UNIT No. 9
Role of Transport and Communication in the Development of Horticulture

9.1 Selling Method

9.2 Modes of Transportation

9.3 Distance course by horticultural crops
TRANSPORTATION AND COMMUNICATION

The selling methods of vegetables, fruits and flowers as well as the use of mode of transportation are covered. Attempt is also made to measure the distance between production point of fruits, vegetables and flowers and the selling point of fruits, vegetables and flowers.

Table No. 9.1
Selling method

<table>
<thead>
<tr>
<th></th>
<th>Own</th>
<th>Broker</th>
<th>Commission agent</th>
<th>Village traders</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetable sellers</td>
<td>30</td>
<td>19</td>
<td>54</td>
<td>15</td>
<td>118</td>
</tr>
<tr>
<td>%</td>
<td>25.42</td>
<td>16.10</td>
<td>45.70</td>
<td>12.71</td>
<td>100</td>
</tr>
<tr>
<td>Fruit sellers</td>
<td>8</td>
<td>20</td>
<td>78</td>
<td>7</td>
<td>113</td>
</tr>
<tr>
<td>%</td>
<td>7.08</td>
<td>17.70</td>
<td>69.03</td>
<td>6.20</td>
<td>100</td>
</tr>
<tr>
<td>Flower sellers</td>
<td>-</td>
<td>17</td>
<td>58</td>
<td>-</td>
<td>75</td>
</tr>
<tr>
<td>%</td>
<td>-</td>
<td>22.67</td>
<td>77.33</td>
<td>-</td>
<td>100</td>
</tr>
</tbody>
</table>

Source :- survey by author

The selling method of vegetables, fruits and flowers adopted by the producer is shown in table no. 9.1.

Out of 100 vegetable producers 45 % of them sell vegetables through commission agents while 12.7 of the total vegetable sellers sell their products through village traders. 25.4 % of the total vegetable growers sells their product directly.

It is observed in course of research work that 78 % of the total fruits growers sell fruits through commission agent while 7
% of total fruits seller sell fruits through village traders only 8 % of the total fruits growers sell fruits directly into the markets.

77.33 % of the total flower growers opt commission agents to sell their products into the markets while 22.67 % of total flower growers sell flowers through brokers.

In short commission agents influence on the market in regard to sell of the horticultural product is significant.

For more details refer table no. 9.1

**Table no. 9.2**

The table shows the modes of transportations of horticultural product during year 2005 – 2006

<table>
<thead>
<tr>
<th></th>
<th>Bullock cart</th>
<th>Motor cycle</th>
<th>auto rikshow</th>
<th>Tampo /truck</th>
<th>Train</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>-</td>
<td>-</td>
<td>30</td>
<td>80</td>
<td>3</td>
<td>113</td>
</tr>
<tr>
<td>%</td>
<td>-</td>
<td>-</td>
<td>26.55</td>
<td>70.80</td>
<td>2.65</td>
<td>100</td>
</tr>
<tr>
<td>Vegetable</td>
<td>2</td>
<td>15</td>
<td>60</td>
<td>38</td>
<td>05</td>
<td>120</td>
</tr>
<tr>
<td>%</td>
<td>1.66</td>
<td>12.5</td>
<td>50.0</td>
<td>31.67</td>
<td>4.17</td>
<td>100</td>
</tr>
<tr>
<td>Flowers</td>
<td>-</td>
<td>48</td>
<td>10</td>
<td>15</td>
<td>2</td>
<td>75</td>
</tr>
<tr>
<td>%</td>
<td>-</td>
<td>64</td>
<td>13.33</td>
<td>20.00</td>
<td>2.67</td>
<td>100</td>
</tr>
</tbody>
</table>

Source – Survey by author

The modes of transportation of horticultural product have shown in table no. 9.2.

Bullock cart, Motor cycle, Autorikshow, Tempo, Truck and Train are used by farmers for transportation of horticultural products.

70.80 % of the total fruit growers send their products either by Tempo or Truck. It is shocking to note only 2.65 % of the total fruit growers send their products by trains.
In case of transport of vegetables picture is slightly different than the transport picture of fruits.

50 % of the total vegetables growers use autorikshaw for transport of vegetables. It is wonder to note that only 1.66 % of the total vegetables growers use bullock cart for the transport of vegetables.

Only 4.17 % of the total vegetable growers send vegetables by trains only.

31.67 % of the total vegetables growers send vegetables either by Truck or Tampo.

