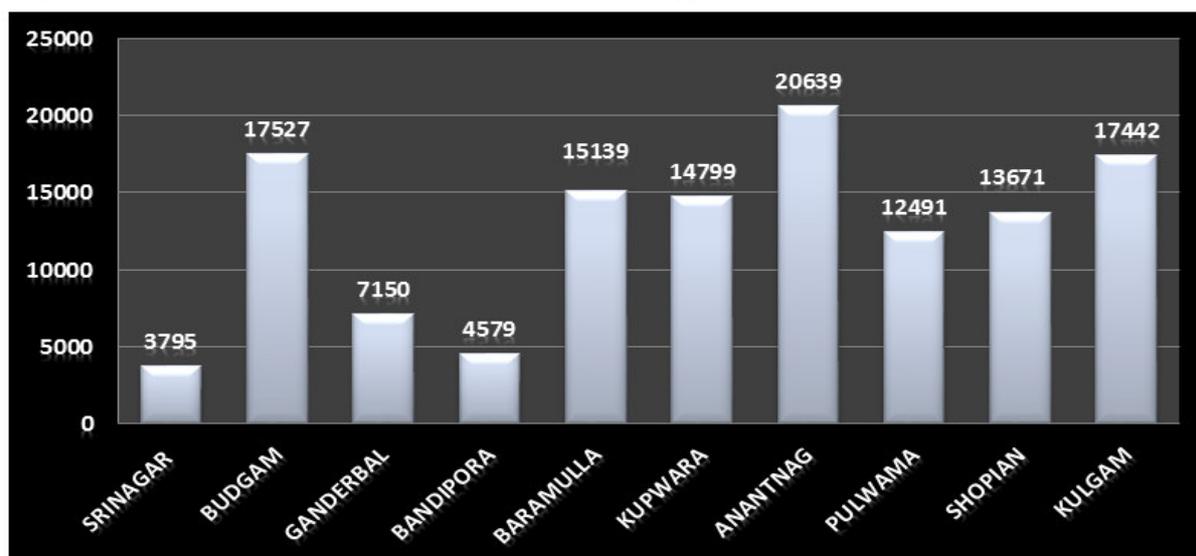
Stagnant water in orchard areas for a long pretty long time has definitely affected the root system of fruit trees thereby making them prone to root rot / color rot/soil borne diseases/ Canker etc which has lead to

driage of fruit trees, besides having adverse impact on return bloom and gradually apple orchards has completely damaged on a large scale while the remaining is also in danger.

5.5) Loss of Areas and Production

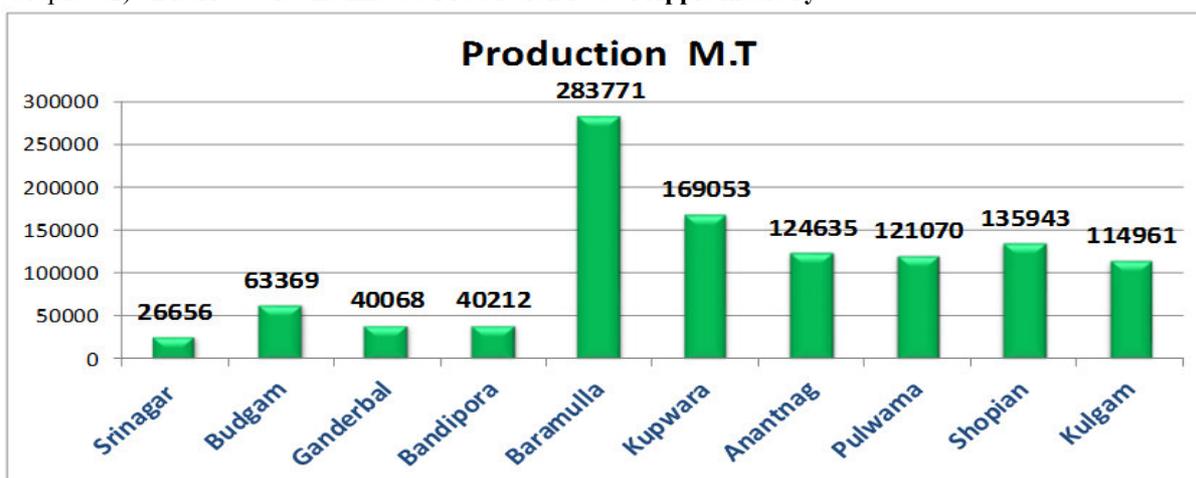
Floods have caused a huge loss in the apple industry and has almost paralysed the Apple industry of Kashmir. The graph 5.1 clearly shows a huge area loss of 20639 (ha) in district Anantnag alone followed by 17527 (ha) loss in District Budgam, 17442 in Kulgam, 15139 in Baramulla, 14799 (ha) in Kupwara, 13671 (ha) in Shopian, 12491(ha) in Pulwama, 7150 (ha) in Ganderbal, 4579 (ha) in Bandipora and 3795 (ha) area loss in Srinagar district.

