Status and Strength of Apple Industry in Jammu and Kashmir

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Abstract
Apple cultivation is highly profitable economic activity in the state, which is famous for its quality apple. It is farm-based, labor intensive and commercially attractive economic activity. The income per acre is much higher than any other horticulture crops, if it is done in systematic way. Apple production plays an important role in improving the standard of living, per capita income and employment generation. More than half percentage of the population is engaged in the cultivation of apple directly or indirectly in the state. The improvement in production is quite important, but the marketing has equal importance to develop a commercial crop. It has been found that the farmers face numerous problems like marketing, storage facilities, good quality pesticides, irrigation etc which contributes a lot for low production. It has been suggested that if these facilities are providing sufficiently, productivity could be enhanced just like in China.

Keywords: Production, Apple, Yield, Kashmir, Horticulture, Cultivation etc

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Introduction
The horticulture occupies a very significant position in the agricultural sector of Indian economy. The various fruits grow in India and are exported to different countries in the world. However, apple production is most prominent one in India. In India apples are grown as a commercial crop in the hilly areas. The apple fruit grows especially in the state of J&K. Apple production is one of the important sources of economy in J&K. Apple cultivation in J&K is fast expanding because apple has a comparative advantage over the other crops that can be grown in hilly regions.

Kashmir has a rich heritage of fruit cultivation. Walter. R. Lawerence, 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, hazel, cherry, peach, apricot, strawberry, raspberry can be obtained without any difficulty in most parts of the valley of Kashmir.

Apple industry is one of the important sources of economy and its Apple cultivation in the state is fast expanding because apple has a comparative advantage over the other crops that can be grown in hilly regions. J & K is major apple producing state accounting for 67.7% of the total apple production in the country and the production per hectare is 10.0 metric tons, which is higher than the national average. The production of apple in state has increased from 1093335 metric tons in 2004-05 to 1367805 metric tons in 2009-10. The production per hectare or average yield in Kashmir valley was 10.94 metric tons in 2004-05; it increases to 11.2 metric tons in 2009-10. The state of Jammu and Kashmir is the largest apple producing state in India. As per the horticulture reports of 2008-09 J and K produces about 71% of national production. It has taken decades to develop Jammu and Kashmir as major apple producing state in India. The cultivation of apple is done in all districts of Kashmir valley. Major contributors to the apple production are Baramulla, Shopian, Pulwama, Budgam, Anantnag, Kulgam etc.

Apples are consumed and cultivated across the world and some part of production are consumed fresh and small part of production is processed in juices, jellies, slices and other jam items.

Review of Literature
1. Dr. Musadiq Amin Shah, 1986
Marketing problems of apple industry in Kashmir valley. Jammu and Kashmir is
the largest apple producing state of India, but the state does not earn that from the apple industry what it should have. The main problem of apple industry in Kashmir is the lack of marketing information and techniques. Without a proper marketing information system the market opportunity cannot be fully exploited. Growers should be provided proper market information to get dispose off their produce in those markets where it can yield maximum prices.


Agriculture including horticulture is the main ingredient of Jammu and Kashmir economy. Geographically J&K is an agro climatic state but they have not utilized all its resources for the development of agriculture. Major portion of the population is engaged with agriculture activities. With the use of scientific technology in the field of agriculture the income from agriculture has increased manifolds.


Jammu and Kashmir has more production than Himachal Pradesh annually. J&K apples are found much tastier than apples of Himachal Pradesh but still do not fetch the price that Himachal Pradesh’s apple does. Many reasons are behind it, as one of the main reasons is that Himachal Radish's apples come to the market at least three months before the Kashmiri apple. Another factor contributing to the popularity of Himachal apples is their Shape, Size, and Color.


Objectives
➢ To study the production and productivity of apple in Kashmir Valley
➢ To study the compound growth rate and trend of apple production in the valley.

Material and Methods
Apple is of particular interest for a number of reasons in Kashmir valley in terms of both area and production. Apple is an extremely important source of nutritive diet. This provides a major source of income and employment also. The production of apple in Kashmir valley and
its marketing all over the country as well as abroad has been promoted directly or indirectly by several and govt. initiated programmers and policies, for example price policy, credit policy, supply of packing boxes, quality control, outright purchase etc. Apple is the predominant temperature fruit crop of Jammu And Kashmir State as it accounts for about 67% of the total fresh fruit production in India. The production of apple in state has increased over the years both in terms of production as well as productivity.

