

# TRAINING NEEDS ASSESSMENT FOR ENHANCING THE IMPACT OF FARMER TRAININGS

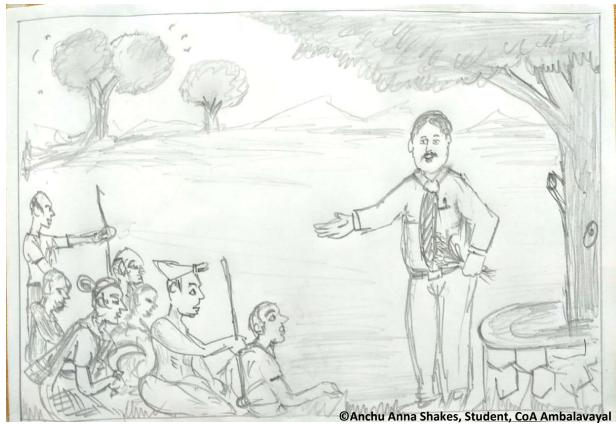


Effectiveness of famers' training depends to a large extent on an efficient assessment of their training needs. But quite often, these training needs assessments (TNA) are not undertaken. In this blog Aparna Radhakrishnan clarifies the basic concepts involved in TNA.

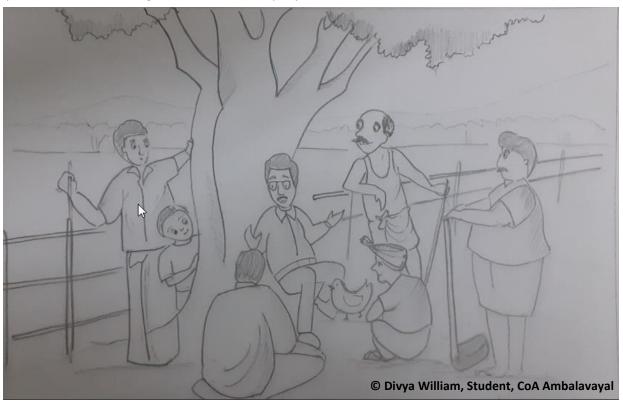
## **BACKGROUND**

"If we are going to go anywhere, we've got to have talent, and I'm going to put my money in developing talent," said McDonald's founder Ray Kroc.

Training is one of the important methods for developing and enhancing the capacities of individuals to improve their performance. Training farmers to enhance their knowledge, skills, and practices is a major investment of EAS. In India, training for farmers is offered by Krishi Vigyan Kendras (KVKs), Agricultural Technology Management Agency (ATMA), the Directorate of Extension of State Agricultural Universities (SAUs), Agriculture and Allied Departments at the state level, agribusiness companies, NGOs and Producer Organisations. Despite spending huge resources on farmer training, farming is increasingly turning out to be an unprofitable venture with youth quitting farming (India has been losing about 2000



farmers per day since 1999) and migrating to urban areas (Sainath 2013). The government's vision of doubling farmer's income will not come true if farmers are not trained effectively to apply new and relevant knowledge at the farm level (Nandi and Ravi 2019; Chand 2017). If the content and methodology of trainings are designed in a way that neither the trainer nor the trainee wants, it will not produce desirable change in the behavior of people.



## TRAINING NEEDS ASSESSMENT (TNA)

TNA is the primary step in training cycle management. 'Training Needs Assessment' is the method of determining if a training need exists and, if it does, what training is required to fill the gap. TNA seeks to accurately identify the current levels of knowledge, skills and practices existing in the target area through surveys, interview, observation, secondary data and/or workshop. The gap between the present status and the desired status may indicate problems that in turn can be translated into a training need. Training need refers to the gap between 'what is' and 'what should be' in terms of trainees' knowledge, skills, attitude and behaviour in a given situation and time.

In order to deliver effective training for farmers, it is necessary to understand the training needs of the farming community. Farmer training should be based on adult learning principles (Knowles 1950) that require a clear analysis of the situation and provision of need- and demand-based knowledge. There is a need to identify the points of dissatisfaction with the current situation and desire for change. Each request implies that a gap or discrepancy exists between what is and what could be or should be the situation.

## TNA aims at the following situations:

- Identifying and solving the exact problem;
- Avoiding repetition, saving time and money;
- Finding out what the future problem could be and taking steps; and
- Providing learning, development or growth.

The processes of Training Needs Assessment can be divided into five steps:

- 1. Identify problems and needs;
- 2. Determine design of needs assessment;
- 3. Collect data;
- 4. Analyse data; and
- 5. Provide feedback.

### **MAJOR APPROACHES FOR TNA**

## 1. Performance Appraisal and Task Analysis

In the performance appraisal approach the actual performance in a given situation is compared with that of the ideal or expected performance. Through this approach one can link knowledge and skill requirements with respect to a particular operation, usually used easily for employees in a particular job role. In task analysis, the data pertaining to the knowledge and skill requirement for the task, their performance in the actual situation is task analysis. Task analysis is a process by which one can know the different elements or sub-tasks which are critical for its performance. The skill requirements for various tasks are distinct.

