

Training Need of Farmers Related Crop Production in Madhya Pradesh

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ABSTRACT

Training needs may be defined as the gap between job requirement and job performance or in other word, gap between "What is " and "What ought to be" in term of performance on the job. A proper assessment of training needs, especially in agriculture, while planning for the training of farmer and extension personal help in conducting effective training courses. Thus data was collected from 240 respondents by interview method with the help of wheel structure and pre tested schedule. They were asked about 14 area of training in relation to crop production technology. For measuring the respondent training need in the crop production rating scale was developed for which a simple numerical scoring method was used. Each item in the scale was provided with three alternative responses. It could be concluded from finding that the area of plant protection, weed management, and seed technology ranked 1, 2 & 3 and fertilizer application , organic farming, soil water conservation ranked 4, 5 & 6 was highly needed to the farmer. The relational analysis indicate that the land holding, material passion and awareness were positively and significant correlated with training needs, seed technology, land holding and income.

Indian farmers play an important role in improving the Indian economy, in this situation it has become essential to provide proper training to the farmers to meet their needs. Today our population is one billion the fast growing population is putting tremendous pressure on the agriculture sector of the country. It is estimated that in the year of 2025 AD, we will need more than 300 million tones of food grains. Majority of the farmers in the country are illiterate or poorly educated hence, they possess a very limited knowledge about the improved farm practices. The communication media like news papers, magazines, bulletin and posters are very little use to them. Farmers training is an effective approach to teach them modern technology and also to improve their knowledge in farming, which ultimate help them in raising their standard of living. Training provides an investment in human beings and therefore the time, money an energy expanded over these are found to pay rich dividend, while imparting training the attitude of the trainers not only get sharpened but also would to suit the ever changing needs of environment, the society and the technology. In the training process the first and the most important step is the identification of training needs.

Training needs may be defined as the gap between job requirement and job performance or in other words, gap between "What is" and "What ought to be" in terms of performance on the job. A proper assessment of training needs, especially in crop production, while planning for the training of farmer and extension personal help in conducting effective training courses. To improve the efficiency level of farmers crucial step in proper assessment of training needs are necessary. Hence an attempt has been made in the present study to identify various areas of training needs of farmers with following specific objectives.

1. To asses the training needs of farmers related crop production practice.
2. To study the relationship between training needs and characteristics of farmers.

METHODOLOGY

The present investigation was conducted in vindhyan plateau. The Sagar district have eleven blocks out of which four development blocks were selected by random

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sampling techniques, two villages from each selected block were selected by applying random sampling procedure. From each village 30 respondent were selected randomly. Respondent were those who were cultivating soybean, arhar, wheat and chickpea. Thus, data was collected from 240 respondents through interview method with the help of well structured and pre tested interview schedule. Total 14 aspect of training in related to crop production technology. For measuring the respondents training need in the crop production, rating scale was developed and simple numerical scoring method was used. Each item in the scale was provided with three alternative responses i.e. most essential, essential and not essential. The total

need score of an individual was computed by summed. The mean score calculated and after mean the ranked was decided.

RESULTS AND DISCUSSION

Table- 1 : Profile of crop growers

The socio-economic profile of respondents were determine in terms of age, education, caste, family type and size, economic status, occupation annual income, materials possession and participation in social organizations.

The distribution of respondents based on their socio-

S.No.	Personality traits	Categories	No. of respondents	Percentage
1.	Age	Young	06	2.50
		Adult	165	68.75
		Old	69	28.75
2.	Family education	Low	123	51.26
		Medium	94	39.16
		High	23	9.58
3.	Caste	Upper cast	26	10.83
		Middle cast	157	65.42
		Lower cast	57	23.75
4.	Occupation	Agriculture	208	86.67
		Labour	15	6.25
		Service	03	1.25
		Business	14	5.83
5.	Income (Rs)	Below 25000	67	27.92
		25000 to 50000	89	37.08
		50000 and above	84	35.00
6.	Social participation	Low	184	76.67
		Medium	54	22.50
		High	02	0.83
7.	Extension contact	Low	152	63.33
		Medium	73	30.42
		High	15	6.25
8.	Mass media exposure	Participation	93	38.75
		Non participation	147	61.25
9.	Economic motivation	Low	01	0.42
		Medium	224	93.33
		High	15	6.25

10.	Attitude level	Favorable	05	2.08
		Highly favorable	226	94.17
		Very highly favorable	09	3.75
11.	Aspiration	Low	41	17.08
		Medium	180	75.00
		High	19	7.92

economic and socio-psychological traits have been presented in Table 1 and discussed as follows :

Age : Data in Table 1 shows the majority 68.75% belong to 26-50 years, age group while 28.75% are in age group of above 51 years and above. Only 2.50 % respondents are young below the age of under 25 years. It is very clear that adult are 26-50 year in majority.

