

PN-ABJ-280

EXTENSION
FOR
EXTENSION WORKERS

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Courtesy of U. S. A. I. D.
(United States Agency for
International Development.)

Extension for Extension Workers.

IN

630.715 USAID/India.

B128 Extension for Extension Workers. Earl I.

Bacon. Aug. 1963.

283 p.

Bibliography: p. 282-283.

1. Agricultural extension work - IN. 2. Training
programs - Agricultural extension work - IN. I.

Title. II. Bacon, Earl I.

73548

PN-ABJ-280

P R E F A C E

The success of any programme in Agriculture depends to a large extent, on the technical knowledge of the people in charge of its implementation. However, only technical knowledge is not enough for an extension worker to do a good job. Technical knowledge is not of any value unless the people, who can use that knowledge to increase production, also know and understand its value to them as individuals.

A sound knowledge of the principles of scientific agriculture and their application to practical farming is essential to those who have to work in close association with the farmer in order to be able to guide them on a well thought-out plan of action. This involves the process of helping people solve their problems through good extension teaching methods. The methods must be used, however, by minds thoroughly indoctrinated in the psychology and techniques of good teaching. This type of education has become known as Extension education and the extension worker must believe that any progress that is lasting is a progress which comes through education. A desire to help people solve their problems must always precede the teaching attempted by the worker. One could say that a good worker must possess an in - born desire to help others.

To be able to work effectively in this process of education requires thorough training of the Extension worker in the methods and techniques of helping individuals; families, and village communities to solve their problems, in order that they may improve their standards and live better.

Since training must prepare extension workers to lead people, through education, to solve their own problems, it is important that the training emphasis theoretical presentation, as well as testing in the field.

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There is a great amount of psychology in Extension teaching and methods of teaching which can be learned or memories refreshed, in the material presented herein.

I, therefore, recommend this book to every extension worker and hope that a thorough study of this material will help him improve upon his methods of Extension teaching, and enable Extension to fulfill it's obligation in the field of Agricultural Education.

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INTRODUCTION

This book is concerned with improvements in Agriculture Extension. It is intended, primarily, for the purpose of reference for in-service training to all Extension workers: Village Extension Workers, Block Officers, Extension Department Personnel, or anyone wishing to understand Extension Education. It is believed that anyone, regardless of his position or profession, will have a broader viewpoint and a better understanding of what Extension is endeavoring to do and by what means or methods he must use to accomplish the objective of better living for the people.

Extension is presented as an educational understanding. Some of the important Extension subjects discussed are: the Psychology of Extension, the Extension process, the individual Extension teaching methods, Youth Clubs, leadership, planning, and evaluation. A short description has been given on several subjects which have to do directly and indirectly to the process of leading rural people into adopting improved practices, which will enable them to live better.

Technology and teaching must be combined if people make desired changes in behavior which measures progress of the people the world over. Ignorance by the people, of better ways to live is a burden that no nation can afford.

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THE FOLLOWING FOUR CHAPTERS, STRESS
THE NEED FOR EXTENSION IN INDIA, DEFINITION OF EXTENSION, AND VALUE OF EACH METHOD OF TEACHING IN EXTENSION.

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Chapter - 1

The Need for Extension in India

India has about 754 million acres of land, but out of this 754 million, only 35 per-cent or approximately 264 million acres are cultivatable. The remainder, or 490 million acres, are either too arid, too rugged, etc., to cultivate.

India has only 5 per-cent of the cultivatable land of the world, but she has approximately 18 to 20 per-cent of all the people in the world.

There are 373 people for every square mile in India. This figure includes all the land: the mountains, forrest, arid, etc. The state of Kerala, South India, has well over a thousand people per-square mile, and there are rural areas in that state that has over 5 thousand people per-square mile. For each individual in India there is only .6 of an acre of cultivatable land to feed and clothe him.

It is estimated that every day in India there are, at least, 40-thousand new babies, enough to make a large village, when they become adults. The high death rate of babies and the short average life of the Indian restricts the increase in population growth per-year to a figure close to 8-million.

This increase in population places a heavy burden on the land. The increase in population is far greater than India has new frontiers for farming. The

majority of any increase in food or fiber production is off-set with this increase in population. This increase places many other burdens on the society, such as; schools, transportation, roads, medical care, housing, and etc. For India to make proper progress all of these things must make progress simultaneously. Any Nation's first concern, of course, is to feed and clothe its people.

India has only begun to make progress in agricultural production. Before the year of 1950, paddy production was :

Year	Production in pounds
1901-1910	920
1921-1930	840
1941-1950	745

This, very definitely, shows the state that agriculture production was in before 1950. It shows a downward trend in production for 50-years.

Since 1950, agriculture production has been on the increase. However, even with this increase, India has imported, the last few years, on the average of two to three million tons of food grain per-year.

The following chart shows the food grain production and the imports from 1950 to 1960 in millions of tons :

Year	Production	Imports
1950-1951	50.02	2.12
1951-1952	51.17	4.725
1952-1953	58.27	3.864
1953-1954	68.72	2.003
1954-1955	66.96	.830
1955-1956	65.79	.700
1956-1957	68.75	1.420
1957-1958	62.03	3.588
1958-1959	73.50	3.174
1959-1960	71.75	3.500

In this 10-year period food grain production increased by 21.75 million tons. The imports continued at about the same level. These import figures may not seem so very large when compared to the over-all requirements of the Nation, but they are very large figures when one considers the necessary foreign exchange, expenses involved in handling, shipping, storage, and etc.

If one considers proper diet as a necessity, even with this import, India does not have enough food. The W. H. O. (World Health Organization) states that the average person should have 2600 calories per-day, and that the average Indian is eating only 1800 calories per-day.

The problem and a challenge :

1. To feed and clothe the ever increasing population.
2. To eliminate the necessity for imports.
3. To increase the calories consumed by the individuals.

The following chart compares Indian's production to other countries and the correlation of the production with the amount of chemical fertilizers used :

Country	Consumption of fertilizers per acre of arable land in pounds	Paddy yields, in pounds per-acre
THE NETHERLANDS	406.93	...
BELGIUM	337.27	...
JAPAN	271.22	4,328
FRANCE	90.92	...
EGYPT	65.56	4,543
ITALY	45.83	4,284
INDIA	2.50	1,353

(From : Fertilizer Association of India, 85, Sundar Nagar,
New Delhi, India.)

The above emphasizes the need for Extension Workers, and stresses the tremendous task before them. There is room for hard earnest work by all. A good Extension Worker has more work than he can do in using the tools (Extension teaching methods) set forth, in this book, to help accomplish the great and responsible undertaking of feeding and clothing the people of the nation. It is indeed disheartening to find workers without a plan of work and with no thought as to even the simplest calendar of work. There are many wonderful undertakings and many good Extension Workers. The desire to do better leaves little room for the worker who does not understand or care.

Chapter - 2

Extension

There are many definitions for the word Extension. The dictionary will say the word means to bestow or to enlarge. Extension comes from the Latin word Extensio. Extensio comes from two words ; "Ex" and "tensio". Ex means out. Tensio means to stretch. Therefore, the word Extensio or Extension means "to stretch out". What can the Extension worker stretch out ? The government may stretch out in many forms and in many directions ; finances and other material resources, but the Extension worker has only knowledge in which he can stretch out. The only method of stretching out his knowledge is by teaching. In otherwords, Extension workers are teachers. They are educators. They teach people how to live better.

There are three ways in which to teach rural people :

1. *Teaching the masses* : Extension must teach large numbers of people (the masses of people). The masses may be reached through Newspapers, radio, television, cinemas, exhibits, publications (magazine articles, bulletins, pamphlets, leaflets, etc.) and circular letters.

2. *Teaching groups of people* : This method takes in several forms of teaching. Some of the more common kinds of educational group meetings are :

Group discussion meetings.
Method demonstration meetings.
Meetings at result demonstrations.
Dramas.
Puppet shows.
Lecture meetings.
Panel discussions.
Debates.
Leader training meetings.
Committee meetings.
Program planning meetings.
Schools.
Cinemas.
Study courses, etc.

3. *Teaching individuals* : The most common method of teaching individuals is by the home visit. A home visit is basic to all good teaching in Extension. It gives the Extension worker the knowledge he must have to teach. He can gain much by visiting the farmer on his farm. He can determine the soil, kind of livestock and poultry, socio-economic standard, the family life, how he lives and many other things which are important to his teaching. Other common methods of teaching individuals are : personal letters, office calls (when the farmer comes to him), telephone calls, consultation with village leaders, and result demonstrations.

Every Extension worker can not use all the methods. He may not use every method on every subject he teaches, but a good Extension worker will use all the methods feasible some time during the year.

Every good Extension worker considers every contact made with the farmer or a group of farmers as a teaching opportunity, regardless of how little or how much he may be able to teach.

A good Extension worker will have aids to help him in his teaching, which is commonly called visual-aids. These include such items as motion pictures, charts, graphs, photographs, posters, blackboards, flash cards, flannel-graphs, flip books, bulletins, leaflets, and etc.

In far too many times the teacher expects the visual-aid to do all the teaching. As an example, a cinema is shown to the people and it is believed they have learned the subject. May it be emphasized that aids are no more than aids to one's teaching. The individual Extension worker must do the teaching. The method (or methods) he uses depends on how well he does the job of teaching and the progress of India depends upon the Extension worker and his accomplishments. The welfare of the worker's future is directly tied in with the accomplishments of his work.

What is Extension ?

The job of the Extension worker in Agriculture and Home Science is to assist people engaged in farming and home making :

1. To want to do a better job-produce more food-make more money-to have a better living.
2. To utilize more fully their own resources and those available to them in solving current problems and in meeting changing economic and social conditions.

Extension depends on a sound program to meet the needs of village or farm people. Extension is a voluntary adoption of improved practices to supply a need-something the farm family wants.

The first job of any Extension worker to the cultivators is to let the farmers know there are better ways of living and there are ways to increase food production that has been tested or proven by research and are reliable. Good Extension also helps research. Every

Extension worker from time to time, will find a farmer with a question that he cannot answer. This problem should be referred to research. Good Extension is a two way flow from research to the farmer and from the farmer to research.

The Extension worker must consider the level of education, the traditions, the taboos (superstitions) and the economic situation of the farm families. He must give study to their judgement in selecting the methods (tools) used to reach his target (goals or objectives).

The Extension worker is a teacher attempting to influence the actions and behaviour of large numbers of people in real live situations, which are continually changing as the result of economic and social developments.

The Extension method which most often is used first is :

1. *Direct contact* : to visit the farmer's home, to observe his method of doing things ; such as preparing land, planting, cultural practices, sanitation, waste land, land utilization, and many more problems involving the farmer's welfare. He must visit the village leaders. In some cases the cultivator, with a problem, may seek the Extension worker.

2. The next important method employed by the Extension worker is to hold meetings, as previously given.

3. There are other methods to teach :

- (a) Youth Clubs.
- (b) Farmer's Clubs.
- (c) Result demonstrations.

A good Extension worker will use many methods to teach people and the success of his program depends upon his selection of methods he uses.

Chapter - 3

Value in Using a Number of Methods in Extension Teaching.

In Chapter I many Extension methods were given to illustrate the three principle ways (mass, group, and individual) to teach people. In this chapter it is desired that every Extension worker will conclude that every subject must be taught many times and by the use of many methods. This does not mean the same subject should be taught over and over again to the same people in the same manner (by the same method). It does mean the Extension worker must teach the same subject several times by several different ways (methods). This chapter is to stimulate the teaching of the same subject through many methods of teaching.

Extension's principle concern, if the workers teach people to live better, is to get people to adopt improved practices that will improve their living. In what way can Extension get people to adopt improved practices that will make them a better living? The Extension worker must teach the improved practices and he must teach the same subject many times and in many ways.

Below is a table which imphasizes the importance of teaching an improved practice many times and by several different methods :

	Percentage of Practices Adopted
One method of teaching ...	40% practices adopted.
Two methods of teaching ...	52% practices adopted.
Three methods of teaching ...	68% practices adopted.
Four methods of teaching ...	76% practices adopted.
Five methods of teaching ...	82% practices adopted.
Six methods of teaching ...	86% practices adopted.
Seven methods of teaching ...	90% practices adopted.
Eight methods of teaching ...	93% practices adopted.
Nine methods of teaching ...	95% practices adopted.

etc. until we reach 98%. The other 2% are unaccounted for.

Compare the Extension worker who is able to use five methods of teaching with the Extension worker who only uses one method of teaching. To the farmers, community, and country the Extension worker who uses five methods of teaching is a little over twice as good as the worker who uses only one method of teaching. It goes without saying that good Extension workers employ many methods in teaching rural people.

Results of different teaching methods.

		Groups score :
Groups		Percentage of Practices adopted
Indirect influence	...	19.0
Mass media	...	23.3
Group contact	...	32.8
Individual methods	...	24.8

The above gives group contact credit for influencing more people to adopt improved practices than any other method. Mass media and individual methods run pretty close to each other in influencing people to adopt improved practices. One out of every three practices adopted is the result of some kind of group meeting.

One out of every four practices adopted is caused from mass media of education. One out of every four is the result of individual contact.

Some of the teaching methods :

I. *Individual Methods* :

- (1) Home visits.
- (2) Office calls.
- (3) Correspondence.
- (4) Result demonstrations.
- (5) Telephone calls.

II. *Group Methods* :

- (1) Lectures.
- (2) Group discussions.
- (3) Program planning meetings.
- (4) Tours.
- (5) Achievement days.
- (6) Meetings at result demonstrations.
- (7) Method demonstrations.
- (8) Leader meetings.
- (9) Schools

III. *Mass Methods* :

- (1) Publications.
- (2) News stories.
- (3) Circular letters.
- (4) Radio.
- (5) Television.
- (6) Exhibits.
- (7) Posters.

When
several
methods
are used

Exten-
tion
receives

Good
indirect
influ-
ence.

The extension Worker Can Classify the Methods According to Other Forms :

- | | | | | |
|--|---|--|--|---|
| <p>I. Written :</p> <ul style="list-style-type: none"> (1) Bulletins. (2) Leaflets. (3) News Stories. (4) Personal letters. (5) Circular letters. | <p>II. Spoken :</p> <ul style="list-style-type: none"> (1) Meetings of all kinds. (2) Home visits. (3) Office calls. (4) Telephone calls. (5) Radio. | <p>III. Objective or Visual :</p> <ul style="list-style-type: none"> (1) Result demonstrations. (2) Exhibits. (3) Motion pictures, charts, slides, and other visual-aids. | <ul style="list-style-type: none"> 1. method demonstration meetings. 2. meetings at result demonstrations. 3. meetings involving motion pictures, charts and other visual-aids. | <p>when using several methods one receiver good indirect influence.</p> |
|--|---|--|--|---|

Another way to determine whether the Extension worker is performing good Extension is to analyze his performance against the following chart :

	Adoptions
1. Seeing and doing (no talking or telling) :	
(1) By demonstrations. ...	6.67
2. Seeing, doing and add hearing (for the Extension worker-telling) :	
(1) Meetings. ...	37.49
3. Seeing, doing, hearing re-inforced by getting the people to read :	
(1) Publicity. ...	
(2) Publications. etc. ...	49.29
4. Seeing, doing, hearing re-inforced by reading, personal contacts with more hearing and reading (supplementary methods). ...	78.69
5. Seeing, doing, hearing re-inforced by reading, personal contacts, more hearing and reading, and add the indirect influences caused by all methods which cause people to adopt improved practices. ...	100.00

These charts only emphasizes again the importance in teaching people many ways-not merely repetition of words but the same thing in many ways. The first chart shows that a good Extension worker may use up to nine or more methods, over a period of time, to essentially teach the same subject. It also proves he will be doing a better job in his work than the worker who uses only one or two methods.

