

STRATEGIES FOR IMPROVED & EFFECTIVE USE OF MOBILE DEMONSTRATION UNIT (MDU)



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Section I

➤ Introduction

1.1 Background

Van-based audio-visual interactive platform cutting across all projects, used as a tool to generate awareness through information dissemination, demonstrate low cost technologies and its transfer and showcase best practices to enable local communities make informed choices.

MDU has covered about 10 thousand kilometres moving around 50 remote villages in 05 talukas of Gadchiroli conducting thematic focused group on-field sessions to mobilize communities and bring them on board.

1.2 The role of Mobile Demonstration Unit (MDU) in effective outreach and IEC activities

1.2.1. To generate awareness

MDU is the tools used to create situations in which communication can take place between the rural people & the Subject Matter Specialist (SMS)/ professionals.

This is an important tool for enabling farmers to learn first-hand about improved agricultural production practices, machineries, new technologies etc.

1.2.2. Information dissemination

Information dissemination using MDU is to bring desirable changes in the behaviour

of the community/concerned persons through educational methods/scientific cultivation practices, so as to improve their general standard of living with their own efforts.

1.2.3. Demonstrate low cost technology transfer

Technology transfer is one of the most effective ways to reduce a technological gap between developing and developed communities.

Technology transfer goes far beyond a simple supply of machinery and equipment. It also involves the transmission of production methods, management and marketing strategy.

Technology identification is the main stage for technology introduction and transfer.

1.2.4. Showcase best practices

These are the methods of imparting new knowledge & skills to the rural people by drawing their attention towards such technologies, thereby arousing their interest and helping them to have a successful experience of the new practice.

Section II

➤ Action plans for wider reach

2.1 MDU Sessions

2.1.1. Intensive MDU sessions

An intensive MDU session describes the sessions that provide rural people with the access to knowledge and information they need to increase productivity and sustainability of their production systems and improve their quality of life and livelihoods.

2.1.2. Method Demonstration

It is used to show the technique of doing things or carrying out new practices e.g. Advanced crop production techniques, sustainable harvesting, jivamrut preparation, silage making etc. This method is usually used for groups of people.

2.1.3. Result Demonstration

Result demonstration is meant for proving the advantages of recommended practices and to demonstrate their applicability to the local conditions.

It is conducted by a farmer/community under the direct supervision of an SMS/professional.

It is designed to teach others, in addition to the person who conducts the demonstration.

It helps the farmers to learn by seeing & doing.

This method can be used to show the superiority of practices, such as bed

preparation, value addition, silage making, Hydroponics etc.

2.1.4. Discussions

All the farmers cannot be contacted by professionals individually because of their large number.

It is convenient & feasible to contact them in groups. This method is commonly known as group discussion. It is used to encourage & stimulate the people to learn more about the problems that concern the community through discussion.

It is a good method of involving the local people in developing local leadership & in deciding on a plan of action in a democratic way.

2.1.5. Field Trips

Conducted tours for farmers are used to convince them and to provide them with an opportunity of seeing the results of new practices and products, skills, etc. and to give them an idea regarding the suitability & application of these things in their own area.

Such tours may also be arranged to enable the rural people to visit places & institutions (connected with the problems of rural life), such as research institutions, training institutions, agricultural universities, model villages, areas of advanced developments, leading private farms, exhibitions, and agricultural mela

2.1.6. Exhibitions

An exhibition is a systematic display of information, actual specimens, models, posters, photographs, and charts, etc. in a logical sequence.

It is organised for arousing the interest of the artisans/farmers in the things displayed. It is one of the best media for reaching a large number of people, especially illiterate & semi-literate people. Exhibitions are used for a wide range of topics, such as planning a model village, showing high-yielding breeds of cattle and buffaloes, new agricultural implements and the best products of village industries.

2.1.7. Group Meetings

Under this category, the rural people or farmers are contacted in a group which usually consists of 20 to 25 persons. These groups are usually formed around a common interest.

These methods also involve a face-to-face contact with the people and provide an opportunity for the exchange of ideas, for discussions on problems and technical recommendations.

2.1.8. Technology Introduction

Appropriate rural technology focuses mainly on those technologies which are simple and within the reach of the ordinary people for their own benefit and the benefit of their community and harness the local or regional capacity to meet local needs.

