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TRAINING PACKAGE ON

FARM GUIDANCE FOR COOPERATIVE EXTENSION OFFICERS

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Course on

Training Methodology and Techniques

ICA/ILA/TUBIN CENTRE

7th March to 24th June 1977

TRAINING PACKAGE ON FARM GUIDANCE FOR COOPERATIVE EXTENSION OFFICER

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General Notes for the Staff

Title

: FARM GUIDANCE. BY AGRICULTURAL COOPERATIVE EXTENSION WORKER

Time

: A training course to cover 2 weeks of 52 days each. Programme is attached as Annexure "A".

Learners' Profile

Majority population of the developing countries of South East Asia depend on Agriculture which is in a state of underdevelopment.

The basic need is to increase the production by bringing about a change in the attitude of the farmers through proper extension service, so that they accept modern farm techniques and methods for a higher production.

The second important need is to motivate to make best use of the available resources by the farmers through the use of modern farm management skills and techniques. A well coordinated farm guidance programme through the Agricultural Cooperative Extension Staff may well be able to change the outlook of the farmer to the extent he will be receptive to. Once the farmer is convinced that the acceptance of new ideas and techniques pays

well, there must be means for informing him about them. This is the function of the extension services to convince the farmer. And once it is done the farmer himself will take initiative and seek means of improving his farm business.

The effectiveness of the such programme could be measured by the ability of extension activities to bring about a change from a state of stagnation that prevails in rural societies into a dynamism.

Components: The subject matter is treated in details in 5 major areas as follows:-

CHAPTER I : The Socio-Economic Background and its influence on agriculture

CHAPTER II : Techniques and Smills of farmmanagement practices to be used for
improving agricultural production

CHAPTER III : The Essence of Modern Farm Practices

CHAPTER IV : FARM GUIDANCE - an extension service

Learning Goals

At the end of the Training Course the learner will be able to

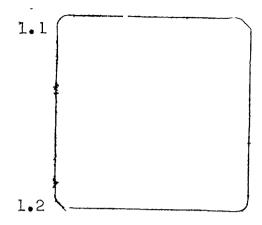
- identify socio-economic factors relevant to local situation,
- ii. describe and use modern farm management methods,

3

- iii. describe modern farm practices,
 - iv. carryout extension work relating to farm guidance in a more effective way, and
 - v. evaluate the results of his work.



BACKGROUND INFORMATION



Background information is essential because an extension worker should know:

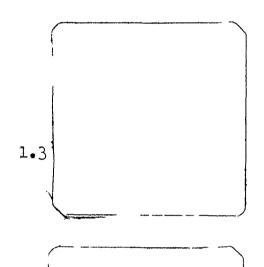
- i. What he is to do?
- ii. Where he is to do it?

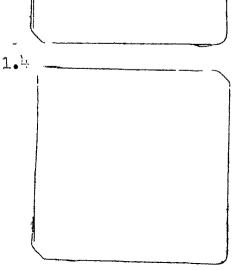
There are three major areas of background information:

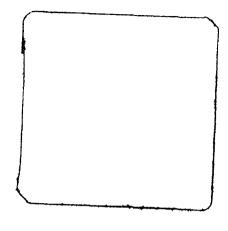
- i. Population
- ii. Land
- iii. Infrastructure
 - i) Population:

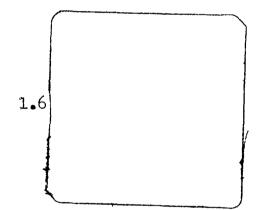
About 70% of the population in developing countries of Asia is dependent on land. The farming population is struggling against poverty and ignorance. About 40% of the population is living below the line of poverty.

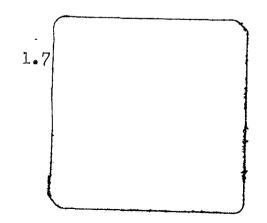
Land man ratio is very poor and dependancy load per worker is very high due to high growth rate of population.











ii) Land:

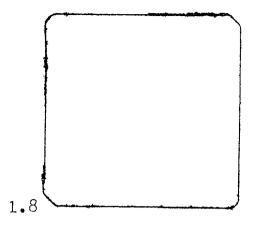
In all the developing countries of South East Asia, the disparity in the distribution of land resources are quite visible. Taking the Indian case, nearly 2/3 of the population own 1/3 of the total operated area and only 1/3 of the population in the higher size groups own 2/3 of the remaining operated area. Majority are in the operational sizegroup below 5 acres or 2 hectares.

Tenure System :

Land tenure system is quite complex where a large number of farming population could be identified as to subsist on tenant farming. 50 percent of their produce is shared by the landlords who do not share the cost of production.

Level of Farming:

Farming, basically is at subsistance level. The advantage of the new technology has remained confined among the few resourceful farmers. Production, therefore, is need oriented and



not market oriented. Agricultural practices both in outlook and application continue to be traditional in character. The basic problem, therefore, relates to low yield leading to low income.

