

FIELD EXPERIENCE TRAINING [FET] GUIDELINES

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FET COMMITTEE



**ICAR-National Academy of Agricultural Research Management
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Field Experience Training (FET) - Guidelines

FET Committee, NAARM

1. INTRODUCTION

The Foundation Course for Agricultural Research Service (FOCARS) is the flagship programme of the Academy. It is designed to serve as orientation and induction training for scientists newly recruited to Agricultural Research Service of Indian Council of Agricultural Research. The FOCARS programme is of four months duration and is organized in three phases viz., Phase – I: *Orientation and capacity building*, Phase - II: *Field Experience Training (FET)* and Phase-III: *multidisciplinary perspectives, electives and evaluation*.

1.1 RATIONALE OF FET

Stakeholder participation is a strategic research management issue for developing appropriate technologies. The changing nature of agricultural research calls for integrating perceptions and perspectives of various stakeholders across the entire value chain. Hence, there is a need to sensitize the entry-level scientists to this dynamic nature of agricultural research on one hand and to the evolving alternative approaches like livelihood options and their prioritization on the other. The FET component of FOCARS is planned to fulfill this need / objective.

1.2 CONCEPTUAL FRAMEWORK

FET, in various forms and varying durations, has been an integral part of Foundation Training since its inception. The concept as well as practice of FET has been constantly evolving based on trainees' feedback and as a sequel to the changes in the national and global research scenario, besides recommendations of various external review teams and committees.

The concept of FET is based on principles of 'seeing is believing' and 'learning by doing'. It is carried out using multi-disciplinary and participatory approach inducing participation among scientists and stakeholders to validate

and assimilate the needs & aspirations of stakeholders. FET serves as 'social laboratory' to integrate and internalize the knowledge and skills gained during 1st phase of NAARM training, and apply the same in 'real-life' situation in order to promote interaction with various stakeholders, analyze and be aware of their profiles, perceptions and problems, and integrate the same to build up need-based action proposals to address the identified and prioritized researchable issues. Conceptual framework of FET as practiced is illustrated in figure 1.

1.3 MISSION

To provide an opportunity to the scientist trainees to focus research efforts on field realities and needs of stakeholders by employing participatory rural appraisal methodology.

