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Vocational Training Needs of Rural Youth in Agriculture for Self-employment in Udham Singh Nagar of Uttarakhand

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ABSTRACT

Making rural youth employable is a big challenge to the menace of unemployment and underemployment. Government is putting efforts towards conducting skill based trainings as trained and productively engaged youth can bring miracles for the nation. The present study was carried out to find out the vocational training needs of rural youth in agriculture related areas. Qualitative and quantitative investigation was carried out in Udham Singh Nagar district of Uttarakhand using analytical research design. Youth (n=120) were selected from three villages representing agricultural progressiveness in decreasing order through disproportionate stratified random sampling. Pre-tested interview schedule was used for data collection. Maximum training need in major agricultural vocations was found to be in fruit and vegetable production (2.050) followed by cattle farming (2.008), Mushroom Production (1.975) Floriculture (Protected Cultivation) (1.933), Poultry (1.658), Vermi-culture (1.616), Fishery (1.541), Bee keeping (1.508), Rabbit farming (1.450) and Sericulture (1.425). Training needs in subareas of major vocations were also calculated. Village was the most favourable area in receiving training for about two months in Rabi season at the morning time. Scientists and demonstrators were preferred the most along with regular trainings and fortnight demonstrations. Among psychological characteristics, achievement motivation (r = 0.188, tcal=2.079) had a significant positive relationship with vocational training needs of rural youth whereas innovativeness, leadership ability, risk preference and occupational Aspiration had non-significant but positive relationships with vocational training needs of rural youth in agriculture related areas.

Keywords: Agriculture, rural youth, self-employment, training needs, vocational training

INTRODUCTION

Globally, a large percentage of the young people live in developing countries where agriculture remains the main source of income. India has the largest youth population in the world and 70 per cent of India's population is below the age of 35 years, making India the youngest nation in the world. Some experts refer to this large proportion of youth as "demographic dividend" because greater proportion of the population is young and is in the working age-group. However, out of the youth population of 460 million, only 333 million youth in India are literate and unemployment rate is highest (10.6 per cent) among youth (CIA World Fact book, 2012). The generation of youth which is expected to rise in the coming years is reliable for food production and food security at domestic, regional and global level depends on agriculture (Proctor and Lucchese, 2012). It is important to bring them into the field of agriculture. Developing country like India has a great

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potential of unexploited youth in the field of agriculture. Agricultural development is an integral part of national development (Daneji, 2011). There are several advantages of involvement of youth in agriculture as they have the latent energy, capacity and ability to produce, propensity to learn and grasp new ideas or technologies faster and they are excellent source of ideas and innovations (Government of India, 2012). The future of any nation depends on youth. Every society has responsibility to prepare its youth constructively for the development of the nation. Hence, the progress of this nation is dependent upon the trained youth.

Attracting and retaining rural youth in agriculture is most critical now than ever before as most of them are heading towards the urban areas in search of employment. Promotion of high value agriculture, precision farming, organic cultivation, Hi-Tech horticulture, micro-propagation, Integrated Pest Disease &Nutrients Management, Post-Harvest Management, enterprises like poultry farming, fisheries, mushroom cultivation, Apiculture etc., require well trained youth with enthusiasm and passion for farming and ability to take risks. The rural youth could be the ideal target for skill training in these new areas of agricultural growth and to do this effectively there is a need to mobilize young farmers.

Training consists largely of well-organized opportunities for rural youth to acquire necessary understanding and skills in various sectors of agriculture. Average farm holding size is reducing day by day and there is a need of co-operation among the youth in the form of groups. In order to make agriculture as the main vocation specific knowledge, particular skills and positive attitude is required. Vocational training of rural youth will definitely provide an edge in agricultural jobs. Traditionally a large proportion of rural youth earned their livelihood either supporting their family enterprise or working in agricultural sector, trade related enterprises and craft sector (Porter *et al.*, 2007). Now the rural youth are engaged in wide range of agricultural activities which make their livelihood strategies (Bennell, 2010). The trained rural youth were found to have started improving their agriculture on scientific lines (Lodhi, 1971). Rural youth have shown relative preference for agriculture (Crop Production), dairy, poultry, sericulture and bee keeping whereas rabbit farming, small scale farming and piggery operations preferred less (Bhanu, 2006). Apart from these enterprises, Medicinal and Aromatic plants possessed enough opportunities which can improve specialized skills, encourage contacts with niche markets, add to crop diversification and provide employment opportunities to those persons (may be adults or youth) who wish to undertake (Rangarao, 2009). Training on vermi-composting seems to be most inadequate and in need mostly by the rural youth. This was followed by piggery, integrated farming, mushroom production and value addition. Vocational training on seed production, production of organic inputs, and also planting material production are also sought thereafter (Sajeev *et al.* 2012).