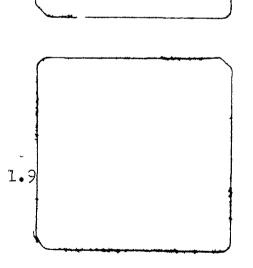
Physical infrastructure :

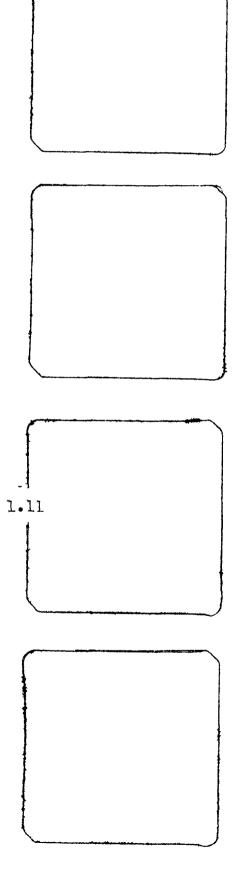
The physical infrastructure on the farms is very poor. Not even 1/3 of the area is under assured water supply. Lack of capital investment due to low income have been responsible for the poor level of development of the farms. Non-availability of resources to the majority of the farmers from financial organisation have made the situation almost static.

The poor level of communications development often restricts the farmers to market food crops. This also results in poor price for the farmer.

Institutional Infrastructure:

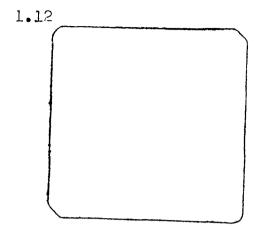
Two types of institutional structures are generally observed:

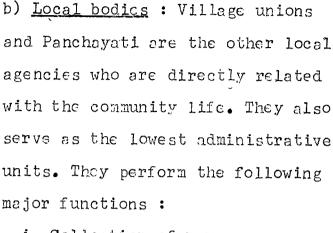


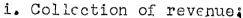


- a) Cooperative Organisations
- b) Local Bodies, such as Panchayati Samiti, village union, village council, etc.
- a) Cooperative Organisations: Cooperative societies and their leadership at the village level play vital role in the implementation of various agricultural development programme. Political and social leadership also clusters round this. The society's activities could broadly be classified as follows:
 - i. Supply of credit and other input
- ii. Buying and selling of produces;
- iii. Other services, and
 - iv. Village development.

It is essential for the extension worker to know the working of the cooperative society. As new innovation to be introduced to the farmers, will be through a group approach, cooperative organisation may provide the best ground for such experiments. It is, therefore, envisaged that a close link must be established between the extension worker and the cooperative societies and other local bodies.



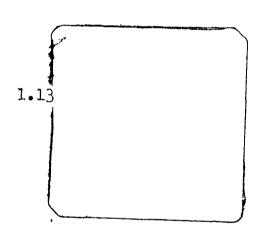




ii. Solving local disputes;

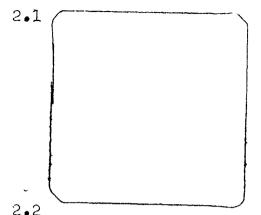
iii. Rural development work.

An extension worker must establish close links with cooperative organisations on the one hand and local bodies on the other. The closer the link the easier will be the task.

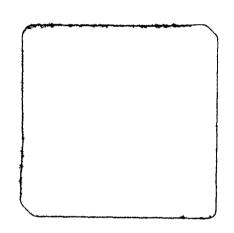


UNIT - II

FARM MANAGEMENT

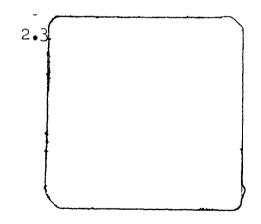


The background information gives you a picture of your working environ ment and situation. We could now share the latest knowledge and skills of improved farm practices which we want to tell to the farmers.



Let us start with the question.

What is farm management? Such farm practices which deals with the proper combination and operation of production factors, including land, labour and capital, and the choice of crop and livestock enterprises to bring about efficiency and continuous profito the farmers.



The answer lies in the ability of the farmers to combine the economics of with that of Agricultural agriculture/practices. The operationa

How to achieve this?

of the Farm Management. The following diagram I illustrates the relation-ship between farm management, agricultural economics and agricultural techniques.

part of the two becomes the function

Types of Farm Management Practices:

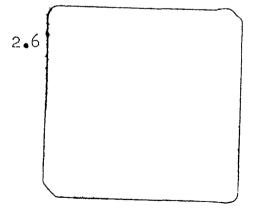
Broadly speaking, there are two

types of farm management practices:

- i. Traditional; ii. Modern
 - i. Traditional farming is self subsisting and hence its goal is utility.
- ii. Modern farming is market oriented hence its goal is profit.

