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RESEARCH PAPER

# Extension contacts of the farmers about post-harvest management and processing of fruit crops in Hoshiarpur district of Punjab

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**SUMMARY :**

The study was undertaken to determine the sources of information utilized by the fruit growers of Hoshiarpur district regarding post-harvest management and processing of fruit crops. The fruit crops selected were kinnow and litchi. An interview schedule was prepared and data were collected through personal contact method. The data were analyzed by using appropriate statistical tools such as percentage, mean score and ranking. Findings revealed that 63.33 per cent of fruit growers were aware of the office of the concerned H.D.O. while a meagre 8.89 per cent of the fruit growers were aware about the location of K.V.K. It also surfaced that a majority of fruit growers had approached H.D.O. for seeking relevant information. Also 88.89 per cent of fruit growers used farmer meeting in villages as a source of information while another 78.89 per cent of fruit growers used regional kisan melas a source of information. The findings also revealed that a majority of the fruit growers used newspaper as a source of information while very few of the fruit growers used farm magazines as source of information regarding post-harvest management and processing of the fruit crops.

**KEY WORDS :** Source of information, Post harvest, Processing, Extension contact

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Since fruits are highly perishable, efficient post-harvest management has become an absolute necessity. Joint efforts of research and development institutes, farmers, government agencies and traders had made India as a major producer of fruits. The magnitude of loss in food grains is to the tune of 10 per cent whereas for fruits, losses are estimated to be 35 per cent due to improper post-harvest management and processing. This not only amounts to losses of crores of rupees but also wastage of labour, energy and inputs involved in production.

So, there is a need to have a strong post-harvest infrastructure for post-harvest management and processing of these perishables. It is equally essential that the fruit growers should be aware of the various sources of information regarding post-harvest management and processing of fruit crops. Information source is an institution or individual that creates or brings about a message (Statrasts, 2004). Awareness is the state or ability to perceive, to feel, or to be conscious of events and objects. More broadly, it is the state or quality of being aware of something.

Fruit growers use various sources of information such as Horticulture Department, State Agricultural University, Officials of Department of Agriculture, newspapers, radio, television etc. to have scientific knowledge about effective management of orchards and to get satisfactory answers related to their queries regarding post-harvest management and processing

of kinnow and litchi. Extension must be held accountable for the relevance and impact of programmes delivered to the farmers (ECOP, 2005).

The sources have been categorized accordingly such as extension officials, visits and participation in extension activities, Awareness about location of offices of extension personnel and exposure to mass media. Some commercial farmers lost confidence in publicly provided extension services with the result that some of these farmers swapped to privately provided extension services (Vink and Kirsten, 2003).

Extension contacts are purposeful contact with different functionaries engaged in horticulture *viz.*, Horticultural Development Officers, KVK Scientists, University Scientists etc. and are measured by number of contacts made by the respondents with the extension functionaries. Similarly, mass media exposure is the frequency of using different media *viz.*, radio, television, farm literature and newspapers by the farmers to gain or improve their knowledge regarding post-harvest management and processing of fruit crops.

Farmers who are regarded as customers in the delivery of extension programme desire quality benefits from the outcome of extension services. The extension officers are accountable for farmers' level of satisfaction, quality and relevance of educational learning programmes. Service quality focuses on evaluation that echoes the customer's perception of reliability, assurance, responsiveness, empathy and tangibility (Wilson *et al.*, 2008).

## EXPERIMENTAL METHODS

The study was conducted in the Hoshiarpur district. Fruit crops which were selected included kinnow *(Citrus nobilis* × *Citrus deliciosa)* and litchi (*Litchi chinensis*). Three villages from two blocks each with maximum area under fruit crops were selected randomly.

The blocks selected were Bhunga and Hajipur. Sikri, Janauri and Hariana were the villages selected from Bhunga block while from Hajipur block the villages selected were Budawarh, Tanda Churian and Charing.

