Information Source Utilization Pattern of Horticulture Extension Personnel for Seeking and Dissemination of Horticultural Technology in Jammu Region of Jammu and Kashmir, India

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A B S T R A C T

Introduction

Information serves as the cornerstone of successful socio-economic development because it plays a key role in decision making. It is the driving and sustaining force behind any development strategy. Today the real challenge is not producing and storing information, but getting people to use information. Cho (2012) affirmed that people use information to create knowledge but not just in the sense of data and facts but the form of representations that provide meaning and context for purposive action. Every rational personal needs some form of information for his/her day to day activities. Horticultural information service contributes significantly to horticultural production. The information
sources for horticulture extension personnel depend upon the type of work and services they perform. Many studies have been conducted to determine the type of sources utilized by the extension workers.

Alfred and Odefadehan (2007) identified various information sources of extension workers like organizations, individuals, associates, local, national and international seminars, trainings, print and electronic media, telecommunication and internet services.

While Ram and Joan (1996) identified agents in the offices, extension specialists, immediate supervisor, news agencies, state/federal agencies school teachers and administrator as prominent information sources to agriculture extension. Extension publication and farm magazine are major information sources consulted by extension agents reported by (Shih and Evans, 1991). State extension directors perceived that programme delivery approaches will changes in the next five years (Agnew, 1991). These changes include increased use of electronic communication and instructional devices. Thus keeping in view the importance of communication a study on Information Sources Utilization Pattern of Horticulture Extension Personnel for Seeking and dissemination of horticultural technology in Jammu region of Jammu and Kashmir were taken with the following objectives

To study the personal profile of the horticulture extension personnel.

To study information sources utilization pattern for seeking and dissemination of horticultural technology.

[Materials and Methods]

The present study was carried out in Jammu division of Jammu & Kashmir state in (2015-16). Total population of horticulture extension personnel working at grass root level in all ten districts of Jammu division was 302 (54 Horticulture Development Officers and 248 Horticulture Technicians). Out of 302 extension personnel, 24 extension personnel, 12 each (HDOs and Horticulture Technicians) were taken for pretesting of interview schedule. Pre-tested extension personnel were not taken in the final sample. Out of balance 278 horticulture extension personnel a sample of 200 respondents (30 HDOs and 170 horticulture technicians) were selected by proportionate stratified random sampling method. The data were collected through personal interview method. Data regarding information utilization sources were collected by assessing on three point continuum i.e. always, sometime, and never with score 2, 1, 0 respectively. Finally data were analyzed by using appropriate statistical methods like frequency, percentage, mean and standard deviation.

Results and Discussion

Profile of the horticulture extension personnel

The study of horticultural extension personnel necessitates an enquiry in to their age distribution. Age acquires a special significance as far as efficiency is concerned. It influences the capacity of work. For the purpose of analysis, the different age groups of extension personnel were classified in three categories low, medium and high age group.

The data presented in the table 1 reveals that the average age of horticulture development officers was (41.80 years) with standard deviation 5.86. More than half (57%) of the horticulture development officers were in medium age group (40-52 years). This age group may be characterized by maturity, high sense of responsibility and paying more attention to their work.
In case of horticulture technicians 45 per cent of the technicians were in high age group (53-59 years). This indicates that technicians were having high service length and possessed more experience in their job.

Horticultural development officers were found to be highly qualified; cent percent were graduate and above. Among this 63 percent were post graduate and 10 per cent were Ph.D, respectively. In case of horticulture technicians more than 60 per cent of the respondents were matriculate and above. Today there is a widespread cultural mandate that women should compete with men by engaging in high commitment careers.

The finding with regards to gender reveals that only (7%) HDOs and 2 per cent technicians were female. This may be due to fact that majority (94%) of the extension personnel were from rural back- ground. Even though India’s masses lives in the villages, there is an urban bias in most of the profession. The taboos existing in the villages may not have allowed female candidates to joining the jobs.

Further, the horticulture activities are field and skilled oriented. The finding are in agreement with Thomas and Laseinde (2015) in which it was reported that majority (89%) of the extension agents were male and only 11 percent were female.

The average service length of the horticulture development officers was 12.70 years. Majority (70%) HDOS had low (2-16 years) service length. This implies that majority of the HDOSs are still gaining experience. Similarly in case of horticulture technicians the average service length was 23.14 years with 42 per cent technicians who had high 29-38 years’ service length.

Utilization of Different Information Sources for Seeking and Dissemination of Horticultural technology

Different information sources are used by the horticulture extension personnel for information seeking as well as for information dissemination as described below.

