

## **Impact of Vocational Training Programme on Income and Employment Generation for Rural Youth in Dewas District of Madhya Pradesh**

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### **ABSTRACT**

Various efforts for agriculture and rural development have been made by the government to encourage the farmers to adopt new agricultural technologies and efficient practices to change their situations for economic prosperity and livelihood security. In this regard Krishi Vigyan Kendra, Dewas (MP) conducted vocational trainings for rural youths on “Nursery Management of vegetables” and “Vegetative propagation techniques in fruit plants” from 2007-2012, 2014 and 2016 with the objective to give rural youths self employment. The results revealed that majority (53.33%) of respondents had low income, while 26.67 percent and 20.00 percent were in medium and high income categories, respectively. Higher percentage (50.00%) of the respondents were of medium income category, while 36.67 per cent and 13.33 per cent were of low and high income categories, respectively.

**Keywords:** Agricultural technologies, employment, income, vocational trainings

### **INTRODUCTION**

The Farm Science Centre known as Krishi Vigyan Kendra (KVKs) are functional in various districts of our country having the objectives: To solve the problem of un-employment in the rural areas of their respective district by providing vocational training and advisory services, To strengthen the allied enterprises other than crop production in the area as a source of subsidiary business or main source of income for diversification of agriculture and increase of farmers income per unit area, to increase the production and productivity in the area of main crops and other enterprises, to educate the farming community and making them economically and socially sound, to disseminate new, proven and economically viable technologies in the area and to get the feedback to know the problems of the farming community in the area and to resolve these by use of technology and

increase the production level. The KVK being an educational institution of the farmers, offers a very real opportunity by organizing trainings to work closely with trainees in developing a more skilled and educated work force. The training programmes of KVK are multipurpose one to cover not only the various needs of farmers but also the entire needs of village and community (Chaudhary, 1999; Sharma *et al.*, 2013).

Training is one of the important aspects of human resource development. Training is a mean to reduce the obsolescence among people and organization in the face of relentless technological innovation. Training plays a vital role in making the farmers more receptive and equipping them with new technologies. Vocational training is the important tool to prepare trainees for job that are based on manual or practical activities traditionally non-academic and totally related

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to a specific trade, occupation or vocation. The empowerment situation in the country is indeed grave and calls for immediate attention of our planners and policy maker. In the past, various employment-oriented and income oriented programmes were experimented and some of these are still continuing through in a modified and synthesized form. These programmes have definitely relived the pressure to some extent but their overall impact seems to be very little when compared to the magnitude of unemployment situation in rural areas. It is also recognized that wage employment cannot be a solution to the problem of unemployment's all section of rural economy. Knowledge empowerment is becoming more and more important along with capital investment. Hence, the KVK is working in the direction of technology diffusion through training and demonstrations which enable farmers in achieving higher returns. Out of these functions, the vocational trainings are design to bridging the gap between technologies awareness and its utilization for increasing agricultural production, getting employment on allied activities and supplement the income for better socio economic status among the society. Krishi Vigyan Kendra conducting location-specific and need based vocational training programmes for rural youth on the extent technologies of agricultural and allied sector. Therefore, keeping this view in mind, the present study was undertaken to know the impact of vocational trainings imparted by KVK Dewas in terms of employment and income generation of rural youth with the following objectives. To study the relation between socio-economic characteristics of respondents and employment and income generation and to determine the extent of income and employment generation through vocational trainings.

## METHODOLOGY

The present investigation was conducted by Krishi Vigyan Kendra, Dewas for eight years (2007-2012 and 2014 & 2016). KVK Dewas has conducted two types of vocational trainings on "Nursery management of vegetables" and "Vegetative propagation techniques of

fruit crops" for 3-5 days at KVK campus. The unemployed rural youths were the participants/trainees during the vocational training programme. These trainings were imparted on skill development covering all the topics related to nursery management of vegetables and vegetative propagation techniques of fruit crops viz. importance of nursery for self employment, different nursery raising techniques of vegetables such as production of seedlings in open conditions, in pro-trays under protected structures (shade net house, low tunnel poly house, poly house), production of fruit saplings by different vegetative methods like layering, budding, grafting, importance of mother plants and progeny orchard, different media necessary for production of seedlings and saplings, growth hormones, different tools related to nursery management of fruits and vegetables, marketing of seedlings and saplings etc. More emphasis will be done on the practical aspects of seedlings and saplings production during the training. From the list of beneficiaries, all 120 rural youth were selected as the respondents by random sampling method for the study. The data were collected with the help of pre-tested structured schedule by personal interview method.