Making rural youth employable is a big challenge and government is putting efforts towards employment generation but still there is lack of proper strategy. Making the employable options available is the major headache now. In rural areas relatively few quality jobs are available for young people. Firms tend to be relatively small and few employers employed large numbers of young people. Considerable data indicate that rural youth have significantly fewer economic opportunities than do their urban counterparts. Hence, most of the rural youth opt for wage employment than self-employment. Proper training and development of youth is the major responsibility of the government. Vocational training in agriculture related areas for rural youth is one of the solutions for growing unemployment among them.

RESEARCH METHODOLOGY

Site Profile, sample selection and data collection

The analytical research design was adopted to meet out the objectives set forth for the study. The

area of the study was Udham Singh Nagar district of Uttarakhand. The method used for selecting the respondents was disproportionate stratified random sampling. The youth were selected from each of the three villages named as Buksoura, Durgapur No.1 and Netanagar which represented "Agriculturally progressive", "Moderately progressive" and "Agriculturally less progressive" randomly through simple random sampling. The sample drawn from the particular stratum of the population was not proportional to the relative size of that stratum. Total number of respondents was 120. Out of the selected 120 respondents, 35 per cent were selected from "Agriculturally progressive" village named Buksoura, another 35 per cent belonged to the "Moderately progressive" village named Durgapur No. 1 and the rest 30 per cent from "Agriculturally less progressive" village named Netanagar. For the purpose of this research, Observation, focus group discussion and interview schedule were used for data collection. The data collected were coded, tabulated, analyzed and interpreted with the help of appropriate procedures and statistical techniques like mean, frequency, standard deviation, percentages, correlation, and t- test. The major vocational training needs components along with five sub components of each major area were identified for the study after properly validating them with the help of agri-experts from G.B.P.UA&T.

Data analysis

Major areas were sub divided into sub areas in consultation with the experts as well as secondary data available in various sources. The responses of the youth were categorized in a three point continuum scale as "Most Needed", "Needed", and "Not Needed" with scores 3, 2, 1 respectively. Weighted mean score was calculated by using the following formula:

aw = "mW/ W

Where,

aw = Weighted mean score

mW = Product of weighted and measurement

W = Total of observation

RESULTS AND DISCUSSIONS

Training Needs in Major Agriculture Related Vocations:

According to the calculated weighted mean score, maximum need of training of rural youth in major agricultural vocations was found to be in fruit and vegetable production (2.050) followed by cattle farming (2.008), Mushroom Production (1.975), Floriculture (Protected Cultivation) (1.933), Poultry (1.658), Vermi-culture (1.616), Fishery (1.541), Bee

Table 1: Vocational training needs of rural youth in major vocations of agriculture related areas

Particulars	Most Needed		Needed		Not Needed		Calculated weighted mean score (WMS)	RANK
	No.	%	No.	%	No.	%		
Mushroom Production	43	35.0	31	25.2	46	37.4	1.975	3rd
Bee keeping	18	14.6	25	20.3	77	62.6	1.508	8th
Fishery	24	19.5	17	13.8	79	64.2	1.541	7th
Vermi-culture	20	16.3	34	27.6	66	53.7	1.616	6th
Floriculture (Protected Cultivation)	43	35.0	26	21.1	51	41.5	1.933	4th
Fruit and vegetable production	48	39.0	30	24.4	42	34.1	2.050	1st
Sericulture	19	15.4	13	10.6	88	71.5	1.425	10th
Rabbit farming	14	11.4	26	21.1	80	65.0	1.450	9th
Poultry	28	22.8	23	11.7	69	56.1	1.658	5th
Cattle farming	48	39.0	25	20.3	47	38.2	2.008	2nd

keeping (1.508), Rabbit farming (1.450) and Sericulture (1.425). The results provide the evidence of interests of rural youth in making fruit and vegetable production, cattle farming, mushroom production and floriculture predominantly (Table 1).