Farmers' goal should not be confined to farming for utility but should achieve the goal of farming for profitability. Thus, the transformation of traditional farming to modern farming could be called as upgrading or modernisation of farm practices.

The modernisation of farm involves certain decisions by the farmer regarding the application of modern methods in farming. Farmer himself is the decision maker, neither government nor the extension worker.



Let us first look to the question why farmers' income differ ?

Farmers income or carnings depend largely on:

- a) amount of capital investment;
- b) amount of labour investment; and
- c) type of agricultural practices.

 Net income of the farmer further is the function of following elements:
 - i. Net income
- ii. Circumstances

These are the constraints:

- a) Social:
- b) Economic; and
- c) Individual

Farm decisions undergo through five different stages:

- i. Observation;
- ii. Analysis;
- iii. Choice of alternatives;
 - iv. Action on decision;
 - v. Evaluation and bearing of responsibility of results.

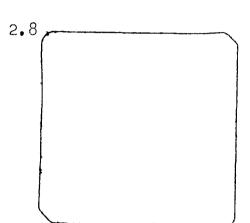
All these stages are interlinked.

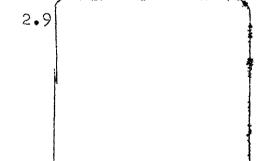
However, in the decision making

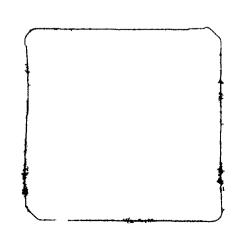
process the extension workers could

help the farmers in respect of

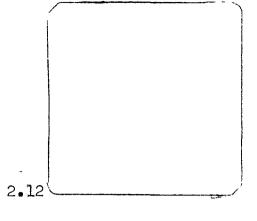
stages 1, 2 and 3 only.







2.10 Contents of decision making: There are basic issues involved in implementing farming decisions : i. What to produce? ii. How to produce (allocation of resources among various crops)? iii. Which production method to adopt ? iv. Where to buy and sale ? v. When to buy and sale. All these five issues are closely interlinked. The extension worker, with the help of the basic principles of farm management, could help the farmer in taking suitable decision. 2.11 The following are the five basic principles of farm management. i. The principle of deminishing return of factor inputs; ii. The principle of added cost and added marginal return; iii. The principle of subsistitution iv. The principle of opportunity cost; and v. The principle of time and risk comparison 13



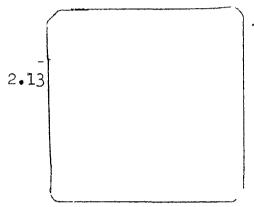
These basic principles help the extension officer in guiding the farmer to make best allocation of the resources to achieve maximum net return.

The whole process is called FARM PLANNING. Farm Planning, as such, is an educational tool for the farmer to achieve efficiency in farming. It is a continuous process.

Application of Farm Management techniques to Farm Planning:

The basic requirement is the inventory of resources: i.e. Land, labour, working capital (self and credit), live stock and machinery, etc.

and resource) differ, from one farm to other. Hence each farm plan should be tailored in a fashion to suit the needs of individual farmer. Hence the choice of modern farm practices to be applied, also become a function of



2.14



farm plan.

3.3

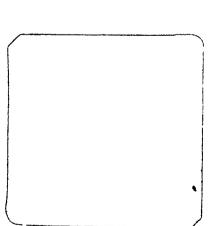
UNIT - III

THE ESSENCE OF MODERN FARM PRACTICES

3.1

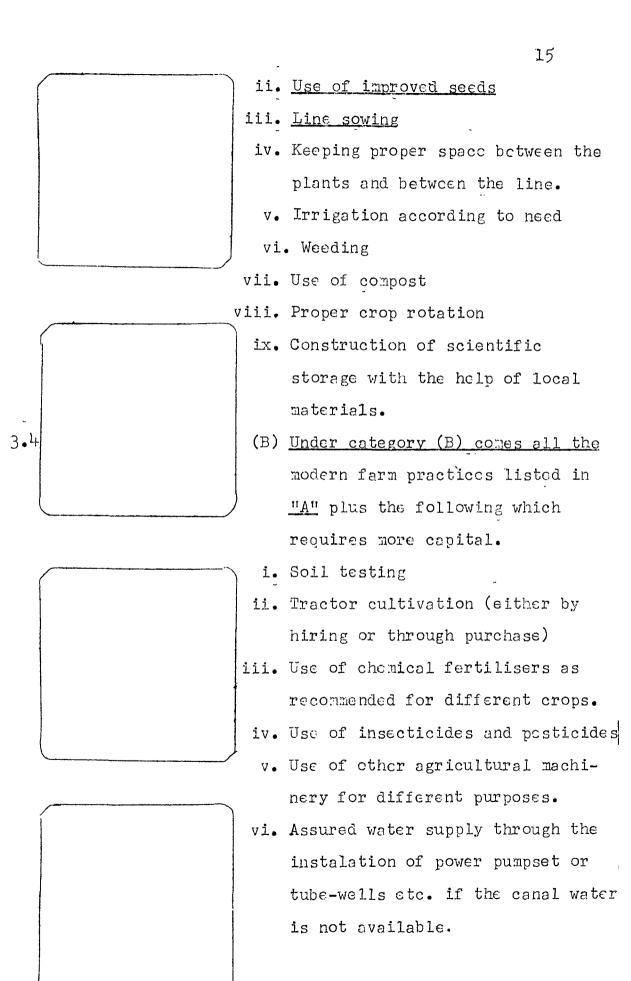
Modern farm practices could be classified into two parts.