Apart from the vocational training, one day training programme were also conducted at frequent intervals to upgrade their skills, to overcome their shortcomings and to motivate them. More frequent visits were also conducted to the nursery established. The trainees were interacted personally for the feedback/study purpose. The feedback were taken from the rural youth after a month of training regarding nursery established in the operational area of the KVK and whether the farmers will continue the enterprises of nursery for the next successive years or not. A total of 195 farmers were exclusively imparted mushroom training during the above said period.

## RESULTS AND DISCUSSION

The total numbers of 8 trainings were conducted in which 180 trainees/participants were participated. It was observed that a total of 29 nurseries were established. The initially 2 units were established having the adoption rate of 9.52 per cent in 2007 and later on increased up

to 4 units having the adoption rate of 18.18 per cent during the year 2016 (Table 1).

Data presented in Table 2 shows that majority of respondents had young age group, higher percentage (42.50%) were generated low income, followed by 18.33 per cent medium income and 15.00 per cent were generated high income through engaging themselves in different types of tasks for which they had received vocational training. Therefore, it can be concluded that the majority of trained rural youth were of young aged and earned low income through vocational trainings. The value

of Chi Square is found to be non significant at 5% level of significance. Hence it can be concluded that there was no significant association between age of respondents and their income generation. Similar types of results were also obtained by Sahai (2005), Namdeo (2007) and Rana (2010).

Data depicted in table 3 show that majority of respondents had passed higher secondary, 20.83 per cent were generated low income, followed by 9.17 per cent were medium income generation and 5.00 per cent were of high income generation group.

**Table 1: Number of training programs organized and nursery established in District Dewas during 2007-2016**

Year	Number of Trainings	Number of Participants	Nursery established	Adoption rate (%)
2007	01	21	02	9.52
2008	01	31	05	16.13
2009	01	22	04	18.18
2010	01	24	05	20.83
2011	01	16	02	12.50
2012	01	25	04	16.00
2014	01	19	03	15.79
2016	01	22	04	18.18

**Table 2: Relationship between age of respondents and their income generation**

Age	Income generation						Total
	Low		Medium		High		
	f	%	f	%	f	%	
Young age	51	42.50	22	18.33	18	15.00	91
Middle age	10	8.33	4	3.33	4	3.33	18
Old age	7	5.83	3	2.50	1	0.83	11
Total	68	57.66	29	24.16	23	19.16	120

$\chi^2 = 0.043$ , non significant at 5% level with 2d.f., table value = 5.99

**Table 3: Relationship between education level of respondents and their income generation**

Education level	Income generation						Total
	Low		Medium		High		
	f	%	f	%	f	%	
Primary passed	08	6.66	2	1.67	2	1.67	12
Middle passed	12	10.00	2	1.67	2	1.67	16
Higher Secondary passed	25	20.83	11	9.17	6	5.00	42
Graduate	17	14.17	9	7.50	10	8.33	36
Post-graduate	6	5.00	4	3.33	3	2.50	13
Total	68	56.67	28	23.34	23	19.17	120

$\chi^2 = 6.487$ , non significant at 5% level with 3d.f., table value = 7.815

Therefore, it can be concluded that highest percentage of the trained rural youth had higher level of education and were earning low income as earlier reported by Raghu *et al.* (2003) and Santhi and Muthu Sathyavathy (2005). The value of Chi Square is found to be non significant at 5% level of significance. Hence it can be concluded that there was no significant association between education of respondents and their income generation.

