

## Evaluation of Competence Enhancement Programme on Motivation and Positive Thinking for Technical Officers of ICAR

Laxman M Ahire<sup>1</sup>, K.H. Rao<sup>2</sup> and Alok Kumar<sup>3</sup>

1. Asstt.Chief Technical Officer, , 2&3. Principal Scientist,  
National Academy of Agricultural Research Management, Hyderabad, Telangana.

Corresponding author e-mail: laxman.ahire1967@gmail.com

*Paper Received on July 11, 2017, Accepted on August 12, 2017 and Published Online on September 10, 2017*

### ABSTRACT

*This study focused on perception of working professionals of different research institutes of Indian Council of Agricultural Research (ICAR) representing the different level of Technical Categories on Competence Enhancement Programme. The aim of this program was to initiate the change in the participants 'attitude. The study was conducted at ICAR-NAARM and all participants who attended Competence Enhancement Programme were selected as respondents for this study. An Online questionnaire & personal interview was conducted after completion of the course. The several parameters such as overall assessment on major training dimensions, learning dimensions, session wise impact, support services and suggestions for further improvement of the programme were studied in this study. The participants were asked to rate the different training dimensions and aspects of the program on 5-point continuum by assigning the scores as 1 to 5, based on their importance. The data was tabulated and converted into averages as impact factors and wherever possible simple statistical tools such as frequency and percentages were also used for data interpretation to get the meaningful information. It was observed that majority i.e. 94.12 per cent of the participants were males, 47.06 per cent of the respondents belonged old age group, 67.65 per cent of them were post graduates in their educational qualification, 64.71 per cent of the respondents possessed the medium level of proficiency in computer skills, 47.06 per cent of the respondents were Senior Technical Officers by designation, 61.76 per cent of them had 21-30 years of the professional experience. The results revealed that the participants perceived a very high level of impact score 4.57 in various areas of major training dimensions. It can be concluded from the results that the programme was well focused on training plan, design, course content, training methods, training delivery and objectives of the programme by the concerned officials and was well executed by the programme coordinators.*

**Key words:** Perception; Working professionals; Participants 'attitude; Competence Enhancement Programme;

ICAR-National Academy of Agricultural Research Management (NAARM) mainly focus to enhance leadership, governance and innovation capacities of National Agricultural Research and Education System (NARES) through capacity strengthening, education, research, consultancy and policy support. The Academy organizes various capacity building programmes for researchers, academicians, extension personnel and other stakeholders in NARES. The Academy strives to enhance individual and institutional capacity for innovation in NARES. Considering the strategic importance of agricultural

research in food security and economic growth of the country, leadership, governance and innovation are emerging as prerequisite for the transformation of National Agricultural Research and Education System (NARES) into a more pluralistic innovation system. (Soamet al., 2016)

Training is a planned process to modify knowledge, skill, attitude or behavior through learning experience to achieve effective performance in an activity or range of activities. Its purpose, in the work situation, is to develop the abilities of the individual and to satisfy the current and future manpower needs of the organization.

Training plays an important role in achieving organizational goals leading to professional excellence and development and also helps an individual to achieve the personal and professional growth. Successful training assists the strategic requirement of the organization and also satisfies the individual needs of the employees working in it. Effective training programs help the employees to focus on their career development which in turn helps the organization to achieve the short term and long term objectives and goals. Institutes should give special attention on participation of employees in designing training methods and modules for efficiency and effectiveness. Participatory designed techniques of training program motivate the employees to learn as objectively as possible which helps them in their performance and makes them committed professionals. Post training evaluation tool is very important for designing training and also helpful to correct and improve the existing training design and future training needs and methods. The evaluation of the total value of a training system programme, is made in social as well as financial terms. Evaluation differs from validation as it assesses the overall value of the programme, and not just the achievement of its laid down objectives. It forms the part of the continuous monitoring of a programme or of the training function. (Ahire, 2009).