Training needs in sub areas of top five major agriculture related vocations

In Table 2, according to the calculated weighted mean score, in major area of fruit and vegetable production, maximum need was sought in case of sub-areas like nursery raising (2.05) followed by plant propagation techniques (2.00), handling storage devices (1.92), production of low volume and high value crops (1.92) and sorting and grading (1.91). Within cattle farming, maximum need was expressed in case of sub-areas like disease management (2.02) followed by identifying breeds (2.01), shed construction (1.94), artificial insemination (1.90) and feed management (1.83). According to rural youth, in mushroom cultivation maximum need was expressed in case of sub-areas

Table 2: Vocational training needs of rural youth in sub areas of top five selected major vocations in agriculture related areas

Particulars	Most Needed		Needed		Not Needed		Calculated weighted mean score (WMS)	RANK
	No.	%	No.	%	No.	%		
Fruit and vegetable production								
Nursery raising	48	40.0	30	25.0	42	35.0	2.05	1st
Production of low volume and high value crops	33	27.5	44	36.7	43	35.8	1.92	3rd
Handling storage devices	35	29.2	40	33.3	45	37.5	1.92	3rd
Sorting and grading	32	26.7	45	37.5	43	35.8	1.91	4th
Plant propagation techniques	42	35.0	36	30.0	42	35.0	2.00	2nd
Cattle farming								
Identifying breeds	48	40.0	25	20.8	47	39.2	2.01	2nd
Artificial –insemination	34	28.3	40	33.3	46	38.3	1.90	4th
Feed management	27	22.5	46	38.3	47	39.2	1.83	5th
Shed construction	40	33.3	33	27.5	47	39.2	1.94	3rd
Disease management	51	42.5	20	16.7	49	40.8	2.02	1st
Mushroom Production								
Mushroom cultivation in plastic bags	46	38.3	26	21.7	48	40.0	1.98	1st
Management in mushroom house	28	23.3	46	38.3	46	38.3	1.85	5th
Mushroom spawn production	32	26.7	40	33.3	48	40.0	1.87	4th
Packaging and marketing	34	28.3	39	32.5	47	39.2	1.89	2nd
Processing	35	29.2	36	30.0	49	40.8	1.88	3rd
Floriculture (Protected Cultivation)								
Cut and loose flower production	43	35.8	26	21.7	51	42.5	1.93	1st
Floral design and decoration	32	26.7	37	30.8	51	42.5	1.84	3rd
Training/Pruning/Pinching/Disbudding	29	24.2	43	35.8	48	40.0	1.84	3rd
Post-harvest products preparation	36	30.0	36	30.0	48	40.0	1.90	2nd
Processing and marketing	39	32.5	34	28.3	47	39.2	1.93	1st
Poultry								
Broiler Production	28	23.3	23	19.2	69	57.5	1.66	1st
Layer production	16	13.3	35	29.2	69	57.5	1.56	4th
Artificial Insemination	13	10.8	34	28.3	73	60.8	1.50	5th
Poultry nutrition	25	20.8	23	19.2	72	60.0	1.61	2nd
Backyard Poultry Farming	24	20.0	25	20.8	71	59.2	1.60	3rd

like mushroom cultivation in plastic bags (1.98) followed by packaging and marketing (1.89), processing (1.88), mushroom spawn production (1.87), management in mushroom house (1.85). Floriculture (protected cultivation) was preferred next and maximum need was expressed in case of sub-areas like cut and loose flower production (1.93) followed by Processing and marketing (1.93), Post-harvest product preparation (1.90), Training/ Pruning/ Pinching/ Disbudding (1.84) and floral design and decoration (1.84). In major area of poultry, maximum need was expressed in case of sub-areas like broiler production (1.66) followed by poultry nutrition (1.61), backyard poultry farming (1.60), and layer production (1.56) and artificial insemination (1.50).

