

Participation of Farm Women in Potato Production

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ABSTRACT

Vegetable cultivation has become highly commercialized. But still there is a wide gap between current production and potential productivity. Women participation in the family farming system is crucial to the sustenance of rural economy. The farm women need to be involved in olericulture sector to push up considerable increase in production level and area under vegetables. Realizing the importance of farm women in vegetable production and to know the extent of training needs of these farm women, the study entitled "participation of farm women in potato production" was undertaken. The study was conducted in Pakhowal and Delhon blocks of Ludhiana district in Punjab. The data were collected personally through the structured interview schedule. The degree of participation of farm women in potato production was determined in terms of (i) operations with respect to manual participation and supervision. (ii) average time spent. (iii) and work load. Knowledge test was prepared to assess the training needs pertaining to selected operations in potato growing. It is evident from the study that participation of farm women in different operations of potato production was medium. The study has confirmed high training need in some areas of potato production by farm women.

Key words : Potential productivity; Women participation

The country's urgent requirement is to enhance the production of nutritious food in a sustainable manner and improve the farm family income in order to ensure household food security, nutritional security and economic security. Vegetables are vital source of minerals, vitamins and dietary fibers and thus play an important role in human nutrition in supplying adequate quantity of free radicals, antioxidants and micronutrients. Vegetable cultivation has become highly commercialized. But still there is a wide gap between current production and potential productivity. So efforts have to be made by researchers, policy makers and extension workers together to overcome these constraints. With the view to achieve a high level of production it is not only enough to develop farm innovation but it is also necessary to transfer the latest technology from the research system to ultimate users i.e. farmers and farm women growing vegetables.

Since ancient time women play a pivotal role in agriculture. Women participation in the family farming system is crucial to the sustenance of rural economy. The farm women need to be involved in olericulture sector to push up considerable increase in production level and area under vegetables. Realizing the importance of farm women in vegetable production and to know the extent of training needs of these farm women, the study entitled "participation of farm women in potato production" was undertaken with the following objectives:

1. To examine the degree of participation of women in potato production.

2. To assess the training needs for farm women engaged in potato production.

METHODOLOGY

The present study was purposively conducted in Pakhowal and Delhon blocks of Ludhiana district in Punjab. Two villages were selected randomly from each block. Twenty five active female members were identified from potato growing households from each village. Thus the sample comprised of 100 farm women for this study. The data were collected personally through the structured interview schedule. The degree of participation of farm women in potato production was determined in terms of (i) operations with respect to manual participation and supervision. (ii) average time spent. (iii) and work load. Knowledge test was prepared to assess the training needs pertaining to selected operations in potato growing.

RESULTS AND DISCUSSION

Participation and supervision by farm women in different operations related to potato crop production.: Data presented in Table 1 revealed that highest mean score of manual participation of farm women were in operations of digging, storage and grading i.e. 1.32, 1.30 and 1.29, respectively, where as regarding supervision mean score were 0.59, 0.39 and 0.41, respectively and found that manual participation was significantly higher than supervision at 1 per cent level i.e. 3.38, 5.09 and 4.66 respectively. The reason of high participation of farm women in storage and grading might be because these

activities are considered a part of household work. Lowest mean scores of manual participation of farm women in operation of irrigation and marketing were 0.08 each whereas mean score for involvement in supervision of operation of irrigation and marketing were 0.44 and 0.27,

respectively and found that participation of farm women in supervision of these operation was significantly higher than manual participation at 5 per cent and 10 per cent level. Manual participation of farm women in operation of ploughing and planking was nil.

Table 1. Mean score of manual participation and supervision by farm women in different operations related to potato crop production