The role of Technical Officers in ICAR system is to support the scientists in various areas of research, extension and education. The capacity building programs are organized to improve the efficiency of Technical Officers focused on improvement in their skills, knowledge and attitude support the system to achieve the institutional goals. The objective of this study is to capture the Technical Officers perception towards competency enhancement programme to find the flaws in the exiting training in order to recommend remedial action to make programs more responsive to the changing needs of the present context.

## METHODOLOGY

The study was conducted at ICAR-NAARM. The applications were invited from more than 100 ICAR institutes to nominate their technical officers to attend the program. Out of 56 officers who have applied for the training, 34 officers were selected for the program. Before deputing these officers for training at NAARM, Hyderabad, their training needs were assessed at their

respective organizations by the Training Nodal Officers. Based on their assessment of training needs, this overall programme was planned and focused on HR practices covering the broad areas viz., perception, motivation, trust building, interpersonal relationship, positive attitude, assertiveness, team work, positive thinking and communication skills. During the implementation of program, the sessions delivered in interactive mode and apart from classroom learning, the participants learn through inter team interaction, team building exercise and institutional visits. The program design was participatory and was of 10 days' duration conducted in the month of August 2016. The sample size of the study was 34. NAARM has developed a mechanism to get an online feedback. Accordingly, the data was obtained from all 34 participants of the programme to study the problems. Other training related information was obtained based on personal interview from the participants. The participants were asked to rate the different training dimensions and aspects of the program on 5-point continuum by assigning the scores as 1 to 5 based on their importance where 1 is the lowest level of agreement and 5 is the highest level of agreement.

Some of the questions are open ended and participants were asked to express their views on different aspects of training. Finally, the data was tabulated and converted into averages as impact factors and wherever possible simple statistical tools such as frequency and percentages are also used for data interpretation to get the meaningful information and the results are presented in the results and discussion chapter.

## RESULTS AND DISCUSSION

*Socio-Economic & Personal characteristics:* The background of the respondents was studied and results are given in figure 1. It was observed that majorities (94.12%) of the participants were males and female's representation in the program is only 5.88 per cent. Regarding age, majority (47.06 %) of the respondents belonged old age group followed by middle age group (44.12%) and very few (8.82%) of the respondents were in young age group. The average age of the participants was 49.3 years which indicated their seniority & professional experience plays a role in their nomination from different ICAR institutes. The results of educational background of the participants revealed