81.67 % of the total vegetables growers send their products by Autorikshow, Truck and Tempo.

64 % of the total Flowers growers are sending flowers by trains.

For more details refer table no. 9.2.

Table no. 9.3

<table>
<thead>
<tr>
<th>Table shows the distance covered by the fruits grower to sale the product during year 2005 - 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 100</td>
</tr>
<tr>
<td>No. of families</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

**Mean = 222.5 km**

The fruit growers are sending their products in the range of 222.5 km.
The vegetable growers are sending their products in the range 39.71 km.

The flower growers are sending their products in the range of 114.16 km.

In order to avoid national losses it is good to start processing units in the centre of the production area. Processed agricultural products should be send from production centre and in form of agricultural products.

This is the step to avoid national losses and also to enhance the income of the agriculturist.

Table no. 9.4

The fruit growers are sending their products at several places which are far away from the production point. 35 % of the total fruit growers have sent their product in range of 0-100 km from production point.

18.33 % of the total fruit growers have sent their products for sale in places which are 400 and above kilometers away from the point of production, on an average fruit growers have sent their products at places which are 222.5 km away from the production point.

For more details refer table no. 9.4.

34.31 % of the total families which are selling vegetables have sent their products for sale the places which are in the range of 0 to 25 kilometers, 5.87 % of the total families which are selling vegetable have sent their products for sale at places which are more than 100 km from the point of production, on an average vegetable growers have sent their products at places which are 39.71 km from the point of production.

For more details refer table no. 9.4
Table no. 9.4

Table shows the distances covered by the vegetable producers for the sale of products during year 2005 – 2006

<table>
<thead>
<tr>
<th>K.M.</th>
<th>0-25</th>
<th>25-50</th>
<th>50-75</th>
<th>75-100</th>
<th>100-above</th>
<th>At local</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of families</td>
<td>35</td>
<td>28</td>
<td>16</td>
<td>9</td>
<td>6</td>
<td>8</td>
<td>102</td>
</tr>
<tr>
<td>%</td>
<td>34.31</td>
<td>27.45</td>
<td>15.64</td>
<td>8.96</td>
<td>5.87</td>
<td>7.83</td>
<td>100</td>
</tr>
</tbody>
</table>

Mean = 39.71 km

source :- survey by author

Table no. 9.6

Table shows the distances covered by the flower producers for the sale of products during year 2005 – 2006

<table>
<thead>
<tr>
<th>K.M. (km)</th>
<th>0-50</th>
<th>50-100</th>
<th>100-150</th>
<th>150-200</th>
<th>200-250</th>
<th>250-above</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of families</td>
<td>20</td>
<td>13</td>
<td>10</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>60</td>
</tr>
<tr>
<td>%</td>
<td>33.33</td>
<td>21.67</td>
<td>16.67</td>
<td>6.67</td>
<td>13.33</td>
<td>8.33</td>
<td>100</td>
</tr>
</tbody>
</table>

Mean = 114.16 km

33.33 % of the total flowers growers have sent their products for sale at places which are in the range of 0-50 kilometer from the point of production.
8.33 % of the total flowers growers have sent their products for sale at places which are in the range of 250 km. On an average the flower growers have sent their products at the places which are 114 km away from the production point.

For more details refer table no. 9.6.

**Conclusions and suggestions**

During course of research work, it is observed that farmers not selling their products to consumers directly.

74.58 % of the total vegetable producers are selling vegetables through market chain.

In this chain neither farmers nor consumers are getting benefit. The middlemen are benefited more than the benefits earned by the farmers.

92 % of the total fruit growers are selling fruits through middlemen.

100 % flower growers are selling flowers through middlemen.

It is clear that drastic changes are essential to change the present agricultural sale method.

In cities small shops be provided to the group of farmers co-operation. This will be the best step to form direct contact between farmers and consumers.

The existence of middlemen will be reduced and farmers will get more remunerative price and at the same time consumer will get agricultural product at cheaper rates.

The train is the cheapest mode of transportation. 3 % of the total selected families are using train facility for transportation of fruits.
4.17% of the total selected families are using train facility for transportation of vegetables.

2.67% of the total selected families are using train facility for transportation of flowers.

It is clear that train facility is not available to all. It is strange to note that all the farmers are not using train facility. Very few farmers are using train facility.

It is essential to provide new train lines to cover maximum villages and provide train facility to all the farmers.

This will help to reduce the cost of agricultural products.