## **RESEARCH NOTE**

# Involvement of Farm Women in Income Generating through Nursery Raising

Moni Singh<sup>1</sup>, Nishith Gupta<sup>2</sup>, Ankita Pandey<sup>3</sup>, and R.P. Sharma<sup>4</sup>

1. Programme Asstt (Home Sc.), 2. SMS (Hort), 3. Programme Asstt (Extension), 4. Programme Coordinator, RVSKVV, Krishi Vigyan Kendra, Dewas

Corresponding author e-mail: thakur\_moni@yahoo.co.in

Paper Received on September 25, 2015, Accepted on October 22, 2015 and Published Online on October 28, 2015

#### **ABSTRACT**

Nursery management is a very important operation for successful production of vegetables like Onion, Chilli, Brinjal, Cauliflower and Cabbage. Dewas district of Madhya Pradesh is a leading district under vegetable cultivation especially cauliflower, Onion, Tomato and Chilli. Out of these crops Onion occupies a largest area under vegetable cultivation during both season. Most of the farmers and farm women of the district are not producing seedlings of Onion in a scientific manner which resulted in production of weak seedlings, poor seedlings growth and attack of damping off disease which is a severe—problem in nurseries raised through traditional methods. Keeping these factors in view the front line demonstration were conducted by Krishi Vigyan Kendra, Dewas during the kharif and rabi season for three consecutive year from 2008-09 to 2010-11 at village Narana and Nanadharakhedi. A total of 15 demonstration (five demonstration in each year) were laid down. With the objective to access the income generation activities through nursery raising of onion and to evaluate the economics from this intervention. Each demonstration was carried out in an area of 200 sq. m. by taking farmers practice ( sowing of seeds in flat bed without seed treatment) and improved practice i.e. line sowing in raised bed during kharif and flat bed in rabi at 10 cm distance + seed treatment with bavistin @ 2g/kg seed.

Key words: Nursery management; Vegetable cultivation;

It has now been realised that to achieve higher yield production of good quality seedling is very much essential. Rural women are playing pivotal role in almost every aspect of our society from time immemorial. All phases of agricultural activities from seed sowing to harvesting and processing of crops are intimately done by rural women. They have made important contributions in creating access to human, natural, financial, physical and social capital for making their livelihood sustainable (*UNIFEM*, 1998). The farm women are participatory in both farming and non farming activities directly or indirectly with men. The small farmland and homestead area is being used intensively mostly by women (*ADA*, *Bangladesh*, 2004).

In Dewas district of Madhya Pradesh less income is one of the major problems of farm women. The socioeconomic status of farm women can be uplifted by creating more income generating activities. The onion is one of the major vegetable crop of this area. Most of the farmers face the problem of getting quality and healthy onion seedlings at the time of transplanting because they lack the technical know how of producing quality seedlings. Farm women can be made an income generating activities as well as solve the problem of farmers with nursery raising of onion.

Nursery raising is one of the few significant income generating activities by which farm women can get income in less time and less expenses. So farm women can develop onion nursery and improve their socio economic condition by selling seedlings of Onion. Farm women can develop the nursery from near the house in available area. The following objectives were kept under this study.

- i. To assess the income generating activities through Nursery raising
- ii. To evaluate the economics of the Nursery raising.

#### **METHODOLOGY**

This study was carried out by KVK, Dewas for three consecutive years from 2008-09 to 2010-11 in the two adopted village i.e. Narana and Nanadharakhedi of the operational area of the KVK Dewas during both season i.e. kharif and rabi. During PRA of these two village, it has been observed that very less income of farm women due to unpaid agricultural practices. To solve this problem of farm women 15 frontline demonstration was conducted by the KVK to generate additional income by raising of healthy and quality seedlings of onion and seedlings these seedlings to the farmers farm women 200g seed of improved variety of Onion i.e. Agrifound Dark Red for kharif and Agrifound Light Red for rabi season were distributed to 15 farm women (five farm women during each year). Each demonstration was conducted in an area of 200 sq. m. Under farmer practice, farm women sown the seeds by broadcasting methods, flat bed without any seed treatment, whereas in the improved practices seeds were sown in raised bed during kharif and flat bed during rabi in line sowing at 10 cm distance along with seed treatment with bavistin @ 3 g/kg seed. Under the improved practice, soil solarisation of beds were also done during the month

of May and June every year. Seedlings were ready for selling in 45 days after sowing of kharif Onion and 60 days after sowing of rabi Onion. In this demonstration cost of seedling preparation, gross return, net return benefit cost ratio were calculated to estimate the income generated by the farm women. Other parameters like technology gap, extension gap and technology index were worked out (*Kadian*, et al., 1997).

# **RESULT S AND DISCUSSION**

With the need for promoting afforestation through farm women participation, production and generate income through good planting material is turning out to be a significant activity. In this study result indicate that the front line demonstration has given a good impact over the income generation activities though agricultural practices as they were motivated by the new intervention applied in other agricultural activities.