A sample of 90 fruit growers was selected with fifteen fruit growers from each village. The data were collected through personal interview method from a sample of 90 farmers of three selected villages of two blocks each.

## EXPERIMENTAL FINDINGS AND ANALYSIS

The findings of the present study as well as relevant discussion have been presented under following heads :

**Awareness about location of offices of extension personnel as source of information :**

Awareness about location of offices of extension personnel also served the purpose of source of information to the fruit growers. Table 1, indicates that 62.22 per cent and as many as 55.56 per cent of the fruit growers in Bhunga and Hajipur blocks, respectively were aware of location of office of extension personnel of PAU's regional centre Fruit Research Station at Gangian, Hoshiarpur. Only 8.89 per cent and of fruit growers from both Bhunga and Hajipur blocks were aware of offices of extension personnel at Krishi Vigyan Kendra, Bahowal, Hoshiarpur.

The data in Table 1 show that a majority of 55.56 and 71.11 per cent of fruit growers from Bhunga and Hajipur blocks, respectively were aware of location of office of H.D.O. while

**Table 1. Distribution of fruit growers according to their awareness about the location of offices of extension personnel in the district**

| Sr. No. | Office of | Block | | Total (n=90) |
|---|---|---|---|---|
| | | Bhunga ($n_1$=45) | Hajipur ($n_2$=45) | |
| | | f (%) | f (%) | f (%) |
| 1. | Regional Fruit Research Station, Gangian | 28 (62.22) | 25 (55.56) | 53 (58.89) |
| 2. | K.V.K | 4 (8.89) | 4 (8.89) | 8 (8.89) |
| 3. | H.D.O | 25 (55.56) | 32 (71.11) | 57 (63.33) |
| 4. | A.D.O | 28 (62.22) | 23 (51.11) | 51 (56.67) |

Note: Numbers in parenthesis indicate percentage

**Table 2 : Distribution of fruit growers according to their extension contacts**

| Sr. No. | Extension contacts | Block | | | | Total (n=90) | |
|---|---|---|---|---|---|---|---|
| | | Bhunga ($n_1$=45) | | Hajipur ($n_2$=45) | | | |
| | | Score | Rank | Score | Rank | Score | Rank |
| 1. | H.D.O | 16 | 2 | 25 | 1 | 41 | 1 |
| 2. | A.D.O | 19 | 1 | 21 | 2 | 40 | 2 |
| 3. | K.V.K and other personnel.(B.D.P.O, Bank, IFFCO and KRIBHCO) | 3 | 3 | 2 | 3 | 5 | 3 |
| 4. | A.S.I | 1 | 4 | 0 | 4 | 1 | 4 |

largely, 62.22 and 51.11 per cent of fruit growers from Bhunga and Hajipur blocks, respectively were aware of office of A.D.O.

A cross examination of data in the Table 1 further revealed that a majority (58.89, 63.33 and 56.67 %) of the fruit growers from the two selected blocks of Hoshiarpur district were aware of the location of office of PAU regional fruit research station Gangian, , H.D.O and A.D.O., respectively.

**Extension officials as a source of information :**

Ranking of the frequency of exposure to the extension officials was also done by giving scores to each respondent. Scores allotted were monthly-2, six mothly-1 and never-0. Accordingly ranks were allotted to the officials. The data in Table 2 reveal that in block Bhunga, ranks 1, 2, 3 and 4 were given to ADO, HDO, K.V.K and (Other extension personnel such as bank personnel, KRIBHCO and IFFCO personnel, BDPO etc.) and ASI, respectively. Similarly, in Hajipur block, ranks 1, 2, 3 and 4 were given to HDO, ADO, K.V.K and (Other extension personnel such as bank personnel, KRIBHCO and IFFCO personnel, BDPO etc.) and ASI, respectively. It can be inferred that in Bhunga block a majority of fruit growers had their extension contacts with ADO and a relatively similar proportion of them had made contacts with HDO. Similarly, in Hajipur block a majority of fruit growers had their contact with HDO while those having contact with ADO were less in number.