A good Extension worker uses many methods to teach people improved practices.

Chapter - 4

The Importance of Each Extension Teaching Method

In the preceding chapters the importance of teaching a subject many times and in many ways was discussed. In this chapter it is desired that the Extension worker become more aware in the importance of the many individual teaching methods. There is a time and place for every method of teaching. It is the Extension worker's responsibility to select the best possible method for any given teaching situation. No one can do this for the Extension worker. The method he uses must be his choice of methods.

The Importance of Extension Teaching Methods

Methods of Teaching.	Percent of improved practices credited to the different methods.	Methods by cost-per cent of funds.
Indirect Influence	19	no cost
Method demonstration	16	19.6
General meetings (meetings of all kinds)	13 (nearly 14)	13.3
Visits (personal and home)	12	13.7
News stories (local papers, magazines and etc.)	9 (nearly 10)	4.9 & radio

Office calls	6	5.4
Bulletins, pamphlets, etc.	6 (nearly 7)	6.2
Result demonstrations	6	17.2
Circular letters	2	1.3
Radio	1	added to news storie
Correspondence	1	4.2
Leader training meetings	1	not avai- lable
Extension schools	1 (a little less)	not avai- lable
Exhibits	0.5	4.2
Telephone calls	0.5	1.1
Study courses	0.15	not avai- lable
Posters	0.04	not avai- lable

Summary of Methods

Indirect influence causes people to adopt improved practices only when there has been some teaching. The better the teaching and more the teaching the more indirect influence will be received. Indirect influence comes through those people, whom the Extension worker taught, teaching others. For illustration: the Extension worker holds a method demonstration on spraying paddy for the Stem Borer. A cultivator present tells his neighbor, who was not present at the meeting, about the demonstration and he in turn sprays his paddy. When a cultivator changes to a new practice, even though he may never have attended a meeting (s), it is not just a happen so. He learned to use the new method as a result of some Extension worker's efforts. There is no cost to indirect influence

as the cost was applied to the method used by the worker. The number of practices adopted by indirect influences is in proportion to the teaching done by Extension; no teaching, no indirect influence; good teaching, good indirect influence.

A method demonstration is the most important method of teaching as more cultivators adopt improved practices from the result of holding method demonstrations than any other method of teaching. The Extension worker who never uses the method is certainly not practicing good Extension. He is, as stated, leaving out of his activities the most important method of teaching.

General *meetings* of all kinds is the Extension worker's second best method of teaching. He is able to reach more people at a time when compared to the individual methods. People also have a tendency to listen and observe a little closer in meetings than they otherwise would do. There is also the possibility the farmer will commit himself in front of his neighbors, and friends. He would not, as a rule, like for them to think of him saying something and then not backing it up with his actions. He is, therefore, committed to action. When the Extension worker discusses a practice alone with a cultivator, the cultivator does not feel so obligated to follow through. There was only the Extension worker and the cultivator doing the discussing. The big factor, however, is in the number of people contacted at one time and the time spent with a group vs the individual approach.

The cost of meetings is practical the same as to the per cent of improved practices credited to the method of teaching.

A visit is the third most important method of teaching rural people. In some respects it may be counted as the most important method of teaching, as it is the "back bone" to all the other methods. A visit is basic to good Extension. However, the Extension

worker should keep reminding himself that more improved practices are adopting through method demonstrations and meetings than through visits. It is also a little expensive compared to the other two, when the clintele is considered the deciding factor. The cost of method demonstrations and meetings come down simply because more practices are adopted by cultivators through the methods compared to the time spent by the Extension worker.

News stories are not used profitable or they are not used at all by many Extension workers. It is, however, one of the most important methods of teaching and is the cheapest method of teaching compared to the results obtained by the method. Every good Extension worker will place a news story in the local daily paper regularly pertaining to some local and current problem. It is the duty of every Extension worker to cultivate good friendship with the local papers, and strive to get all the cooperation possible for articles the local people are interested in. One will find a large percent of the people are interested in news stories on how to improve, economical value of practices, etc. A good success story is always good.

Bulletins are something the good Extension worker desires and needs. He should have material to back up his teaching whether in a Bulletin form or otherwise. Usually, in India, this is one of the most serious problems in the states. It is encouraging to observe that much progress has been made in this direction the last few years. Much is yet to be desired.

Bulletins alone will not do the job. A good Extension worker uses bulletins to back-up his teaching. In most cases written material should be given to rural people only after the worker teaches the subject. This teaching might be a general discussion just between the worker and the cultivator. It is poor teaching when a worker hands a farmer the printed material and tells him to read. Printed material should, in

many cases, be handled with caution or one will not get the cultivator to adopt the improved practice. The cultivator has to understand and he has to be convinced the practice is good for him. This is the Extension workers job. The farmer called on the worker, in the first place, to discuss *his* problem.

Office calls are important and they do not cost unless printed material is given to the caller. The farmer who takes the time and trouble to visit the worker in his office, generally speaking, is the cultivator who is seeking advice. He is a man whom Extension should spend some time with. A man seeking information is receptive to learning.

It is not uncommon for a farmer to visit a worker's office and then have to wait long periods of time before he is able to see the worker. During that time a great deal of his enthusiasm may have vanished or he has lost some of the confidence he had for the Extension worker. This is especially true if he believes the worker is not too busy to see him. Cultivators approaching the Extension worker is the ideal situation for teaching, if handled properly.

Result demonstrations are important, but not nearly as important as the average Extension worker believes. This depends on what the worker does with the demonstration. The value depends on the worker, the reason for having the demonstration, how it is conducted, and what other teaching methods are used, because he has the demonstration. Result demonstrations, as can be seen in the above chart, only accounts for six out of a hundred improved practices adopted by the people. The workers must make result demonstrations more profitable to Extension. If the workers has a demonstration, puts up a sign, and forgets the other methods of teaching, the demonstration is of very little value, compared to the cost of carrying it out.

The good Extension worker will hold method demonstrations at the result demonstration plot. He

should hold a meeting at the beginning of the demonstration to acquaint the people of the purpose, what he is attempting to prove, how he plans to carry out the demonstration, and request their moral support. There should be another meeting along about the middle of the growing season, or a little afterwards, to tell the cultivators what has actually been done, compare growth, etc., at this stage, what is expected, and the short comings so far. The last meeting (the third meeting) should be at harvest time. He should be given a resuma of the proceedings and have the farmers as witness to the production.

Another type of meeting at the result demonstration plot should be a method demonstration. The worker might be able to combine a meeting or two of the above with a method demonstration. He may hold the first meeting at transplanting time. In this case he could hold a method demonstration on line planting. He may choose to hold the first meeting when he starts to plant his nursery.

A good Extension worker is not through with the result demonstration after harvesting. His best teaching should come after harvest. He can put the results in the local paper - a news story. He should, by all means, prepare group discussion meetings on the economic value of the demonstration, improved cultural practices, etc.

The improved practices adopted by the cultivators because of the meeting is credited to that method of teaching, but the demonstration provided the means for the meeting-thereby, increasing, indirectly, the value of the result demonstration.

Study the above table again so as to fully realize that just having a result demonstration, with no other teaching, is a very costly method to use.

Exhibits are much like result demonstrations. If one puts up an exhibit and forgets it, the exhibit will

not cause many people to adopt improved practices. It might be worthy to note, exhibits are to teach and to lead people into action. The exhibit should be so arranged to encourage people to adopt what is being exhibited. The cost of an exhibit is high compared to the results obtained, unless other teaching methods are also used. One can increase the value, especially in large melas, by having someone to explain the exhibit along with recommendations and the economical value of the improved practice exhibited.

Correspondence of all descriptions are important. Can one imagine the prestige of a man receiving a letter from a government official who never does receive letters from the government? A letter is something personal to rural people. It is something they will read. It is hoped that somewhere in the future the Blocks will purchase duplicating machine and occasionally, on important subjects, forward circular letters to their constituents.

Radio will come into it's own as a method of teaching. Sometime in the future the worker will, at least, be able to send in important items to the Farm Editor and have announced over the radio. The Farm Editor will be able to broadcast the latest research findings, etc., of interest to the rural people.

Summary

The remaining methods are minor methods of teaching. This does not mean they are unimportant. Far from that, every method is important at a time. Every good Extension worker uses many methods to teach rural people. Our basic teaching methods of visiting farm houses, result demonstrations, method demonstrations, meetings, and news stories, as you can see, are most important. Extensions job is to get people to adopt improved practices. Many methods of teaching, when there has been good teaching, gives many improved practices adopted.

Caution

If an evaluation of the many methods were taken in India many would show up of little value. If a method is not used, it does not have any value as a teaching method. Even if used, the method may need only to be improved upon to be of value.

THE FOLLOWING ELEVEN CHAPTERS STRESS THE IMPORTANCE OF GOOD TEACHING SO THE PEOPLE MAY HAVE THE EDUCATION NECESSARY TO CHANGE THEIR BEHAVIOR TOWARDS THOSE IMPROVED PRACTICES RECOMMENDED BY RESEARCH AND TAUGHT TO PEOPLE BY THE EXTENSION WORKERS IN ORDER THAT ALL MAY HAVE A BETTER LIFE.

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Chapter - 5

Principles of Extension

1. Extension starts where the people are and with what they have. Progress of people can only begin from this point.

The Extension worker can not bring the people to him. He must go to the people. He cannot "make" them do anything. They are on their lands, in their homes, etc., and to be able to teach them the worker must go to these places to teach. In many cases the people have made but little progress throughout history. The Extension worker may be unable to understand this lack of progress. However, the reason why this lack of progress is practically unimportant compared to the need for advancement today. Whatever the reason, Extension workers must take the people as they are in their progress and begin working from that point. Such a statement may apply to a family, a village, or a district. A good Extension worker will find something to work with the family on, even though it may be small. It could be the starting of a vegetable garden in the corner of their compound.

2. The classroom is where the people are : on the farms, in their homes, in the village, on the road or under a tree. When a worker counsels with a cultivator he is always anxious to leave something with the farmer to think about, study, and to come to a decision for improving himself.

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3. Extension programs are based on the needs of the people and are decided upon by the people. Sometimes there may be a need that the people do not feel. It is Extension's job to make this need become a felt need by the people. If a worker knows of a need he must call it to the people's attention, create an interest in the people for the practice, and lead them to see their need for it.

4. People learn to do by doing. A demonstration is the best teaching method. "You can never teach to others that which you can not do yourself". The worker must know the improved methods needed by the people, practice doing the methods until he is confident in himself doing them, and then demonstrate to the people. In the process of the demonstration he should get the people to practice doing the improved practices.

5. Extension is carried on either with the masses, or with groups of people, or with individuals. One may save time and teach many at a time either by the mass method or in groups. Statistics show that more people adopt improved practices through group meetings than if visited individually. This is because of several factors, but the most important reason is that the worker is teaching many people at a time, instead of just one person.

6. Extension works with and through people. Local leaders are trained by Extension workers to extend information to others. In training local leaders there has been many methods advocated; leaders for a whole area to cover everything, committees to train others, or leaders in certain commodities (paddy, sugarcane, chillies, etc.) Whatever the method the people should decide the program, work with the program, and help evaluate the results obtained.

7. The spirit of self-help is essential for democratic living. The success of Extension work depends entirely on voluntary participation. The people must

understand that what Extension is advocating is for their good and the Extension worker must also create a feeling that they can do the job.

8. There is a close identification of the Extension worker with the rural people. Why is it that some Extension workers are able to make the people feel he is part of the society, community, and the people, while others remain an "outsider"? It is because he has been able to make the people understand his cause, his limitations, and his desire in wanting to help. No Extension worker can be successful unless he has an in-born faith in rural people.

Extension, to be good, must work in harmony with the local culture. The worker must know a great deal about the people he works with. Some of the things he must know are :

Native skills.

Native methods.

Native tools.

Habits of the people.

The formal modes of association.

The people's beliefs.

The people's practices.

What value people give things and ideas.

What superstitions are taboo.

What faith they believe in.

An Extension worker must know these and more. He must not expect the people to change from one method to another method or one belief to another belief just because he is their Extension worker. To change one's behavior may take years and the change desired may not take place during his life-time.

The worker must realize that the community is the basic unit of work. Therefore, he should know the leaders and cultivate their friendship. This includes

the panchayat and other elected people. He must know all of the existing institutions, which may be religious or political, but he should use caution in dealing with them, until he understands the people he is working with. He should avoid politics in the form of political groups. He should use as many people as possible, but avoid being used. He must, however, show enthusiasm for cooperating with the rural people when and where he is convinced that his efforts will work to advantage in carrying out his Extension program.

The worker starts in the home. This sometimes involves the women. Sometimes the lady Social Educational worker can help out in this task.

It is good for Extension workers to give some thought to, "know how" unaided by cultural understanding vs "know how" aided by local social understanding and education.

The Extension worker Analyzes local problems :

1. He must determine if they are good.
2. He must determine which ones are responsible from the growth of superstitions.
3. He must determine whether they are out-moded.

The Extension worker must remember that the farmer is skeptical and because of this he must be shown. A good Extension worker must :

1. Go to where the people are-in the home, farm etc.,
2. Be willing to demonstrate-with his own hands and mind.
3. To get out in the field.

Chapter - 6

Basic Features of Extension work

Extension work has many and varied features, each affecting in some measure the farm, the farm home, the community, the district, the state, and the nation. Each in turn reacting helpfully upon the others. There are many points that one might call basic features to Extension work, but the following features may be called basic to Extension work :

1. It is a joint democratic enterprise-farm people with their Block, State and central Governments, cooperatively financed and cooperatively administered.

2. It is practical education, applying science to real life situations, on a learn-to-do-by-doing basis.

Teaching is the transferring of knowledge, skills, and facts. Extension gets it's knowledge and facts from research. Skills, in many cases, are things learned by application. Skills also comes from research. In learning to transfer knowledge we must practice.

3. It is education for action, action by individuals in improving their farm and home skills and management, their health and other individual needs, action by groups to improve such environmental, economic, and social factors as marketing, purchasing, community health, recreation, soil conservation, etc.

If Extension does not cause a change in behaviour of people to the extent that new practices are adopted, there is not any need for Extension. The Extension

job is to change people's behavior to the extent that new improved practices are adopted. Extension's cause is to change from the old to the new, but in doing so it is Extension's responsibility to LEAD the people into adopting the right practices. Therefore, Extension is education for action.

4. It is education in Agriculture and Home Economics, primarily of rural people-men, women, and youth-for all of the rural people.

5. It is education that through participation builds the individual mentally to exercise effectively his own thinking, judgement, and leadership in solving his own problems, and in cooperation with others to solve group problems.

A good Extension worker wants the people to solve their own problems-not to rely on the government or government workers. When Extension begins to receive, from the people, the right kind of participation through proper leadership much of depending on the government will disappear. Extension wants participation so that it may develop thinking and judgement in the local leaders.

