

Assess the Training Needs of Extension Personnel

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Abstract: Training is an important process of capacity building of individuals so as to improve his performance in his endeavor. Training need assessment is vital to training process. Need assessment helps to identify present problems and future challenges to met through training and development. It is required to find out the needs of individual training on which they should build their professional competencies to carry out the assigned job in their organization. This study focused on exploring assessment of the training needs of extension personnel and Preferences of extension personnel about different aspects of training. The data were collected from 115 respondents i.e. extension personnel were selected for the study purpose through a paper-based questionnaire. The results identified majority (52.17 per cent) of the extension personnel expressed medium level of training needs, while, 33.05 per cent extension personnel expressed high level of training needs. The findings indicated that out of five broad training areas viz., Teaching, Research, Extension, and training, Administration and Human relation, Frontier areas of agricultural science the training content with highest training need index were Experiential learning methods (62.40 per cent), Research project management techniques, monitoring and evaluation (52.60 per cent) and Monitoring, evaluation and impact assessment of training programme (60.00 per cent), Performance based appraisal (42.90 per cent) and Climate change (53.30 per cent), respectively.

Keywords: Training, Assess, training need, extension personnel

INTRODUCTION

Training is the process of teaching the new and / or present employees the basic skills they need to effectively perform their job. Alternatively speaking, training is the act of increasing the knowledge and skill of employee for doing his / her job. Thus, training refers to the teaching and learning activities carried on for the primary purpose of helping members of an organization to acquire and also to applied the required knowledge, skill and attitude to perform their job effectively.

The extension personnel of agricultural university play a significant role in transferring new varieties and also the improved agricultural technologies of agricultural as well as horticultural crops to the farmer. The problems in boosting the production of crops are not merely due to lack of new technology and physical resources but largely

attributed to the lack of proper human resource development, management and skilled manpower. The fundamental purpose of training is to help the people to develop skills and abilities which when applied at work will enhance their average job performance training is an investment and a trainer should be able to measure the results directly in knowledge, skill, attitude, profit, well being of individuals and financial terms. Bhatnagar (1987).

The extension personnel are engaged in different extension system under the directorate of Extension of the SAUs such as ATIC, KVK's, REC's, DEC's etc. Efforts are made for transfer of agricultural technology by the extension personnel by organizing different approaches such as trainings, farmer rallies, field visits, demonstration, exhibitions etc. for benefits of various end users i.e. farmers, village level worker, entrepreneur etc. For

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increasing the effectiveness of such programmes there is need to train/ update the extension personnel (trainers) also. The obvious choice is to train the extension personnel of agricultural university. In order to make training more meaningful and effective, the training needs of extension personnel have to be established prior to the training programme so that the subject matter areas of training could be determined on the basis of perceived needs of the extension personnel in agricultural university.

METHODOLOGY

The present study was conducted in the jurisdiction of Mahatma Phule Krishi Vidyapeeth, Rahuri Dist. Ahamednagar in Maharashtra. The extension personnel of Mahatma Phule Krishi Vidhyapeeth, Rahuri who were working in Krishi Vigyan Kendras, Regional Extension Centers, District Extension Centers and Agriculture Technology Information Center were considered for the study. Thus total 115 respondents i.e. extension personnel were selected for the study purpose.

RESEARCH FINDINGS

Training needs

The present study deals with the training needs of extension personnel. An attempt has been made to study the training needs of extension personnel's in various broad areas viz., teaching, research, extension and training, administration and human relations and frontier areas of agricultural science. This data was collected and analyzed in the form of Training Need Index (TNI) and accordingly ranks were allotted.

Distribution of agricultural scientists by their extent of training needs

The data on distribution of agricultural extension personnel by their extent of training needs is presented in Table 1.

The data from Table 1 revealed that majority extension personnel (52.17 per cent) require training to medium extent, followed by 33.05 per cent in high extent category and only 15.00 per cent in low extent

Table 1
Training needs of extension personnel by their extent of training needs

Sr. No.	Category	Frequency (N = 115)	Percentage
1.	Low (Up to 79 score)	17	14.78
2.	Medium (score 80 to 93)	60	52.17
3.	High (score 94 and above)	38	33.05
	Total	115	100.00
		Mean = 86.81	S.D. = 7.21

category of training needs. This shows that majority of extension personnel requires the training to update their knowledge.