### Socio-Economic & Personal Profile of the respondents

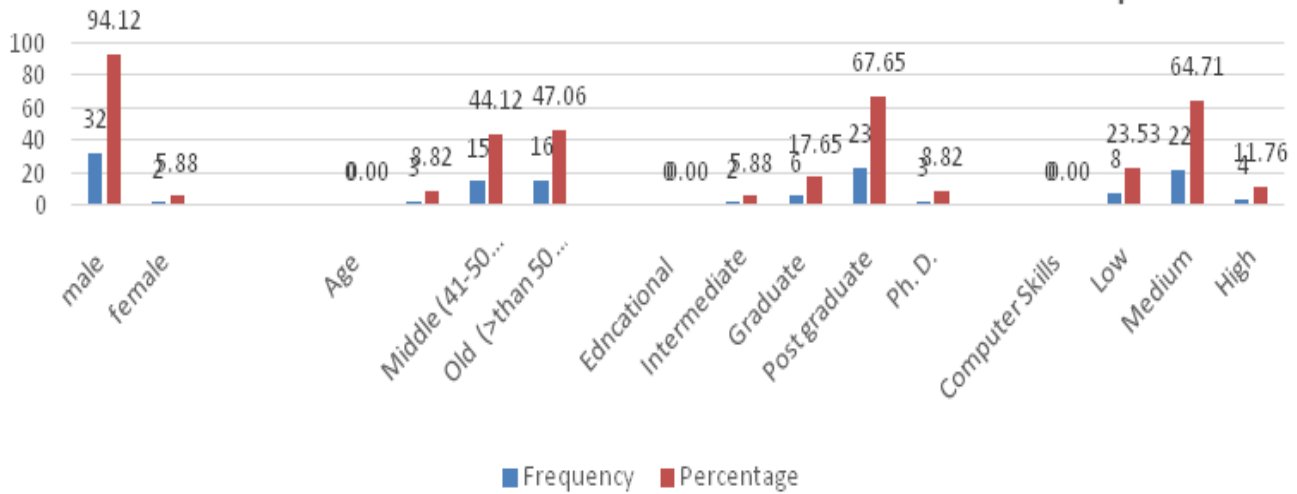


Fig 1: Socio-Economic & Personal Profile of the respondents

that majority (67.65%) of them were post graduates followed by graduates (17.65%). Among the participants 8.82 per cent were doctorates and very few respondents were intermediates (5.88%). During submission of online application for consideration of this training program, the applicants were asked to indicate the proficiency acquired by themselves in handling of computers for discharging their duties and the results indicated that majority (64.71%) of the respondents possessed the medium level of proficiency followed by one-fourth (23.53%) of them with the low level of proficiency. Only 11.76 per cent of the respondents had

the high level of proficiency in computer skills. Therefore, it can be inferred that sufficient scope exists for imparting computer skills among the technical personnel’s in the ICAR system. Technical officers are expected to compute the large among of data generated in the scientific projects and to analyze the data using statistical tools and techniques efficiently.

*Distribution of respondents based on their discipline:* Subject specialization entails that majority of the respondents belonged to the plant sciences (35.29%) followed by agricultural engineering (20.59%), social sciences (14.71%), computer applications

### Distribution of the respondents based on their discipline

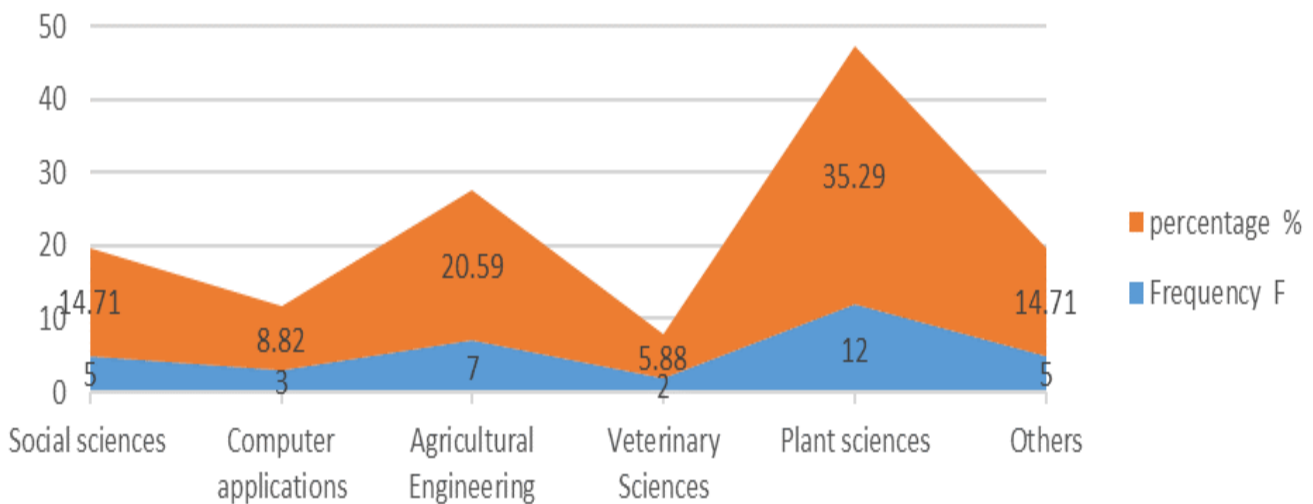
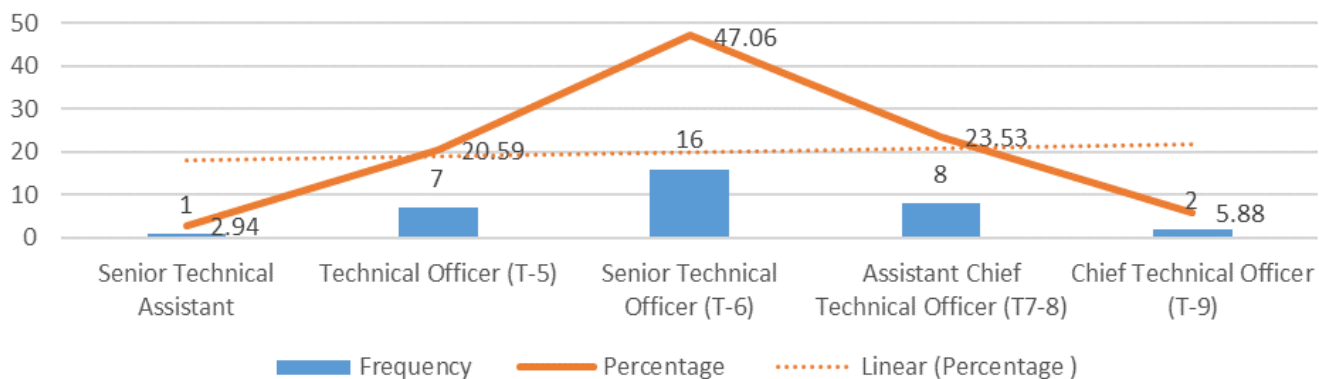