**Visits and participation in extension activities as source of information :**

Sufficient knowledge and information can also be had by visiting the various extension functions organized by Punjab Agricultural University, Ludhiana or by different agro based organizations from time to time for the benefit of the fruit growers.

A perusal of data in Table 3 reveal that a majority (88.89 %) of fruit growers participated in farmer meeting in villages in both Bhunga and Hajipur blocks. Not as many as 11.11 per cent and 13.33 per cent of fruit growers participated in field trips in Bhunga and Hajipur blocks, respectively.

Largely, 73.33 and 71.11 per cent of fruit growers from Bhunga and Hajipur blocks, respectively visited *kisan mela* at PAU, Ludhiana while another majority of 77.78 and 80.00 per cent of fruit growers from Bhunga and Hajipur blocks, respectively visited regional *kisan mela* at Ballowal Saunkhri.

Table 3 shows that quite a few (35.56 and 28.89 %) fruit growers from Bhunga and Hajipur blocks, respectively participated in demonstrations while not more than 6.67 and 2.22 per cent of the fruit growers from Bhunga and Hajipur blocks participated in various training camps. Table 3 also shows that rank I was accorded to farmer meeting in villages while rank VI was given to training camps.

**Exposure to mass media as source of information :**

In modern era, almost everyone has a little bit attachment with one or other source of mass media such as radio, television, newspaper etc for the information, news, events of their interest. Therefore, a study was also conducted in this respect.

Ranking of various sources of mass media used by fruit growers for getting information was done by assigning scores to them. Scores assigned were Always-2, Sometimes-1 and Never-0. Accordingly ranks were given. Table 4 reveals that in both the blocks, ranks 1, 2, 3 and 4 were given to newspaper, TV, radio and farm magazine, respectively. It can be inferred from the ranks that a majority of the respondents in both the blocks used newspaper as a main source of information while majority of them used TV as a source of mass media information. Very few fruit growers used farm magazines as a source of information.

It is perceived that good reading habits are a door to vast sea of knowledge and information for individuals. Keeping this in mind two categories namely newspapers and farm magazines were considered for the purpose of evaluating reading habits of the fruit growers.

**Conclusion :**

It is revealed that as many as 42.22 per cent and 22.22 per cent of fruit growers had six monthly contacts with H.D.O.'s and A.D.O.'s, respectively of their areas. More than half of the fruit growers used *Kisan mela* at PAU, Ludhiana, regional *Kisan melas* and farmer meetings held in villages as a potential source of information for post-harvest management and processing. It also surfaced that more than 75 per cent of

**Table 3 : Distribution of fruit growers according to their participation in extension activities**

| Sr. No. | Extension activities | Block | | Total (n=90) | Rank |
|---|---|---|---|---|---|
| | | Bhunga ($n_1$=45) | Hajipur ($n_2$=45) | | |
| | | f (%) | f (%) | f (%) | |
| 1. | Farmer meeting in village | 40 (88.89) | 40 (88.89) | 80 (88.89) | I |
| 2. | Field trips | 5 (11.11) | 6 (13.33) | 11 (12.22) | V |
| 3. | *Kisan mela* at PAU | 33 (73.33) | 32 (71.11) | 65 (72.22) | III |
| 4. | Regional *Kisan melas* | 35 (77.78) | 36 (80.00) | 71 (78.89) | II |
| 5. | Demonstration | 16 (35.56) | 13 (28.89) | 29 (32.22) | IV |
| 6. | Training camp | 3 (6.67) | 1 (2.22) | 4 (4.44) | VI |

Note: Numbers in parenthesis indicate percentage

fruit growers always used newspapers, television and radio as source of information while majority of the fruit growers never used farm magazines as a source of information regarding post-harvest management and processing of fruit crops.

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