6. It is education which stimulates village people to analyze and recognise their own problems and to take steps to solve them individually and collectively.

While working in Kerala State the author had the privilege to visit a village that did not have an outlet by road. The village people had been planning on building one for forty-years. The enthusiasm of the Extension worker caused the village to elect a leader. This leader and the worker sold the remainder of the people on building the road cooperatively. They now know the value of working together. They also have a leader.

7. It is education that recognizes the psychology and habits of the people in each community and utilizes those techniques that, in terms of local interest and understanding have maximum effectiveness.

In Mysore State an Extension worker began giving the village men education on the importance of a village well instead of the old pond. All present agreed it was a fine thing to be done. On each visit to the village the worker brought the subject up. In every instance all agreed. Still no action. Finally, in desperation, he decided to discuss the problem with the women, but they were not allowed to talk to him. One by one he held discussions with the women through the men. The outcome—a new well. The above is quoted to emphasize that Extension must recognize the psychology and habits of the people.

8. It is education that not only helps in solving the immediate problems, but it also encourages developing programs toward long-time objectives. As soil conservation should be carried out in fairly large areas the people receive education directed at the long-time objective—conservation to cover the area in question—a water-shed. This takes time and the people have to work toward a goal for a long period.

9. It is the application of scientific facts supplied through the cooperative Extension Service, the local programs being developed by the village people themselves and reflecting the local needs.

Extension must lead the people to see their needs, so they can engage their cooperation in solving problems. The things the worker knows the people need should be brought to them in such a way as they too may recognize the need.

10. It is flexible and it can swiftly and effectively adjust its teaching efforts to new situations—local, state, national, and inter-national.

11. It is a help in developing, among rural people, those traits of character, qualities of leadership, and knowledge of basic issues that make them valuable citizens, whether they stay in the rural area or move to the city.

Chapter - 7

Change in Behavior

Extension's principal concern in education is to change the behavior of people for their betterment as an individual, home, community, state, and nation.

Dr. J. Paul Leagans of Cornell University, states, "man's progress is made on the basis of what he *knows*, what he thinks, what he *can do*, and what he *actually does* with his physical and human resources."

Learning is an active process; which results in a change of behavior. When a person learns to do something different from what he had previously been doing, he has become changed in behavior. All behavior changes are not good. A man may learn to gamble or do some other vice. He has changed, but this change is not good for him or the society in which he lives. As an Extension worker, working for the good of a society, it is his duty to change people's behavior in the right direction-for better living.

A man may be accustomed to producing eight-hundred pounds of paddy per acre. He has been producing this amount for a long period. He knows that if he continues the same practices in which he has been accustomed to doing, he will continue to produce this amount of paddy. He has been doing this without going in debt and he has been feeding his family. He may have seen some fields which produced more, but for some reason, perhaps fear, he has not

changed from his old practices. He has not changed in behavior. What mental process does this man go through before he changes some of the old practices for some of the new practices ?

First, he must gain the knowledge, the skills necessary, and his attitude must be changed before he will be able to produce more. Extension workers must change this man's behavior in attitudes, knowledge, skills, and the cultivator must understand the new practices. All of these changes contribute to a change in behavior for the good of the individual and his home. This, in turn, helps provide for a better community, state, and nation.

The Extension worker is the starting point for these changes. He transmits knowledge through good Extension methods of teaching in order to influence PEOPLE to change by gaining knowledge, developing new skills, and change in attitudes so the people will improve their farm, home, and community. This gives him "better living" through increased production, better health, better homes, food, and etc.,

Laws, social practices and business customs comprise the system under which man lives in community groups. One fundamental concept is that man likes things as they have always been. All human communities, in the history of man, tend to become static. There are however, influences which disturb the balance and demand a change. Technology (new methods, machines, etc.) is always the disturbing influence. Without that disturbing influence, no society would ever change and man, even today, would be digging holes in the ground with a stick to plant his maize.

Technology, or knowledge, has made many advancements and it is left to man to use this new knowledge for the advancement of a better life. Can one surmise how man began to use steel to cut with, to plow with, and to ride on ? At first it was flint, but

then man discovered bronze, which took its place; until, of course, inevitably the iron technology would come along to replace the bronze technology.

One can also surmise the resulting change over from first, the flint, the bronze, and then the iron. Many would not change from the old to the new immediately. It was that process of changing knowledge, skills, and attitudes which brought man forward in his living from the cave and tree dweller to where he is today.

When man uses a new technology, he must be willing to accept in proportionate magnitude, the resulting changes in social customs, business practices, political concepts, and military strategy. Land ownership and land tenancy also undergo changes in like magnitude. Hence, when man changes his technology ever so slightly, his community must change in like magnitude. The tolerance for change in any human community determines the likelihood of Extension meeting successfully this changing technology.

Economic and social problems confronting people and their leaders are largely man-made, either by unwise design or by apathetic default. Whether human problems are man-made or imposed by nature, modern man has available both the power and the resources to solve them, at least, at the minimum level. This can be done through intelligent planning, acceptance of current technology, and the application of modern methods through individual and cooperative efforts. To do this requires acceptance of the idea of progress through educational change by both the people and their leaders.

Broadly speaking, education is the most potent force yet discovered, for moulding a free society into a desired form. One must remember, however, that it can be used in promoting *evil* as well as *good*. However, one may look at it, modern societies place

education at the top as a means of promoting progress by the people.

Sometimes the abilities and desires of people for improvement are scarcely manifested in outward behavior toward progress. This does not alter the fact that these tendencies exist. Often they are latent, smouldering, and unaroused. This condition is usually the result of customs, tradition, and other external forces exerted on man by the environment in which he lives.

As has been said, Extension does not work for people, but with people. People can be stimulated to improve themselves through proper educational approaches (Extension methods). They can and will help themselves when given the opportunity under conditions of freedom, encouragement, and educational leadership. In this lies the greatness of the leaders and the potentialities of the people.

Factors Controlling the Behavior of the Villager

There are many factors which control the behavior of the individual Indian cultivator. Listed below are a few factors that contribute to his being slow to improve himself :

1. Low production.
2. Fear-by adopting new methods may place him in a worse economical position.
3. Not convinced that Extension workers know the answers.
4. Inadequate food for the family.
5. Poor housing.
6. Poor sanitation.
7. Lack of adequate finances.
8. Over population.

9. Lack of respect for research.
10. Has been told wrong too many times by Government workers.
11. Fear-of taxes.
12. Poor land-lord-tenant agreements.

The list is incomplete and would require a great deal of research to make complete. As for as Community Development, the above are a few reasons why people are slow in India to change their behavior. The mind of the typical Indian cultivator, although some are illiterate to near illiterate, is not a dull mind. In other words, this is not the reason why, as far as improved practices are concerned, that change of behavior comes slow. This would go very far down the list, if ranked chronologically to value. Indian cultivators are receptive to good improved practices which will improve their living.

The Problem

The average production of paddy in an Indian village is two thousand (2000) pounds. The villagers meet and decide that in four years they will be producing three-thousand pounds. What problems does this create for Extension? First, an analysis of the situation must be made to determine why they are producing only two thousand pounds. Stating it in a different term, Extension must decide what changes in practices has to occur, before the three thousand pounds per acre can be produced. To close the gap in what the people produce and what they desire to produce requires changes in practices. Change in some form is inevitable. It will take place in the people and in their condition of living. If left alone the question arises : what kind of change, how much change, and how fast will this change take place? This change must proceed in the right direction and at a proper speed. Extension workers should have but two duties to perform :

1. To disseminate practical and useful information.
2. To see that this practical and useful information is put to work.

All of this requires education to change the people. This change should be in a pre-determined direction which will make the maximum achievements. This change must be focused and guided in useful directions.

These changes are sometimes crucial changes in the Indian villagers behavior in what he *knows*, what he *believes*, what he *can do*, and what he *actually does*. These changes must come through proper guidance by Extension workers by leading the people into adopting new ways of life.

To teach *people* one must change their behavior through good teaching, There are four steps to be followed in good Extension teaching. They are as follows, with a few Extension teaching methods listed under each step which should be used by Extension workers in their efforts to accomplish the desired change in people :

I. *Interest*—create interest in the people for the improved practice advocated.

1. General information :

- Meetings.
- New stories.
- Radio.
- Literature, bulletins, leaflets, etc.
- Tours.
- Exhibits.
- Direct contact.
- Good counseling.

2. Creative activity :

- Committee work.
- Leaders.
- Demonstrations.

3. Appeal to value :

- Income.
- Labor saved.
- Home improvement.
- Health.
- Personal pride.

II. *Desire*—create a desire for the improved practice advocated.

1. Seeing the product, or result, or installation.
2. Participation by people.
3. Testimonials by people.
4. Samples.
5. Exhibits.
6. Direct contact.
7. Good counseling.

III. *Action*—encourage action on the clintele's part.

1. See that supplies are available for practice advocated.
2. Make steps in practice easy.
3. Reminders.
4. Leader activity.
5. Comittee activity.
6. Publicity.
7. Promptness on the Extension worker's part.

IV. *Satisfaction*:—Promote satisfaction in the clintele, who carried on the practice.

1. Personal contact.
2. Good counseling.
3. Timely hints.
4. News stories-publicity.
5. Value of results.

Anyone of the above methods helps promote the Extension teaching steps. However, one method alone will not do all the teaching which is necessary. To change the behavior of a lot of people, many methods must be used in combination to have the desired cumulative impact on the masses. It is only when several methods are used that large numbers of people will take action with the improved practice or will change their behavior in favor of the practice.

India in the last few years has changed a great deal. Much of this can be seen, by anyone who observes. Each new technique has made new friends for the Extension workers, but as always with new technology, there are elements of discontent merely because there are always a few who are satisfied with the old order and resent the new order to creep into the society. It is Extension's jobs to lead this change of behavior as long as it makes, a better living for the people. Progress must be at a maximum speed in India's agriculture. History will say that Extension was the motivating force behind the change for the betterment and uplift of the nation. Extension must and will have as its objective, the best possible change in behavior in order that all may have a better life.

Chapter - 8

Learning and Teaching

Learning is the process by which one, from his own activity, becomes changed in behavior. Learning also, represents the changes in behavior.

People can be led by the educational process to make substantial and permanent improvements on their farms, in their homes and in their communities. Programs without first the emphasis on achieving the educational change in people that motivates and trains them to help themselves, can not in the long run be successful in a free choice society. Therefore, the educational role of rural development must be sustained for this is the only action which will attain the objectives through sound and enduring means.

The following article on "Learning and Teaching" gives one much "food for thought" on many principles of good teaching in order that the people may learn. A full understanding of this chapter will help Extension workers to become better teachers.

Factors affecting Learning and Teaching

I. Learning is an active process which results in changed behavior.

Most things people do are learned. There are some things they do which are not learned. Those things people do that are not learned, they do by

instinct; such as, birds build nests, squirrels store nuts, babies suckle while very young, and one did not learn to breath, feel, taste, hear, and see. Everyone did learn through these five senses, however.

The things one does by instinct make him only as others are if only these things are done. If there has not been any learning, all people are the same. Those things which one learns makes him different from other people. One person knows how to drive a car, another does not; one speaks English (or some other foreign language), another does not; one knows how to apply phosphate fertelizer correctly, another does not know. These things make one different from each other, because they are learned. Just as learning makes one different from another person, it, also, makes a person different than he was before he learned. He has become changed in behavior.

As already stated, learning is acquired through the five senses: seeing, hearing, feeling, tasting, and smelling. The best way to learn is by doing, but in order to do one must see, therefore seeing is the most important, but retention comes through doing.

If a learner acts, expresses himself or just does something he is learning. If only the teacher acts or expresses himself, the teacher is learning. Thus, learning becomes the act of doing something by the learner, which makes him different than he was before he learned-he has changed in behavior.

The above has implications for the Extension worker (the teacher) in that he must strive for a change in behavior of his clintele. To adopt an improved practice the ryot must learn and to learn he must be taught.

II. Teaching is arranging situations so the learners, by their own activity, becomes changed in behavior.

The Teacher's Responsibility

1. *A suitable place* for students (Ryots) to learn, to assemble teaching material, aids of all kinds (the kind that is needed for a given learning situation), equipment, light, ventilation, tables, chairs (if needed, etc.) so the learner may learn by his own activity.

2. He must *guide* the activity of the learners so that the "teaching objectives" which are to be learned may be learned.

3. He must *inspire* the learner to want to learn by associating what is to be learned to life situation, so that the learning will be meaningful to him.

He must arrange learning situations so that the learners, by their own mental and physical activity, become different than they were before the learning process (generally speaking, the class, demonstration, etc.)

This throws the learning process squarely on the shoulders of the Extension worker. He must arrange learning situations, guide and inspire learning.

III. Good teaching is so directing of activities of learners as to result in the largest amount of desirable changes in behavior and the smallest amount of undesirable changes in behavior.

1. Quality in learning is very important. If a certain standard of performance is developed, practice should be continued until the standard is achieved. Learners learn what they do-not what they hear or read. If during practice, poor work is done, the learner learns to do poor work. They learn what they do.

2. Quantity of learning is very important. Teaching is measured by what is learned. "Nothing sold, nothing bought; nothing learned, nothing taught." This applies to quality and quantity. The worker wants the learners, the ryots, to learn the best way of doing things and in solving problems.

It is the Extension worker responsibility not only to arrange learning situations, but to teach, by the best methods and get the cultivators to adopt as many improved practices as fast as possible. When India succeeds in it's uplift program it will be the cause exerted by the Extension workers to change the behavior of the people to the extent that improved practices were adopted sufficiently in numbers and of the kind which is best for improving production, health, etc., which makes a better living.

IV. Education is the process by which knowledge is made useful to the learner in developing skills and attitudes and in solving problems.

Every person is educated according to the knowledge he has. Some have more knowledge than others. Knowledge comes from research. Knowledge that is useful contributes to the wealth of the nation. Production depends upon those who are engaged in production. Those who engage in producing food, fiber, and other products depend upon professional workers for the knowledge that can make them successful in contributing to their own and to the national income. Professional workers in Agriculture and industry depend upon schools for their training. The teachers in schools use knowledge which comes from research. Thus, knowledge which is made useful to the learners in developing skills, attitudes, and in solving problems, should contribute to the learner by being of value to him in making a living and learning how to live, and it should also contribute to national wealth.

In otherwords, Extension is the teaching of knowledge, skills, facts, and understanding. Facts come from research. Skills are also from research, but one must remember they are teaching skills—the how to do a thing. To change attitudes Extension must also show the people how a thing is good for them.

V. Attitudes are the mental feelings that learners have toward what is being learned.

If during learning a learner dislikes what he is doing, he is learning not to do it. In all probability, when he finishes his class and does what he chooses to do, he will do what he likes to do, and will not do what he dislikes to do. Since attitudes largely determine behavior, they are important in teaching. Attitudes are learned and should be taught.

In teaching ryots, he will like to do what is taught, provided he can see how it will make him a better living - generally speaking, more Rupees. If the worker teaches the ryot the need of an improved practice advocated, through more Rupees or better health, etc., more than likely he will have the correct attitude for that which is taught. It is always the responsibility of the Extension worker's to teach attitudes.