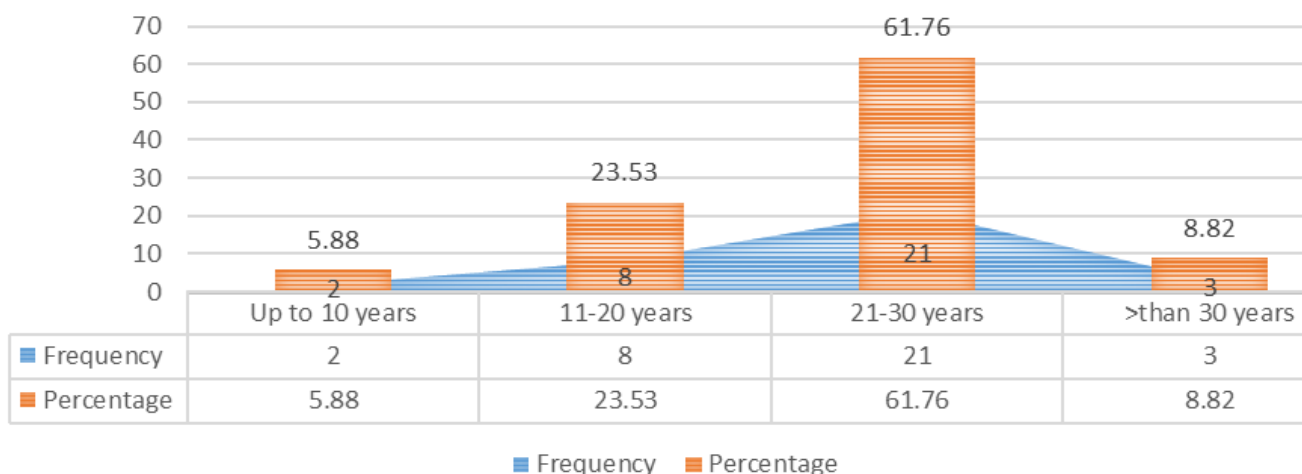
Fig 2: Distribution of the respondents based on their discipline