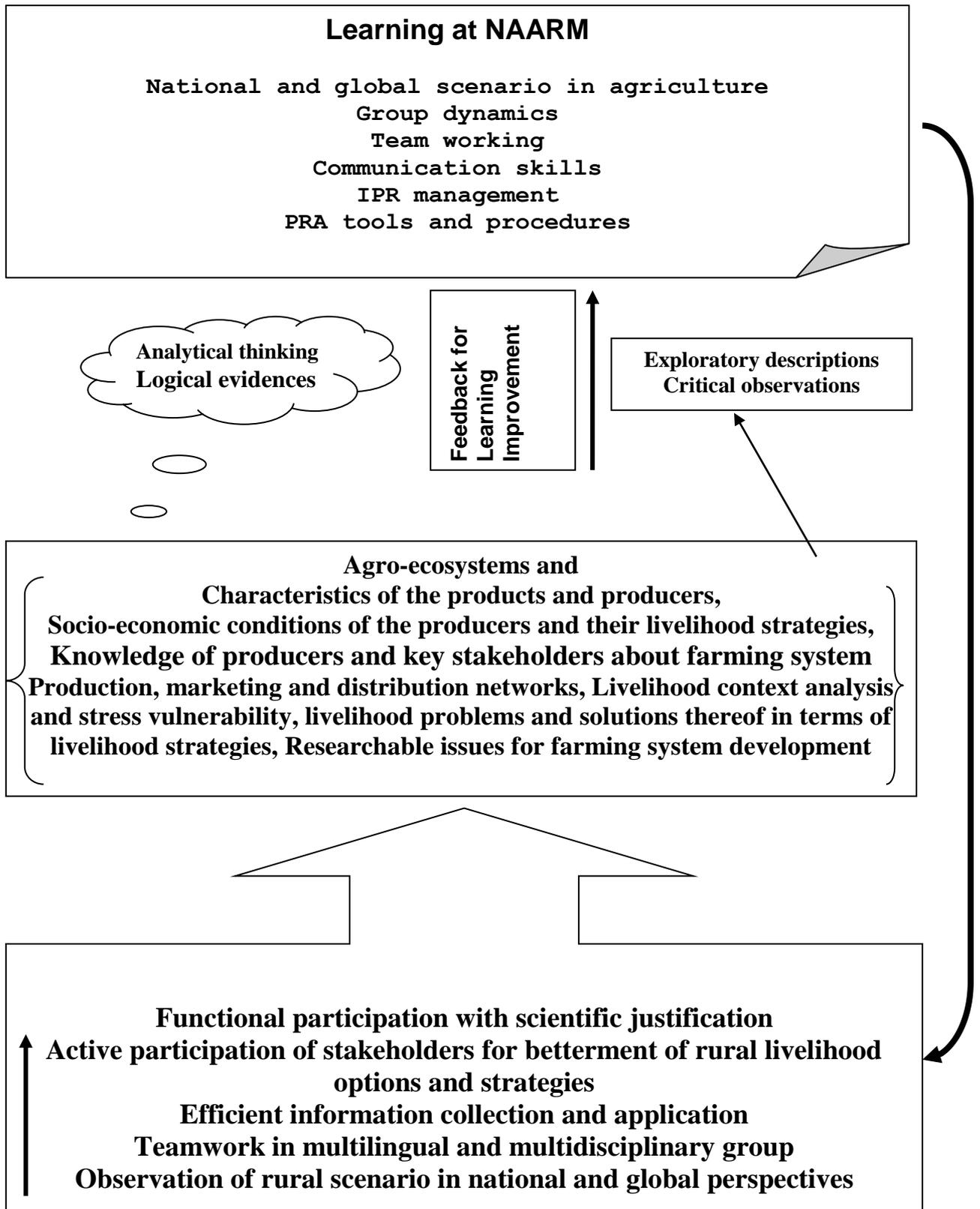
1.4 OBJECTIVES

The overall aim of the FET is to provide ARS probationers and opportunity for gaining first-hand experience and insight into agricultural and rural development scenario in general and the farming situation in respect of the theme based enterprises in particular.

The specific objectives of the FET are:

- ❖ To provide an opportunity to Scientist-trainees to interact with the farming community and gain insight into their livelihood.
- ❖ To study socio-economic implications and consequences of technologies, products and processes
- ❖ To generate a detailed account of technology products and processes, used by producers with respect to production scenario, problems, opportunities, and futuristic approaches.
- ❖ To inculcate culture of teamwork and multi-disciplinary perspective among scientist-trainees.
- ❖ To provide comprehensive insight in to the role of private industry and other stakeholders in value chain.

Fig. 1. Conceptual Framework of FET



1.5 STRUCTURE OF FET

FET shall be conducted in three segments namely:

1. *A one day mock FET*: After the theoretical orientation to the Participatory rural appraisal tools, popularly described by the acronym PRA, trainees shall be taken to a village for the mock FET, simulating the real one, to gain insight and understanding the work to be undertaken by them.

2. *First two-weeks PRA-based survey of a village identified by the FET center* for analyzing *socio-economic conditions*, problems and challenges faced by the farmers. This appraisal is to probe deeper into the problems and suggest the most feasible and practical solutions to farmers based on the situation and farming system in question.

3. Third week of FET acquaintance and association with an industry / other stakeholders termed as the industrial attachment / exposure for the purpose of vertical integration.

All these three segments exclude the travel time meant for departure from and arrival at NAARM. Normally three days of traveling time is given from NAARM to report at different centres and three days for return journey. At the end of FET, each group would prepare a comprehensive report and a working paper for necessary evaluation along with necessary documentation in the form of photographs, videos, news clippings, audio clips etc.,

2. METHODOLOGY

2.1 FET CENTER SELECTION

Consent of potential centers is sought to host the FET for ensuing FOCARS batches. Only those centers, which respond positively, are considered for posting of Scientist-trainees. Theme identified for appraisal would be the main criterion for centre selection. The final selection of FET Centers is based *by and large* on the following criteria:

- ❖ The center should have adopted villages where they made their presence felt.