VI. Problem solving is the mental process used by the learner in making decisions and in doing things which he is capable of understanding, and which he did not know the answer before he learned.

A problem related to life experience becomes a teaching objective. A problem used as a teaching objective is one which the learner can use later on in life, if not at present, and it is one that the learner did not know the answer before he was taught or he learned it.

Teaching objectives, both large and small objectives, is a must, if the worker does good teaching. One must learn to associate his teaching to the local problems, using local situations and local resources.

VII. Schools are systematically organized institutions, which provide facilities for teachers to train learners in an educational process.

School offer courses in general education and in vocational education. General education refers to

learning that is useful to all people, regardless of the kind of work they intend to do. Vocational education refers to learning that is useful in making a living.

Even though there are schools to train the teachers (the Extension worker) that do not mean that the Extension Service should forget this type of training in their programs with the people.

Summary

There are five things that all Extension workers must teach rural people for Extension teaching to be successful. They must teach.

1. Knowledge.
2. Skills.
3. Facts.
4. Understanding, and
5. Attitudes.

Three Principles that Influence Learning.

There are three principles that affect the learning process which all Extension workers should consider in order to be good Extension teachers :

I. *The Principle of Practice :*

What is learned is what is practiced. Learning does not continue without practice. Practice which produces learning enables learners to do things better each time they practice. Repeating the practice without improving performance is not learning. Permanent learning usually requires continued practice. A single experience may produce permanent learning if it is intense or vivid enough. If a person burns his hand on a hot fire, he has learned not to touch fire and is not likely to forget it as the learning was so vivid. What one learns is what he does, not what he is told or what he reads. The wrong practice is wrong learning. The learner learns only what he does in practice. Practice without interest of the learner

produces no learning. The quality of performance, the ideal or goal which is sought, the vividness of experience, produces learning. In complex skills, such as learning to pilot an air-plane, practice should continue until doing becomes automatic and the learner acts without thinking.

II. *The Principle of effect :*

Satisfyingness promotes learning by making experiences vivid and encourages further practice. Annoyingness promotes learning by making the experience vivid and discourages further practice.

If the learner's act contributes to the attainment of his goal, he tends to find the act satisfying. Most learning is for the sake of reaching a goal. If annoyingness operates very long during the practice, the learner is learning not to do the practice. The learner who dislikes record keeping will not keep records when free to do as he pleases.

Desirable behavior should never be used as punishment. Teachers should make learning as intensely satisfying to the learners as possible. Successful achievements are satisfying and teachers should make success possible for learners. Obstacles, which cannot be overcome should not be placed before the learner.

Good teaching with useful objectives can cause learners to like what they now dislike.

Satisfying	Annoying
Activity (when well & rested)	In-activity (when well & rested)
Approval	Dis-approval
Success	Failure
Security	In-security
Confidence	Fear
Freedom	Compulsion
Knowledge	Ignorance

III. *The Principle of Association :*

Experience that occur together tend to re-occur together. Occuring together must be simultaneous or in sequence. This is useful in teaching science by applying the learning in Botany, Mathematics, Physics, etc., to problems in Agriculture. Merely memorizing facts should not be expected to be useful in life situations. Only as they are applied do they become useful. Theory and practice should be taught together, if they are to contribute to each other. The relationship of a fact to a situation makes learning easier and more permanent.

Summary of Principles

The Extension worker should at all times remember the 3-D's (dimensions) in teaching. They are ; telling, showing and doing. Before cultivators really learn an improved practice they must do the practice. If he learns how to do a practice from one of the Extension worker's learning situation, but never practices what he has learned and is not taught again he tends to forget. This is where the many Extension teaching methods begins to play such an important role in cultivators adopting improved practices. If Extension does not continually teach the same subject in many different ways - not just repeating, the cultivator tends to forget and he may never adopt the improved practice advocated.

It is the Extension workers responsibility to be able to teach in such a way that the cultivators receive satisfaction from the teaching and does not become annoyed in the process. He must make learning as appetizing as posible. The cultivator must be shown that which is being taught is good for him, that he can do the practice, and that he will be rewarded.

As learning is associated with experiences, the teacher (Extension worker) must relate improved practices in terms of the cultivator's and by associa-

tions that he (the cultivator) knows about or the worker must create situations, in which the cultivators become associated with. For illustration ; if a cultivator takes an interest in a result demonstration, follow the practices through the demonstration, he has been taught through his association to the problem.

Four steps in Learning and Teaching

I. Preparation :

1. Prepare the learner by associating the thing to be taught with something already known. (The old vs the new).
2. *Approach*-recognize that the problem exists in a situation.

II. Presentation :

1. Show the learner the thing to do and tell him the things to know.
2. *Drawing out*-accumulations and evaluation of facts.

III. Application :

1. Have learner to try it, correcting only when necessary.
2. Acceptance-develop a trial conclusion, which may need changing or modifying.

IV. Testing :

1. Have learner do it unassisted to prove he knows it.
2. Summation-final conclusion.

Chapter - 9

The Communication Process.

In the field of human relations, communication means the exchange of ideas. Dr. Paul Leagans of Cornell University, defines communication as, "the process by which a communicator helps others to gain ideas, facts, feelings, impressions, etc., in a manner that the receiver gains a clear understanding of the meaning, intent and use of the message". Thus, communication becomes the means by which an idea (or knowledge) is taught to any one, group, or masses of people. In every walk of life one takes re-course to communication. In other words, man invariably has to lead some kind of social life for which he is destined and in doing so, he must communicate.

Whenever two people meet they communicate. How many times do these people separate without either one actually understanding the other one? How and why does this happen? One can easily say it is due to poor communication. The man who communicates, the source of communication, can easily control what he says. The way in which ideas are given meaning by the receiver, is practically impossible to control, as far as the man who starts (the source) the communication is concerned.

The Extension worker is very much involved in the communication process. His main job or responsi-

bility is to teach people. If he teaches, he must communicate with some one. If he is a good Extension worker, he must teach (communicate) with a lot of people. The ability to influence others is very closely inter-related with his ability to communicate well. Unless an Extension worker has the ability to influence people, at least at the minimum level, to accept new ideas, knowledge, skills, and facts he cannot be a success in his work. Therefore, all good Extension workers become somewhat of an expert in communications. The poor Extension worker may have never found his key to success—the ability to communicate well.

If one stops long enough to study a little about communications, he will become convinced that communication is a factor in his success or failure and is important enough that stress should be given to the subject by every one working in the "uplift" program in India. It is worthwhile for each worker to go into the subject and try to find out how he can improve his communications. In any communication system, there are four main factors. They are : (1) the source, (2) the message, (3) the channel, and (4) the receiver.

I. *The source (s) :*

1. All communication must come from some source :
 - (a) The source may be a person.
 - (b) The source might be a group of people—even an institution.
2. There are things which determine how the source will operate in the communication process :
 - (a) His communication skills, the ability to think, to write, to speak, etc.

(b) His attitude towards :

1. His audience.
2. The subject on which he is communicating.
3. Himself.
4. Any other factor which is pertinent to the communication situation.

3. His knowledge about :

- (a) His subject.
- (b) His audience.

4. The social system in which he operates :

- (a) Who his friends are.
- (b) What his role is.
- (c) What group he belongs to.
- (d) What his social back ground is.

In any communication process communication starts with a source. Some one must start things going, but one must also remember that many things condition how this source should or will communicate.

II. The Message :

1. The message, in any communication, has several factors which must be considered :

(a) The code has to be chosen :

1. This can be looked at in terms of a given language :

- (a) The natural languages : Spanish, Hindi, English, etc.
- (b) These include other languages : music, art, gestures, etc.

(b) The content has to be selected and organized :

1. Ideas to be presented (or taught) has to be selected.
2. Ideas (or message) must be filtered.
3. Focus message on the filtered points.
4. Ideas tested.
5. Support of ideas selected and tested.
6. Ideas and support must be arranged properly.
7. Follow the plan.

(Selection of content and the organized way the content is communicated is the most important part of any good communication).

Example : The Extension worker has selected Japanese paddy method as the message. Japanese method of paddy production is a very large subject—certainly too large to teach at any one time. The question is, what part of the message should be taught? The worker has discovered that planting in lines is the largest problem with the people. He has filtered the message down to the specific item of line planting of paddy. The teacher (source-Extension worker) must now select supporting facts to communicate. He selects figures from the research station, some good local results, or figures from some good reliable cultivator on line planting to teach - to communicate. He now must decide how to teach these supporting facts in order that the receiver, the cultivator, will understand and accept. After all the material has been selected, filtered and arranged he must follow through on his plan of action.

The process may be explained : a Gramsevak intends to teach cultivators the subject of sugarcane manuring. The Gramsevak knows quite a lot about

the subject. At this point, he must remember that the cultivators know a lot about sugarcane manuring. Thus, the Gramsevak has as his first task the job of finding out what he should communicate. It can be assumed there are six salient points to the manuring. The cultivators may be doing a good job on three of these points. It is needless to say that the Extension worker should stress, in his message (communication) the three points that the cultivators are not doing a good job in. This is the filtering out process. A lot of pruning is necessary in communications. Many times items which are of no benefit to the people are communicated to them. After selecting the message part, it is important to filter out exactly and precisely what to communicate. Of course, this filtering out process might bring the source (teacher) to an entirely different subject as the ratio of N. P. K. or kinds of manure.

Once the message has been filtered, focus on those filtered points during the communication and support the points with facts and figures.

III. *The Channel (s) :*

When a source has selected his message, he must decide what channel he will use to present his message. He must decide what method or media of communication will be most effective.

1. The simplest way to describe channels is to list the five senses which can be used to receive a message. In other words, the channels of communication are ways of presenting a message so that :

- | | |
|---------------------------------|--|
| (a) The message can be seen. | } All Extension
methods employed
for teaching take
recourse to one or
more of these senses |
| (b) The message can be heard. | |
| (c) The message can be touched. | |
| (d) The message can be smelled. | |
| (e) The message can be tasted. | |

2. Generally, communication is more effective when more channels are used—when more senses are stimulated.

3. Generally, communication is more effective when more of the senses are stimulated more directly and immediately.

4. The following kinds of channels (Extension teaching methods) can be analyzed under the five senses: lectures, discussions, interviewing (counseling), radio, recording, cinemas, demonstrations, on-the-job training, in-service training, camps, news articles (newspaper, magazines, books, bulletins, leaflets, etc.,) dramas, exhibits, etc.

IV. *The Receiver :*

The final link in the communication process is the receiver. All factors which operate on the source operates equally on the receiver.

1. All communication must end with some receiver.

(a) The receiver might be one person.

(b) The receiver might be a group of people—even an institution.

2. There are things which determine how the receiver will operate in the communication process :

(a) His communication skill.

(b) His attitudes.

(c) His knowledge.

(d) The social system in which he operates.

From the above points it should be clear that to be a good Extension teacher (good communicator) requires much thought on the method (s) he will use to communicate with those whom he wishes to teach—the

receivers. He will use every available resource and arrange his teaching in such a manner that the receiver understands. Only when the other fellow understands has the communicator (Extension worker) done a good job in his communication. One may easily state that to communicate well in Extension the Extension worker must know the subject (knowledge) he is communicating. A good teacher can not be too particular in these matters. He sometimes, may have to go to great length and trouble in his preparation to accomplish the objective he has set out to do. He can be assured that his time in preparing himself well will pay in the end.

Feed - Back

Feed-back is another point which should be discussed in the communication process-a very important point which all Extension workers should think a great deal about. Feed-back may be defined as the reaction of the receiver to the communication. Questions, statements, gestures, sounds of different kinds are some of the expressions in feed-back. If one studies and interprets feed-back and adjust his communications accordingly, he can improve his communication. Feed-backs are made or given by the receiver(s). The communicator should be alert to these signals. People tend to feed-back with what they expect from the source. Unfortunately, in many cases, the feed-backs are not effective on the source because :

1. The source usually retain things with are pleasant and disregards those things which are unpleasant.
2. The effect of feed-back is mutilated by the explanation given by the source. This can be in his actions alone. Both of these lower the efficiency of the communication process.

The source can do the following to improve feed-back in communication situations :

1. In making contacts, particularly initial ones, they should be face to face.
2. Invite questions, statements and etc., from the receiver. Lack of questions, statements, etc., may be because the subject matter is relatively new, unfamiliar, or too technical.
3. Observe what the receiver is doing. Remember it takes energy to listen or think. One knows where the audience is if he is a good communicator.

Communication and Learning

Learning takes place usually, as a result of teaching. Teaching is essentially communication. Therefore, learning to a large extent is dependent on communication. If, after teaching, the villager has not learned it is probably due to poor communication between the worker and the villager.

The correlation between learning and communication can be realized when viewed as follows :

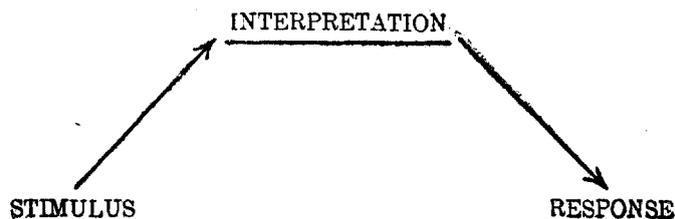
STAGE I

In any communication situation the source produces a stimulus (the message) and the receiver gives a response. Before a response takes place a highly complicated process of interpretation takes place within the mind of the receiver. There are, of course, varied complications depending on the subject, highly technical vs not so technical, the association the receiver connects with the message, the effect the message has on him, the senses being stimulated and more items that have to do with the learning process. Some stimulies are so severe that learning takes place immediately and it may last throughout one's life. For illustration : You may tell a baby that fire is hot, but the process will have to continue or the baby will attempt to again place his hand in the fire. The

response in learning, in this case, will last forever through the stimuli-the severe burn and hurting. A person may unconsciously say "I get it" or he may snap his fingers and say "I get it" or his gesture may only be by a slight movement of the head. The communicator should be on the alert for these signs. People learn through their responses to stimuli. If the Extension worker can not supply a stimuli in his teaching, he cannot expect a response. If an analysis is made about interpretation it can be seen that it is composed of :

1. Paying attention to the stimulus.
2. Giving meaning to the stimulus.
3. Understanding the stimulus.
4. Acceptance or rejecting the stimulus.

When a new idea is presented to a villager by an Extension worker a stimulus is produced. The villager may accept or reject the idea, which is the response. Acceptance or rejection of the idea depends to the extent to which the villager gives meaning to and understands the idea. If the idea is accepted it means that the villager has attached meaning and understanding to the idea. If the idea is rejected it should be remembered that the villager was unable to attach meaning to and understand the idea, therefore he decided to reject the idea.

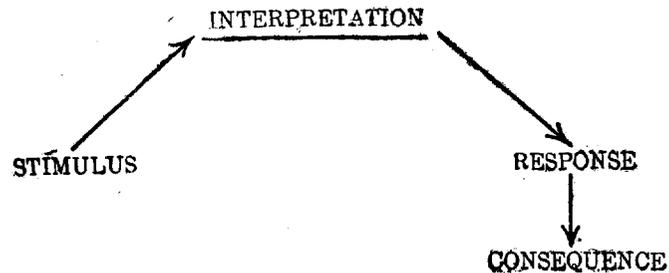


STAGE II

Once a response is made by the receiver that response will result in consequence. In some cases

the consequences may be rewarding and satisfying, while in some other cases the consequences may be disappointing. Unfortunately, if the consequence to a response turns out to be disappointing, further occurrences of consequences may be completely stopped.