### Distribution of the respondents based on their designation



**Fig 3: Distribution of the respondents based on their designations**

### DISTRIBUTION OF THE RESPONDENTS BASED ON THEIR PROFESSIONAL EXPERIENCE



**Fig 4: Distribution of the respondents based on their professional experience**

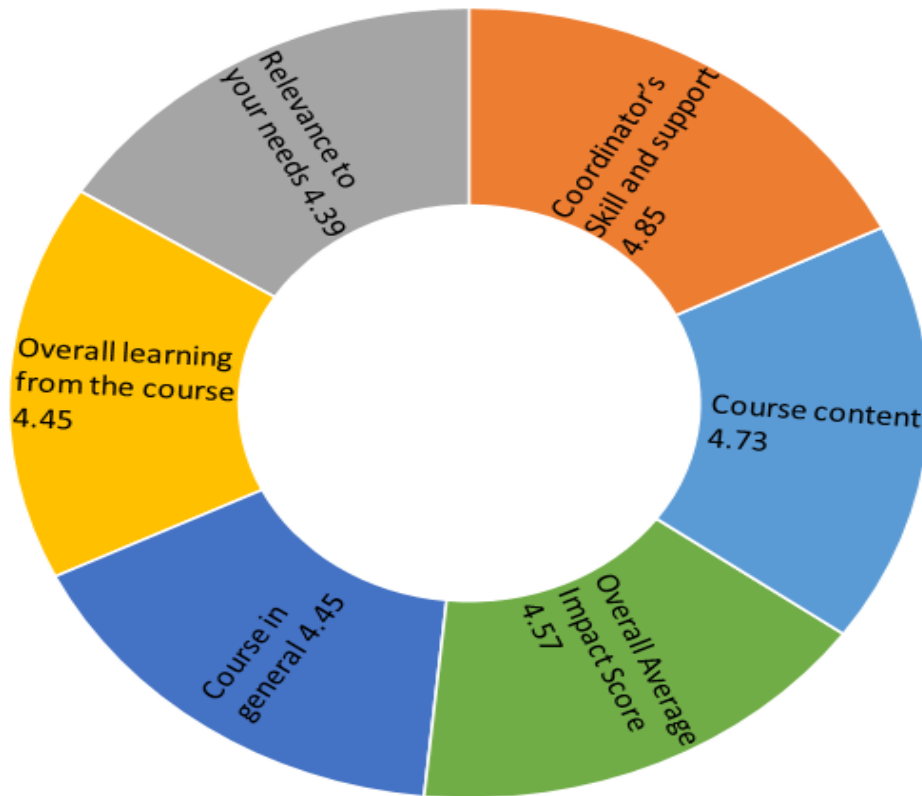
(8.82%) and veterinary sciences represented 5.88 per cent of the respondents as indicated in Fig. 2.

*Distribution of respondents based on their designation:* ICAR employees are categorized into Scientific, Technical, Administrative and Supporting services. As far as technical services are concerned the technical officers have different designations as indicated in Fig 3. It was observed that around half (47.06%) of the respondents were Senior Technical Officers followed by Assistant Chief Technical Officers (23.53%), Technical Officers (20.59%), Chief Technical Officers (5.88%) and very few were Senior Technical Assistant (2.94%). Basically the personnel appointed as Senior Technical Officer (T-6) reaches the position of Chief Technical Officer (T-9) as per the position as

per the departmental promotional policy adopted in ICAR system once in every five years. Likewise, the personnel appointed as Senior Technical Assistant (T-3) will reach to the position of Technical Officer (T-5) by promotion.

*Distribution of the respondents based on their professional experience :* The average professional experience of the respondents observed (Fig 4) to be 24 years, which indicated that the technical officers who attended the training program were quite senior in the ICAR system. Majority (61.76%) of them had 21-30 years of the professional experience followed by one-fourth (23.53%) of them with 11-20 years of experience. 8.82 per cent of the respondents had more than 30 years of experience and only 5.88 per cent of the respondents

## Overall Assessment on training dimensions - Impact Score



**Fig 5: Overall Assessment on major training dimensions of the programme**

had up to 10 years of professional experience. The overall experience profile indicated that all the category of technical officers had long professional experience in the ICAR system.