- ❖ The center should not have hosted the FET during the previous 5-6 batches of FOCARS or 1 ½ year to 2 years period.
- ❖ The center should have reasonably good board & lodge, transportation, communication and documentation facilities.
- ❖ The state-wise representation of Scientist-trainees of the FOCARS.
- ❖ Languages known by trainees and gender representation / grouping.
- ❖ The likelihood of getting cooperation and academic support from centers.

2.2 GROUP CONSTITUTION AND POSTING

Keeping in view the multi-disciplinary / interdisciplinary nature of the FET work and tools / techniques used therein, following criteria are employed in constituting FET groups and their posting to different centers.

- ❖ Each group shall normally consist of five to six members. However, group size may vary depending on the actual number of Scientist-trainees in a FOCARS batch.
- ❖ There shall be, to the extent possible, equitable representation of relevant subject matter disciplines. Nature of work of the centre also to be considered.
- ❖ There shall be, at least **two Scientist-trainees** conversant with the local language / dialect in vogue, in and around the locale of the center.
- ❖ Normally, there **shall be more than one lady** Scientist-trainee in the group; posting them alone shall be avoided to the extent possible.
- ❖ In order to foster feeling of fraternity among young Scientists, half the group shall normally be from regions other than the region in which the center is located.

At the Academy, the Scientist-trainees are given adequate theoretical and practical orientation to various PRA tools and techniques to be used during FET.

2.3 REPORTING AT CENTERS

Scientist-trainees shall report in the forenoon of the first day of FET at the FET Center. Trainees shall spend twenty one days (14+7) at the FET Center to accomplish the specified work. **All days in these twenty one days are working days for the intended purpose, without any kind of leave.** They shall be relieved from the FET center in the afternoon of the last day of FET and report back at NAARM after journey period allowed. **They shall not suffix or prefix any closed holidays during this period.** On return, there shall be a center wise FET presentation on lessons learnt during the FET, the outputs, and outcomes of the exercise followed by finalization of reports and development of working papers. With respect to accommodation during FET as far as possible the center provided government accommodation will be utilized and in case the accommodation in a Centre is not available a certificate to that effect has to be obtained for the purpose of TA bill claims in a lodge/etc.,

2.4 PLAN OF WORK

A plan of work is developed to ensure efficient and timely completion of the various activities to be carried out (table 1). It is mandatory for each group to adhere to the intended plan of work.

2.5 VILLAGE SELECTION

The local FET Coordinator will select a representative village for the identified theme in advance. The following criteria shall be considered for selecting the village.

- ❖ The village shall be an adopted one by the centre with a good rapport and suitable for the theme under study.

It should be preferably within the radius of 10-15 km from the FET Center, with an easy access, either through public / private transport.

2.6 DATA COLLECTION AND ANALYSIS

- ❖ Data from both primary and secondary sources should be collected.
- ❖ It is advisable for the team to synthesize and analyze the data collected on daily basis.

- ❖ Scientist-trainees will adhere to the methodological framework discussed at NAARM.
- ❖ All members should work as a cohesive group.
- ❖ Trainees may identify relevant and different key informants for different PRA techniques.
- ❖ Trainees may use PRA principles for rapport building, interviews, facilitation, discussion, recording and wrap-up.
- ❖ The members of the group may apportion the work among themselves suitably to facilitate easy, early and efficient completion of work.

2.7 INFORMATION SHARING AND VALIDATION

The FET methodology has an inbuilt mechanism to validate the information, which has been collected, collated, synthesized and analysed in the village workshop and institute seminar.

2.7.1 Village workshop

The village workshop has to be conducted in the study village for the dual purposes of sharing their learning experiences with the villagers, and seeking suggestions and feedback on the PRA outputs for triangulation and validation. The village workshop should be organized as per the programme schedule. Deviations, if any, in scheduling of Village workshop due to specific justifiable reasons, duly approved by the FET Local Coordinator, should be reported to the FOCARS Program Directors & FET Committee well in advance.

The draft report would be revised incorporating feedback received in the seminar.

Points to be covered in Village Workshop

- ◆ Problems as perceived and experienced by farmers and probable solutions. Expectations of farmers about roles and responsibilities of government agencies – with special reference to extension workers, development workers, and scientists focusing on theme under study.
- ◆ Village development, opportunities and suggestions for the same, experiences of stake holders relevant to the them and lessons learnt.