Graph: 5.1) District-Wise Estimated Area loss (in Ha) of Apple industry



Also from the graph 5.2 it can be seen that Baramulla District faced a huge loss of 283771 MT of production loss followed by district Kupwara with 169053 MT of production loss, 135943 MT in Shopian, 124635 MT in Anantnag, 121070 MT in Pulwama, 63369 MT in Budgam, 40212 MT in bandipora, 40068 MT in Ganderbal and 26656 MT in Srinagar.

Graph: 5.2) District-Wise Estimated Production loss of Apple industry



Damages to fruit production have been reported to the extent of 52.9% , an area 127232 ha have been effected with production loss of 1119738 Mts resulting in to the economic loss of 1565.00 Crore approx.

6) Problems and challenges faced by farmers after the floods

Apple producers face a number of legal, economic and physical challenges when developing their recovery plan.

6.1) Repairing the physical damage to soil

Erosion occurred when soil has carried away with the flood water. Gullies and gaps in the apple orchards has formed as a result of loss of soil. Farmers have to repair their orchards in order to make it fertile again. If the cost

of repairing is too high the farmers may be forced to abandon the field.

6.2) Repairing of damaged apple orchards

The devastating floods have left apple orchards in inefficiency of production and disease full. Apple orchards are not in a position to produce the best quality of apple unless it would be repaired. In order to get the orchards in full efficiency of production and at the best quality of production, these orchards need a huge package of budget to repair it at its best.

6.3) Water logging in orchards

In most of plane areas farmers face a problem of water logging during the rainy season this left their orchard fruitless and could create the problems of diseases like son Jose scale, scab, canker, root rot etc. Such type of orchards needs a proper and systematic drainage system so that water logging problem can be resolved. However farmers can't do this at their own until the government and horticultural departments will not come forward to help the farmers and to protect this precious industry.

6.4) Refunding of KCC and FCC loans

The farmers have taken KCC and CCF loans on behalf of orchard lands to meet the cost of capital used in the production of apple crop. Farmers have to refund these loans to respective banks with interest of 7% and 12% respectively. But unfortunately floods have left farmers paralysed and income less as their main source of income has damaged. So refunding such loans is big challenge to farmers.

7) Discussion and Suggestions

- The top most demand of flood effect farmers to the government is to remit their KCC and CCF which they had taken for the production of apple, as the farmers have faced huge losses due to floods and they are not in a position to repay it. The government should come forward to help farmers by providing at least a 50% relief of their loans.
- Floods have left most of the orchards in severe danger of diseases and could completely vanish some orchards, if not repaired on proper time. Horticulture Department should send teams to farmers to provide the general awareness and solutions regarding the diseases caused by the floods and should provide full support to farmers to eradicate this problem.
- Horticulture Department should issue best and high quality yielding apple plants to farmers at subsidised prices for the re-plantation.
- Fertilisers should be provided to flood effected farmers at subsidised prices in order to meet their financial crises.
- Advanced technology and equipments used in cultivation should be provided to farmers so that they could produce best quality apples.

8) Conclusion

Floods have created a huge damage to apple industry of Kashmir. Apple industry is the main source of income in Kashmir. About 70% people in Kashmir, directly as well as indirectly, depend on apple industry. But unfortunately floods have severely damaged this precious source of income. This could lead to problem of unemployment and restlessness among people if not taken into the consideration. The government should immediately come forward to save this industry and should cooperate with farmers to resolve their problems.

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