*Overall Assessment of Major Training Dimensions:* The respondents were asked to rate the major training dimensions on five-point continuum, which assigned a score ranging from one to five. A score of one refers to very low impact and a score of five refers to a high level impact in terms of changes occurred among the participants.

The results indicated in Fig 5 that the participants perceived a very high level of assessment (overall average impact score 4.57) in various areas of major training dimensions. It was also found that the major training dimension were rated in the order of Coordinators Skill and Support (4.85), followed by Course Content (4.73). Two major dimension of training namely “Overall learning from Course” and “Course in General” were rated equally as 4.45 out of 5. “Relevance to Your Need” was rated as 4.39 which helped the participants to change themselves to achieve the training goals. Therefore, it can be concluded that all the major dimensions of training were highly rated

by the respondents and it was supported with the average impact score as 4.57 which is very high by any general training evaluation standards. Personal interaction with participants indicated that the training programme has impact on different personal attributes such as knowledge, skills and attitude which would help them to perform better in their job environment. It can also be concluded that the coordinators skillfully developed the course content and the participant’s needs were considered while developing the next training program. These results are in support of the findings of *Ahire (2009)*, *Singh et al. (2012)* and *Kumar et al.(2015)*.

*Learning Aspects :* The observation on learning aspects of the training focused on eleven dimensions are presented in Table 1. The participants were asked to learning dimensions on five-point continuum similar to the major training dimensions to get the meaningful information.

The overall average learning impact score was 4.50 which are very much significant for the level of learning of participants. Among 11 learning dimensions, “Participants had enough opportunities to interact with

**Table 1. Other training dimensions related to learning aspects**

Training dimensions – Learning aspects	Impact Score*
Expectations from the Course were mostly fulfilled	4.55
I will Recommend this program to others	4.64
Proportion of exercise/case studies/examples was adequate	4.42
Topics were updated to suit the present scenario	4.55
Additional knowledge was gained due to the program	4.55
Resource material well organized / useful and adequate	4.48
Teaching aids used were well prepared	4.42
Speakers were clear in their presentation and relevant to the topics	4.42
Participants had enough opportunities to interact with the trainers	4.70
Training methodologies used were interesting and relevant for the purpose	4.24
I can use the information learned and skills acquired	4.58
Overall Average Impact Score	4.50

\*Maximum possible score = 5; Minimum possible score = 1.

the trainers (4.70)” was rated high followed by “I will recommend this program to others (4.64)”. The former dimensions were highly rated may be due to the fact that the interaction with trainees helped the participants most to learn the maximum from the programme. It motivated the participants to recommend this program to others. The next learning aspect “I can use the information learned and skills acquired (4.58)” was rated very good among the participants. The other learning dimensions such as “Expectations from the course were mostly fulfilled”, “Topics were updated to suit the present scenario” and “Additional knowledge were rated equally rated as 4.55 out of 5. These dimensions significantly contributed to the learning process among the participants in acquiring additional knowledge, which in turn changed their attitude. The other learning dimensions such as “Resource material well organized / useful and adequate”, “Proportion of exercise/case studies/examples was adequate”, “Teaching aids used were well prepared”, “Speakers were clear in their presentation and relevant to the topics” and “Training methodologies used were interesting and relevant for

the purpose” were also rated fairly well by the participants. It can be concluded from the above results that the programme was well focused on training plan, design, course content, training methods, training delivery and objectives of the programme by the concerned officials and was well executed by the programme coordinators.

*Session wise impact assessment of the training program* : The overall effectiveness of the training programme depends on the topics identified for the programme. This particular training programme meant for the technical officers of various ICAR institutes based on the identified theme “Motivation and Positive Thinking”. The schedule of the program contained 23 sessions focused on the broad topics related organizational behavior and functional skills. They include personality development, interpersonal relationship, assertiveness, time management, trust building, motivational techniques, positive thinking, oral communication, life style management and emotional intelligence etc. All these 23 sessions conducted were assessed by the participants on five-point continuum on different aspects such as “Time allocated”, “Range of coverage”, “Usefulness” and “Teaching aids”. The responses were converted into impact score averages and results were presented in Table 2 to obtain meaningful interpretation.