Introduction of technologies which are low cost, energy-efficient and environment-friendly as well as appropriate and sustainable for application in rural areas, to increase people's participation in development and to inform, motivate, and

train rural populations, mainly at the grassroots level"

2.1.9. IEC campaigns

Campaign is used to focus the attention of the people on a particular problem, e.g. soil fertility loss, erosion, milk adulteration, use of poor quality seeds, vaccination, Neglect of crop rotation, Inadequate use of efficient farm equipment etc.

Through this method, maximum number of farmers can be reached in the shortest possible time.

It builds up community confidence and involves the people emotionally in a programme.

2.1.10. Participation in Events

Participation in the events organised locally, is an important activity for any organization. It may bring some many key benefits such as

- Ensuring our organization's presence in multiple external / relevant forums, this is vital for the Organizations image
- An opportunity to build new relationships and strengthen existing one's

Section III

➤ New aspects those can be added to the MDU to make it more effective

3.1 Soil health Campaign & Others

The soil of the field is the pivotal source of agricultural products. Soil provides nutritional elements as well as water to the plants.

95% of food sources are obtained from the soil.

Without the help of healthy soil we cannot produce healthy food grains. Soil not only produces food grains but also it ensieves rain pour water, stores carbon.

For the storage of the carbon and to combat the effects created by climate change, it is very necessary to maintain the potentiality of soil.

To make the farmers aware about their betterment and to recommend the points based on soil health so as to utilize the balanced quantity of the fertilizers as per the status of soil health, we may aims at to assess the systems related to Soil Health management. To make the farmers aware about the importance of soil health, the awareness campaigns can be conducted across the district.

3.2 Demonstrations on improved package of practices

“Package of Practices”, introduction is to enhance agricultural productivity by replacing traditional ways of farming with scientific technologies.

These practices incorporate a highly analytical approach to the cultivation of

diverse crop varieties and includes all aspects of farming activities, starting from seed selection and land preparation all the way till harvest.

These package of practices or PoP are remarkably specific to each crop.

Researchers and agricultural universities are the primary bodies that develop these practices, with the objective to make farming more efficient and sustainable in the long run.

The adequate awareness, education and the thoroughgoing implementation of POPs further ensures a bountiful harvest for farmers.

3.3. Implementation Principles

3.3.1. Design & planning

Improving the effectiveness of demonstrations requires sound design and planning. Specifically, we need to understand whether demonstrations are needed in each context, what kinds of demonstrations are needed, how many demonstrations are needed, what selection criteria is used for host farmers/community, and the locations of demonstration. We also need to understand the support structures we put in place to ensure consistency in implementation of demonstrations, including provision of oversight and reference materials for the field staff and

beneficiaries.

Here are some key constraints we can use to improve the design and planning of demonstrations we plan.

We should carry out formative research at the design phase and during demonstration to evaluate the appropriateness of using demonstrations. If demos already exist in the area, what aspects are working well and what constraints need to be addressed to improve the effectiveness of demonstrations? Are demos needed? What alternative methods exist for transferring skills and knowledge to farmers?

In implementing demonstrations, we should avoid not having a top-down approach where external actors introduce ideas into the community without prioritizing the needs and preferences of farmers.

Farmers need to be given greater say in the design and planning of demos.

Demonstrations should be kept simple so it is easy to attribute results to the promoted technology or practice.

Decisions on demonstration size and location of demonstrations should be flexible to accommodate the needs of diverse farmer groups.

Selecting sites where production conditions are most favourable makes the demo less believable. Consider selecting sites where conditions are representative or even less favourable to showcase the potential for restoration.

Starting with a few pilots and then let farmers drive the process of scaling up activity. The pilot demos should be done within resource levels that are manageable for farmers in the area.

Ensure Local Resource Persons have the capacity to support farmers as they implement any activity. Inadequate support is typically a major cause of failure.

In implementing demonstrations, we should keep in mind that the demo is a means to an end and not an end in itself. The ultimate goal is to help farmers appreciate the value of experimentation and evidence based decision-making in adopting new farming practices.

Enlist all possible key questions to ask during demonstration to ensure demonstrations more effective.