Both performance and task appraisal is relevant in group farming or joint group farming situations where the activities of each and every member determine overall efficiency. For example, if a particular group/individual is performing less, then this approach can be used to send them for specific training that will enhance the particular skill that is lacking.

The whole agricultural value chain can be divided into various tasks and the performance in each task can be analysed. Open-ended questionnaires, interview methods, case methods, direct observation and scales could be used to measure the skill gaps. The blog published by a farmer from the United States shows how well performance evaluations can be done for family members engaged in farming (Brown 2014).

## 2. Survey method

It is one of the most frequently used and the most standard method. Questions in surveys can be openended, closed-ended, projective, and ranked according to priority depending upon the respondents. In survey method, if anonymity is kept, it will increase trustworthiness and authenticity. TNA can be done based upon the individual perception and opinion of the individuals for whom the training programme is organised. This method is fast and inexpensive. Through this method we can involve a large number of people and it is less expensive for training needs identification.

Village level assessment of needs can be done through Subject Matter Specialists (SMS) of KVKs, and Agricultural Officers, and villages with similar characteristics could be grouped together. If there is heterogeneity, groups can be formed within villages and similar groups can be clubbed for trainings. Survey is a very efficient tool and can be done at least twice a year. One can be done when funding is sanctioned and the second can be done after the training is over. The participants can rightly assess whether the training was need-based or what more they need in upcoming trainings.

- Questionnaire for farmers should be developed by following a step-by-step procedure (Marshal 2010);
- Questionnaire should be in prepared in the local language;
- The questions should be simple and straightforward;
- Sufficient time should be given for the farmers to read, comprehend and answer the questions.
   An introduction should either be given orally or in a written format about the confidentiality and purpose of the data collected.

# 3. Competency Study

In this approach, the first step is to measure the different qualities needed for the individual to perform his/her job effectively and efficiently. Based on the qualities required the individuals are further analysed in terms of their competencies in performing the job. The competencies in terms of knowledge, skills and other qualities required need to be identified by experts.

For example, for marketing of an agricultural commodity, one requires many competency skills, including the use of ICTs. A thorough analysis is made by matching individual qualities with the expected competencies required for marketing. The same commodity may be marketed quicker and at a higher price with the appropriate market chain competencies. It includes the active involvement of experts and trainees through an open discussion approach so as to arrive at the right conclusion. This method is comparatively fast and inexpensive.

Simple Likert scale could be used to measure competency as given below.

Scale	Level of Skill		Definition of Skill
1	Not At All Skilled	:	CANNOT or NEVER perform before
2	Not Very Skilled	:	CAN perform WITH guidance.
3	Somewhat Skilled	:	CAN perform INDEPENDENTLY but require guidance at times.
4	Skilled	:	Can perform independently WITHOUT guidance.

# 4. Feasibility Analysis

Another simple but very relevant method that involves economic terms is feasibility analysis.

Under this method, the major questions to be addressed are: "Why should the training be done?" and "Is the benefit of training higher than the cost of current deficiency?" If, for example, the current

deficiency is loss in agricultural production due to the lack of skill in a particular technology then this can be assessed. The benefit of training is also calculated. If the difference amount is higher, the more feasible is the training and there is a need to conduct that training.

For example, let's imagine organisation A is looking to invest in mushroom cultivation training. First, the organisation will have to analyse what specific problem the investment will address. The teams will also take training costs into account, plus what resources will be required for training and implementation. Those conducting the study will then evaluate all the pros and cons. Finally, based on all these, they can make an informed decision on whether the investment is a go.

TNA feasibility analysis generally means financial feasibility analysis. Feasibility analysis also gives an idea of whether the training has to be replicated for similar sets of farmers.



## 5. Target Group Analysis

Target group analysis is a less popular but relevant approach. In this method, trainees for a particular training are identified. It is also necessary to find out what is known about them so as to help design and customise the training, and what other group can also benefit from the training. In other words, we may have to do the target group analysis based on the objectives of a programme if the programme comes first, or else identify the target group and formulate programmes based on their needs.

For example, if the training is given to a group that has more social contact, this group will disseminate information at a faster rate, thus benefitting other farmers. So such target groups have to be given more weightage for faster dissemination of information. Therefore the complete information of a target group gives an idea about their training needs.

## 6. Contextual Analysis

This is a very important but less used approach. Fund availability should match with the training requirement of the farmers. If the fund for the Kharif season comes towards the end of the year, it's in vain. The contextual analysis approach analyses the timing when the training be presented and what the other requirements are to deliver training successfully.

If training on a nutritional garden has to be given, it should be a few weeks prior to the vegetable growing season of a region; and the requirements of training may vary according to the target as well as type. Such data helps in designing the training and needs of farmers appropriately.