It was observed the session on “positive attitude to work in teams” was rated very high as 4.64 out of 5. The second most important topics were “inter team interaction” and “video for self-assessment” which were equally rated as 4.63 out of 5 on five-point rating scale. The third, fourth and fifth in the order were “interpersonal relationship”, “assertiveness at workplace” and “motivational techniques”, which were rated as 4.59, 4.48 and 4.46 respectively’ as an overall impact score. The other topics which obtained sixth to tenth position in the overall impact score are “oral communication (4.45)”, “Effective Communication-A Process Towards Motivation (4.43)”, “Emotional Intelligence –A Desired Personality Trait (4.41)”, “In Pursuit of Excellence (4.38)” and “Positive Thinking (4.35)”. The other topics such as “Team work”, “How to stay self-motivated”, “personality typing”, “Effective Time Management”, “Trust Building”, “Evaluation and designing for commanding Thinking”, “Field Visit-IIRR”, “Field Visit-IIMR and “Oral communication Theory”

**Table 2. Session wise impact assessment of the training program**

Topics / Sessions	Impact Score*			Overall Impact Score
	TA	RC	UN	
Overall Communication Theory	4.25	4.06	3.88	4.02
Effective Communication-A Process Towards Motivation	4.56	4.56	4.53	4.43
Oral Communication Practical Exercise	4.41	4.41	4.41	4.45
In Pursuit of Excellence	4.47	4.38	4.47	4.38
How to stay self-Motivated Experience sharing	4.31	4.25	4.16	4.20
Visit to IIMR-Processing Unit	4.34	4.31	4.25	4.33
Interpersonal Relationship	4.66	4.66	4.56	4.59
Personality Typing	4.5	4.0	4.28	4.29
Effective Time Management	4.44	4.19	4.09	4.24
Positive Attitude to Work in Teams	4.69	4.5	4.69	4.64
Inter Team Interaction	4.63	4.56	4.69	4.63
Visit to IIRR-Museum	4.28	4.16	4.03	4.13
Emotional Intelligence –A Desired Personality Trait	4.53	4.38	4.34	4.40
Assertiveness in Workplace	4.59	4.44	4.28	4.48
Positive Thinking	4.41	4.28	4.41	4.35
Team Work	4.38	4.38	4.31	4.27
Trust Building-Practical	4.09	4.19	3.91	4.09
Life Style Management	3.78	3.47	3.59	3.64
Video for Self-Assessment	4.63	4.66	4.63	4.63
Life is Beautiful	3.59	3.38	3.34	3.42
Mind Power	3.34	3.03	3.16	3.19
Motivational Techniques	4.59	4.47	4.41	4.46
Evaluation and Upgrade of Designing for Commanding Thinking	4.25	4.22	3.97	4.12
Average score	4.34	4.21	4.19	4.23

\*Maximum possible score = 5 and Minimum possible score = 1

TA = Time allocated; RC = Range of coverage; UN = Usefulness; TA-Teaching aids;

got the scores more than the 4.01 for overall impact. Out of 23 sessions planned for the training programme only three topics namely “Life Style Management”, “Life is beautiful” and “Mind Power” were rated low with the overall impact score of 3.64, 3.42 and 3.19 respectively. There is a scope for improvement with respect to these sessions by changing the speakers / trainers associated with the topics. Alternatively, these sessions can also be replaced with the other topics suitable to the theme of the training programme.

The data on the average impact score with respect to time allocation, range of coverage, usefulness of the topics and teaching aids utilized by the trainers 4.34, 4.21, 4.19 and 4.19 respectively as indicated in Table 2.

Therefore, it can be concluded that the design of the training, training plan, content, training method and training delivery were carefully executed by the training coordinators. It can be assumed that the training programme achieved its objectives and the training

helped the participants in learning process. The changed behaviour of the participants in turn helped the participants to gain knowledge and positive attitude to achieve the professional excellence and to fulfill the organizational goals.