- (A) Such farm practices which have general application both on traditional farm and on modern farm;
- (B) Such farm practices which have restricted application due to capital intensive character.
- (A) Under category (A) comes those practices which could be applied even on traditional farm without much capital investment. They are more labour intensive and hence involve less risk for the farmer. Through such methods farm productivity could be improved considerably, but it could not ensure optimum profitability.



The following od rn farm practices fall in this category:

i. Deep ploughing through iron plough



Constraints of modern farm practices:

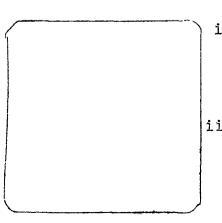
Technology is size neutral but there are many constraints.

- i. Attitude of farmer
- ii. It is capital intensive
- iii. Requires certain given level of infrastructure
 - iv. Modern HYV seeds are more
 susceptable to pest attacks
 and plant diseases.
 - v. Requires timely supply of variable inputs.

In underdeveloped agricultural country adoption of modern farm practices is a time taking process. To accelerate the pace of the adoption of modern farm practices some joint action could be initiated through the cooperatives to remove some of the constraints. Such efforts may be in the form of:

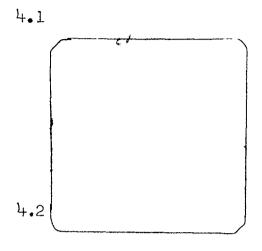
- i. Joint irrigation schemes
- ii. Supply of essential inputs such as improved seeds, fertilisers, pesticides.
- iii. Establishment of Agro-Service Coopcratives to provide the essential services related to modern farm practices.

3.6



UNIT IV

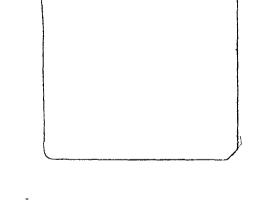
FARM GUIDANCE - AN EXTENSION SERVICE



What farm guidance aims at?

Form guidance aims at changing the attitudes and behaviour of the farmers by making them responsive towards the adoption of new technologies in farm operation.

It is essentially an extension work aimed at changing the outlook of the farmer and bringing them to the point where he will be receptive to and on his own initiative will continuously seek means of improving his farm business. The success depends on the effectiveness with which extension work relating to farm guidance is



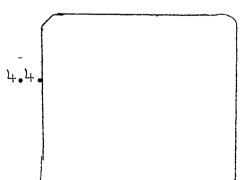
4.3

The basic question that is usually asked in farm guidance is "Where to start with ?"

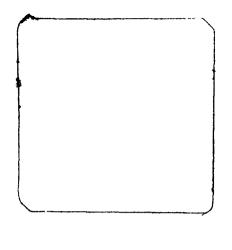
"Where to start with ?"

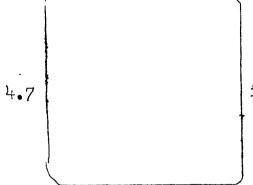
For the answer you will have to look to the basic principles of extension work as applied to farm guidance.

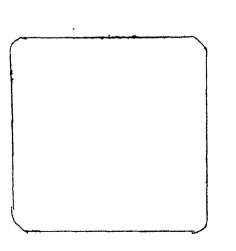
carried out.



18 4.5 The following principles may serve as a guidaline : i. Start from conditions that exist (local, regional and national) ii. Aim bosically at people's interests and needs iii. Develop programme gradually iv. Keep programmes flexible v. Make programmes broad and adaptable to the needs of the peoplc. vi. Use local leaders vii. Use local agencies viii. Work through understanding of culture ix. Work with all classes of people and use the community approach x. Help people to recognise their needs. i. To start from the conditions
 that exist : Learn through personal contact about the environment, Know the character of the rural community in general and farm families in particular.