#### 7. Stakeholder Interview

It would be difficult to assign a large sample size of respondents for the assessment. Therefore, a small but representative sample size in each sector will have to be selected. The sample size could vary between 0 (if non-existent) to 10 (if various players are available within the sector), with an ideal size ranging between 3 to 5 key players whenever possible. It is important to remember that the aim of this assessment is to consult key stakeholders in relation to their views on the needs for a particular training. The outcome expected is to identify key areas of interest, and the knowledge and skills needs of relevant target groups, thereby ensuring the relevance of the modules and sessions suggested for the training programme.

#### **GROUND REALITIES**

Though I presented different approaches to TNA to help those who are keen to improve the effectiveness of training through conducting TNA, in reality, it is often ignored. The reasons include:

- The training is usually based on the specific objectives/targets to be attained, as determined by the Central or State Government or by the District Administration. For instance, it could be for a particular group of people or a region or on a topic pre-decided and the role of the training agency is confined only to getting participants and organizing the training for them.
- Training funds are exclusively kept for training implementation (travel, lodging, honorarium for resource persons, overheads, etc.) with no allocation for TNA.
- This could be intentionally ignored as trainer himself does not spend time to modify or update
  the regular and routine training content, or he/she may be unaware of methods for organising
  TNA.

In such cases, there is no mechanism to organize TNA and this often results in:

- a) similar production centric trainings without proper convergence being organised by different agencies leading to ineffective use of resources (very common when institutional convergence is poor);
- missing the major areas where farmers are interested in enhancing their capacities resulting in unintended and uninterested participants attending these trainings leading to very limited impact on the ground; and
- c) trainings get concentrated around a group of so called 'usual attendees' of training programmes and the really needy get ignored.

In such cases, the trainers may have to consider different approaches. For instance:

Case 1: The topics are decided based on the objectives of a project. In this case location, specific customization both of problem, methods and selection of participants need to be done based on TNA.

Case 2: Topic not decided. Broad objective is known as livelihood enhancement. In such a case, a detailed TNA needs to be done to decide upon the topic, methods, and selection of participants. In both cases, during TNA, the participant too could also make suggestions as to the trainer's qualifications or expertise.

Case 3: If the training arises from the occurrence of a specific problem in a locality, then the methodology and selection of the rest of the participants needs to be done based on TNA.

Keeping a register in KVKs, other SAU Centres, offices of the Department of Agriculture to collect the knowledge/training gaps of farmers and other visitors is another way of collecting their demands for training. Though it may not be very representative, it may still give some directions on the demand for training.

## **CONCLUSIONS**

TNA is the first step in organising effective training. TNA with farmers can be organized in many ways starting with document reviews and farmer interviews. A part of the training fund should be kept aside for TNA. Each approach has its own pros and cons and the trainers should use this depending on the time and resources available to undertake TNA. TNA also helps training organisations to clearly define the needs of its stakeholders. This would help them in saying 'No' to requests or orders for routine trainings which sometimes these organisations are forced to do.

## References

Barbazette J. 200. Training needs assessment: Methods, tools and techniques. Retrieved from https://epdf.pub/training-needs-assessment-methods-tools-and-techniques.html.

Brown Jolene. 2014. Strengthen your family farm through performance evaluations. Retrieved from https://www.unitedsoybean.org/article/strengthen-your-family-farm-through-performance-evaluations

Chand R. 2017. Doubling farmer's income rationale, strategy, prospects and action plan. New Delhi: Gol. NITI Policy Paper No. 1.

Farmers information need assessment. Manual retrieved from https://dae.portal.gov.bd/sites/default/files/files/dae.portal.gov.bd/publications/e52ea5d4\_bbe8\_486c \_b34f\_1cfe5c0cc36f/Extension\_Mannual\_Chapt6.pdf.

Inne Lego, Bordoloi R, Meghwal PK, Singh RJ and Singh R. 2018. Training needs assessment of agricultural extension personnel in Arunachal Pradesh, India. Int. J. Curr. Microbiol. App. Sci. 7(01):1684-1694.

Knowles MS. 1950. Informal adult education. New York: Association Press. Guide for educators based on the writer's experience as a programme organizer in the YMCA.

Manual on Training Need Assessment. Project on improvement of local administration in Cambodia. Ministry of Interior and Japan International Cooperation Agency. Retrieved from https://www.jica.go.jp/project/cambodia/0601331/pdf/english/3\_TNA\_01.pdf

Marshal Mary G. 2010. Questionnaire design asking questions with a purpose. Retrieved from https://ag.purdue.edu/extension/pdehs/Documents/tamuquestionnaire.pdf.

Nongtdu G, Bordoloi R, Saravanan R, Singh R and Singh NU. 2012. Training needs of agricultural extension personnel in Meghalaya. Indian Journal of Hill Farming 25(1):1-8.

Pandey RK et al. 2015. A critical analysis on training needs of farmers about mustard production technology. International Journal of Agriculture Sciences 7(14):892-895.

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