

Short Note

TRAINERS' PROFILE AND TRAINING MANAGEMENT IN SELECTED AGRICULTURAL TRAINING ORGANIZATIONS IN HYDERABAD, INDIA

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Training is a planned and systematically organized effort to increase and update knowledge, improve skills, inculcate attitude, and strengthen capabilities and capacities of individuals so that they would be more productive, effective and meaningful in their pursuits. Training is a plan, procedure or mechanism for meeting the goals of individuals as well as organizational mandate. It is a systematic development of attitude and behaviour pattern required from an individual in order to perform a given task or job adequately and effectively. Training management is the process to carry out different activities under three different phases, namely planning phase, implementation phase and evaluation phase. These activities involve training needs assessment, training plan development, design, implementation, monitoring and evaluation, and follow up of training programmes by the trainers to bring desirable changes in the behaviour of trainees in the stipulated time frame.

In spite of its crucial importance in agricultural development, training has not been systematically studied to understand its various management facets and their contribution to training effectiveness. With this background, the present investigation was carried out with the following specific objectives: i) To study the profile characteristics of the trainers and their training management abilities and ii) To study different dimensions of training management in agricultural training organizations.

The study was conducted using ex-post facto research design. Survey questionnaire was used for data collection. Hyderabad, the capital of Andhra Pradesh state in India is known as 'training capital' of India' as it is home to national and international training institutions across sectors including agriculture. Five national agricultural training organizations, namely National Academy of Agricultural Research Management (NAARM), National Institute of Agricultural Extension Management (MANAGE), National Institute of Rural development (NIRD), National Plant Protection Training Institute² (NPPTI) and Extension Education Institute (EEI)

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located in Hyderabad were purposively selected to explore training management and trainers' profile. These institutions impart training in almost all key areas of agriculture to a broad spectrum of trainees. All the trainers working in the five training organizations formed the sample for the study. Trainers' profile characteristics and training management abilities were assessed using a questionnaire developed for the purpose. The questionnaire was pre-tested and validated with expert's judgement. The trainers' profile characteristics studied were age, gender, educational qualification, discipline, designation, training experience and training undergone.

Questionnaires were personally distributed among 110 trainers of the five selected training organizations, out of which 54 responded with filled-in questionnaires within the stipulated time. However, considering the completeness of the data provided, responses from 50 trainers were considered as sample for detailed analysis. Simple tabular analysis with frequencies and percentages was followed for summarizing the data and findings.

Training management was operationalized and assessed in terms of 14 training dimensions (with 160 items) such as training needs assessment, training plan development, design of training programme, objectives for training, curriculum development, training methods, training aids, supporting training material, published literature, physical facilities, training programme implementation, monitoring and evaluation, follow up of training and team work. The responses to these items were obtained on a three-point continuum namely, frequently, occasionally and rarely with corresponding scores of 3, 2 and 1, respectively. The responses, which were dichotomous in nature, were scored as 2 and 1. The respective items were summed up to obtain final score of training management. The overall training management score, thus, ranged from a minimum of 160 to maximum of 469.

Using the actual and highest possible scores, training management index were calculated by using the following formula:

$$\text{Training Management Index (TMI)} = \frac{\text{Actual training management score}}{\text{Maximum possible training management score}} \times 100$$

Finally, using mean and standard deviation, trainers were categorized in to low, medium, high categories of training management ability based on the calculated overall training management index. ANOVA was employed to know the differences in training management in agricultural training organizations.

The data on profile characteristics of trainers (demographic variables) are presented in table 1. The trainers were distributed in three categories viz., below 35 years, 35 to 50 years and above 50 years (Table 1). More than half (54%) of the respondents fell in old age group (>50 years) followed by middle age group (46%) and none of them were found in young group of below 35 years. The middle age

group refers to the productive age and the older age group refers to the experience and expertise, which are essentially required for higher level of training management. Similar findings were reported by Barth *et al.*, (1993), Herman and Gioia (2005), Ssesanga and Garrett (2005), Yadav and Mishra (2006) and Immanuel and Kanagasabapathi (2007) in their studies.

The distribution of trainers based on gender is highly skewed in favour of male trainers (88%) as there were only 12 per cent females. Hence, higher representation of female trainers in agricultural training institutions requires gender-sensitivity or special considerations. These findings were in support of Ssesanga and Garrett (2005) and Sontakki *et al.*, (2006). Crowder *et al.*, (1998) quoted that educators need to become more responsive to gender related issues by taking into account the women's role and contributions in the total agricultural industry.

It is interesting to note (Table 1) that all the trainers had Ph. D degree (100%). Hence, it can be inferred that training management requires advanced qualifications, expertise and skills to perform the role of trainer more effectively and doctorate degree might be an important requirement for higher level of training management. These findings are similar to those of Sharma (2004), Raju (2005) and Yadav and Mishra (2006) with regard to the requirement of highest degree (Ph. D).