Note: Record interactions and feedback for annexing the same in the FET report besides using them for suitably revising the report. All presentation materials used in the Village workshop should be used for FET presentations at NAARM and submitted to concerned FET faculty for evaluation

Table 1: Plan of Work

Day-wise Activities to be carried out by Scientist-trainees during Field Experience Training

Day	Work Activities	Remarks/Resource Persons
1	Reporting; Discussion with Head of FET center & local FET Coordinator ; Logistics arrangement (accommodation, communication & transport)	FET Local Coordinator & Scientist-trainees
2	Visit to Village; Meeting primary stakeholders (local officials, panchayat leaders etc.) and briefing them the purpose and objectives of FET; Collecting village basic information and developing agro-ecosystem map; Biodiversity of village and prospecting farmer's varieties for registration as per PPVRA format and discussing and recording their uses with KIs REFER ANNEXURE IN THE END), Finalizing work schedule including dates for village and institute seminar	FET Local Coordinator & Scientist-trainees & Key Informants
3	Transact walk; Agro-ecosystem analysis to develop agro ecology map	
4	Mobility Map, Seasonal Calendars' along-with gender disaggregated calendar; Time Line and Time Trend	Scientist-trainees & Key Informants
5	Documentation of ITKs, Technology map, Matrix ranking, Consequence diagram and Livelihood analysis	Scientist-trainees & Key Informants
6	Venn diagramme and social map and Bio-resource flow diagram	Scientist-trainees & Key Informants
7	Problem Identification and Ranking, Problem tree and casual diagram for the top most researchable problem identified by the farmers. Start Report writing.	Scientist-trainees & Key Informants
8 & 9	Triangulation of PRA data and information by discussion with Scientists of FET Center, Agricultural Research Stations, Krishi Vigyan Kendras, etc.; Officials of Development Departments like Agriculture, Animal Husbandry, Forestry, Fisheries, Rural Development, etc.; Officials of Non Governmental Organizations; Panchayat Officials; Dealers and representatives of Input Supply Agencies, Marketing networks etc.); Data analysis and synthesis; Report writing	Scientist-trainees & Key stakeholders
10	Report writing	Scientist-trainees & Key Informants
11	Village seminar; report writing	Scientist-trainees, Villagers, FET Local Coordinator, Officials of Development departments, NAARM Monitoring Faculty (if available)
12	FET draft Report improvement after incorporating changes as suggested at village seminar. Preparation for Institute seminar presentation.	Scientist-trainees, Key Informants, FET Local Coordinator.
13	Institute seminar; report writing FET draft Report Finalization after incorporating changes as suggested during institute seminar; Submission of FET draft Report to Local FET Coordinator at the center	Scientist-trainees, Key Informants, FET Local Coordinator, Officials of Development Departments & Monitoring Faculty (if available)
14	Prepare for industrial FET in and around the center, finalize it in consultation with local coordinator(s). Departure to the place of Industrial attachment.	Scientist-trainees & FET Local Coordinator
15-18	Arrival at place of industrial attachment. Conducting interviews, observation in the selected industry. Data analysis and synthesis; Report writing. Departure to FET centre	Scientist-trainees
19	Report finalization and printing including a report on identified farmer varieties for registration documented as per PPVFRA format	Scientist-trainees
20	Verification of all Receipts, Bills and certificates for signatures etc.	Scientist-trainees
21	Submission of FET Report (one copy) at centre, Obtaining Distance and all other prescribed Certificate(s), Certification of various bills and receipts required to settle FET advance, and Relief formalities and Departure	Scientist-trainees & FET Local Coordinator

2.7.2 Seminar at FET Center

The seminar shall be organized and presented at the FET Center as per the schedule, with the objective of sharing learning experiences with Scientists of FET Center and inviting their suggestions and feedback. FET Monitoring Faculty from NAARM may attend this seminar.

The seminar audience shall comprise the Head, the Local Coordinator and other Scientists of the FET Center, scientists of other local ICAR Institutes/State Agricultural University if available, Officials of Development Departments, Non Governmental Organizations, Key stake holders and others as advised by the Local FET Coordinator(s).