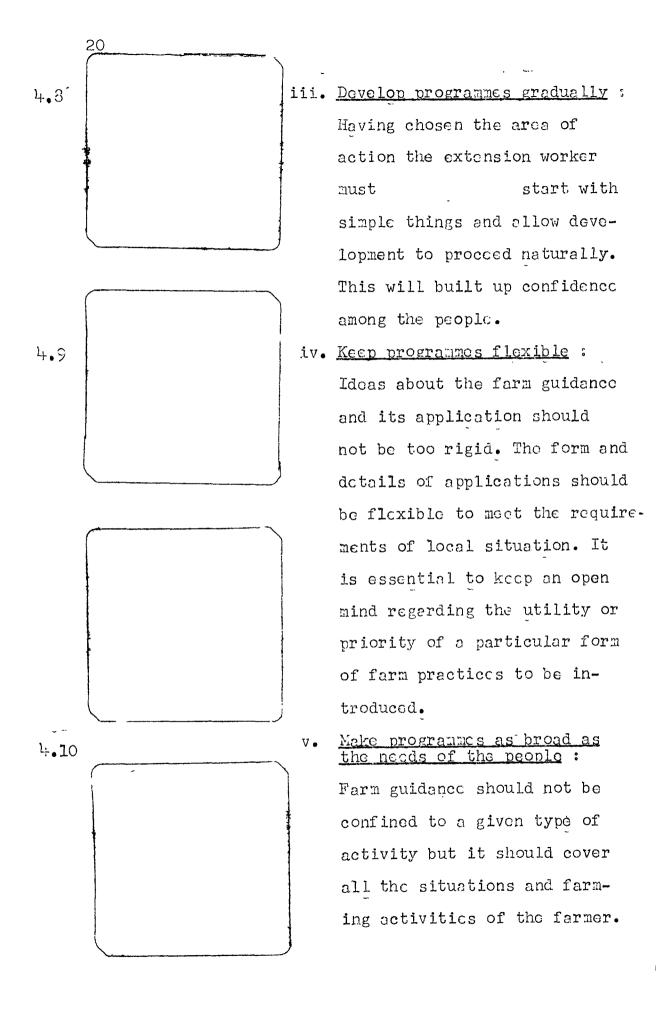


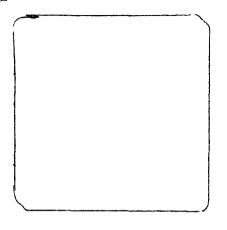


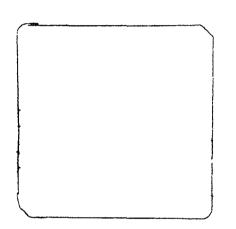
The ability of any member of a community to make independent decision is closely related to the strength of the traditional structure of the community. Due to traditional respect for the wisdom associated with old age the head of the household has the final decision towards accepting new methods towards accepting new methods and practices on form.

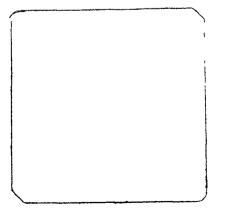
ii. Aim basically at peoples interests and needs:

Do not set out to recognise what you think they need but begin with the service for which the people feel they need you. A good rule to remember is: "Start at the point of greatest interest". For example you may feel that the farmers require knowledge about the use of fertiliser, but perhaps it may be that farmers are m-ore keen to know about the benefits of line sowing.









Vi. Use local leaders

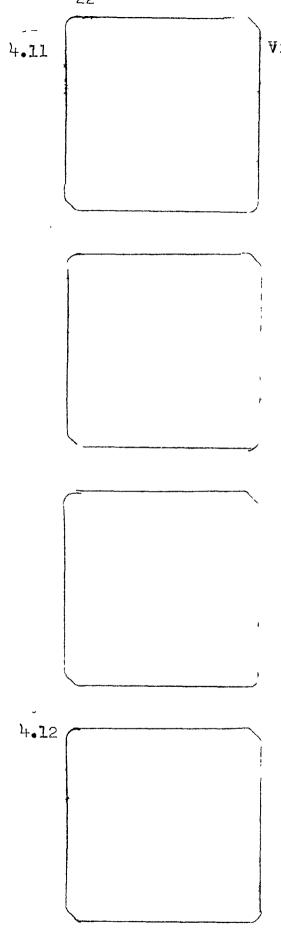
Individual decision in farming is influenced by group action. The farmer can only adopt new practices which are convincing to them because of previous experiences pre-disposing their acceptance.

Such experiences are gained from the larger society and the surrounding environment in a cummulative fashion.

It is, therefore, necessary to establish linkage between the individual, his family and society which should be mutually reinforcing and productive.

In a village working with the group is important since the ability of the individuals to take decisions by themselves may be limited.

The village leadership plays vital role in changing the attitude of the community.



Vii. Use existing local agencies:

The effective use of the local agracies could make the task of the extension worker much easier. Primary agricultural cooperative society as the local agencies provides the answer to your problems. It represents the cross section of the farming community with various cultural, economic and political environment.