Agriculture is an interdisciplinary science requiring subject-domain science-based knowledge, skills, and expertise in biological, geo-physical, engineering, basic sciences and humanities and social sciences. There are more than 60 specializations in which one can pursue and obtain higher degrees like PhD in agriculture and allied sciences. Keeping in view the diversity of subject matter discipline profile of the sampled trainers, it was considered to group them based on the major areas for reasons of convenience in summarizing the data. Accordingly, as seen from Table 1, majority of the trainers belonged to social sciences discipline (62%) followed by crop sciences (16%) and engineering (10%). This might be due to the fact that most of the selected training institutes cater to the training needs in the areas of agricultural extension management, rural development and agricultural research management. Obviously these training areas require specialization in social sciences like agricultural extension, agricultural economics, statistics, agri-business management, etc. The least represented disciplines of the trainers were home science, basic sciences and animal sciences (4% each). These findings were partly similar to those reported by Sontakki *et al.*, (2006) and contradictory to the findings of Yadav and Mishra (2006). A total of eight major disciplines were formed to represent large number of subjects observed among the respondents.

The profile of the trainers (Table 1) indicated that majority of them were in the senior cadre of organizational hierarchy of scientific / faculty positions represented by their designation such as Professor/Principal Scientist/Director (40%) followed by middle management cadre represented by Associate Professor/Senior Scientist/Deputy Director (36%) and junior level trainers constituted only 24 percent

represented by the designations such as Assistant Professor/Assistant Director/Scientist (Senior Scale). Raju (2005), Yadav and Mishra (2006) and Sontakki *et al.*, (2006) reported similar findings in their studies with regard to middle level positions and higher-level positions. The results of Ssesanga and Garret (2005) were contradictory with the observation of present investigation, which might be due to the lack of availability of experienced manpower in Uganda.

Effective instructional and facilitation abilities are very crucial on the part of trainers for the success of training endeavour. These abilities are developed over a period of time mostly on the job as there are hardly any specialized higher education programmes in these areas. Hence, it is obvious to observe most of the trainers in senior cadres. Further, the senior cadre has delegated authority for taking administrative and management decisions for effective training management and also to formulate training policies at state, regional and national levels.

The training experience of the trainers (Table 1) indicated that majority (52%) had over 15 years of experience followed by 32 per cent training experience of 10-15 years. Only 16 percent of the trainers had less than 10 years of experience. These observations support the finding on trainers' designation where majority are observed under senior cadre.

The involvement of senior and middle management level trainers (76%) with long training experience of more than 10 years (84%) will facilitate better training management decisions for training effectiveness. It was evident from Table 1 that over half of the sampled trainers (52%) had undergone 5-10 training programmes followed by 44 per cent who had attended up to 5 training programmes. Similar findings were reported by Raju (2005) and Yadav and Mishra (2006). It can be inferred that the trainers themselves had sufficient exposure to the trainings. The trainers, who had less exposure, should be motivated by the top management of the training institutes to undergo the management related trainings. It would help them develop their training management skills so that they can perform their role as a trainer in a better way.

More than half of the respondents (56%) opined that winter was the ideal season for conducting training programme (Table 1). This might be due to the fact that the winter season is very pleasant in Hyderabad. The combination of winter and summer was considered by 12 percent of the respondents as ideal to conduct training programmes. Ten percent of the trainers preferred either summer or combination of monsoon and winter as best seasons for conducting training programmes. The finding of winter as most favourable season for conducting trainings is similar to that of Kartikeyan and Kakoti (2005).

The surveyed trainers were assessed for their training management ability by computing training management index and were grouped in to three categories of training management abilities. It could be seen from Table 2 that majority of the trainers had medium level of training management abilities (70%) followed by high (16%) and low (14%) levels. These findings are in line with the findings reported by

Goel (2007). The results imply that there is immense scope to improve training management ability of trainers in the studied training organizations. On personal inquiry, majority of the trainers informed that they are not able to adequately attend to post training follow-up due to continuous training activities round the year. This is one area on which the trainers would want to focus in the future by reworking their training priorities.

The training management consists of different training dimensions. Depending on the training culture built over the years, different training organizations might follow the various training dimensions to varying degrees. In other words, training organizations differ in the way they approach and manage training. Hence, it is important to know if there is differential management of the various training dimensions by the selected training organizations. ANOVA (Post Hoc Test) was employed to verify the above Proposition. The following null and empirical hypotheses were formulated and the results are presented in table 3

There is no significant difference in training management mean score and different components of training management mean scores in training organizations. There is a significant difference in training management mean score and different components of training management mean scores in training organizations. It was observed from Table 3 that there was no significant difference in overall training management among various training organizations. Hence, Based on the findings the null hypothesis could not be rejected.

At the same time, in-depth analysis revealed that there was a significant difference in the training management dimensions such as design of training programme, objectives of training, published literature, physical facilities, training programme implementation and training monitoring and evaluation and their computed 'F' values were significant. Hence, empirical hypothesis is accepted by rejecting null hypothesis. These findings are similar to those of Raju (2005), who studied the training organizations in banking sector.

Therefore, it is essential to consider the significant dimensions of training management as important factors by the top management or trainers in agricultural training organizations for enhancing the quality of training. Utmost importance should be given to design of a training programme by including suitable methodology. Objectives should be formulated according to the needs of the clientele group. Relevant literature should be distributed among the participants and infrastructure should be created for smooth conduct of training programmes. Trainings should be implemented properly and appropriate strategy should be developed for monitoring and evaluation of training. Regular follow up of training is an important measure for improving the training effectiveness.

