

Training Needs of Farm Women in Vegetables Cultivation in Hilly Areas

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ABSTRACT

In hilly state of Uttarakhand, the role of farm women in agricultural operations become important due to several unique factors like migration of males to plains in search of jobs, small land holding and less mechanization of agriculture. The present study was undertaken in Bageshwar district of Uttarakhand to assess the training needs of farm women for vegetable cultivation technology. It was assessed that farm women most needed training in areas like knowledge of improved varieties, disease and IPM, spacing, seed treatment, weed control, cropping system, marketing, package of practices, management of fertilizers, quality improvement and nursery raising. The study concludes that the practices like sowing time, harvesting, seed rate, intercultural operation, irrigation and use of organic manures in which farm women received training contributed major role in reducing overall knowledge gap.

Average productivity of vegetable crops in Uttarakhand is (79.32) very low and far from the national average yield of 154.6 q/ha. It is mainly because of poor knowledge as well as adoption of scientific technology in vegetable cultivation. A wide gap exists between the yield obtained and the potential yield. It has been proved through various impact studies that the production and productivity of vegetables can be increased many times by adopting scientific technologies including use of high yielding varieties. Information on knowledge gap and training needs will help to formulate the training courses in vegetable production technology. Well planned and comprehensive study to gather the desired information was felt necessary. Hence various important practices involved in vegetable production technology like improved variety, seed treatment, seed rate, sowing time, nursery raising, spacing, use of organic manures, management of fertilizers, irrigation, intercultural operations, weed control, disease and IPM, cropping system, harvesting, quality improvement, package of practices and marketing included in the study. Since the farm women play major role in agriculture of Uttarakhand hills. Present study was undertaken to assess the knowledge gap and training needs of farm women involved in vegetable cultivation.

METHODOLOGY

The present study was conducted in Bageshwar block of the Bageshwar district of Uttarakhand. Out of three blocks (Bageshwar, Kapkot & Garur) only Bageshwar block was randomly selected four villages namely Karalagaon, Panchdev, Okhlisrot and Badibegar were randomly selected. The total number of farm women was 40 out these 10 farm women were chosen at random separately from each village. Collection of data was accomplished by supplying the well-structured schedule from women. As the study was aimed to measure the knowledge gap and level of training needs. The tool consisted of 17 statements on training needs of farm women in vegetable cultivation covering various aspects like improved variety, seed rate, seed treatment sowing time, nursing raising, transplanting and spacing, use of organic manures, use of fertilizers, irrigation, intercultural operation, weed control, diseases & IPM, cropping system, Harvesting, quality improvement, package of practices and marketing.

The following device was developed to measure the knowledge of farm women regarding selected technologies recommended for vegetable cultivation.

$$\text{Knowledge} = \frac{\text{Total obtained knowledge score}}{\text{Maximum obtained knowledge score}}$$

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RESULTS AND DISCUSSION

A- Knowledge gap of farm women in vegetable cultivation-

Knowledge gap of the farm women was assessed under 17 major aspects of vegetable cultivation. The perusal of data presented in the Table-1 revealed that the overall knowledge gap of farm women in relation to vegetable cultivation technology was found 39.15 per cent and it was ranged from 21.87 (sowing time) to 53.15 (improved variety). For this gap improved variety, diseases and IPM, spacing, seed treatment, weed control, cropping system, marketing, package of practice,

management of fertilizers, quality improvement and nursery raising were the major practices. The data further indicate that the practices namely sowing time, harvesting, seed rate, intercultural operation, irrigation and use of organic manures in which training was received by farm women. The overall knowledge level of farm women was raised up 60.85 per cent for these practices. Thus it can be stated that the practices in which farm women received training were contribution major role in reducing overall knowledge gap of vegetable cultivation technology. These findings were supported by the reports of sahu et al. (2007), and Dubey and Srivastava (2005).

Table -1 Knowledge gap of farm women in vegetable cultivation.

N= 40

S. No.	Vegetable cultivation practices	Maximum obtained knowledge (score)	Total obtained knowledge (score)	Knowledge gap percentage	Rank
1	Improved/Hybrid variety	160	75	53.15	I
2	Seed treatment	160	86	46.25	IV
3	Seed rate	160	115	28.12	XV
4	Sowing time	160	125	21.87	XVII
5	Nursery raising	160	100	37.5	XI
6	Spacing	160	85	46.87	III
7	Use of organic manures	160	102	36.25	XII
8	Management of fertilizers	160	95	40.62	IX
9	Irrigation	160	106	33.75	XIII
10	Intercultural operation	160	109	31.87	XIV
11	Weed control	160	87	45.62	V
12	Diseases and IPM	160	81	49.37	II
13	Cropping system	160	89	44.37	VI
14	Harvesting	160	117	26.38	XVI
15	Quality improvement	160	97	39.37	X
16	Package of practices	160	94	41.25	VIII
17	Marketing	160	92	42.5	VII
	overall knowledge gap	2720	1655	39.15	

B- Training needs of farm women

The training needs of farm women in various aspects of vegetable cultivation technology were assessed with scale of 3 point continuum i.e. most needed, some what needed and least needed with weight-age of 3, 2 and 1, respectively. Mean score of the training needs

obtained for different aspects are presented in Table-2. Most of the farm women felt that they needed training in the area of improved varieties with the mean score of (2.32) followed by diseases and IPM, spacing, seed treatment, weed control, cropping system, marketing, package of practices, management of fertilizers, quality

improvement, and nursery raising with the mean score of 2.25, 2.20, 2.12, 2.05, 1.97, 1.90, 1.87, 1.82, 1.80 and 1.75 respectively. The least training needs preferred practices were sowing time (1.47), harvesting (1.52), seed

rate (1.55), intercultural operations (1.60), irrigation (1.62) and use of organic manures (1.70). These findings are accordance with the findings reported by Rajput et al. (2005) and Bhagat and Nain (2005).

Table-2 Training needs of farm women in vegetable cultivation technology.

N= 40

S.No.	Vegetable cultivation practices	Level of training needs			Total obtained (score)	Knowledge gap percentage	Remark
		Most Needed	Some Needed	Least Needed			
1	Improved/Hybrid variety	21	11	8	93	2.32	I
2	Seed treatment	18	9	13	85	2.12	IV
3	Seed rate	5	12	23	62	1.55	XV
4	Sowing time	4	11	25	59	1.47	XVII
5	Nursery raising	10	10	20	70	1.75	XI
6	Transplanting & Spacing	19	10	11	88	2.20	III
7	Use of organic manures	8	12	20	68	1.70	XII
8	Management of fertilizers	12	9	19	73	1.82	IX
9	Irrigation	7	11	22	65	1.62	XIII
10	Intercultural operation	6	12	22	64	1.60	XIV
11	Weed control	17	18	15	82	2.05	V
12	Diseases and IPM	20	10	10	90	2.25	II
13	Cropping system	16	7	17	79	1.97	VI
14	Harvesting	4	13	12	61	1.52	XVI
15	Quality improvement	11	10	19	72	1.80	X
16	Package of practices	13	9	18	75	1.87	VIII
17	Marketing	14	8	18	76	1.90	VII

CONCLUSION

The study revealed that farm women possessed poor knowledge of improved varieties, disease and IPM, spacing, seed treatment, weed control and fair knowledge of sowing time, harvesting and seed rate. Hence these practices can be considered while formulating training courses in vegetable production technology. These information are of immense value and will help to disseminate the factual technology to the farmers field which will subsequently help to enhance the production & productivity of vegetables in the state & nation as well.

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