Note: The presentation material used in the FET Center seminar should also be used for the FET Presentations at NAARM. These materials should be submitted to the concerned FET faculty for evaluation.

Points to be covered in FET Center Seminar

- ◆ Objectives of FET
- ◆ Observations as to how this kind of investigation helps Scientist-trainees in their scientific career and to serve the rural people more effectively, especially for taking up need-based research projects in the future.
- ◆ Methodology: PRA approach
- ◆ Salient findings / observations of the village study
- ◆ General problems of the farmers of the study village and the top-most researchable problem identified in relation to the theme under investigation.
- ◆ Learning experience gained

Note: Record the feedback for annexing the same in the FET group report besides suitably revising the report in the light of the interactions and feedback.

2.7.3. Points to be covered in Industrial attachment training

- Focus on the top most researchable problem identified and the probable solutions suggested by various stake holders during the PRA exercise

- Interplay and linkages among the stake holders with respect to equity and profit sharing along with probable interactions and modes existing among the players
- Action plans keeping the research, extension, and developmental gaps and those which are best addressed by vertical linkages existing among stake holders during commercialization
- To understand the value chains in technology commercialization process.

3. DOCUMENTATION

It is mandatory to document the village study experience in the form of a REPORT. Documentation and report preparation is the combined responsibility of the group. They should submit soft and hard copies of the report to the FOCARS Program Directors/ FET committee chairman at NAARM on the day of reporting. A copy of final report would be submitted on the last day of FET.

The report shall contain the information on all activities carried out in the village as per plan and objectives of the study. The academy would provide technical format of the FET group report to the scientist trainees separately. Scientist trainees should strictly adhere to the format and contents under various headings and sub headings provided to them. The copyright © of this report shall lie with NAARM.

Tips for draft report preparation

- ❖ Arrange work done certificate, acknowledgment and contents page in the beginning of the report.
- ❖ Keep the report concise and clear. Techniques must be reported in the same sequence as indicated in guidelines.
- ❖ Use **Arial** font size 12, for the entire text of the report in 1.5 spacing.
- ❖ Characterize titles, subtitles and captions to tables and photographs suitably using bold, italic and underline effects.
- ❖ Organize the report in a logical and easy-to-follow manner.
- ❖ Include images of PRA exercises / ITK and biodiversity evidences / observations (a total of 36 post card size photographs may be pasted directly into the report). Photographs shall pertain to all PRA tools and techniques as listed in the work plan, interactions with organizations and

team with FET coordinator and monitoring faculty, Village workshop and institute seminar with complete views of audience. Soft copies of digital photographs (*.jpg or *.bmp) have to be submitted to NAARM on return.

- ❖ Photocopies of the PRA outputs should find a place in the report. Original maps, transparencies, digital materials should be submitted to Program directors of FOCARS
- ❖ Discuss the salient findings of the report with key informants of the village, scientists of FET Center, officials of development departments before finalizing it.
- ❖ Prepare a list of key issues and arrange them in order of relative importance.
- ❖ Discuss each sub-topic among members of the team.
- ❖ Findings and observations must be consistent and free from ambiguity.
- ❖ The report should have the following annexures:
 - ⇒ *List of farmers, key informants and villagers interviewed / interacted*
 - ⇒ *Check lists/ questionnaires / schedules used.*
 - ⇒ *List of ITKs / Flora and Fauna representing biodiversity*
 - ⇒ *Feed back obtained at village workshop and institute seminar along with attendance list.*

3.1 DEVELOPING A WORKING PAPER:

Findings of the FET exercise should preferably be synthesized as a working paper. The working paper shall consist of success stories, lessons learnt, strengths and weaknesses of various technologies, opportunities and threats for their sustainability on a time frame and other logical issues which are the aftermath of technological commercialization, adoption and so on. These papers from all groups shall be compiled and developed into a theme paper or strategy paper.

4. EVALUATION

The performance of the scientist trainees would be evaluated at the FET center and at NAARM. The purpose of the evaluation is to:

- a. Understand the experience and insight gained by Scientist-trainees on various aspects of FET.

- b. Understand the application of knowledge, experience and insights added to their scientific profession, and
- c. Understand the individual and group competency in the context of team building and group dynamics.