In most cases, if the idea presented is economical for the receiver, practical for the receiver, easy and scientific for the receiver the consequence as a result of the response to the idea will be satisfying. An Extension worker should be convinced before attempting to communicate that the idea is economical, practical, easy, and based on facts (Science or research).

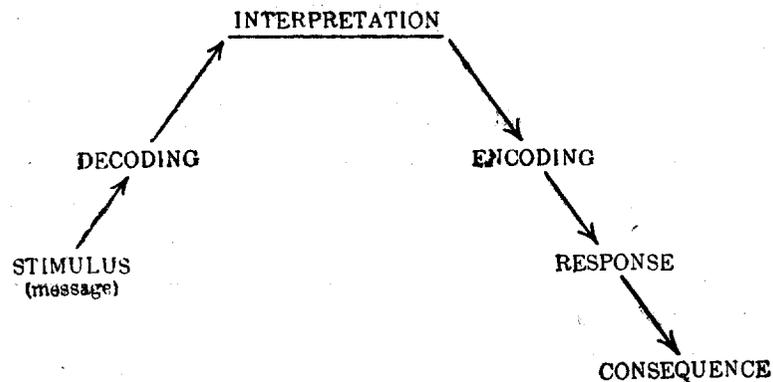


STAGE III

A pertinent question is, how can an Extension worker help a villager in the process of interpretation? One can see that interpretation takes place before response and that meaning and understanding of the stimulus (idea) takes place during interpretation.

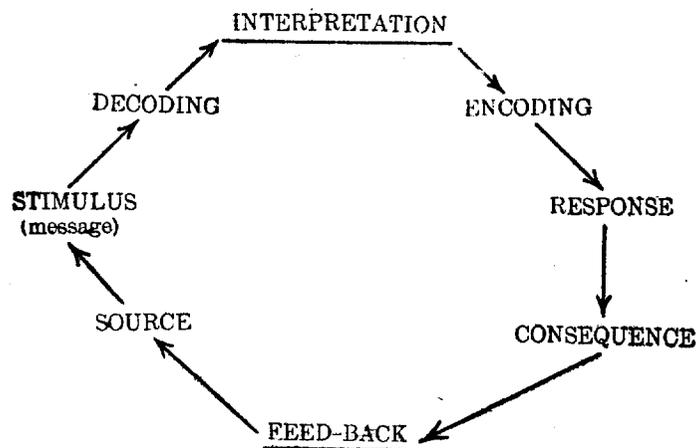
The stimulus produced by the source should be decoded (given out) properly so the receiver may interpret before he makes a response. The result of interpretation will be encoded (taken in) by the receiver and will be shown in the form of consequences by the receiver. It follows then that if decoding (teaching) of the stimulus is not properly done, if communication as related to the source has been improper (poorly done) that the encoding (learning) of the stimulus, which should take place as a result of the interpretation of

the stimulus will also be ineffective. Extension workers should learn to decode his message (stimulus) in the best manner possible in order to ensure proper encoding by the learner.



STAGE IV

It is important that due consideration be given to feed-back in learning. If the feed-back turns out to be unpleasant, it is the duty of the source to rectify his mistakes in his communication.



Good Extension workers use many Extension teaching methods in order to be able to communicate the message to as many people as possible and many communication methods not only reach more people but they also give the individual receiver (learner) more opportunities to learn and be convinced of that which is being communicated.

Education is Communication

Stages	Mass Media	Neighbors Friends & relatives	Salesmen and Dealers	Agri. Agents	Indirect Influence
1. AWARENESS	XXX	X	X	X	
2. INTEREST	XX	X	-	XX	—
3. AVALUATION	—	XXX	X	XXX	—
4. TRIAL	—	XXX	X	XXX	—
5. EDOPTION	—	—	X	XX	XXX

Chapter - 10

Proper Approach

If one so desires he may find many examples similiar to this one: why is it that a particular salesman of "Brooke Bond Tee" makes good money through his sales, while another salesman of "Brooke Bond Tea" cannot make many sales? This difference is very striking in view of the fact that both salemen are selling the same product. As both salesmen have equal opportunities, why does this difference in salesmanship exist? The same differences of success or level of succes can be found in all fields of human endeavor. One can find many instances where, in a particular community, an Extension worker fails in his work and, in the same community, another worker makes a success. Some localities become unbearable for an Extension worker whereas this same place becomes a heaven of success for another worker. How can these differences in workers be accounted for? It is, generally speaking, very hard to accurately determine from the many reasons or causes that contributes to the failure of one and to the success of another worker. When one gets acquainted with an individual for the first time, he may form certain opinions about the individual and, in most cases, these opinions will remain for a long period of time. These opinions may remain with one all of his life. This is particular so, if those opinions are bad. On what basis or by what factors does anyone go by to form these opinions

about an individual in which he has met for the first time? Whatever the cause, the basis for one's feelings towards another person is created as a result of the approach which the other fellow makes.

It is difficult for one to know whether an approach was proper or improper. Can a person say this approach is good and that approach is bad; this approach is effective and that approach is ineffective; this approach is proper and that approach improper? Whether an Extension worker is capable of seeing an advance or not, if a particular kind of an approach will be good to use in meeting certain people, he can with practice and study improve upon his approach. One can be assured that all human beings, consciously or unconsciously, place considerable value on the method in which they are approached.

The word approach may be defined, to come or go near. One may define Extension approach as a method used to reach or contact people with the ultimate aim of achieving the worker's objective.

Good Extension workers are always anxious to make the proper approach to his clientele. If the approach happens to be an improper one, Extension work has been hurt and this damage can be of such a nature and size as to last a very long time. This bad approach may even follow the worker wherever he might be assigned to work. It is good judgment, on the worker's part, to always strive to make the best approach possible for it is a very difficult task to try to repair damages created by an improper approach.

For all practical purposes, we can describe the Extension worker as a *salesman*. Extension has the commodities of knowledge, facts and skills to sell. His commodities are the best things in life. He should be proud of his opportunity for it is not only honorable but is the best items people can buy and it does not cost them money. Unfortunately ideas, knowledge,

and skills are abstract things : things which cannot be seen with the eye. To sell an abstract item is sometimes a difficult undertaking and it is easy to become discouraged in the process. It often requires courageous action. However, good Extension workers have indomitable courage in standing up for that which is right. The advantage in selling concrete commodities is in the ability for people to see and feel. The customer, the buyer, is able to get a more vivid picture of what he is buying. The seeing and handling senses are not stimulated when the salesman (Extension worker) is selling abstract things. It is indeed essential that Extension workers have those abilities of a good salesman for salesmanship is one of the most desirable traits of a proper approach.

Even though Extension sells abstract things, the selling often lies in the ability of the worker to sell on the basis of concrete evidence. To teach a farmer that the use of Murate of Potash will increase production is an abstract thing. When the farmer, as a result of this teaching, begins to fertilize his potatoes with murate of potash, the abstract thing is transformed into something concrete. This is the reason we have result demonstrations. There are, however, many items Extension has to sell that remains abstract. There are items one must remember and consider when making a teaching approach : he is working with human beings, the land belongs to the people, and the worker does not have the right to be there unless the farmer is willing for him to be on his property. The worker does not have the right to tell the farmer that he must do something. Furthermore, with proper thought, Extension does not want this authority. This leaves the worker with only one approach. He must convince the farmer, by selling him the idea, there is a better method, which in turn will make him, the farmer, a better living. If the worker has sold the farmer something which is good, for him and his family, Extension will always have him as a friend.

Extension is capable of leading farmers to accept new practices, new ideas, knowledge, and skills when the workers use good salesmanship-the proper approach. Extension workers should recognize their responsibilities in making the proper approach, and strive to improve with experiences.

Norms: In any human society there are certain unwritten laws observed by that society, which are handed down from one generation to the succeeding generation. These human laws, observed by human beings, contribute to what is known as the "norm" of that society. In some societies, these norms may be very rigid, while in another society they may be observed very little. Whether rigid or lax, anything outside the norm of a society is considered unbecoming and is unwanted by the society. This aspect about a norm can be described more clearly by examining the culture prevalent in most places in India. According to the culture of India, elderly people are always respected, irrespective of whether they are rich or poor, educated or illiterate. This may not be so noticeable in another society. In a number of societies it is considered outside their norm for a son to smoke before his father, but for a son to smoke in front of his father in another society may not be regarded as being outside of their norm.

It should not be hard for one to visualize why it is important for Extension workers to observe the norms of a society in which he works. No human being is identically similar to another. Likewise, the norms of two societies will not be identically similar, even though they may be contiguous. Anytime one ignores the norm of a society, he is disliked by that society. When a good Extension worker makes an approach, he is sure that he is within the norms of the society in which he makes the approach.

Closely allied to norms are :

1. Certain things one should do.
2. Certain things one should not do.
3. Certain things he may or may not do.

Any individual has the above three choices in which he must control his actions. In most societies in India a child is expected, implicitly, to obey his parents. In like manner, the parents do not expect the child to be disobedient. When a person becomes old in age he may be helped financially or he may not be helped within his own culture group. Thus, in one's day-to-day living he has choices within the three alternatives.

In the case of an Extension worker, he should try to teach villagers. He should not give orders. He may or may not be sincere in his work.

When one is doing what he should not do, in all probability, his approach will be improper. When he is doing something which is not expected of him, in all probability, his approach will be improper. Any action within the norms of the society will enable him to make good approaches. Any action outside the norms of the society will lead to an improper approach.

Role conflicts : For an Extension worker to make a proper approach, he should not get involved in role conflicts. The word "role", in this case, means that which is expected of one within a given situation. Role conflicts happens in homes. Before a girl marries she may not have any personal problems to keep her from looking her best at all times. After she marries she assumes two roles. She has the role of keeping a house; and of being a wife. When she has children, she assumes a third role, that of being a mother. She must approach her three duties in somewhat different roles or she becomes involved in role conflicts. Unless the husband realizes this aspect

of his wife's life, he may become displeased with her. Because she cannot look her best at all times or perhaps give him the attention which he expects or believes he deserves he become peeved over her actions. Many petty quarrels, no doubt, are caused over role conflicts.

The Extension worker is expected to teach. Suppose the worker, instead of discharging his primary role of teaching, assumes the role of an executive. What are the results? He is in a role conflict and will not be successful in his role as an Extension worker (teacher). One cannot make the proper approach, which is necessary to his work, unless he understands his role and is able to avoid role conflicts. He must have a clear insight into his role in which he finds himself.

The necessity of avoiding assumptions : To make a proper approach it is necessary that Extension workers avoid making too many assumptions. There are, no doubt, assumptions which are good. The unfortunate thing is that when making assumptions one draws conclusions, in the form of assumptions, from his own experiences which are limited to his past associations which constitute one's background. When an Extension worker contacts a farmer, if he indulges in too many assumptions, he may make an improper approach, simply because of the background of the farmer compared to the worker's background being so different. The worker, because of his training, may have a background mainly based on theoretical information. In the case of most farmers, their background is constituted from their experiences and associations. They have their own skills, belief and attitudes, which are based on their background. Most farmer's knowledge comes from their own experiences and associations. When the worker makes an approach to the farmer, he may make certain assumptions and those assumptions will be limited by his information. Some of the more important things

farmers should know and study about may never be discussed, because the worker assumed the farmers knew these things. If this happens, the farmers may not understand the worker and for all practical purposes the approach was ineffective. At least, the approach was not of the standard desired. Some one said, "get into the shoes of the farmer" and evaluate his approach.

Closely related to assumptions is the art in communicatins. In human relations communications means the exchange of ideas. In making approaches, one must make himself understood by those whom he approaches. Each must understand what the other is communicating. The author has on many occassions requested the worker to interpret a question to a farmer. In many instances the worker answered the question. Many times the worker stated the farmer already knew the answer, therefore, there is not any need for the question. How many of these cases are true or just assumptions on the worker's part ?

Personality : Personality means individuality. Extension has as many personalities as it has workers. The effectiveness of an approach depends, to a very large extent, on the personality of the person who makes the approach. One may feel at ease and enjoy the presence of some people, while with others he becomes bored, uninterested, and even disgusted. One of the reasons for this feeling is the personality of the individual whose presence he is in.

Every individual, because of his won individuality will have many roles to play and such roles constitute what is called his other roles. One's self and other roles constitutes one's personality and the way in which one discharges these different roles determines his personality.

Every Extension worker has a series of self-roles, like behaving in a good manner, telling the truth, being a good neighbor, friendly toward others, etc. Because

of his position he has a series of other-roles, like teaching, helping the Extension Service, leadership, etc. The way in which the worker discharges the different sets of roles will, undoubtedly, determine his personality. Therefore, one's personality influences the approach he is able to make.

Proper approach is the cumulative effect of a number of things. Only reflective creative thinking coupled with purposeful and careful observation will enable one to make good approaches in his work. Personalities may be improved by the individual who is concerned. Most everyone will agree that once a wrong approach is made, the door in which the approach was made is lost to Extension.

The first thing which an Extension worker must realize is that he is dealing with people and not just physical problems. To tackle the physical problems, he may have to break through a wall of resistance. This wall may be a durable one or it may be a mere image. In either case the worker is seeking people to do things that he knows are good for them - through research. To many farmers the worker is just another Government man, and in the past it is possible the cultivator has encountered difficulties in dealing with Government people.

The technician (Extension worker) provides :

1. Sound technical information.
2. He stimulates thought and action.
3. At the proper time, he supplies technical know - how.

In the process of these three, Extension is concerned with two basic assignments :

1. The dissemination of useful and practical information.
2. The practicable application of that information.

In far too many times Extension workers either forget or never learned their basic assignments. They, in far too many cases, go in for art clubs, drama clubs, sport clubs etc., to the extent that no useful and practical information was disseminated to the cultivators.

Indian cultivators will accept new practices voluntarily, provided the worker learns to approach him in the proper manner. In many cases the first approach the worker makes leaves lasting impressions.

No Extension worker will gain friends by bragging about himself. The cultivator is not interested whether the worker is a college graduate or not. The cultivator had rather hear one say that he has had practical experience in actually doing the practice, job, or whatever it is being discussed. A man getting his car fixed is not interested in whether the mechanic is a college graduate. He is interested in getting the car in good condition again. Rural people are interested in their welfare. If the worker meets a cultivator who has a problem that he has faced before and had success in helping to solve, mention the fact. It is not necessary that the worker, but the farmer solved the problem. Give successful results of other farmers. A farmer is pretty quick in spotting a bluffer. Always impart knowledge in a friendly way. Avoid arguments. No Extension worker ever won an argument. There are too many after effects. A worker must be enthusiastic about his job and ideas. No salesman made a sale, unless he believed in the product being sold.

A good Extension worker is always prepared to help. Most farmers will respond if the worker offers to help. Ask a lot of questions and do a lot listening. Do not try to tell all you know. Instead, try to leave something with the cultivator for him to think about.

Give the cultivator more than one method to solve his problem-if possible. Let him choose his method.

He will be more of a willing man. He will also tell his friends, "this I have done".

A good Extension worker has courage. There are many problems that research has not solved, but if you know of a better way, a better method than the cultivator is practicing the worker must have the courage to back up his conviction. The worker that knows he is right should go on with the job before him.