Education : The data in table 1 revealed that educational level of the respondents is concerned about 39.16% education to within middle school, while 9.58% possessed college level of education. Low percentage is 51.26%. It is clear from the table that level of education is not so poor in the study area.

Caste : The data in table 1 revealed that majority (65.42%) belong to middle caste group (Back-ward) while, 23.75% respondents are from lower caste group (schedule caste). The 10.83% respondents are from upper caste status . It is thus, clear from the study that majority (89.17%) of the respondents belong to either middle or lower caste categories.

Occupation : Again the table-1 shows that 86.67% respondents have agriculture. The 6.25 %, 5.83% & 1.25% respondents have labour, business and service as occupation, respectively. It is thus clear that majority of the respondents Occupied the agriculture occupation about labour, business and service respectively.

Annual Income : The data in table -1 found that almost all the respondents taking side work, either farming, service, business and labour for there livelihood, therefore, over all picture shows that 35.00% respondents income range has gone about Rs. 50,000 per annum and above. While 27.92% & 37.08 respondents income in the range of Rs.25,000 or below and between Rs.25000-50,000 per annum, respectively. It is clear from the table that the income of the respondents is neither remarkable nor much bad.

Social Participation : It is evident from the table-1 that the majority (76.67%) of the respondents have no concern with any social, economic and political organization. They have not taken any type of membership in these

organizations while, 22.50% reported their membership in only one organization and very little percentage (0.83%) of respondents participations is in two or more organizations.

Extension contact : The table -1 indicates that the majority 6.25 % of the respondents are not in touch with the extension personnel i.e. SDAOs, SADOs, ADOs, SMS, ASOs & RAEOS. while, 63.33% & 30.42%, respondents have their contact with district authorities low and medium as per farming need or at the time of problems in crop production respectively.

Mass media exposure : Majority of respondents non-participation 61.25% in mass media while 38.75 % were participated in mass media. It is thus clear that television is the very popular source of the information, while demonstration either on farm or off farms of respondents are giving very good exposure.

Economic motivation : The table-1 about economic motivation of the respondents shows that majority (93.33%) has medium level while, 6.25% possessed high and 0.42% exhibited low level of economic motivation. It is clear thus from that economic motivation level of respondents is quite encouraging and pushed the farmer's towards the new thought.

Attitude towards training : The table-1 revealed that majority of the respondents (94.17%) were recorded Highly favorable. The percentage of respondents in favorable and very highly favorable was 2.08 and 3.75% respectively. It is thus, clear that majority of the respondents possessed poor thought towards training but they are interested to take skillful training in major technique of crop production technology.

Aspiration : It is evident from the table 1 that majority (75.00%) of respondents level of aspiration is quite medium, while 7.92 % highly aspired. About 17.08 % respondent's level of aspiration is quite low. The data reflect that majority of respondent's aspiration is neither high nor low thus medium.

Table- 2 : Assessment of training need

No	Training Aspect	Most essential		Essential		Not essential		Total score	Mean score	Rank
		F	P	F	P	F	P			
1	Seed Technology	114	47.50	124	51.67	2	0.83	592	2.47	III
2	Field preparation	106	44.17	129	53.75	5	2.08	581	2.42	IV
3	Sowing Methods	93	38.75	128	53.33	19	7.92	554	2.31	VIII
4	Soil Testing & Soil Sampling method	22	9.16	150	62.50	68	28.33	434	1.81	XIII
5	Fertilizer application	89	37.08	141	58.75	10	4.17	559	2.33	VI
6	Organic farming/bio farming	96	40.00	139	57.92	5	2.08	571	2.38	V
7	Intercultural operations	65	27.08	138	57.50	37	15.42	508	2.12	XI
8	Plant protection	126	52.50	112	46.67	2	0.83	604	2.52	I
9	Water management	95	39.58	127	52.92	18	7.50	557	23.32	VII
10	Weed management	121	52.42	117	48.75	2	0.83	599	2.50	II
11	Soil & water conservation	98	40.83	134	55.83	8	3.33	570	2.38	V
12	Post harvest technology	53	22.08	140	58.33	47	19.58	486	2.03	XII
13	Marketing farm produce	62	25.83	149	62.08	29	12.08	513	2.14	X
14	Agriculture implements/ tools	80	33.33	144	60.00	16	6.67	544	2.27	IX