Table 4 shows that majority of respondents had medium size of land holding, 28.34 per cent were earned low income, followed by 12.50 per cent medium income and 6.67 per cent belonged to high income generation. Therefore, it can be concluded that highest percentage of the trained rural youth were having medium land holding and earned low income. The value of Chi Square is found to be non significant at 5% level of significance. Hence it can be concluded that there was no significant association between size of land holding of respondents and their income generation.

Majority of respondents (Table 5) had medium extension participation, 38.33 per cent were earning low income, followed by 11.67 per cent and 15.00 per cent had medium and high income generation group, respectively. Therefore, it can be concluded that highest percentage of the trained rural youth had medium extension participation and generated low income. The value of Chi Square is found to be significant at 5% level of significance. Hence it can be concluded that there was significant association between extension participation of respondents and their income generation. These findings are in line with the findings of Patel *et al.* (2007).

The data of table 6 shows that majority of respondents who attended more than two trainings, 38.33 per cent were generating low income, 10.83 per cent medium and 11.67 per cent were generating high income. Therefore, it can be concluded that highest percentage of the trained rural youth had attended more than two trainings, but they had generated low income. The value of Chi Square is found to be significant at 5% level of significance. Hence it can be concluded that there was significant association

**Table 4: Relationship between size of land holding of respondents and their income generation**

Size of land holding	Income generation						
	Low		Medium		High		Total
	f	%	f	%	f	%	
Landless	11	9.16	8	6.67	8	6.67	27
Marginal farmers	10	8.33	2	1.67	4	3.33	16
Small farmers	13	10.83	4	3.33	3	2.50	20
Medium farmers	34	28.34	15	12.50	8	6.67	57
Total	68	56.66	29	24.17	23	19.17	120

$\chi^2 = 3.538$ , non significant at 5% level with 3d.f., table value = 7.815

**Table 5 : Relationship between extension participation of respondents and their income generation**

Extension participation	Income generation						
	Low		Medium		High		Total
	f	%	f	%	f	%	
Low	11	9.16	11	9.16	04	3.33	30
Medium	46	38.33	14	11.67	18	15.00	75
High	11	9.16	04	3.33	01	0.83	15
Total	68	56.65	29	24.16	23	19.16	120

$\chi^2 = 9.111$ , significant at 5% level with 2d.f. table value = 5.99

**Table 6: Relationship between number of trainings attended by the respondents and their income generation**

Number of trainings attended	Income generation						Total
	Low		Medium		High		
	f	%	f	%	f	%	
One	09	7.50	04	3.33	04	3.33	17
More than two	46	38.33	13	10.83	14	11.67	73
Two	13	10.83	12	10.00	05	4.16	30
Total	68	56.67	29	24.16	23	19.16	120

$\chi^2 = 8.86$ , significant at 5% level with 2d.f. table value = 5.99

between number of training attended by respondents and their income generation.

The data of Table 7 shows that majority of respondents were young age group, 42.50 percentage were engaged themselves for 10 to 130 days of employment, followed by 10.83 per cent engaged for 131 to 250 days and 7.50 per cent for 251 to 360 days. Therefore, it can be concluded that the highest percentage of trained rural youth were young aged and engaged for low employment (10 to 130 days). The value of Chi Square is found to be non significant at 5% level of significance. Hence it can be concluded that there was

no significant association between age of respondents and their employment generation.

The data depicted in Table 8 shows that majority of respondents had higher secondary passed respondents, 23.33 per cent were engaged themselves for 10 to 130 days of employment, followed by 7.50 per cent engaged for 131 to 250 days and 3.33 per cent for 251 to 360 days. Therefore, it can be concluded that highest percentage of respondents were having higher secondary and college level education, but engaged themselves for low employment (10 to 130 days) in the aspects of vocational trainings received from Krishi Vigyan Kendra.