Training needs of extension personnel in the area of teaching

The data regarding training needs of extension personnel in the area of teaching is presented in Table 2.

Table 2
Training needs of extension personnel in the area of teaching

Sr. No.	Training areas	TNI(%)	Rank
1.	Experimental learning methods	62.40	I
2.	Preparation and use of ICT based teaching material	51.40	II
3.	Designing e-learning modules	44.10	III
4.	Online learning / Virtual learning	40.90	IV
5.	Classroom management	35.50	V
6.	Evaluation of teaching and learning	20.10	VI
7.	Curriculum development	17.60	VII

The data from Table 2 revealed that the extension personnel suggest major seven areas of teaching in which they require training. In these areas, the training needs on experiential learning methods (62.40 per cent) ranked first, followed by preparation and use of ICT based teaching material (51.40 per cent), designing e-learning modules (44.10 per cent), online learning / virtual learning (40.90 per cent), classroom management (35.50 per cent), evaluation of teaching and learning (20.10 per cent) and curriculum development (17.60 per cent).

From the above table it is therefore conclude that the reforms that are being implemented in education probably might had lead majority of respondents to opt for training need on experiential learning methods. Further, the use of computer in teaching is increasing day by day. Hence, extension personnel may had preferred training needs on preparation and use of ICT based teaching material and designing e-learning module.

Training needs of extension personnel in the area of research

The data on training needs of respondent extension personnel in the area of research are presented in Table 3.

Table 3
Training needs of extension personnel in the area of research

Sr. Training areas No.	TNI(%)	Rank
1. Research project management techniques	52.60	I
2. Research project monitoring and evaluation	52.60	I
3. Multi-disciplinary/ consortium based research	43.40	II
4. Methodological approach for technological assessment and refinement	40.40	III
5. Identification, documentation and validating methods of indigenous technical knowledge (ITK)	39.10	IV
6. Farming system research	25.80	V
7. Critical path methods	25.80	V
8. Participatory research methods	20.70	VI
9. Commodity market research	11.60	VII

The findings from Table 3 indicated the extension personnel suggested major nine areas of research in which they required training. In these areas, the research project management techniques (52.60 per cent) and research project monitoring evaluation (52.60 per cent) both ranked first, followed by multi-disciplinary / consortium based research (43.40 per cent), methodological approach for technological assessment and refinement (40.40 per cent), identification, documentation and

validating methods of indigenous technical knowledge (ITK) (39.10 per cent), Participatory review techniques (39.10 per cent), critical path methods (25.80 per cent), farming system research (25.80 per cent), participatory research methods (20.70 per cent) and commodity market research (11.60 per cent).

From the data it is observed that there is not much difference in the Training Need Index scores which implies the importance of training needs in the area of research. The respondents thus seem to acquire training especially in the areas of research is on project management, monitoring and evaluation. Further, they also seem to acquaint with the other emerging researchable issues.

Training needs of extension personnel in the area of extension and training

Further, an attempt has also been made for identifying training needs of scientists in the area of extension and training which is presented in Table 4

Table 4
Training needs of extension personnel in the area of extension and training

Sr. Training areas no.	TNI(%)	Rank
1 Monitoring, evaluation and impact assessment of training programme	60.00	I
2 Enhancing skills of preparing quality publication	51.90	II
3 Personality Development	50.20	III
4 Process Documentation and Communication skills	50.20	III
5 Recent advances in training methodology	35.60	IV
6 Agriculture Extension Management	19.20	V
7 Designing of ICT based modules for agriculture knowledge management	18.40	VI
8 Farm journalism	16.20	VII
9 Convergence of different stakeholders in agricultural extension	14.70	VIII
10 Geographical information system	9.80	IX

The findings from Table 4 indicated the extension personnel suggested major eleven area of extension and training in which they required

training. In these area, monitoring, evaluation and impact assessment of training programme (60.00 per cent) ranked first, followed by enhancing skills for preparing quality publications (51.90 per cent), personality development (50.20 per cent), process documentation and communication skills (50.20 per cent), recent advances in training methodology (35.60 per cent), agriculture extension management (19.20 per cent), designing ICT based modules for agriculture knowledge management (18.40 per cent), farm journalism (16.20 per cent), convergence of different stakeholders in agriculture extension (14.70 per cent) and geographical information system (9.80 per cent).