3.3.2. Stakeholder Engagement

Implementation of any demonstration often dependent on variety of Stakeholder Engagement. There is a wide array of stakeholders involved in implementation of demos, including farmers, government departments, NGOs, formal and informal private sector, and local leaders.

Periodic stakeholder mapping exercises can help assess the capacities, roles, and interests of persons involved in implementation of demonstrations, identifying gaps and align capabilities. Farmer field days are the most common coordination platform for stakeholders involved in implementation of demonstrations but more regular interactions are needed.

Bringing together all key partners regularly. This will facilitate information sharing and coordination. Many field activities often rely on farmer field days for coordination of stakeholders around demonstrations but these should be complemented with other mechanisms of interacting on a regular basis.

Involving the private sectors and link them directly with farmer groups and village agents so they can build sustainable relationships

Where possible, negotiate with private sector and input suppliers to have demo kits that can be distributed directly to farmers as a way of strengthening market access.

3.3.3. Information Management

Data and information flows serve multiple purposes within agricultural demonstration projects. World Vision explored the following questions regarding information management:

- 1) What data is typically collected at demonstration sites?
- 2) How is the data collected?
- 3) How is data utilized?
- 4) What constraints and opportunities exist in data collection and utilization demo sites?

“Data should organized for a monthly meeting; we can evaluate problems and try to adjust.

Annually, we can have look at all data and on evaluating/discussing we may know what worked and build a plan for upcoming year.”

“The information helps us to correct our mistakes we have made. It helps us to monitor the performance of the demonstration sites.”

This section outlines typical practices, and makes recommendations for improving information management in demonstrations.

To improve information management, programs should help farmers capture info in user friendly formats rather than relying on written format.

Approaches such as the use of low cost video for extension as applied by Digital Green are recommended.

Data collection templates should be standardized to make it easier to consolidate data across sites.

Sharing information with farmers after reporting period and reflecting on lessons learned from the previous season while planning the upcoming season will improve outcomes. Better use of emerging ICT platforms can improve efficiency and data quality.

3.4. Learning and facilitation methods

A variety of learning methods can be used to transfer and exchange knowledge and to develop skills. It is important to realise there is no single right method, but that the actual choice depends on several factors, like for instance the group size & composition.

The demonstration event should also contain a combination of well-considered and well-balanced activities, to support good learning conditions.

3.4.1. Group size & Composition

The decision on the group size depends on the objectives of the demonstrations and has many major impacts on the format of our demonstration event.

- **Smaller groups (8-15 participants)**

- More effective for knowledge exchange, reflection.
- Easier to manage.
- Small closed groups who meet regularly have built up trust, possibly enabling effective discussions.

- **Larger groups**

- When the objective is to raise awareness and wide knowledge transfer.
- Help to attract sponsors and farm supplying companies.
- Need good audio-visuals

3.4.2. Selecting suitable learning methods

Relate learning content to farming practice

Paying attention to the broader context. Address the impact of the demonstrated practice or innovation on the whole farm, and also discuss the wider context (e.g. societal, economic).

By providing this additional information participants can make more informed decisions on whether or not to adopt a practice or innovation.

The opportunity to visit another farm is often one of the main motivations of farmers to attend a demo, so it is important to link the demonstration content to actual farm management conditions on the host farm and provide as many practical examples as possible.

This also means paying attention to problems, failures, mistakes or the negative side effects of a practice. These problems often reflect the barriers for adopting practices. So, when they are addressed and explained how they could be dealt with, they might contribute to the adoption of practices and innovations by the participants.

Engage participants in active knowledge exchange

Offer opportunities for peer-to-peer knowledge exchange: We can increase participation in presentations and demonstrations, by e.g. actively giving participants the opportunity to share their experiences with the audience, by organising discussions with smaller numbers of participants, or by organising workshops in which active knowledge exchange is stimulated. Create opportunities for more informal knowledge exchange, by providing enough time for farmers to chat to each other, for example during lunch, drinks or workshops.