**Table 1: Apple cultivated area in J&K**

<table>
<thead>
<tr>
<th>Year</th>
<th>Area under Apple (Ha)</th>
<th>Deviation % (+) (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>107935</td>
<td>00</td>
</tr>
<tr>
<td>2005-06</td>
<td>111869</td>
<td>+03.64</td>
</tr>
<tr>
<td>2006-07</td>
<td>119049</td>
<td>+06.41</td>
</tr>
<tr>
<td>2007-08</td>
<td>127806</td>
<td>+07.35</td>
</tr>
<tr>
<td>2008-09</td>
<td>1333105</td>
<td>+04.14</td>
</tr>
<tr>
<td>2009-10</td>
<td>138062</td>
<td>+03.72</td>
</tr>
</tbody>
</table>

*Source: Department of horticulture, Srinagar Govt. of Jammu & Kashmir*

The table 1 depicts that there is continuous progress of area under apple cultivation in Jammu and Kashmir State from 107985 hectares in 2004-05 to 185062 hectares in 2009-10. The main reason for the increasing trend was mainly comparative advantage of this crop over the other commercial crops grown in high altitude region in the state. It is also highlighted from the table 1 that deviation in area over the years also remains somehow constant in the range of 3 to 7 %.

**Table 2: Productions of Apples in J&K**

<table>
<thead>
<tr>
<th>Year</th>
<th>Production of Apple (MT)</th>
<th>Deviation % (+) (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>1093335</td>
<td>-</td>
</tr>
<tr>
<td>2005-06</td>
<td>1151341</td>
<td>5.30</td>
</tr>
<tr>
<td>2006-07</td>
<td>1222176</td>
<td>6.15</td>
</tr>
<tr>
<td>2007-08</td>
<td>1211845</td>
<td>7.34</td>
</tr>
<tr>
<td>2008-09</td>
<td>1332811</td>
<td>1.60</td>
</tr>
<tr>
<td>2009-10</td>
<td>1367805</td>
<td>1.70</td>
</tr>
<tr>
<td>2010-11*</td>
<td>1679908.396</td>
<td>-</td>
</tr>
<tr>
<td>2011-12*</td>
<td>2581172.325</td>
<td>-</td>
</tr>
</tbody>
</table>

*Source: Directorate of Horticulture, Srinagar Govt. of Jammu & Kashmir.*
Estimated apple production for the year 2010-11 and 2011-12 was calculated by the following formula

\[ P^* = \left\{ \text{Anti} \log \left[ \log n - \log m \right] \right\} - 1 \]

\[ P^*_{2010-11} = 1679908.396 \]
\[ P^*_{2011-12} = 2581172.325 \]

Note: *Indicates the estimated apple production

The table 2 reveals that there is a continuous increase in apple production in J&K. During the years 2005-06, 2006-07 & 2007-08 the growth rate of apple production was 5.3%, 6.15% & 7.34% respectively. The low growth rate of apple production during the years of 2008-09 & 2009-10 was because of climatic changes such as snow fall, continuous rains, rise in temperature etc in the state. However an appropriate efficient marketing system is a prerequisite for sustaining the tempo of increased agricultural production. The marketing system is economic efficiency if the price-spread is smaller that ensures fair returns to the farmers for their efforts. The analytical study of price-spread in Jammu and Kashmir is shown through the following marketing mechanisms.
So there is a long chain of exploitation from farmer to ultimate consumer, who sucks the blood of poor farmers. The problems due to which this exploitation takes place are as under:

- Small holding size and small production.
- Difficulty in contacting the consumers directly.
- Lack of credit within the growers.
- Lack of marketing knowledge.
- Lack of institutional measures in this regard.

In order to make apple cultivation a remunerative activity, it is imperative to regularize this trade. Once the market is regularized this would increased the profit of farmers, and subsequently production and productivity would increase by the use of improved technology.

**Conclusion**

The horticulture of the state has grown significantly during the post independence period. There is increase in production, land under crop and also income. Exports from the state have also increased. Apple crop dominates all other crops of horticulture. Almost half of the land under horticulture products is occupied by apple produce. Apple production accounts almost 80% of total horticultural produce. Kashmir division is responsible for bulk apple production in the state. Almost 98% of land under apple is situated in Kashmir division. So Kashmir is the main producer of apples in Jammu And Kashmir State as well in the nation. However the basic growth retarding factors of the crop are its weak research base, discouraging marketing mechanism, lack of government efforts, lack of irrigation, lack of labor in peak season etc. these factors playing a fundamental role in lower the productivity of apple in the valley.
References

- www.telegraphindia.com/109114/jsp
- www.kashmirlive.com/71390.html
- www.kashmirfourm.org
- www.tribuneindia.com/j&k.html