Every worker has to learn to work with groups. Even the home, in large families, sometimes becomes a group problem requiring group solutions. Instead of backing away from this take advantage of the situation. There are other groups of necessity due to geography, etc. There are artificial groups (man made) which are brought together for all to co-operate. These are the hard groups to handle. There are other groups which are "natural groups" like family, close neighbors, villagers, neighbor groups that are in the habit of doing things together. In each case, find the leader and start from there. A good way to find a leader is to make mental notes when talking to others, how many times a certain man's name is used. He may not know it but he is their leader. Sometimes the leader does not want to assume leadership. However, Extension must work with these leaders for they are, generally speaking, the first to adopt new improved practices.

No one can actually tell another Extension worker how to do a good job. The worker, must seek and find the solution. What works well today may not work so well in another place. What works for one may not work so well for another. A good supervisor does not tell his subordinates exactly how to do a job. In so doing, if he continues, the supervisor has damaged the initiative of the subordinate. As a good worker one will experiment, study and become better each day by observing one's mistakes and by trying a different approach next time where mistakes occur.

Chapter - 11

Science, Farmers and a Bridge



A good Extension Bridge requires :

1. Work on the worker's part.
2. Knowledge to communicate.
3. Interest in one's work and the welfare of the people.

In the previous chapters an outline was made for the different and various ways of teaching. The most important question is, what does Extension teach ?

There is one fundamental principle that all Extension workers should follow, and that is to teach as many facts as possible. Extension should get these facts from the laboratories and from research. Extension has the facts on one side and the people on the other side. Research, or facts, are of little value unless they reach the people.

The Extension workers must carry these facts to the people through the many methods of teaching as given in previous chapters. This is called the "Bridge" between research and the people, who can and will use the results of research. If it were not for the Extension worker the message would, in many instances, never reach those who need and can profit from the research. Research is for the betterment of the society in which one lives. In Agriculture, research is so designed that people who produce the food and fiber can grow more per acre, improve the quality, and produce more on a economical basis. This gives the people more food, more fiber, and more money which gives a better life to all.

Agricultural progress depends upon people. For true progress people (1) must know, (2) must understand and (3) must act. How far people progress depends largely upon their access to accurate and reliable information they can use to help solve their problems.

Communication is the vital bridge. Experience has proven that a steady flow of accurate, understandable, factual information can :

1. Speed the adoption of improved practices.
2. Help meet farming emergencies by giving farmers timely information on insects, diseases, and other rapid changing conditions.

Resources that spell progress

Briefly, there are three kinds of resources :

1. Capable scientist at work on the problems of farm people.
2. Farmers who have confidence that science can help them.
3. A bridge of communication to carry knowledge from the source to the user.

There are three parts to this getting information to the people :

1. Getting knowledge from a source (research).
2. Interpreting knowledge so people will understand it.
3. Transmitting the interpreted information to the people, who will use it.

In every case where knowledge is to be carried to the people it is left to the Extension worker to do this most important task. It is Extension's job to secure the information and then interpret in a way that people will understand and use. Extension workers can improve the farmer's belief in research by being honest. In other words, the workers teaches those things which he knows and is ready to say "I do not now" to a lot of questions that he does not know the answers to.

All Extension departments need a good information section to interpret research findings, and to pass the information on, in an understandable form, so that the Extension field workers will understand and be in a position to give the people in a form which they will understand. This is one of the many reasons why any Extension department needs specialist in the different fields. The information branch identifies sources of knowledge, keeps up-to-date farming infor-

mation, what institutions are doing research work, and determines how results may be made available by the information branch.

It is Extension responsibility to speed the adoption of improved practices, disseminate practical and economical information, and see that these practices are used by the people. Every Extension worker should know how and where to get information and how to interpret (teach) wisely, so the people may understand and use. This is the "bridge" which must be built for people to make the kind of progress wanted and expected.

Chapter - 12

Teaching, General.

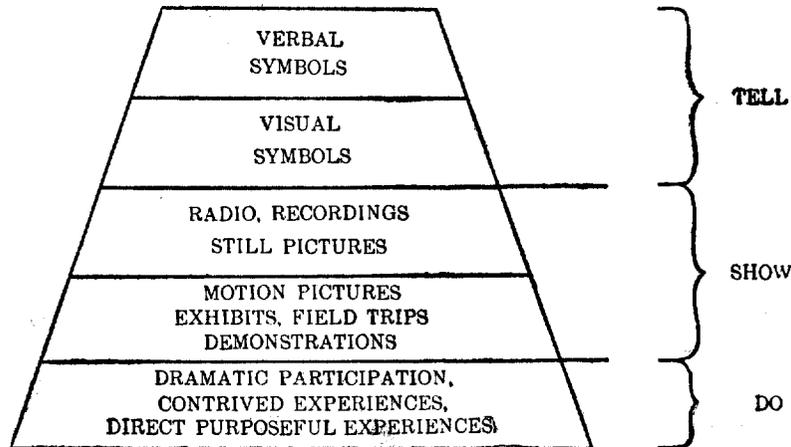
Teaching is the ability to transfer knowledge, skills, and facts. Good teaching can be compared to the 3-D (three dimensions) movie, it has three dimensions. The three dimensions in teaching are : telling, showing, and doing. A good Extension teacher will tell the people how to do a better job, show him how to do a better job, and then have him practice doing a better job.

Statistics show that people remember :

- 10% of what they hear,
- 20% of what they see and hear, and
- 70% of what they hear, see, and do.

Extension Personnel, a corp of teacher.

Ways to teach - teaching techniques :



The above tri-angle is built from the bottom up. In other words, the most important method of teaching is the bottom method, "Direct Purposeful Experiences."

1. *Direct purposeful experiences* is the "bed rock" of all good teaching. The teacher (Extension worker) relates items from experiences. He gives experiences from research and he gets the cultivator to do things research (experiences) has proven to be right. Research is carried out under the guidance of purposeful objectives.

2. *Contrived experiences* is an edit of the reality. If the Extension worker is teaching the finer parts of a good dairy cow, the best teaching comes by having a good dairy cow so he can point out the parts of the body he is discussing. If he does not have a good dairy cow, he must use the next best thing (which is) perhaps, a model of a good dairy cow. If he does not have a model, perhaps a good picture is his next best teaching aid. If one is teaching fertilizers, he should have samples of fertilizers, etc., to teach effectively.

3. *Dramatic participation* is something which no one can do as well as the Indian, provided he uses his initiative in his teaching. Dramatic participation is a wonderful way to teach. More learning takes place when the learner participates in the drama. A good way to have dramas is by puppets. Indian rural people enjoy dramas whether people or puppets are doing the acting.

Even though the above pertains to dramas one must understand that when a learner actually participates, he is part of a drama whether he is participating in a group discussion, result demonstration or some other activity.

The above are the three most important methods in teaching and can be used in such a way as to get the learner (the cultivator) to do. "If I do, I know."

Our next teaching methods employs the art of showing the learner. "If I see, I remember."

4. *Demonstrations*. Demonstrations are more useful when one can present by participation-which may be called dramatic participation. Too often the learner is just an observer, but he remembers more than if the message was just told to him.

5. *A field trip* is another good method in which the teacher may employ telling and showing.

6. *Exhibits* alone is not enough, as pointed out earlier, but by combining telling one adds to the learning. The only drawback to the method is that the learners are only spectators.

7. *Motion pictures* are too fast for the average learner to learn well. If all the teacher does is show the film, there is not very much learning. An advantage to a film is that it is entertaining, as well as educational. One will note that motion pictures rank only seventh in importance an an Extension teaching methods. It is only a picture thrown against a flat surface with a narrator who can say a few words on the main topics. Rarely ever is a motion picutre narrated in detail. Motion pictures often lose the personal touch of an individual and is left to the judgement of the audience as to it's true meaning.

8. The following teaching methods employ telling, "If I hear, I forget". Radio, recordings, lectures and still pictures can only be used as an aid in teaching a subject. There is very little value to these methods, unless the teacher is well versed in their use, and can and will use properly. Each has it's own value and each is a better method than just visual or verbal symbols.

9. Visual and verbal symbols give room for errors. Visual symbols in the form of charts, graphs, posters, cartoons, and etc., is often the most economical way to teach the subject selected to teach. Verbal symbols are too easy to misunderstand. An example can be given using the word "cow". Does the word cow mean the same to every farmer? The answer is "no". In all probability the individual farmer associates the word with an animal which he owns or is accustomed to seeing. For one farmer "cow" may mean a good dairy animal. To another farmer "cow" may mean an animal that will produce an off-spring that will make an excellent work animal. He may not know what H²O means at all. All people do not get the same meaning from reading a book. Beauty to one man may mean something entirely different from another and so on. Symbols are the least important method of teaching.

Every good teacher will, however, combine his teaching methods so he can tell the farmer, show the farmer, and have the farmer to do.

"If I hear, I forget
If I see, I remember
If I do, I know"

Chapter - 13

Steps in Extension Teaching

A good teacher will, in carrying out his teaching program or in any given individual teaching situation, prepare and present his teaching in steps. Any Extension worker should consider he is always teaching,



regardless of the method he is using. A home visit is just another teaching opportunity or the worker may have used another method, as a group meeting, for the purpose of teaching. In any teaching situation

the worker should have a "plan of action" for his teaching. The following six steps is a good "plan of action" to follow :

1. Call the farmers ATTENTION to the fact that there is a better method than what he is using or doing. He may not be aware of the fact that another way is more profitable and will make him a better living.

2. Create an INTEREST in the farmer for the new practice. Tell him what other successful farmers, that are using the new method, are producing. Leave a feeling the new practice is easy and sell him the idea he cannot afford to do without it.

3. The worker must continually sell the new practice to the farmer, until he DESIRES to use the method. Creating a desire and interest in people are so closely related until one may be doing both at the same time. First, the farmer must be lead to see the need for the practice. Each worker will have his own approach to the farmer in leading him to see his need for the practice, but in the chapter "Group Discussion" this point will be discussed more fully. The worker must understand something of the psychology of human beings, and appeal to him through the things he is most likely to be interested in. Practically all people are interested in making money so it is only natural that the worker should spend a great deal of his time in showing the farmer how he can make more money. Increased production that is more profitably produced is more money. Through this approach the worker is creating a desire in the farmer for the new practice advocated.

4. The Extension worker must CONVINCe the farmer that the practice advocated is good for him. Only after being convinced will he go into action, that is-adopt the practice advocated. The worker may have to use many approaches and in several different teaching situation to convince the masses of people.

5. After the cultivator is convinced the practice is good, the Extension worker often helps him into ACTION. Extension's goal, from the start, was to get him to use the method. Often with just a little help from the Extension worker, the farmer will adopt the practice, at this stage of learning.

6. The sixth and last step is to see and to help the farmer see that he has derived benefits from the use of the new practice. He becomes SATISFIED in his undertaking. Many times the farmer will not repeat the use of the new practice because he has not seen just how or where he has been benefited. The Extension worker should follow through, observe results, and if favorable results were obtained, he should show the farmer where and how he was benefited. Too often the worker considers his job complete as soon as the farmer begins the use of the practice. Many times the worker has just begun with the farmer and with that practice. Good workers follow through in order to teach SATISFACTION to his clientele.

The six steps in teaching are :

1. ATTENTION.
2. INTEREST.
3. DESIRE.
4. CONVICTION.
5. ACTION.
6. SATISFACTION.



Chapter - 14

Teaching Objectives

Every time a teacher (Extension worker) teaches, he should know where he will start, where he will end, and how he will lead the group to this and in view. To do this, he should have worked out a plan, using the steps in teaching, throughout the teaching situation. This is his goal for teaching the subject, whether it is for one or for several teaching situations.

In teaching objectives a great deal of filtering out must be done in the preparation for teaching. Related theory and practicals should be associated together, therefore practicals should follow theory whenever possible.

An objective in teaching is an aim or end of action. It is a point to be hit, reached, etc. As this is the case, here is an example : Most crops are low in production or yield. In most cases, the people's objective is to reach a higher level of production. Their objective is to increase production, whether it is paddy, wheat, sugarcane, groundnuts, or increase in milk, etc. In most cases, paddy is the most important crop, so the following examples will be on paddy, but most all crops will have a similiar breakdown of teaching objectives.

Teaching objectives should be broken down (or devided) into two parts. In the case of paddy the two catagories of teaching objectives are :

1. The large objective : to increase the production of paddy yields,
2. Small objectives of which there are many.

Before the large objective of increasing the yield of paddy can be reached, there are many small objectives to be taught. A combination of a lot of small objectives achieved reaches the goal, which is to increase the production of paddy. It is true that any one improved practice adopted by a farmer may increase production, but to reach the end of action all known improved practices must be adopted by the farmer. In essence, this means the more improved practices adopted, the more the yield has increased. The more practice to be adopted, the more objectives there are to be taught. All of these are small teaching objectives which must be taught farmers before the large objective becomes a reality. A large number of small objectives taught well will convince farmers that more paddy can be grown per acre.

Listed below are a number of small objectives that Extension workers should teach in order to reach the large object :

1. Lead the farmer to see the need for him to increase production of paddy. This is, in all probability, the most important small teaching objective.
2. Lead farmers to believe that a paddy nursery is necessary.
3. Lead farmers to believe that good seeds are necessary.
4. Lead farmers to believe in a method of testing seed.
5. Lead farmers to believe in improved varieties of paddy.
6. Lead farmers to see the need for transplanting paddy.

7. Lead farmers to believe in the need of fertilizers.

8. Lead farmers to see the need of doing a good job in fertilizing.

9. Lead farmers to see the need of a good green manure crop.

10. Lead farmers to see the need of good barnyard manure or compost manure.

11. Lead farmers to see the value of manure, fertilizers, and good cover crops.

12. Lead farmers to see the need for treating seed.

13. Lead farmers to see the need for planting at the correct time of year.

14. Lead farmers to understand how plants take in their nutrients.

15. Lead farmers to understand the meaning of "limiting plant nutrients".

16. Lead farmers to understand the size, preparation, time to plant, and how to plant paddy nursery.

17. Lead farmers to see the need of good land preparation : when to prepare land for paddy, number of times to plow the land, depth to plow, and condition of land when planting paddy.

18. Lead farmers to see the advantages of transplanting, time to transplant, and how to transplant (depth, width of rows, distance between plants vs just transplanting). Lead the group to see the economic value of planting in lines.

19. Lead farmers to realize, if sowing paddy seed, the importance of planting the correct amount of seed, how to measure the amount of seed when sowing, and time to sow.

20. Lead farmers to determine the kind and amount of fertilizers to apply by :

- (1) Judging the fertility in terms of past production, lodging, weight of seed, etc.
- (2) How to detect plant nutrient deficiencies.
- (3) How to interpret the recommendations made by the Department of Agriculture.

21. Lead farmers to determine how to apply fertilizers :

- (1) When broadcasting.
- (2) Applyin in rows.
- (3) Applying in bunds.
- (4) When side dressing.
- (5) When placing under the seed.

22. Lead farmers to determine how to buy fertilizers intelligently :

- (1) If bag has tag-the interpretation.
- (2) How to calculate the cost of each plant nutrient.