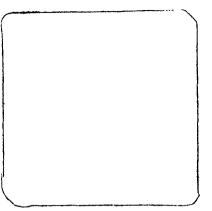
So the work must start from

your home (Society).

The Chairman and the Secretary, generally represent the leader-ship and their words carry weight. If they express their approval to certain projects, it will secure the confidence of others.

Do not ignore the importance of the local leaders outside cooperative.

Secure confidence of such traditional leaders of village chiefs also.



viii. Work through understanding of culture :

The sin of the ferm guidance is not to destroy the cultural practices in farming. Probably farmers use the best method under their given situation. It is, therefore, essential to avoid conflict regarding certain farming customs.

Take care of the appreciation and tolerance of the values and desires of the local groups.

Start your job from the least conflicting issue. Your success

4.14 ix.

Work with all classes of people:

will win confidence.

Do not confine your activities to a given class of people. Try to reach gradually to all section of the Community.

There may be some classes who can not be approached easily and hence it may be right to avoid antagonizing any group. There is likelyhood of some opposition in the beginning, particularly from

those whose interest may be affected through community development.

Through continuous propaganda and contacts try to help the people to recognise what is lacking in their lives and how conditions can be improved and environment changed.

4.16

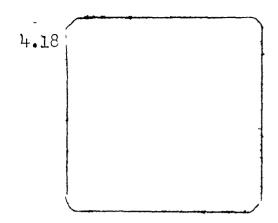
What is your Rolc as Extension Office To know your role, look to your goal. The role that you must play is that of modifying the traditional farming system in the light of your experience and knowledge acquired here, so that it will be acceptable and beneficial to the rural commu-

4.17

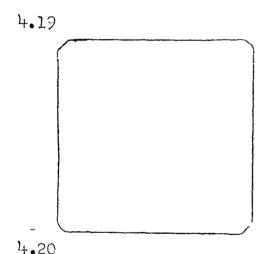
The First Task :

nity.

'Once you have identified local problems and secured the confidence of the local leaders your first task is to select the communication medias suitable to local situation.



Extension workers have limited choice. Some of the medias of mass communication like T.V., Radio and films are not of direct benefit to you as they are not under your control. Neither the overhead projector nor the slide projector you have.



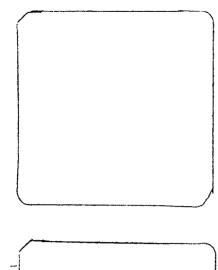
Find out your own suitable

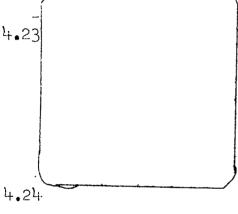
medias. Here are some which may
help in solving your problem.

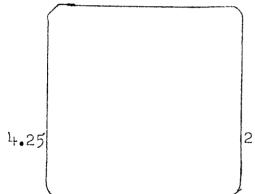
Choose them carefully and use them
after testing their utility for
your work and under your working
conditions.

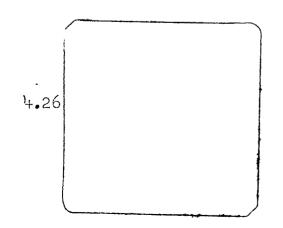
Selected medias of communication for the agricultural extension worker:

- i. Organisation of farmers meeting
- ii. Member education programme and study circles organised by the cooperative society.
- iii. Secing is believing organise demonstration farms on farmers plot.
 - iv. Use posters, charts and maps.









should be convenient and should not clash with the normal activities of the farmer. Issues for communication be placed in simple ways. Involve people into discussions - avoid controversics, use charts to bring your point.

Advantages of this method: Gives opportunity to organise group - helps in identifying problems - establishes contacts and saves time in communication.

Limitations: It is not always easy and possible to organisc meetings-response generally not encouraging-people often non-participative. It does not have lasting impact.

 Use of Member Education Programme and Study Circle of Cooperatives:

The extension worker could profitably utilise such programmes for imparting guidance about modern farm practices.

Advantages: It saves time makes the cstablishment of contacts casier. Provides basic ground for starting the work. Display of charts etc. easier.

<u>Limitations</u>: Generally one way communication - does not have lasting effect - no effective feed back.

Display of Posters - Charts and Printed Matter :

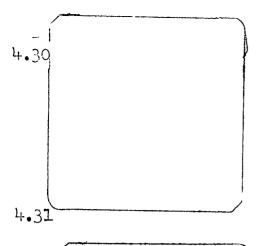
These are good propaganda medias. Posters and charts do make some impact by way of stimulating the curiosity of the farmers. Printed matters however, get confined to those who are educated - hence it has limited value. - It does not have lasting effect. Too many posters and charts some times confuses people. No feed back.

A Drganisation of Demonstration Farms

Secing is believing. In teaching
better agricultural methods one is
dealing with visible things that
can be easily demonstrated.