Information sources utilized by horticulture extension personnel for seeking horticultural technology

Table 2 depicts that the newspapers, journals, package of practice, radio, television, internet, trainings and subject matter specialists have been utilized as sources of information for seeking horticultural technology by the horticulture extension personnel.

It is evident from the table 2 that cent percent of the horticulture development officers consult their seniors (SMSs) and read newspaper “Always and “Sometime” for seeking horticultural technology followed by internet and package of practice (97%) each respectively.

The sources which were “Never” utilised by the horticulture development officers for seeking horticultural technology were radio (30%) followed by journals (23%) and television (17%) respectively. Similarly, in case of horticulture technicians majority (99%) of the technicians consults their seniors (HDOs and SMSs) ‘Always” and “Sometime” for seeking horticultural technology followed by watching television (83%) and reading newspaper (65%) respectively.

The sources which were “Never” utilized by the horticulture technicians for seeking horticultural technology were journals (92%) followed by internet (83%) and radio (56%) respectively.
**Table 1** Profile of the horticulture extension personnel

| Parameter                        | HDOs n=30          | Horticulture technicians n=170 |
|----------------------------------|--------------------|--------------------------------|
| Average age (in years)           | 41.80±5.86         | 47.94±9.61                     |
| Age group (% personnel)*         |                    |                                |
| i) Low (25-39 years)             | 37                 | 25                             |
| ii) Medium (40-52 years)         | 57                 | 30                             |
| iii) High (53-59 years)          | 06                 | 45                             |
| Average education (in years)     | 17.70±1.44         | 9.80±1.86                      |
| Education (% personnel’s)        |                    |                                |
| i) Primary                       | -                  | 02                             |
| ii) Middle                       | -                  | 26                             |
| iii) 10th                        | -                  | 54                             |
| iv) 12th                         | -                  | 15                             |
| v) Graduate                      | 27                 | 02                             |
| vi) Post graduate                | 63                 | 01                             |
| vi) Ph.D                         | 10                 | -                              |
| Gender (% personnel’s)           |                    |                                |
| i) Male                          | 93                 | 98                             |
| ii) Female                       | 07                 | 02                             |
| Family background (% personnel)  |                    |                                |
| i) Urban                         | 23                 | 04                             |
| ii) Rural                        | 77                 | 96                             |
| Average service length (in years)| 12.70±8.75         | 23.18±10.08                    |
| Service length (% personnel’s)*  |                    |                                |
| i) Low (2–16 years)              | 70                 | 23                             |
| ii) Medium (17-28 years)         | 23                 | 35                             |
| iii) High (29–38 years)          | 07                 | 42                             |

± is the Standard deviation
*categories by Singh cube root method
Decimals are rounded up to nearest whole number

**Table 2** Information sources utilized by horticulture extension personnel for seeking horticultural technology

| Sources of Information | HDOs (%) n=30 | Horticulture technicians (%) n=170 |
|------------------------|---------------|-----------------------------------|
|                        | Always | Sometime | Never | Always | Sometime | Never |
| News papers            | 67     | 33        | 0      | 11     | 54        | 35    |
| Journals               | 30     | 47        | 23     | 0      | 8         | 92    |
| Package of practice    | 57     | 40        | 3      | 12     | 49        | 39    |
| Radio                  | 7      | 63        | 30     | 9      | 35        | 56    |
| Television             | 30     | 53        | 17     | 11     | 72        | 17    |
| Internet               | 80     | 17        | 3      | 5      | 12        | 83    |
| Trainings              | 33     | 60        | 7      | 2      | 49        | 49    |
| HDOs / SMSs            | 40     | 60        | 0      | 86     | 13        | 1     |
Table 3: Level of information seeking behaviour of horticulture extension personnel

| Levels                  | HDOs (%) n=30 | Horticulture technicians (%) n=170 |
|------------------------|---------------|-----------------------------------|
| Low (2 – 6 score)      | 20            | 69                                |
| Medium (7 – 9 score)   | 33            | 25                                |
| High (10 -13 score)    | 47            | 16                                |
| Mean with Standard deviation | 9.20±2.52  | 5.63±2.17                        |