23. Lead farmers to see the necessity for good manuring :

- (1) Compost and value.
- (2) Green manures-legumes and non-legumes-and their value.
- (3) Dried manures.
- (4) Cowdung.
- (5) Urine.
- (6) Night soil.

24. Lead farmers to see the need of controlling insects.

- (1) Establish a need for controlling.
- (2) Believe in the use of insecticides.
- (3) Kinds of paddy insects.
- (4) Damage by the different insects.
- (5) Believe that he, the farmer, can poison successfully.
- (6) Kinds of insecticides to use and how to mix and use properly.
- (7) Establish when to poison successfully.

25. Lead farmers to see the need of harvesting at the correct time, how to control lodging, thrashing of paddy, drying of paddy, and storing.

26. Lead farmers to see the need for each improved practice above and lead them to believe they can do the job.

The author does not consider himself a paddy expert, therefore, there may be practices omitted in the above that should be taught farmers. One does know, however, that all farmers must be taught the practices and attitudes listed above and that all of these small objectives must be taught.

When one considers the above is just on one commodity and in most places there are several or many commodities, each year research gives Extension new material to teach, and a worker should teach the same objective (subject) in several places and by several methods, one can begin to understand the enormous job which lies ahead for those who want the farmers of India to succeed.

Teaching is the art of teaching a large number of well chosen small objectives in order that the large objective may be accomplished.

A good teacher goes into every teaching situation with a large teaching objective for that occasion and with a given number of small teaching objectives in order that his large objective will be accomplished.

In every subject the first and foremost objective to be taught is the need for the practice.

Four things an Extension Worker Teaches.

A good Extension worker teaches until four things set shape in a new practice. They are :

1. Knowledge.
2. Understanding.
3. Skill.
4. Attitude.

The worker teaches the practice until farmers understand the value or need for him to adopt the practice. It may, as discovered in chapter II, have to be taught nine or more times before the farmers fully understand. First, the worker must understand and know how to do the practice. It is not enough that farmers understand only the importance of the practice. The practice must be taught until the farmer believes, understands, knows the skill, and has gone into action—which is called “a change of attitude”. His behavior has changed when he uses the practice.

Chapter - 15

The Role of Extension Education

When people attempt to carry on Extension without a clear understanding of the principles of Extension, one finds Extension taking innumerable forms. To study the forms of Extension without understanding its essence (the essential characteristics) leads only to an overlapping confusion. In far too many instances workers attempt to teach the forms without understanding the essence. The Extension process must never be confused with any of the various Extension programs.

To help understand the forms, and the essence of Extension, it is believed imperative that one understand two terms :

1. Extension Services—a program for agricultural development and rural welfare, which employs the Extension process as a means of program implementation.

2. Extension process- a program of working with people through out-of-school education along those lines of current interest and needs, which are closely related to gaining a livelihood, improving the physical level of living of rural families, and fostering rural community welfare.

In other words, Extension Services are such items of work like distribution of seeds, fertilizers, Para grass

sprigs, mango seedlings, etc. Before the above items can be distributed, there must be an educational system or you must use the Extension Process. The Extension worker must go to the farmer and convince him that the new method is good for him and he can make a better living by using (make more money-generally speaking). The teaching methods used in convincing the farmer the new method are the Extension tools the worker has to work with. It is education or the Extension process.

Any method or activity, which is not educationally is not part of the Extension process, no matter how important it may be, and even though it may be carried on within the title "Extension Service" - perhaps by the same personnel.

The Extension process may be thought of as being made up of two essentials :

- (1) Action.
- (2) Operations.

It is *people* doing things.

I. Essential activities (acts) :

- (1) Farm and home visits.
- (2) Method demonstrations.
- (3) Result demonstrations.
- (4) Local participation in program planning.
- (5) Meetings of all kinds.
- (6) Tours.
- (7) Exhibits.
- (8) Melas, etc.

It is these acts (activities) which constitute the out-of-school education, which is Extension. These are the occasions in which Extension education is with rural people.

These acts may not be universal among Extension Services, but all employ some of them. It has, how-

ever, been well established that all of them, used in suitable combinations, are far more effective than any one used alone. It follows then that every Extension worker should be highly trained in all the methods.

II. *Supporting Operations* :

Even though supporting operations are not essential activities, for a worker to do the best job which he is capable of doing, supporting operations sometimes appear to be essential. A worker may go on for years doing a good job without the supporting operations, but he cannot accomplish the most and do his best without the supporting operations. They are, therefore, supporting operations to the essential activities. They help in carrying out essential activities in the best manner possible. The supporting operations are :

1. Formulation of a work plan.
2. Preparation of a calendar of work (events). A calendar of work is for the best possible use of time to balance the work load throughout the year, avoiding impossible situations.
3. Planning for in-service training. No alert Extension worker ever feels that he knows enough about his job.
4. Planning for evaluation-some kind of a record needs to be kept, and in such a way the records may be useful in evaluation.

Records are good :

- (1) To evaluate one's work.
 - (2) To leave for one's successor.
 - (3) They are required-for one's pay.
5. Execution of the supporting operation. "Plan your work, work your plan"- No plan is helpful until it is put into effect.

One may argue that some of the supporting operations are essential, but they are not, because they do not go with the people-they are not with the people.

A program is a list of activities to help carry out one's work in the most profitable and convincing manner. In doing so, one may list his activities (essential activities) by the month or even by days. Certain specific activities must be scheduled for a specific date in order that planning may be done well. In either case a calendar of work has been made.

The role of Extension education would look like the following in outline form :

Extension

Extension Services	Extension Process
<ol style="list-style-type: none"> 1. Distribution of seeds, fertilizers, cuttings of all kinds, etc. 2. Working with credit, supply and collections. 	<ol style="list-style-type: none"> 1. Essential activities : <ol style="list-style-type: none"> (1) Farm and home visits. (2) Method demonstrations. (3) Result demonstrations. (4) Meetings of all kinds. (5) Tours. (6) Exhibits, etc. <ol style="list-style-type: none"> A. Supporting operations : <ol style="list-style-type: none"> (a) Work plan. (b) Calendar of work. (c) In-service training. (d) Evaluation. (e) Execution of plan.

THE FOLLOWING TEN CHAPTERS STRESS THE IMPORTANCE OF USING EACH EXTENSION TEACHING METHOD TO THE BEST ADVANTAGE FOR THE EXTENSION WORKER SO THAT PEOPLE WILL CHANGE THEIR BEHAVIOR AND MORE OF THE PEOPLE WILL ADOPT IMPROVED PRACTICES AND AT A FASTER RATE. EXTENSION WORKERS SHOULD BE GOOD TEACHERS AND IN ORDER TO BE GOOD TEACHERS THEY MUST KNOW HOW TO TEACH. EACH EXTENSION TEACHING METHOD HAS IT'S OWN INDIVIDUAL CHARACTERISTICS WHICH ARE PECULIAR TO THAT METHOD. TO BE GOOD TEACHERS IN EXTENSION ONE SHOULD STUDY THESE CHARACTERISTICS AND STRIVE TO IMPROVE HIS TEACHING TECHNIQUES ON EACH SUCCEEDING TEACHING SUTUATION.

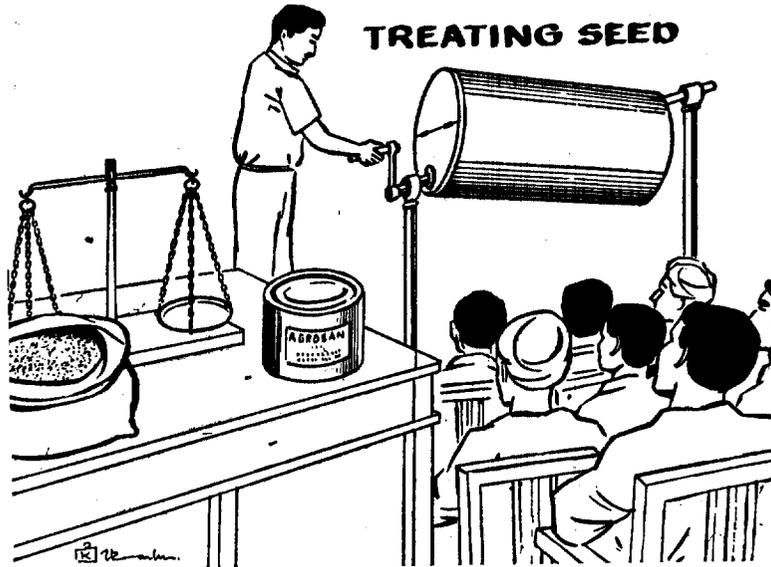
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Chapter - 16

Method Demonstration

(a teaching method)



An Extension worker should determine his best method to teach farmers. Statistics have shown, as in chapter III, that a method demonstration is the most important method of teaching, from the standpoint of getting farmers to adopt new practices.

WHAT ARE THE OBJECTIVES of a method demonstration ?

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They are :

1. *To teach skills effectively.* One may ask, what are the ways in which to apply fertilizers to paddy or any other crop. The answers will be many, such as, applying phosphates in the soil ten days before planting, side dressing with nitrogen, a small amount of nitrogen just before planting, etc. How one side dresses paddy when the plants are in rows, or when plants are grown from broadcasting may be two distinct and different operations. The art in applying this fertilizer may be used as a method demonstration. If one is recommending the use of parathion, a demonstration on how to apply, stressing the safety measures, may be an important new practice to demonstrate. Others may be spraying of different crops, line planting, inter-cultivation, testing seed by the salinity test, grafting, pruning, etc.

Unless one teaches the skill to the farmer, the demonstration may not be too effective.

2. *To motivate and stimulate action* due to : (1) seeing, (2) hearing, (3) doing, and (4) discussing.

This gives the value of a good method demonstration, because of the many senses there can be employed. One should tell the farmer what he is going to see and do. He should show the farmer what and how to do, and he should get farmers (as many as possible) to do what he has told and shown. Last, allow free discussion on the practice demonstrated.

3. *To develop opportunity for developing leadership.* If the demonstration is on a farmer's farm, arrange to have him tell and do as much as possible. Use other farmers present for the same purpose.

4. *To build confidence* in the demonstrator. If a farmer gives the demonstration or takes part in the drama, it builds confidence in him. If the Extension worker gives the demonstration, it builds confidence in

~~the worker and helps him become a better Extension worker.~~

5. *To promote personal acquaintance* between the demonstrator and the people. A farmer may not take an active part because he is not personally acquainted with the demonstrator whether the demonstrator is a farmer or Extension worker. Once he feels he knows the Extension worker and the other cultivators he becomes more active and more expressive in his views.

6. *To serve as a news-agency.* It stimulates publicity. The cultivators present talk among themselves and with their neighbors and friends. They discuss the demonstration, so the demonstration is given publicity as well as the Extension worker, the Block, and Extension.

7. *To yield a high rate of "takes" to "exposures".* This was proven, as stated above, in chapter III. More farmers adopt more improved practices through method demonstrations than any other method of teaching. It yields the highest "takes".

8. *To accomplish changes in practice at low cost.* Some teaching methods cost a great deal more than the results they obtain. Often, the method demonstration cost very little except the Extension worker's time. In the light of his accomplishments, in such cases, the cost becomes very small compared to other ways of teaching when the "takes" are considered.

Suggestions for Carrying out a Method Demonstration.

1. *Encourage attendance.* Extension workers should encourage attendance. If the worker feels there may be too many farmers present if publicity is widespread, he will have to use local contacts, personal

letters, etc. In such cases he should hold several demonstrations. Where a large gathering is preferable, Extension workers use circular letters, newspaper, posters, etc. Whatever the method invite the people one desires to attend. Be sure all know the place and time of the meeting.

2. At the beginning of the demonstration, *tell the people* what is being demonstrated. The Extension worker's success may depend on how important he can dramatize the subject and lead the people to be interested.

3. *Tell the cultivators why* the practice is being demonstrated. Do not leave this to some one else's judgement. Be sure the cultivator understands why the demonstration is being held. He might, otherwise, leave the meeting with the wrong impression. The worker also has an opportunity to teach in explaining the "why".

4. *Show the farmer how to do the job.* Do not miss the opportunity to show. There is not very much teaching in showing a farmer a mould-board plow, unless he is shown how it operates.

5. *Have the cultivators do the job.* If the Extension worker is demonstrating more than one practice, have the farmers to do each. A few, perhaps, will not participate, but the demonstrator should not be discouraged. He should always strive for participation.

6. *Hold question and answer session.* One will sometimes be surprised at the things which may have the individual confused. Give all a chance to clear any doubts.

7. *The Extension worker must be able* : to tell, to show, to demonstrate, to teach others, and be able to carry on a discussion of the practice demonstrated. If the worker is not sure of himself, he should practice until he is sure before holding the demonstration. Do not try to hold a demonstration being half sure of oneself.

8. Before holding a demonstration *the Extension worker must determine if the method will help the villagers.* Do not hold a demonstration for the sake of just holding a meeting. Determine if the method has value and can be used economically by the people.

9. *Have equipment and materials* exactly where the demonstrator plans to use them. The equipment shown should either be available to the farmer's use or cheap enough that he can afford to buy. Do not demonstrate something expected on the market-demonstrate only those things available.

10. The Extension worker should :

- (1) Have equipment in place and see that the equipment works prior to the meeting, preferably in time to get in shape, if out of order. Many demonstrations are ruined because the sprayer or duster fails to work.
- (2) If walking or riding the route should be selected and marked.
- (3) The Extension worker should have superior confidence in himself in carrying out the demonstration.

11. *In selecting the place to hold the demonstration, it is best to select a leader of the community, a man that all the others have confidence in. The place should be easy accessible.*

12. *Was the demonstration profitable? Evaluate :*

- (1) Were the villagers motivated to learn the new practice? The Extension worker must plan to show the cultivator the value of the practice. The farmers should go away from the demonstration with a feeling of "need".
- (2) Did the demonstration show the farmers how it will be to their advantage to adopt the practice?
- (3) The practice should be important for all to do.

13. *Was the new method capable of being fitted into a definite farm plan?*

An Example of a Method Demonstration

Using the above information the Extension worker decides to hold a Mould Board plow demonstration. What should he do first? He should determine the equipment he will use and whether the equipment is available. He should determine his method of teaching and the aids to be used in his teaching. He may require a Mould-board plow that is taken apart and another mould board plow ready to plow. He may require charts showing the parts of the plow, method of plowing, etc. He may also require the common country plow and two pair of oxen.

The next important item is to determine if he can get the equipment, aids, and oxen. He may have to make his charts.

The Extension worker has determined that he can get the above items. He now selects a time and place, being sure to keep in mind when he will be ready with the equipment, aids, and oxen. He now selects a leader's place, a place accessible to the public, and in consultation with the farmer sets the date and time of the demonstration.

He is now ready to invite or give publicity to the meeting. He must now decide on the methods to use in getting the farmers to attend the meeting and he must prepare for the activities involved in the demonstration.

If there are charts to be made, he should begin immediately the preparation of these. He must tell the people something and the meeting place for this must be clearly worked out. As he is going to show the parts of the plow he will select a place where all can see-preferably this place will be a little higher than the audience.

He should select two areas of land that are identical as possible. One area will be for the mould-board plow and one for the Dasi plow. The two pair oxen should be as near alike as possible.