*Support Services* : It was observed from Table 3 that the food served to participants during their stay at hostel was excellent (impact score 4.45) as rated by the participants. The other services such as library (impact score 4.24), medical (impact score 4.12), reception at arrival (4.09) and transport (4.06) were also rated excellent by the participants. Cleanliness of accommodation (3.67 out of 5) could be rated only very good by participants. Therefore, it can be inferred that all there is scope for improvement in cleanliness of accommodation at hostel and it needs to be addressed looked by the hostel management.

*Suggestions by the respondents for improvement of programme* : The respondents were asked to give

**Table 3. Opinion of the respondents on different logistical supporting services (N=34)**

Assessment of program on supporting services	Score*
Reception at Arrival	4.09
Cleanliness of accommodation provided	3.67
Food / Catering	4.45
Transport	4.06
Medical	4.12
Library Services	4.24
Average score	4.11

\*Maximum possible score = 5; Minimum possible score = 1

**Table 4. Suggestions by the respondents for improvement of programme (N=34)\***

Suggestions	No.	%
This program must be made mandatory for the newly recruited technical personnel's in ICAR system	02	5.88
Quizzes and games may be added in the program	01	2.94
Hands on exercises may be added more	02	5.88
Visit to local ICAR institutes not worthy	01	2.94
Assignments may be given to the participants on daily basis	02	5.88
Such programs should be started by other institutes of ICAR also	01	2.94
Visit to corporate houses may be arranged	01	2.94
Not Responded	24	70.58

\*Multiple responses reflected

suggestions for further improvement of the programme and their suggestions were listed in Table 4. Equal percentage (5.88%) of respondents suggested that “This programme must be mandatory for the newly recruited technical personnel in ICAR system”, “Hands on exercises may be added more” and “Assignments may

be given to the participants on daily basis”. Other suggestions include “Such programs should be started by other institutes of ICAR also” and “Visit to corporate houses may be arranged”. These suggestions to be considered for further improvement of the programme. The course designers in consultation with the management should make necessary changes in different dimensions of training and should take appropriate steps to improve the programme.

## CONCLUSION

Knowledge, skills and attitude are the most critical ingredients of an employee which influence the efficiency and effectiveness of performance in any organization. The quality of organization's human resources has significant bearing on competitive advantage. Training helps employees to perceive their job and role in right perspective. Effective training programs help the employees to get success in achieving organizational goals and objectives. Changing demands in performing day today's work call for explaining the other alternatives such as work based learning, coaching, mentoring and counseling are also the best way to train the employees. It can be concluded that the design of the training, training plan, content, training method and training delivery were carefully executed by the training coordinators. It can also summarize that the training programme achieved its objectives and the training helped the participants in learning process. The changed behaviour of the participants in turn helped the participants to gain knowledge and positive attitude to achieve the professional excellence and to fulfill the organizational goals.

## REFERENCES

- Ahire (2009). A Study on Management of Training in Agricultural Training Organizations. Ph. D. thesis submitted to the School of Agricultural Sciences, Yashwantrao Chavan Maharashtra Open University, Nashik.
- Kumar, Alok; Jaiswal, A.K.; Singh, A.K. and Yogi R.K. (2015). Knowledge Up-gradation of Extension Functionaries on Non Timber Forest Produce i.e. Lac via Model Training Course. *J. of Comm. Mob. and Sust. Devel.*, **10** (2) : 199-205.
- Singh, D.K. and Pandey N.K. (2012). Impact of model training course on enhancement of knowledge of extension functionaries in application of scientific potato production technologies. *Indian Res. J. Ext. Edu.*, **12** (3) : 8-12.
- Soam, SK.; Sontaki, BS; Raju, DT and Subash, SP, (2016). Annual Report 2015-16, National Academy of Agricultural Research Management (NAARM), Rajendranagar, Hyderabad 500030, Pp 1-131.