Favourable Factors for Receiving Training by Rural Youth

Table 3 indicated that most favorable place for receiving training was village. Almost half (50 per cent) of the respondents preferred their own village for receiving training. About 49.2 per cent of the respondents perused Universities as the place of receiving training. KVKs were also preferred by 27.5 per cent youth. 36.7 per cent of the respondents required a month long training followed by two months (30.8 %). Many respondents (26.7 %) also preferred three months duration for training followed by more than three months training (1.7 %) and 3.3 per cent respondents who opted for less than month training. Less than one percent youth (0.8 %) opted for no training. Rabi season was preferred most by 63.3 per cent respondents followed by Zaid season (25.8 %) and Kharif season (10.8 %). Morning time was mostly preferred by the respondents (38.3 %) and followed by evening hours (34.2 %). Afternoon time was less preferred (27.5 %). Scientists were preferred for training by 78.3 per cent respondents followed by Grass root extension workers (50.8 per cent), Block functionaries (34.2 %) and fellow farmers (20.8 %). Regular trainings (89.2 %) and fortnight demonstrations (58.3 %) were the most required follow-up support for the respondents followed by important subsidies (53.3 %) and linkage with the institutions (39.2 %).

Table 3: Opinion about training

Preferred place for receiving training		
Category	**Frequency**	**Percentage**
Village	60	50.0
Universities	59	49.2
KVKs	33	27.5
Preferred duration for receiving training		
No training	1	0.8
Less than 1 month	4	3.3
1 month	37	30.8
2 months	44	36.7
3 months	32	26.7
More than 3months	2	1.7
Preferred season for receiving training		
Kharif	13	10.8
Rabi	76	63.3
Zaid	31	25.8
Preferred time for receiving training		
Morning	46	38.3
Afternoon	33	27.5
Evening	41	34.2
Preferred personnel for receiving training		
Scientists	94	78.3
Block functionaries	41	34.2
Grass root extension workers	61	50.8
Fellow farmers	25	20.8
Kind of follow-up support for receiving training		
Regular trainings	107	89.2
Fortnight demonstration	70	58.3
Important subsidies	64	53.3
Linkage with the institutions	47	39.2

Psychological characteristics and vocational training needs of rural youth in agriculture related areas

The results of correlation analysis indicated that a significant and positive relationship between achievement motivation and the vocational training needs of rural youth in agriculture related areas. Positive relationship between the two variables might be due to the fact that many of the rural youth were shifting their focus in self-employment in agriculture.

They wanted to learn more about the agricultural vocations available and they needed definite training for gaining new skills and rejuvenating old skills too. This result coincides with the study conducted by Howard (2004) who mentioned that there was a positive relationship in between achievement motivation and entrepreneurial needs.

Table 4: Relationship between psychological characteristics and vocational training needs of rural youth in agriculture related areas

Variables	Correlation Coefficient (r)	t cal
Innovativeness	0.040 NS	0.439
Achievement motivation	0.188*	2.079
Leadership Ability	0.073 NS	0.801
Risk preference	0.016 NS	0.176
Occupational Aspiration	0.168 NS	1.850

CONCLUSION

The involvement of certain youth in agricultural enterprises in areas such as mushroom production, bee-keeping, vermiculture, fruit and vegetable production, sericulture etc. showed their potentials. Analysis of training needs revealed that the youth gave priority to fruits and vegetable production followed by cattle farming, mushroom production, floriculture (protected cultivation), poultry, vermiculture, fishery, bee keeping, rabbit farming respectively in order of preference. Sericulture was liked by least. In terms of their preference for organizing training they preferred villages as venue of training. Training was preferred most during Rabi season for month duration. Regular training and fortnightly demonstration was preferred as follow-up support to training. The government has emphasized the need to involve youth in agriculture and has accordingly framed several policies. Scientists and demonstrators were preferred the most along with regular trainings and fortnight demonstrations. Scientists were preferred for training followed by Grass root extension workers. Regular trainings and fortnight demonstrations were the most required follow-up support for the respondents. Looking at the results, it becomes the prime responsibility of the training institutions to step ahead in a quick succession. The KVKs along with the ICAR institutes will play a vital role in developing skills of Indian youth. Enterprise training units in KVKs will also help the youth in improving their technical skills. For creation of employment opportunities training needs of rural youth are to be assessed in details. In view of the above, objective of the study is to find out the vocational training needs of rural youth in agriculture related areas for self-employment purpose. This will help in formulation of suitable entrepreneurial training modules and in designing educational training programme that can help in attracting youth in agriculture.

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