The results indicated that farm women obtained 29000 seedlings in rabi and 25800 seedlings in kharif season as compare to the farmers practice in which farm women obtained 19066.67 and 19500 seedlings during rabi and kharif season respectively. So there is a 52.74 and 32.52 percent increase in number of seedlings

Table 1: Impact of front-line demonstrations ononionfor income generation activities through Nursery Raising during 2008-09 to 2010-11

Particular	Year 2008-09		Year 2009-10		Year 2010-11		Average	
	Rabi	Kharif	Rabi	Kharif	Rabi	Kharif	Rabi	Kharif
Variety	AFDR	AFLR	AFDR	AFLR	AFDR	AFLR	AFDR	AFLR
Potential Yield (No. of seedlings)	30000	30000	30000	30000	30000	30000	30000	30000
Recommended practice (RP) yield								
(No. of seedlings)	29200	25600	28900	26700	28900	25100	29000	25800
farmer practice (FP) Yield								
(No. of seedlings)	20200	19000	19000	21000	18000	18500	19066.67	19500
Increase over FP	44.55	34.74	52.11	27.14	60.56	35.68	52.74	32.52
Technology Gap	800	4400	1100	3300	1100	4900	1000	4200
Technology Index	2.67	14.67	3.67	11	3.67	16.33	3.33	14
Extension gap	9000	6600	9900	5700	10900	6600	9933.33	6300
Cost of Cultivation (Rs.) RP	93.07	93.2	94.07	92.01	93.02	94.07	93.38	93.09
Cost of Cultivation (Rs.) FP	87.02	88.25	78.02	88	79.8	78.8	81.61	85.01
Gross Return (Rs.) RP	1460	1280	1445	1335	1445	1255	1450	1290
Gross Return (Rs.) FP	1010	950	950	1050	900	925	953.33	975
Net return (Rs.) RP	1366.93	1186.8	1350.93	1242.99	1351.98	1160.93	1356.61	1196.9
Net return (Rs.) FP	922.98	861.75	871.98	962	820.2	846.2	871.72	889.98
B:C Ratio RP	15.7	13.7	15.4	14.5	15.5	13.3	15.53	13.83
B:C Ratio FP	11.6	10.76	12.17	11.93	11.27	11.58	11.68	11.42

during rabi and kharif season respectively as compare to farmers practice. The reason for more production of seedlings of Onion in demonstration might be due to less attack of damping off disease because in the demonstration, seeds were treated with fungicide bavistin and sown the seeds in raised bed during kharif season. This finding is in corroboration with the finding of *Sreenivasa*, *Ravana Reddy*, *R.V.* (2014).

Yield in respect of number of seedlings of the demonstration plots and potential yield were compared to estimate the yield gaps which were further categorised into technology and

Extension gap as reported by Hiremathet al. (2009). The technology gap shows the gap in the demonstration yield over potential yield and it was ranged highest (4200 no.) in kharif season as compare to rabi season (1000 no. of seedlings). The technology gap may be attributed to the dissimilarity in the weather condition (Mukherjee, 2003). Further the higher extension gap of 9933.33 was recorded during rabi season as compare to kharif season (6300 no. of seedlings) educate the farmers through various extension means for the adoption of improved practices for raising Onion seedlings in rabi season as compare to kharif season to reverse this trend of wide extension gap. The adoption of technology in the demonstration were studied through technology index which shows the suitability of the technology in the farmers field. The lower the value of technology index, more is the feasibility (Mishra et al., 2007). Table 1 shows that technology index value was minimum during rabi season (3.33%) as compared to kharif season (14%) suggestion the superiority and feasibility of high adoption of this technology during rabi season.

The inputs and outputs prices of conditions prevailed during the study of demonstration were taken for calculating gross return, net return and benefit: cost ratio (Table 1). The economic analysis of the data over the years revealed that highest gross return, net return and benefit cost ratio was obtained in the demonstration during both the season as compared to farmers practice. During rabi season highest gross return (Rs. 1450.00), net return (Rs. 1356.61) and B:C ratio (15.33) was recorded as compared to farmers practice which recorded Rs. 953.33 gross return, Rs. 871.72 net return and 11.68 B:C ratio. Similarity during kharif season, farm women also obtained highest gross return (Rs 1290.00), net return (Rs. 1196.90) and B:C ratio (13.83) as compared to the farmer practice.

## CONCLUSION

With development of low cost vegetable nursey with empowerment of farm women and upliftment of their social and financial status can be a profitable venture. Nursery raising and its management in the village in a new intervention being carried out in the villagers. In Narana and Nanadharakhedi most of the farm women are small marginal farmers and some are belong to land less family. To improve their skill to increase their socio economic status identify for nursery management training. Nursery raising is an income generating activity for sure land less people. Less time and less money consuming new intervention.

#### REFERENCES

UNIFEM. Gender consideration in sectoral planning for pacific Island planners in Agriculture, fisheries and forestry, UNIFEM Pacific regional office, Suva, December, (1998).

ADA., Bangladesh: Gender poverty and the millennium development goals. ADB country gender strategy, Bangladesh resident mission and regional and sustainable development department. Manila, Philippines: Asian development bank, (2004).

Kadian, K S., Sharma, R. and Sharma, A.K., Evaluation of front line demonstration trials on oilseeds in Kangra Vally of Himanchal Pradesh. Ann. Agric. Res.18:40. (1997).

Sreenivasa, Ravana Reddy, R.V., Income generation activity through community based nursery raising techniques-A case study, International journal of Engineering science invention, 3(7):4045, (2014).

Hiremath, S.M. and Nagaraju, M.V., Evaluation of Fron-tline Demonstration trials on Onion In Haveri district of Karnataka". Karnataka Journal of Agricultural Sciences, 22(5): 1092-1093, (2009).

Mukherjee, N. Participatory, learning and action. Concept, Publishing Company, New Delhi, Pp.63-65, (2003).

Mishra, D.K., Tailor R.S., Pathak, G. And Deshwal, A.K., Yield gap analysis of blight disease management in Potato through Front-Line Demonstration, Indian research journal of extension education, 7(2 & 3): 82-84, (2007).

• • • • •