| S.No | Operations | Mean scores of involvement | | | t-value manual v/s supervision |
|------|--|----------------------------|-------------|-------------|--------------------------------|
| | | Manual | Supervision | Total | |
| 1 | Soil preparation | | | | |
| | (a) Ploughing | 0 | 0.11(5.50) | 0.11(5.50) | — |
| | (b) Planking | 0 | 0.11(5.50) | 0.11(5.50) | — |
| 2 | Purchasing of seed | 0.39(19.50) | 0.62(31.00) | 1.01(50.50) | 1.79* |
| 3 | Sowing | | | | |
| | (a) Row formation | 0.12(6.00) | 0.36(18.00) | 0.48(24.00) | 1.13NS |
| | (b) Seed sowing | 0.18(19.00) | 0.83(41.50) | 1.10(50.50) | 3.81*** |
| 4 | Application of manures and fertilizers | 0.27(13.50) | 0.69(34.50) | 0.96(48.00) | 2.09** |
| 5 | Irrigation | 0.08(4.00) | 0.44(22.00) | 0.52(26.00) | 2.16** |
| 6 | Digging | 1.32(66.00) | 0.59(29.50) | 1.19(95.50) | 3.38*** |
| 7 | Grading | 1.29(64.50) | 0.41(20.50) | 1.70(85.00) | 4.66*** |
| 8 | Storage | 1.30(65.00) | 0.39(19.50) | 1.69(84.50) | 5.09*** |
| 9 | Marketing | 0.08(4.00) | 0.27(13.50) | 0.35(17.50) | 1.83* |

***Level of significance at 1 percent level, **Level of significance at 5 percent level, *Level of significance at 10 percent level
NS Non Significant

Average time spent (hrs/day) and workload (man days/annum) of farm women in different potato growing periods: The data in Table 2 showed that farm women spent maximum time in grading and storage i.e 0.27 hr/day and 2.26 hr/day, respectively. Maximum work load was in the same period i.e. grading and storage, these were 12.37 man days/annum and 12.30 man days annum, respectively.

Table 2. Average time spent (hrs/day) and workload (man days/annum) of farm women in different potato growing periods.

| S. No. | Operations | Average time (hrs. per day) | Work load (man day per annum) | % |
|--------|--|-----------------------------|-------------------------------|-------|
| 1 | Soil preparation | | | |
| | (a) Ploughing | 0.1199 | 5.4707 | 7.27 |
| | (b) Planking | 0.0194 | 0.8851 | 1.18 |
| 2 | Purchasing of seed | 0.1781 | 8.1258 | 10.8 |
| 3 | Showing | | | |
| | (a) Row formation | 0.0846 | 3.8599 | 5.13 |
| | (b) Seed sowing | 0.1792 | 8.1760 | 10.86 |
| 4 | Application of manures and fertilizers | 0.1686 | 7.6924 | 10.3 |
| 5 | Irrigation | 0.0914 | 4.1701 | 5.54 |
| 6 | Digging | 0.2114 | 9.6451 | 12.8 |
| 7 | Grading | 0.2712 | 12.3735 | 16.4 |
| 8 | Storage | 0.2696 | 12.3005 | 16.3 |
| 9 | Marketing | 0.558 | 2.5459 | 3.38 |
| 10 | Seed production | - | - | - |

Training needs of farm women in various areas of potato production : Data indicated that the farm women had high training need intensity in the area of selection of varieties and pest and disease control with TNQ value of 0.77 and 0.90 respectively. The farm women had expressed low training need intensity in the area of soil and soil preparation, sowing and sowing time, seed rate and irrigation with TNQ value 0.08, 0.18, 0.12 and 0.05, respectively. Further farm women showed medium training need intensity in the areas of manures and fertilizers application and hoeing and weeding with TNQ value 0.49. The results are supported by studies carried out by Kaur (1993) and Malhotra (1996).

Table 3. Training need intensity of farm women in various areas of the potato production

| S. No. | Areas | Training need quotient | Training intensity |
|--------|--|------------------------|--------------------|
| A | Soil and soil preparation | 0.08 | Low |
| B | Sowing and sowing time | 0.18 | Low |
| C | Seed rate | 0.12 | Low |
| D | Application of manures and fertilizers | 0.49 | Medium |
| E | Irrigation | 0.05 | Low |
| F | Hoeing and weeding | 0.49 | Medium |
| G | Harvesting | 0.00 | - |
| H | Selection of varieties | 0.77 | High |
| I | Pests and diseases | 0.90 | High |

Training Need Quotient (TNQ) range
0-0.3 low, 0.3-0.6 medium, 0.6-0.9 high

CONCLUSION

It is evident from the study that participation of farm women in different operations of potato production was medium. The study has confirmed high training need in some areas of potato production by farm women. Thus, there is a need to organize training programmes to stimulate

higher participation of farm women in potato production so that women become more economically independent. Moreover it will improve nutritional status of the family. Based on these training needs, government and non government organizations may organize educational and training programmes.

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