Offer a wide range of experiences and look for ways to surprise participants: Include a range of diverse activities. Examples may be field walks, observing practical demonstrations carried out by a demonstrator, and letting participants carry out hands-on activities. Such practical activities enhance learning and understanding, and also the interactions between participants. By adding a surprise effect to the demonstration activities, participants will more likely remember the information for a longer time. This surprise effect can be generated in different ways, for example, by skilful storytelling techniques, using an original engaging

activity for participants, or by revealing a product/innovation during the demo event.

Create a stimulating and familiar setting: Arrange the meeting room/space in such a way that every-

One can comfortably listen to and understand the speaker(s) and other participants.

Some ideas are:

Use microphones so that each participant can hear the speaker (in particular, when outside)

Use visual material that each participant can see (i.e. do not use posters with small font size, which may be only visible to the front row)

If indoors: put chairs in a circle/half circle, so everybody has clear sight of the other participants.

Organise a "market" with different stands/presenters so people can walk around in smaller groups.

Think about where you will hold discussions, considering that farmers tend to be more at ease in the field or barn, than in indoors.

Use a variety of learning methods

Go for a combination. Various learning methods can be employed during demonstration events, e.g. posters, presentations, experiments, discussions, workshops, etc. These methods differ in the degree of interaction between demonstrator and participants and the active engagement required by the farmers, and appeal to different learning styles. Again, the choice of what combination of learning methods is being

and the group composition and size.

Adapt to different knowledge levels and learning styles in the audience. If possible, get an idea of knowledge levels of your communities in advance. If not, start with basic information for newcomers in the field. Auditory learners prefer to hear the information.

They often talk to themselves while they are studying or thinking. This can be supported by stimulating the audience to repeat the key messages out loud, e.g. by asking them questions.

Visual learners prefer to see information and visualize the relationships between ideas, for example in info graphics, charts, schemes and colours.

Reading/writing learners prefer to read or write down information, in booklets or handouts.

Kinesthetic (Physical) learners prefer to actually perform hands-on exercises and experiments.

Make use of suitable educational tools: Educational tools are all sorts of materials used during a demonstration to facilitate learning (e.g. hand-outs, videos) to increase interaction

Visualise content: e.g. show equipment used on the farm, posters with engaging

Provide supporting information for the demonstration event: e.g. booklets with additional information on the host farm or a list of attendees.

3.5. Evaluation and Follow-up

Evaluating our demonstration event helps to improve the organisation of future events.

It is important to link the evaluation to the objective of the event: If the objective are innovation adoption, technology adoption organisers need to monitor the participant's inclination to adopt the demonstrated innovation/technology.

'Follow-up' refers to the further development and distribution of the content of the demonstration, after the event is finished, to further increase its impact. Although follow-up activities take place after the event, it is important that they are announced or discussed with the participants during the demo event.

Follow-up activities could be formal, such as organised follow-up demo events.

Informal follow-up can include telephone contact between participants, the demonstrator or field staff or participating farmers.

3.6. Sustainability strategies for demonstration

3.6.1. Sustained Resources

A common practice among implementers/organizations is providing support in the form of inputs to farmers or farmer groups hosting demonstration sites for just one or two seasons with declining support in the second season and very little to no support in the last season of the project.

This phasing out of financial support may be the biggest constraint they faced in sustaining the demonstration sites as a learning tool and the likelihood that technologies would be adopted.

If the inputs are not available to the farmers at an affordable price, chances are that the demo will not lead to sustained adoption.

To address this concern, implementers should try to work closely with suppliers, particularly private sector input companies, to build strong linkages with farmers. The idea is that once the project ends, farmers will continue to access the inputs from these companies either for demonstration or as regular purchase/sales.

3.6.2. Training and Capacity building

Demonstrations are a critical platform for knowledge transfer and skills building for farmers.

During implementation, we should look to increase the number of demonstrations and the capacity of lead farmers and field staff to continue providing the training through demonstrations.

To be sustainable, farmers and field staff need continuous support even after the project ends.

3.6.3. Motivation

Sustainability also depends on the ability of farmers to stay motivated to continue using the technology shown at a demonstration and to continue demonstrating new ideas.

This is tied to the perceived benefits farmers will get from demonstrations.

Farmers will continue scaling out adoption of practices that lead to increased yield/reduced labour burden.

3.6.4. Linkages

Refer point no. 3.3.2.