Extension education is one of the important mandates of the university along with education and research. The respondent scientists had the responsibility of extension education. Hence, they may had identified such training needs in the area of extension. Besides this, training is important component of extension education. Majority of scientists are involved in these training programmes. This might be the reason for majority of respondents inclining for training needs particularly on monitoring, evaluation and impact assessment as well as recent advances in training methodology. They had also shown inclination for training on personality development and process documentation and communication skills.

Training needs of extension personnel in the area of administration and human relation

The data on training needs of extension personnel in the area of administration and human relation are presented in Table 5.

The findings from Table 5 indicated the extension personnel suggested major nine area of administration and human relation in which they required training. In these area, performance based appraisal (42.90 per cent) ranked first, enhancing leadership traits (37.00 per cent), managerial skills for enhancing organizational effectiveness (34.40 per cent), organizational communication (32.20 per cent), human resource management (30.70 per cent), team based work culture (25.60 per cent), e-governance (20.40 per cent), motivational

Table 5
Training needs of extension personnel in the area of administration and human relation

Sr. No.	Training areas	TNI(%)	Rank
1.	Performance based appraisal	42.90	I
2.	Enhancing leadership traits	37.00	II
3.	Managerial skills for enhancing organizational effectiveness	34.40	III
4.	Organizational communication	32.20	IV
5.	Human Resource Management (HRM)	30.70	V
6.	Team based work culture	25.60	VI
7.	e-governance	20.40	VII
8.	Motivational techniques for employees	17.90	VIII
9.	Group dynamics	10.30	IX

techniques for employees (17.90 per cent) and group dynamics (10.30 per cent).

The data reveals the importance of administration and human relations in the service profession of respondent extension personnel. Thus, the training need index score for areas like performance based appraisal, leadership traits and managerial skills had been ranked higher than other.

Training needs of extension personnel in frontier area of agricultural sciences

The results on training needs of extension personnel in the frontier areas of agricultural science are depicted in Table 6.

The findings from table 6 indicated the extension personnel suggested major nine frontier area of agricultural science in which they required training. In these area climate change (53.30 per cent) ranked first, issues related to intellectual property rights (35.20 per cent), biotechnology and its application in agricultural science (24.10 per cent), strategies for enhancing food and nutritional security (20.80 per cent), nanotechnology (19.40 per cent), bioinformatics (5.90 per cent) and genome research conservation (2.70 per cent).

The data on training needs of extension personnel in the frontier areas of agricultural science indicated topics like Climate change, IPR and Biotechnology which need to be focused in the context of global scenario in agriculture. This might

Table 6
Training needs of extension personnel in frontier
area of agricultural sciences

Sr. No.	Training areas	TNI(%)	Rank
1.	Climate change	53.30	I
2.	Issues related to Intellectual Property Rights (IPR)	35.20	II
3.	Biotechnology and its application in agricultural science	24.10	III
4.	Strategies for enhancing food and nutritional security	20.80	IV
5.	Nanotechnology in agriculture	19.40	V
6.	Genome research conservation	10.90	VI
7.	Biomolecules	9.30	VII
8.	Biosecurity	5.90	VIII
9.	Human Resource Management (HRM)	2.70	IX

be reason for inclination of training needs of majority of respondent extension personnel toward of these topics.

CONCLUSION

It can be concluded that most of them possess medium level of needs but the training needs regarding experiential learning methods research project management techniques, monitoring, evaluation and impact assessment of training programme, performance based appraisal and climate change were observed to be high.

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