All the surveyed trainers in the selected agricultural training organizations located in Hyderabad, India had doctorate degree. Majority of them were male (88%) and were in old age group (54%). Social sciences was the most represented

discipline. Majority belonged to higher cadres like Professor/Principal Scientists/Director (40%) and more than half of them (52%) had over 15 years of training experience and had undergone 5-10 training programmes. Winter was the most preferred training season (56%). Majority (70%) of the trainers perceived that they had medium level of training management abilities. It is, therefore, suggested that the trainers should be motivated and permitted to attend the different management related trainings to update their training related skills so that they can gain the expertise in the field of training management. It is also the responsibility of the training organizations to formulate the suitable strategies to train their trainers according to the institutional mandate to achieve the organizational goals. The selected agricultural training organizations managed training uniformly as revealed by non-significant result in terms of overall training management. But, there is a significant difference in some of the training dimensions such as design of training programme, objectives of the training programme, published literature, physical facilities, training programme implementation and training monitoring and evaluation. Hence efforts should be made by appropriate organizational interventions through advanced training of trainers on prioritization of training programmes based on identified needs, clear statement of training objectives, designing programmes based on needs and objectives, literature and material support, systematic implementation, monitoring and evaluation and follow up to improve the quality in these dimensions. Further, provision of incentives and strengthening of training facilities and infrastructure are also suggested in this regard based on personal follow up with surveyed trainers.

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Table 1: Distribution of the trainers based on profile characteristics (N=50)

#	Profile	Categories	Frequency	Percentage
1	Age	< 35 years (young age)	-	-
		35-50 years (middle age)	23	46.00
		> 50 years (old age)	27	54.00
2	Gender	Male	44	88.00
		Female	6	12.00
3	Qualification	Post Doctorate Fellow	-	-
		Doctorate	50	100.00
		Post Graduate	-	-
4	Discipline	Social sciences	31	62.00
		Animal sciences	2	4.00
		Crop Sciences	8	16.00
		Engineering	5	10.00
		Home sciences	2	4.00
		Basic sciences	1	2.00
		Others	1	2.00
5	Designation	Assistant professor/ Assistant Director/Scientist (SS)	12	24.00
		Associate Professor/Senior Scientist/Deputy Director	18	36.00
		Professor/Principal Scientist/Director	20	40.00
6	Training Experience	Up to 5 years	3	6.00
		5-10 years	5	10.00
		10-15 years	16	32.00
		More than 15 years	26	52.00
7	Training undergone	Up to 5 Programmes	22	44.00
		5-10 Programmes	26	52.00
		More than 10 Programmes	2	4.00
8	Season to conduct training	Summer	5	10.00
		Winter	28	56.00
		Winter & summer	6	12.00
		Monsoon & winter	5	10.00
		Any season	4	8.00

Table 2: Distribution of the trainers based on their training management ability index (N=50)

Training management ability categories*	Frequency	Percentage
Low (<83.42)	7	14.00
Medium (83.43-88.43)	35	70.00
High (> 88.43)	8	16.00
	Mean: 83.47	SD ± 4.96

*Figures in parentheses indicate scores

Table 3: Analysis of variance of Training Management Dimensions

S. No.	Group of Organizations	Training Dimensions (Variables)	df	SS	MS	'F'
1	Between groups	Training need assessment	4	65.172	16.293	0.988
	Within groups		45	742.208	16.494	
2	Between groups	Training plan development	4	4.351	1.088	0.468
	Within groups		45	104.469	2.322	
3	Between groups	Design of training programme	4	119.756	29.939	3.157*
	Within groups		45	426.724	9.483	
4	Between groups	Objectives of training	4	24.276	6.069	5.608**
	Within groups		45	48.704	1.082	
5	Between groups	Curriculum development	4	37.493	9.373	2.062
	Within groups		45	204.587	4.546	
6	Between groups	Training methods	4	28.873	7.218	0.490
	Within groups		45	662.347	14.719	
7	Between groups	Training aids	4	49.639	12.410	0.292
	Within groups		45	1911.581	42.480	
8	Between groups	Supporting training material	4	43.708	10.927	1.498
	Within groups		45	328.292	7.295	
9	Between groups	Published literature	4	14.796	3.699	2.613*
	Within groups		45	63.704	1.416	
10	Between groups	Physical facilities	4	127.200	31.800	4.120**
	Within groups		45	347.33	7.718	
11	Between groups	Training programme implementation	4	116.105	29.026	2.484*
	Within groups		45	525.895	11.687	
12	Between groups	Training monitoring and evaluation	4	383.953	95.988	2.743*
	Within groups		45	1574.867	34.997	
13	Between groups	Follow up of training	4	94.168	23.542	1.893
	Within groups		45	559.612	12.436	
14	Between groups	Over all training management index	4	108.293	27.073	1.111
	Within groups		45	1096.488	24.366	

*Significant at 0.05 % level **Significant at 0.01 % level