The FET Center Coordinator shall evaluate the performance of the Scientist trainees with respect to the overall activities carried out at FET Center and presentations in village workshop and institute seminar for 25 marks on the following basis.

- a) Overall performance during FET inclusive of General discipline & behaviour ... **15 marks**
- b) Performance in village workshop and institute seminar judged based on Subject Matter Coverage, Style of Presentation, Discussing Ability, Use of A.V. Aids ... **10 marks**

At NAARM, the FET Faculty and Monitoring Faculty will evaluate trainees on the following items:

❖ FET presentation at NAARM	...	25 marks
❖ FET Draft Report	...	50 marks
Total	...	100 marks

5. TIPS FOR SCIENTIST-TRAINEES

- ⇒ Scientist-trainees will individually submit their 'work done report' countersigned by FET Center Coordinator to FOCARS program Directors.
- ⇒ Necessary documents like distance certificate, joining report, relieving report duly signed by FET center Coordinator must also be submitted on the day of joining for NAARM to Program Directors.
- ⇒ The work done certificate should form a part of draft report in the prescribed proforma.
- ⇒ Scientist-trainees should submit their tour reports along with the TA bills and journey tickets / bills in original.
- ⇒ Soft copies of digital photographs must be submitted to the photo lab in the prescribed proforma.
- ⇒ Trainees are ***not entitled for any leave*** during FET.

6. ROLE OF FET CENTER COORDINATORS

- ◆ Overall facilitation and guidance
- ◆ Facilitating the necessary logistic support in terms of board, lodging, transport, communication, computers etc.
- ◆ Identifying village in advance for FET work.
- ◆ Helping Scientist-trainees in the identification of key informants for conduction of PRA in the village, establishing contact with the Development Departments and other key stakeholders.
- ◆ Identifying suitable agro-based input / service / processing organisations in the vicinity (preferably within 150-200 kms) of the centre for industrial attachment / exposure of trainee group for 7 Days (inclusive of travel)
- ◆ Ensuring evaluation & sending reports (in sealed cover), certification of bills through the group facilitator to NAARM
- ◆ Guiding and supporting Scientist trainees in conducting village workshop and institute seminar besides inviting all concerned.

7. ROLE OF MONITORING FACULTY

Faculty Members from NAARM shall monitor and counsel the groups by visiting the Centers. They are expected to provide on-site facilitation and guidance during their visit. They may time their visit preferably during second week of FET so that they may be in a position to attend Village workshop or Institute Seminar or both. During their visit they are expected to

- ◆ Review and monitor the work done
- ◆ Facilitate the conduct of village workshop / institute seminar / both
- ◆ Review the draft report and ensure its timely submission at NAARM.
- ◆ Facilitate /counsel on any other specific queries / problems of trainees.
- ◆ Evaluation of scientist trainees on the basis of their performance during FET and presentations at NAARM
- ◆ Monitor and report the presence and performance of Scientist trainees
- ◆ Provide feedback on FET center's suitability and identification of new potential centers.

8. FET ADVANCE: UTILIZATION AND SETTLEMENT

Each FET group shall select a group facilitator who will receive an advance of Rs.23, 000/- (Rupees Twenty three thousand only). He / she will ensure the utilization of this amount provided for the purpose in accordance with the guidelines provided under the specified heads (Table 2.) in consultation with the team members. All bills should be obtained in the name of **‘Director, NAARM’, duly countersigned by the FET Local Coordinator**, and they should be submitted for settlement to the Course Directors on the day of return from the FET.

Table 2. Head-wise breakup of the FET advance.

SNo	Head	Amount (₹)
1.	Honorarium to two (2) local FET Coordinators @ Rs.4,000/- each	8,000
2.	POL/Hiring Charges for Vehicle (Non-AC) for transportation of ARS trainees, monitoring faculty and coordinators	7,500
3.	Contingency expenditure (photographic charges, tea, refreshments and other expenses during village and institute seminars, stationery and other material purchase/ hire charges for FET work including seminars, FET report preparation charges and other miscellaneous charges)	7,500
Total		23,000 (Rupees Twenty three thousand only)

8.1. Other advances: Travel cost from FET Centre to the place of the industrial attachment shall be borne by Scientist Trainees and settled on return to NAARM along with TA advance taken for journey to the FET centre and back.

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