**Table 7: Relation between age of respondents and their employment generation**

Age	Employment generation						Total
	Low (10 – 130 days)		Medium (131 –250 days)		High (251 –360 days)		
	f	%	f	%	f	%	
Young age	51	42.50	13	10.83	09	7.50	73
Middle age	18	15.00	15	12.50	03	2.50	36
Old age	07	5.83	02	1.67	02	1.67	11
Total	76	63.33	30	25.00	14	11.67	120

$\chi^2_{cal} = 1.983$ , non significant at 5% level with 2d.f ,table value = 5.99

**Table 8: Relation between education of respondents and their employment generation**

Education level	Employment generation						Total
	Low (10 – 130 days)		Medium (131 –250 days)		High (251 –360 days)		
	f	%	f	%	f	%	
Primary passed	09	7.50	05	4.17	01	0.83	15
Middle passed	10	8.33	03	2.50	02	1.67	15
Higher Secondary passed	28	23.33	09	7.50	04	3.33	41
Graduate and above	24	20.00	12	10.00	02	1.67	38
Post-graduate	05	4.17	01	0.83	05	4.17	11
Total	76	63.33	30	25.00	14	11.67	120

$\chi^2_{cal} = 1.154$ , nonsignificant at 5% level with 4d.f.,table value=9.49

The value of Chi Square is found to be non significant at 5% level of significance. Hence it can be concluded that there was no significant association between education of respondents and their employment generation.

Data presented in Table 9 showed that majority of respondents had medium size of land holding group, 36.67 per cent were engaged themselves for 10 to 130 days of employment, followed by 12.50 per cent engaged for 131 to 250 days and 4.17 per cent engaged for 251 to 360 days of employment. Therefore, it can be concluded that highest percentage of the trained rural youth were having medium size of land holding and having low employment (10 to 30 days). The value of Chi Square is found to be non significant at 5% level of significance. Hence it can be concluded that there was no significant association between size of land holding of respondents and their employment generation.

The data of table 10 show that majority of respondents had medium extension participation, 47.50 per cent were engaged themselves for 10 to 130 days of employment, followed by 11.67 per cent to 131 to 250

days and 5.84 per cent were engaged for 251 to 360 days. Therefore, it can be concluded that highest percentage of the trained rural youth had medium extension participation and they were having low days (10 to 130 days) of employment. The value of Chi Square is found to be significant at 5 per cent level of significance. Hence it can be concluded that there was significant association between extension participation of respondents and their employment generation.

The data of table 11 show that majority of respondents had attended more than two trainings, 46.67 per cent were engaged for 10 to 130 days employment, followed by 12.50 per cent were having 131 to 250 days and 3.33 per cent were having 251 to 360 days of employment. Therefore, it can be concluded that highest percentage of the trained rural youth who attended more than two trainings, but they were employed for very few days (10 to 130 days) employment from the task which they had done after the training. The value of Chi Square is found to be non significant at 5 per cent level of significance. Hence, it can be concluded that there was no significant association between number of training attended by

**Table 9: Relation between size of land holding of respondents and their employment generation**

Size of land holding	Employment generation						
	Low (10 – 130 days)		Medium (131 –250 days)		High (251 –360 days)		Total
	f	%	f	%	f	%	
Landless	09	7.50	06	5.00	01	0.83	16
Marginal farmers	13	10.83	05	4.17	06	5.00	24
Small farmers	10	8.33	04	3.33	02	1.67	16
Medium farmers	44	36.67	15	12.50	05	4.17	64
Total	76	63.33	30	25.00	14	11.67	120

$\chi^2_{cal} = 5.132$ , non significant at 5% level with 3d.f., table value = 7.815

**Table 10: Relation between extension participation of respondents and their employment generation**

Extension participation	Employment generation						
	Low (10 – 130 days)		Medium (131 –250 days)		High (251 –360 days)		Total
	f	%	f	%	f	%	
Low	10	8.33	09	7.50	06	5.00	25
Medium	57	47.50	14	11.67	07	5.84	78
High	09	7.50	07	5.84	01	0.83	17
Total	76	63.33	30	25.00	14	11.67	120