Table 4: Information sources utilized by horticulture extension personnel for dissemination of horticultural technology

| Methods            | HDOs (%) n=30 | Horticulture technicians (%) n=170 |
|--------------------|---------------|-----------------------------------|
|                    | Always | Sometime | Never | Always | Sometime | Never |
| Farm and home visit| 87     | 13       | 0     | 69     | 30       | 1     |
| Demonstration      | 40     | 60       | 0     | 17     | 66       | 17    |
| Trainings          | 30     | 67       | 3     | 8      | 56       | 36    |
| Field days         | 50     | 47       | 3     | 6      | 58       | 36    |
| Farmers tour       | 7      | 90       | 3     | 2      | 44       | 54    |
| Exhibitions        | 7      | 90       | 3     | 1      | 68       | 31    |
| Newspapers         | 10     | 20       | 70    | 0      | 1        | 99    |
| Radio              | 3      | 33       | 64    | 0      | 1        | 99    |
| Television         | 3      | 20       | 77    | 0      | 1        | 99    |
| Mobile phone       | 73     | 27       | 0     | 53     | 45       | 2     |

Table 5: Levels of information dissemination sources utilized for transfer of horticultural technology by horticulture extension personnel

| Levels                  | HDOs (%) n=30 | Horticulture technicians (%) n=170 |
|------------------------|---------------|-----------------------------------|
| Low (2 – 7 score)      | 07            | 58                                |
| Medium (8 – 10 score)  | 43            | 38                                |
| High (11 -17 score)    | 50            | 04                                |
| Mean with Standard deviation | 10.90±2.52  | 6.78±2.37                       |

Level of information seeking behaviour of horticulture extension personnel

The average information seeking behaviour of horticulture development officers was 9.20 (±2.52) and horticulture technicians were 5.63 (±2.17) respectively. Further the table 3 shows that 47 per cent of the horticulture development officers had high (10-13 score) level of information seeking behaviour followed by 25 and 6 per cent who had medium (7-9 score) and high (10-13 score) level respectively. Study revealed that horticulture development officers had high level of information seeking behaviour where technicians had low level. Horticulture development officers were highly qualified and were well aware about different information sources which enable them to use different information sources like newspaper, journals, mobile phone and internet etc. where, majority of horticulture technicians were upto10th standard and is not able to use some of the information sources like internet and journals.
Information sources utilized by horticulture extension personnel for dissemination of horticultural technology

Table 4 depicts that farm and home visit, demonstration, trainings, field days, farmers tour, exhibitions, newspapers, radio, television, mobile phone were utilized by horticulture extension personnel for dissemination of horticultural technology to the clients.

The table further shows that cent per cent of the horticulture development officers’ visit farm and home of orchardist, use demonstration technique and mobile phone as a source for dissemination of horticultural technology “Always” and “Some time”.

Similarly, in case of horticulture technicians more than 80 per cent of the technicians who visit farm and home of orchardist, use demonstration technique (99%) and mobile phone (98%) as a source for dissemination of horticultural technology “Always” and “Some time” respectively. Same time sources which were “Never” utilized by the horticulture development officers for dissemination of horticultural technology were television 77 per cent followed by newspaper (70%) and radio (64%) respectively.

In case of horticulture technician’s sources which were “Never” utilized as a source for dissemination of horticultural technology were television, newspaper and radio (99%) each respectively.

This indicate that farm and home visit, demonstration are the effective medium for the dissemination of horticulture technology and provides firsthand knowledge to the extension personnel about farm and home conditions that builds confidence between the extension personnel and orchardist.

Level of information dissemination sources utilized for transfer of horticultural technology

The data presented in the table 5 revealed that one half (50%) of the horticulture development officers had high level (11-17 score) of utilizing sources for technology dissemination followed by 43 and 7 per cent who had medium level (8-10 score) and low level (2-7 score) respectively. The average score of utilizing information sources for technology dissemination by horticulture development officers was 10.90 (±2.52). Similarly, in case of horticulture technicians 58 per cent of the technicians had low level (2-7 score) of utilizing information sources for technology dissemination followed by 38 and 4 per cent who had medium level (8-10 score) and high level (11-17 score) respectively. The average score of utilizing sources for technology dissemination by horticulture technicians was 6.78 (±2.37).

Overall level of information dissemination behaviour of horticulture development officers is medium to high where it was low to medium in case of horticulture technician. The finding are similar to those of Kher (1996) who reported that majority (74.04%) of the agricultural extension officers had medium level of information output behaviour.

It is concluded from the study that majority of the horticulture technicians were of high age group, and near to retirement with high service length. Where horticulture development officers were of medium age group and are still gaining experience. Majority of the horticulture extension personnel were male and from rural background. Main sources which were utilized by HDOs for information seeking were internet, SMSs, newspaper, journals and package of practices where as in case of horticulture technicians it was their senior
officers (HDOs/SMSs). Farm and home visit, demonstration were mainly utilized as sources for technology dissemination by both the respondents. The overall information seeking and dissemination behaviour of horticulture development officers was medium to high and it was low to medium in case of horticulture technicians.

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