*F= Frequency, * P = Percentage

The Table 2 reveals that the aspects were the training is most essential were plant protection technology and weed control methods, opinioned by 52.50% and 50.42% ranked Ist and IInd respectively followed by seed technology and field preparation (tillage) reported by 47.50% and 44.17% ranked IIIrd and IVth respectively. The training need was also indicates in aspect of organic/ bio farming techniques” and proper fertilizer application methods reported by 40.00% and 37.08% respondents which ranked Vth and VIth respectively. Sharma (2000) also reported that wheat grower mostly needed training in weed control, fertilizer controlling disease control and similarly Prasad (1996) Quoted that plant protection and weed management and use of agricultural implements.

The training in area of soil testing and post harvest technology is also shown essential in the table reported by 62.50% and 58.33 % respondents, respectively. Similarly the table further reveals that training need on the aspect of use of agricultural implements /equipment and machines, soil and water conservation practices were perceived as most essential but ranked IXth and Vth respectively. The intercultural operation, post harvest technology, sowing method and soil testing are as training were also important but in the opinion of the respondents ranked XIth, XIIth, VIIIth, & XIIIth, respectively. It is clear from the table that plant protection weed eradication, seed technology are the in which the training was perceived as most essential.

Table-3 : Correlation Co-efficient between training needs and independent Variables

No.	Independent Variables	Correlation with training needs			
		Seed technology	Fertilizer application	Plant protection	Training Needs (Over all)
1	Age	0.0281	-0.1068	-0.0862	-0.0312
2	Education	0.1029	-0.0613	0.2160*	0.0287
3	Land holding	0.2514**	-0.2402**	0.2024*	0.2489**
4	Income	0.1641	-0.2212*	0.1904*	0.1506
5	Material possession	0.2018*	-0.1397	0.2138*	0.1043
6	Mass media exposure	0.1472	-0.1288	0.2275*	-0.0146
7	Awareness	0.2060*	-0.0793	0.1470	0.2832**

**Significant at 1% level of probability * Significant at 5% level of probability

The study observed that (table 3) socio-economic characteristics like- land holding, material possession and awareness were positively and significantly correlated with training need of seed technology. In case of fertilizer application the characteristics namely land holding and income of respondents has negative correlation with their training needs. The education, land holding, income, material possession and mass media exposure of the respondents has positive correlation with their training needs in the plant protection. Over all training need of respondents have positive and significant association with their land holding and awareness (Gaurav and Kamble, 1995) the remaining characteristics of the respondents like age, education, income, material possession; mass media exposure did not show any correlation with their overall training needs.

CONCLUSION

It could be concluded from findings that the majority to the farmers of study area belong to the age group of 26 to 50 years, come under middle categories of the caste, primary to high school education, middle range of income, poor social participation. Most of the respondents were not in contact of extension personnel, However television and radio are popular source of information followed by newspapers and magazines. The demonstration also proved as an effective training methods among the farmers and level of economic motivation of the respondents was medium, but the attitude towards training was very favorable. The aspects of plant protection, weed management, and seed technology ranked I, II & III and

fertilizer application, organic farming, soil water conservation ranked IV,V & VI was highly needed to the farmers. The relational analysis indicated that the land holding, material possession and awareness were positively and significant correlated with training need of seed technology, land holding and income has influence in negative direction in fertilizer application, education, land holding, income, material possession & mass media exposure were positive significant in plant protection overall training need of respondents have positive and significant association with their land holding and awareness.

REFERENCES

- Sharma, R (2000) A study on training needs of wheat growers, M.Sc.Ag thesis (Unpublished) J.N.K.V.V., Jabalpur, India.
- Prasad, S.V. (1990) A study on assessment of training needs of village extension officers of Kurnool district of Andhra Pradesh M.Sc.Ag. Thesis (Unpublished) ANGRAU, Hyderabad. 28 (3) :37-40.
- Gaurav, K.V. and Kamble, L.P (1995) Training need of rural women, Maharashtra Journal of Extension Education XIV: 93-95.
- Singh Meera, Mishra Sunita & Rani, Sobha (2002) Training needs of Women in Agriculture, Indian Journal of Extension Education XXXVIII (1&2): 114-116.