$\chi^2_{cal} = 10.791$ , significant at 5% level with 2d.f.,table value = 5.99

**Table 11: Relation between number of trainings attended by the respondents and their employment generation**

Number of trainings attended	Employment generation						Total
	Low (10 – 130 days)		Medium (131 –250 days)		High (251 –360 days)		
	f	%	f	%	f	%	
One	10	8.33	07	5.84	05	4.17	22
Two	10	8.33	08	6.66	05	4.17	23
More than two	56	46.67	15	12.50	04	3.33	75
Total	76	63.33	30	25.00	14	11.67	120

$\chi^2 = 5.694$ , non significant at 5% level with 2d.f., table value = 5.99

respondents and their employment generation as also described by Rajput *et al.* (2005).

### Extent of Income and Employment Generation

The data presented in table 12 reveal that out of the total respondents, majority of respondents 60.83 per cent were getting 10 to 130 days of employment, 24.17 per cent were getting 131 to 250 days of employment and 15.00 per cent were getting 251 to 360 days employment. Thus, it can be concluded that highest percentage of rural youth (60.83%) who received vocational trainings in the aspects, namely nursery management of vegetables and vegetative propagation techniques of fruit crops were having very low employment (10 to 130 days) in Dewas district.

The data of table 14 revealed that the distribution of respondents on the basis of their income earned from Nursery management of vegetables. It shows that majority of respondents, 53.33 per cent had low income, while 26.67 percent and 20.00 percent were in medium and high income categories, respectively. Thus, it can be concluded that higher percentage of the respondents who were engaged in nursery management of vegetables had low income. Similar

**Table 12: Distribution of respondents according to their level of employment generation**

Categories	Respondents (N =120)	
	Frequency	Percentage
Low (10 to 130 days)	73	60.83
Medium (131 to 250 days)	29	24.17
High (251 to 360 days)	18	15.00
<b>Total</b>	<b>120</b>	<b>100.00</b>

findings were also reported by Singh *et al.* (2016) and Lal and Tondon (2011).

Tables 15 revealed that higher percentage (50.00%) of the respondents were of medium income category, while 36.67 per cent and 13.33 per cent were of low and high income categories, respectively. These results are in accordance with the findings of Sharma (1992) and Sharma and Singh (2000). Thus, it can be concluded that higher percentage of the respondents who were engaged in Vegetative propagation techniques of fruit crops had medium income category.

### CONCLUSION

Most of the respondents belonged to medium socio-

**Table 13: Net Income of respondents from different activities**

Activities	Net income (in Rupees)		
	Low	Medium	High
Nursery management of vegetables	35550	59400	73350
Vegetative propagation techniques of fruit crops	2875	4105	5485

**Table 14: Distribution of respondents according to their income from Nursery management of vegetables**

Categories	Respondents (N =120)	
	Frequency	Percentage
Low (Rs 25000-40000)	32	53.33
Medium (Rs 40001-65000)	16	26.67
High (Rs 65001-80000)	12	20.00
<b>Total</b>	<b>60</b>	<b>100.00</b>

**Table 15: Distribution of respondents according to their income from Vegetative propagation techniques of fruit crops**

Categories	Respondents (N =60)	
	Frequency	Percentage
Low (Rs 2500-3500)	22	36.67
Medium (Rs 3501-4500)	30	50.00
High (Rs 4501-6000)	08	13.33
<b>Total</b>	<b>60</b>	<b>100.00</b>

economic status. The majority of the respondents were from low number of vocational training attended. The maximum respondents had medium market orientation and medium risk preferences. The majority of the respondents belonged to low category of income and employment generation. Socio-economic status, number of vocational training attended, market orientation and risk preference significantly associated with income generation and employment generation. The major constraints are inadequate marketing facilities, lack of follow up, lack of transport facility. The important suggestions were made by the trainees for making the programme more effective. Majority of the respondents felt that marketing facilities may be created at village level for sell out their product, provide proper guidance after training, loan procedure should be easy and less time consuming.

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