Since people observe, they tend
to analyse and soon they start
appreciating.

The question and answers related to organisation of demonstration farm are given below,



What is a demonstration farm ?

Demonstration form is one of the methods of convincing farmers in order to enable them to adopt bette farm practices.

What is the objective ?

To enable the extension workers to acquire skills on various technique of organising demonstration as a means of changing farmers attitude.

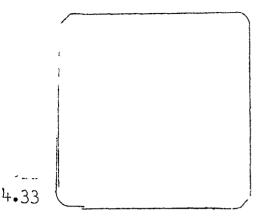
Why. demonstration farm ?

Because seeing is believing.

How to organise a demonstration far

- i. Selected the farmer who will be accepted and followed by others. He must be a natural leader and also a progressive farmer. He will be the key instrument of communitation.
- ii. Select the most suitable plot of the selected farmer. Obtain his confidence and willingness for the adoption of modern farm practices.
- iii. Carefully select the crop in relation to soil type and physical infrastructure available.

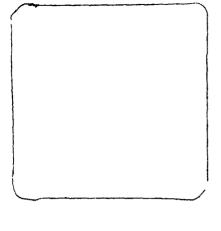
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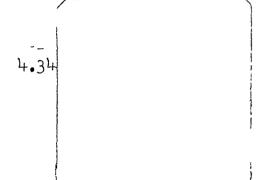


- iii. Carcfully select the crop in
 relation to soil type and
 physical infrastructure available.
 - iv. Ensure the availability of the supply of various inputs.

Operational method of organising demonstration farm if you are to show the benefits of fertiliser application.

- a) divide the selected farm into at least three sub-plots of equal size.
- b) keep one plot as a control plot.
- c) workout the input pattern for the control plot.
- d) work out two different levels of input pattern in relation to cost i.e. treatment I and treatment II.
- e) carefully apply the various
 levels of inputs on the various
 plots. Follow all other modern
 farm practices on the two treatment plots. Supervise the whole
 process of production.





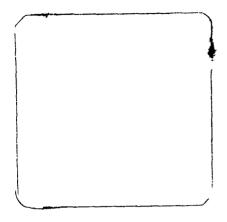


f) When the crops are metured try to demonstrate the plot to group of farmers.

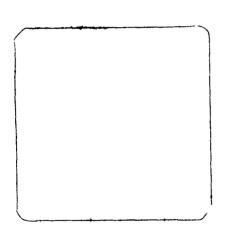
g) Production figures on different plots be noted down and the results should be communicated to the members at the meeting of the society.

An example of the demonstration plot with details of input and output figures are given in Annexure A & B. The method of demonstration plot could be more successful if it is also linked with field working situation.

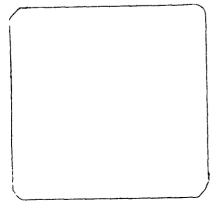
In this approach, the farmers who show some willingness are brought to the farm of the member whose plot is chosen as demonstration plot. They are shown the preparatory operations This is repeated every time when any new operation takes place on the demonstration plot. At each stage the extension worker should explain and discuss with the farmer about the various operations. At the end of the harvest it requires no effort to convince the farmers.



4.37



4.38



Advantages :

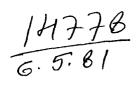
The greatest advantage of the demonstration method is that it has lasting effect. It also provides the extension worker to develop his own field skills and adjust the adoption of technology according to local situation. It develops cooperative spirit and involves the farmer in the whole process.

Limitations :

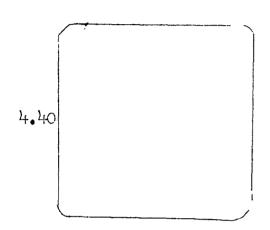
- 1. It is a time taking process and requires a lot of preparatory work.
- 2. Failure of one demonstration case, due to unforcesen circumstances may spoil the whole efforts of the extension staff.
- It requires a given level of input supply and infrastructure.

Organisation of exhibition of agricultural tools and machinery during local festivals:

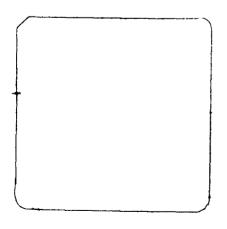
This method could be used to show the use and efficiency of various modern agricultural tools and implements at a local festival.







4.41



Advantages:

It has the advantage of demonstrating the use to a large gathering a low cost.

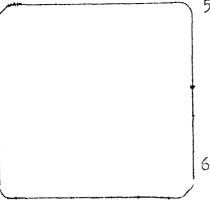
Limitations:

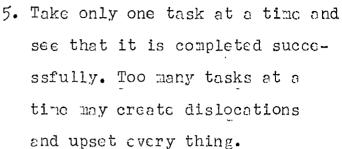
It is difficult for the extension worker to organise such exhibition Such exhibition serve to a selecte group of farmers who could afford to make use of the machinery.

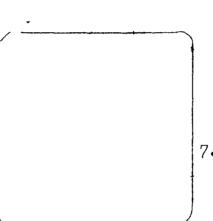
For a successful extension worker here are some "DO'S" and "DONT" for you.

"DO'S" and "DONT" for extension officer imparting farm guidance.
"DO'S"

- 1. Be a good listener you cannot talking learn if you are Z , only, promote two way communication.
- 2. Learn as much as you can of the community and its problems.
- 3. Approach your work and people with a smile despite problems and disappointments
- 4. Follow the "principle of involve ment".





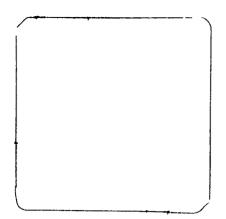


- 6. Trust the people even to the extent of allowing them to make their own mistakes. Let the people do things by themselves eventhough they may be far from perfect. Remember this is "learning by doing".
- 7. Try to accept inavoidable limitations your own and those of your community. People cannot be changed overnight because you want to change them. Time constraint is always there.

"DON'TS"

- 1. Avoid arguments and conflicts.
- 2. Avoid making quick judgments or appraisal without sufficient knowledge or evidence.
- 3. Don't be disheartened over initial sctbacks; your tolerance will pay you.

4.1:2



4. Don't try to pose as "you know all". It is always better to sa "I do not know I will find out" rather than to give wrong information.

UNIT-V

EVALMATION

Why evaluation ?

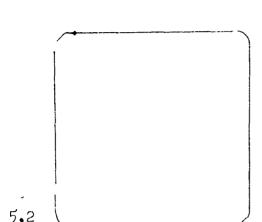
Because evaluation tells us how much programme has been achieved.

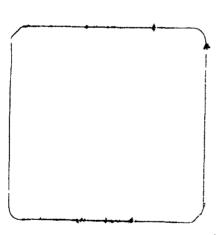
It also tells us what could not be achieved and why it could not be achieved.

The basic idea behind the evaluation system is to find out necessary information in order to modify his behaviour and action/programme. Failure on an action programme results mainly from communication gaps.

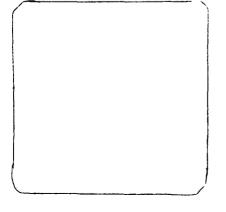
It is, therefore, essential to develop the communication system for assimilation of information.

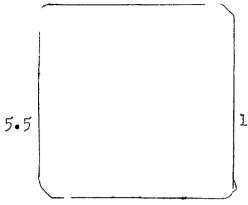
A system of feed back is essential for any action programme because often the message is not received in proper form due to various disturbances. A system of feed back helps the extension worker to correct the course of action and remove the barriers.





5.3





There are three methods of communication and feed back.

- 1. Individual method
- 2. Group method.
- 3. Mass method

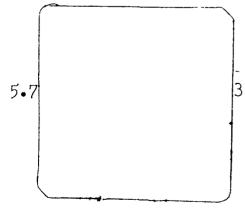
1. <u>Individual Method</u>:

The message is direct between the expert and the farmer. There is direct feed back. But this type of approach is not suitable for programmes involving the community. It is time consuming and costly.

2. Group Method:

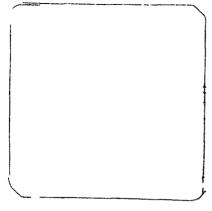
The group approach to communication and feed back is suitable for such programmes which requires group action. It is less time consuming and less costly. But in this system the feed back is not sufficient.

This difficulty could be overcome through organising meetings, discussions etc.



• Mass Communication System :

You could transmit the message but no feed back. You can not explain. You do not know the reaction.



As individual farm plans are essential for improving farm yield, similarly feed back should also follow the same pattern. But time and expenditure may not permit the adoption of this method.

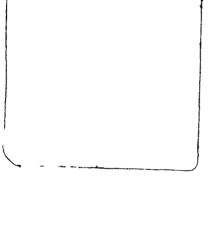
How to get feed back from indivifarmers in such a situation ?

- a) Divide your target population into various sub-groups.
- b) Select a few farmers from each group.
- e) Meet them individually or in groups to know the results of your efforts and the difficulties encountered by them.
- d) Organise meetings of the members and utilise the opportunity to know what you want to know.

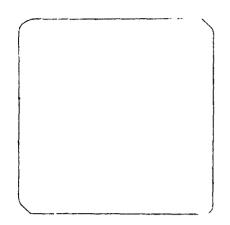
Start your evaluation in the following order:

- i) People's awareness about the programme
- ii) Pcoplc's interest in the programme

5.8



5.9



- iii) People's constraints in the adoption of the programme.
 - iv) People's reaction to the result of the programme.

Thus the whole Feed Back Process follows the given cycle.