After telling the farmers what is being demonstrated and why demonstrated, the worker demonstrates the practice. If there is a farmer skilled in the practice it is a good idea to have him demonstrate. This also helps develop leadership. He gets others to try their

hand with the plow. The two plows will now take their respective plots of land. He may wish to time the plowing demonstration and to start and stop at given times to be able to compare results.

In the end, the farmers are called together again and the worker will invite questions from them. It is very important that the worker be prepared to ask a few well chosen questions, and if these questions are not asked by the farmers, he should ask the questions to determine whether the farmers have learned that which he set as his objective to teach.

Caution :

A demonstration should never show something which is not available to the farmers or something which he cannot do. It should be practicable and economical to all.

Before conducting the demonstration, the worker should prepare a demonstration outline as :

Demonstration :

Treating seed grain for smut.

Materials needed :

- (1) A mixer (home made, if possible).
- (2) Dust mask or clean handkerchief to prevent inhaling of dust,
- (3) Seed grain that has been cleaned through a fanning process.
- (4) $\frac{1}{2}$ ounce of Ceresan (ethyl Mercuric phosphate) for each measure of seed, be sure to state amount of seed.
- (5) A dry place to store grain for 24 hours.
- (6) A circular describing method shown.

Demonstration Break-Down.

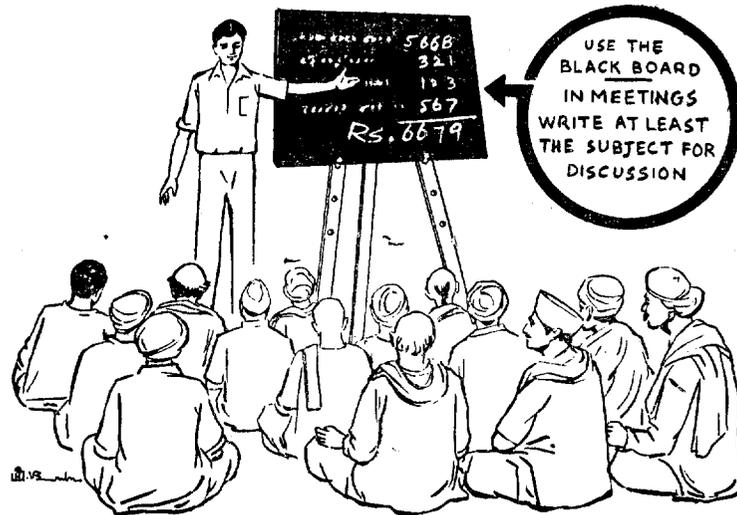
Important steps in the practice	Key-points
A step is a logical segment of the job, when something happens to advance the work.	A key point is anything in a step which might make or break the job, injure the worker ; make the job easier to do, a "knack", a "trick", special timing, or a bit of special information.
Put measure of seed grain in the mixer.	
Scatter $\frac{1}{2}$ ounce (one level table-spoonful) of ethyl Mercuric phosphate (Ceresan) on grain.	Tie dry handkerchief over mouth and nose or wear a dust mask, as the dust is poisonous. Use exactly the correct amount of ingredients.
Fasten cover of mixer securely.	
Turn the crank of mixer slowly (20 to 30 revolutions per minute).	Mix thoroughly.
Store treated grain in a dry place or in one pile.	Leave 24 hours. Keep dry. Keep livestock from the poisoned grain.
Repeat with additional grain.	Until all seed are treated.
*	
Sow within 2 or 3 days, if possible.	— to prevent reinfection. Do not feed treated seed to humans, poultry or animals. It is poisonous.

Suggestions for Improving Method Demonstrations.

1. Select topic pertinent to needs and interest of community.
2. Select a subject that lends itself to demonstrating.
3. Present demonstration when subject matter is timely.
4. Select place, providing suitable facilities for the demonstration.
5. Publicize adequately.
6. Be thoroughly familiar with subject matter.
7. Plan demonstration so that action, explanation, and use of equipment reinforce the Central idea.
8. Talk directly to the audience in a friendly, conversational manner. (Avoid arguments and over-aggressiveness).
9. Use appropriate demonstration materials, which may be easily and clearly seen by all.
10. Use equipment that is accessible to the farmers.
11. Present topic, step by step in a logical sequence, teaching one thing at a time.
12. Show appreciation for methods already being used by groups.
13. Summarize carefully.
14. Distribute interesting supplementary literature.

Chapter - 17

Meetings (a teaching method)



There are many kinds and types of meetings that good Extension workers hold for the purpose of teaching people how to live better. Below is a list of different kinds of meetings held for educational purposes :

1. Group discussion meetings.
2. Method demonstration meetings.

3. Meetings at result demonstrations.
4. Dramas.
5. Puppet shows.
6. Field trips, tours and achievement days.
7. Lecture meetings.
8. Panel discussions.
9. Debates.
10. Leader training meetings.
11. Committee meetings.
12. Program planning meetings.
13. Schools.
14. Cinemas.
15. Study courses.

Whenever two people meet it is a meeting. A meeting is the most common method of teaching. It is popular, because an idea may be taught to several people at one time. A meeting, too often, is used as an Extension teaching method because they can be held with a minimum of effort and preparation. Too often meetings are called without adequate preparation. In each of the above meetings a great deal of preparation and study, by the teacher, should proceed the meeting. Farmers may not read or write. They may even be illiterate but this does not mean that they have dull minds. Actually, they are pretty smart people, and they are capable of discovering when a person is bluffing. A good meeting is good for Extension, but when a worker holds a bad meeting, he is hurting both Extension and himself. Each of the above types of meetings need study by every Extension worker, so he may improve his teaching techniques. No Extension worker is too good in any of the types of meetings. Each can and should improve.

Group Discussions

Of the many types of meetings, the group discussion type is the most important. A good teacher will use the group discussion type of meeting as often as possible. A worker may have to use the lecture type of meeting when the group is too large or when he does not have enough time for a discussion. He should remember, however, that he may not be doing good teaching in the process.

A group discussion gives the Extension worker :

1. An opportunity to determine how much the members of the group know about the subject.
2. Gives the worker more chances to discuss a subject, not just repeating himself, that may need repeating.
3. Gives members present the advantage of learning other member's views and knowledge.
4. Does not exhaust information before members have had time to learn more about the subject.
5. Give members a feeling of pride for taking part in the discussion, in that each had an opportunity to contribute his knowledge or his thoughts on the subject.

The group discussion process may be carried out successfully by many approaches. No one approach is so outstanding that a recommendation can be made that one should always use that method and only that method.

The Extension worker as a teacher, should filter out and select his large objective and small teaching objectives which he plans to teach. His first concern, in the actually teaching process, is to determine how he will introduce his subject. The introduction should lead the group into the subject selected, determined necessary, and prepared by the Extension worker.

In every case, with few exceptions, the Extension worker should lead the group to decide problems, methods for, and the solution to the problems. For a good discussion it must be emphasized, the people should decide (make decisions) these things—not the worker. The worker may know best, but it is the people who do things. All of this depends on the initiative of the worker. He should ask himself, “am I sold on the method of asking questions and allowing the members of the group to do likewise or am I of the opinion that only I know the answers”?

Another good question, “Am I afraid of the method”? In other words, is it true that some workers are afraid the farmers will ask questions which he does not know the answers to and he does not want to say, “I do not know”?

The first process in any group discussion is to exhaust the knowledge of the group—find out what they know. This involves frank discussions, and the leader (Extension worker) may have to do a lot of leading by asking good leading questions. At times he will have to contribute to their knowledge. The more technical the subject, the more he will find he has to contribute. On subjects which are very new to the audience, he may have to contribute a lot. But in each of these a few well thought out and well placed questions are essential to learning.

Agreed that one of the best methods of teaching is by group discussion, how will the discussion leader begin the meeting? The method he uses in opening the meeting may determine the meetings success or failure. The opening of the meeting is one of the most important procedures of the meeting, if not the most important. Many workers have had bad meetings, because they did not choose the correct approach to the subject. It is generally a bad practice to call a group of farmers together and then start the meeting, “I have called this meeting in order that I may teach

you.....". It is much better to ask a leading question. Another good way to start the meeting off wrong is to ask the group what they would like to discuss or ask them what their problems are.

If one were to ask a group of farmers what their problems are they may say irrigation or lack of finances. The Extension worker may not be prepared to discuss either of these subjects and his meeting becomes a failure. It is much better to prepare the lesson on a common problem that all are interested in. To illustrate the point, one may have prepared his lesson mainly around the proper date to plant the first paddy crop. How will the worker start the discussion? Even here he has many alternatives to choose from. He may start the discussion by asking the farmers to name the crops they grow or what crops they like. List all the crops named on the blackboard. The list may include cotton, tobacco, paddy, sugarcane, groundnuts, chillies etc. The worker remembers that Sri P. P. Rao named paddy, so he asks Sri Rao, "you named paddy as being your favorite crop, why do you like paddy"? Have a discussion on this question. He may now ask, "what is the best time to plant the first crop of paddy"? Hold a discussion on that subject and after all have contributed, place on the board the results of research. The group should figure, in rupees, the value of planting paddy on the correct date as shown by research. If there are not any research on this question, perhaps the Block has carried on a result demonstration on the problem or if there is a reliable farmer of the community who has carried out his own demonstration, the worker may use his data. If there are no material from these resources, he may have to use data from some book on the subject.

The worker selected, long before the meeting, the large objective, "grow more paddy" and prepared his lesson. His first question may be :

1. Should paddy be grown by the Japanese method ? or
2. Does the Japanese method of growing paddy make more money ? or
3. Can more money be made growing paddy by the Japanese method or by the old (common) method ? or
3. Can more money be made by increasing the production of paddy ? or
5. Can more money be made growing paddy than is now being made by farmers of this community ?

The number of questions one might ask on the subject is inexhaustible but, as stated, the question should lead the group into a discussion of the subject the worker has prepared himself to teach. A question asked which involves economics (people making money) is always an interesting way to begin a group discussion meeting.

One may make a statement on the subject in the beginning and then follow with the prepared question. In any case, it is believed that most Extension workers will find that starting a meeting with a well thought out question makes a very good way to start a discussion.

As an example of a group discussion, the following data may be used for a very good group meeting or when one is counseling with farmers: In the West Godavary District, Andhra Pradesh, a fertilizer and insect (combination) chilli demonstration gave the following results :

Plot 1 :

1. No plant protection.
2. No nitrogenous fertilizer.
3. Applied F. Y. M. (Farm yard manure).
4. 10 cart loads and 1,000 pounds of ground nut cake per acre.

Plot 2 :

1. Plant protection against Thrips.
2. 100 pounds of N. per acre.
3. F. Y. M. 10 C. L. and 1,000 pounds of ground nut cake per acre.

Plot 3 :

1. Plant protection against Thrips.
2. 150 pounds of N. per acre.
3. F. Y. M. 10 C. L. and 1,000 pounds of ground nut cake per acre.

Plot 4 :

1. Plant protection against Thrips.
2. 200 pounds of N. per acre.
3. F. Y. M. 10 cartloads and 1,000 pounds of ground nut cake per acre.

Production :

1. Plot 1,09,450 pounds of green chillies.
2. Plot 2,14,900 pounds of green chillies.
3. Plot 3,19,000 pounds of green chillies.
4. Plot 4,21,050 pounds of green chillies.

As a teacher the worker may show the above results to the members of the group in two ways :

Number I

	Plot 1	Plot 2	Plot 3	Plot 4
Plant protection	no	yes	yes	yes
Nitrogen fertilizers	no	100*	150*	200*
F.Y.M., cart loads	10	10	10	10
Ground nut cake	1,000*	1,000*	1,000*	1,000*
Production	9,450*	14,900*	19,000*	21,050*

Results :

100* N + spraying = 5,490 pounds of chillies.

150* N + spraying = 9,550 pounds of chillies.

200* N + spraying = 11,600 pounds of chillies.

Number II

	Plant protection	N	F. Y. M.	Ground nut cake	Yield	Increased yield
Plot 1	no	no	10 C.L.	1,000	9,450	
Plot 2	yes	100	10 C.L.	1,000	14,900	5,450
Plot 3	yes	150	10 C.L.	1,000	19,000	4,100
Plot 4	yes	200	10 C.L.	1,000	21,050	2,050

Results :

1. First 50* N + spraying gave 5,450* increase.

2. Increased N of 50* increased yield 4,100*.

3. Increased N of 50* increased yield 2,050*.

Where is the point of deminishing returns ?

The above demonstration does not answer all of the economic questions in growing chillies. The data

on the demonstration will show the members of the group the *need* for them to apply fertilizers and control insects. It may also show the *need* for applying farm yard manure, but as manure and ground nut cake was applied on all four plots and at equal rates, there are not any figures to show the value of these two practices.

To teach the need of spraying and use of nitrogen fertilizers, the Extension worker goes into the meeting well prepared. He has a leading question, which is, "does it pay to fertilize chillies with nitrogen fertilizer and to control Thrips" ?

To teach this question properly, a blackboard is an absolute necessity. The teacher (Extension worker) may secure cost data from those present or he may use the figures from the dealers who sell the products, but the figuring of the value of fertilizer and spraying should be done on the blackboard, using figures given by the members present.

If the worker so chooses, he may compare the profit from plot number four to the common method used by most of the farmers. This may be worked out in chart form as :

Common methods		New method	
9,450*	Rupees	21,050*	Rupees
Seed			
Preparing land			
Manure			
Fertilizer			
Weeding			
Irrigation			
Harvesting,			
etc.			

The above figures should be given by the farmers present. The worker may present the cost of the nitrogen fertilizer and cost of spray material. At the end of the discussion, compare the profit of the new with the common method of producing chillie. It should also be pointed out that each additional 50* (pounds) of nitrogen produces a somewhat less increase in number of pounds of chillies. If this trend continues with every increase in use nitrogen fertilizer then there is a point where the increase in nitrogen does not pay, in rupees. This could be the point of deminishing returns.

It should be emphasized in the begining, the worker could give the group the answers, but they will become more convinced, if the worker uses their figures. The worker should be reasonable sure of what the answer is going to be, before he begins the problem with the group. If the worker will work the problem out with a member present before the meeting, the member will help the worker keep the figures somewhat correct. In the end the worker can give the actually figures for all items of cost given by the farmer who carried out the demonstration if he desires to do so.

In reaching the above decisions, the worker has used the knowledge of the members present, discussed certain techniques, he has used experiments or result demonstrations (which ever used) and the teacher (Extension worker) has contributed to the discussion.

The worker has now established the need for using improved practices (nitrogen, fertilizer and insect control) in growing chillies. He has also established a need to grow more chillies. What is the next step? With a little discussion as the groups went along on the problem, the worker used well over an hour. As someone remarked, "no souls are saved after 20 minutes of preaching", certainly the meeting of over an hour is long enough for one

meeting. The worker may, before closing, lead the group to list (Extension worker writes on the blackboard) the practices that one would have to do in order to produce 21,050 pounds of chillies per acre. All practices are now listed by the worker's leadership. Have the group select one of the practices for the discussion next time. Set the date, time, place and subject for the next group discussin meeting. This gives the worker ample time to prepare for his next lesson.

It should be remembered, at the next meeting that the instructors job in the beginning, is the same as the above described lesson : Lead the group into the subject and lead the group to see the need for the practice advocated.

Summary of Group Discussion

Lead the group to decide :

I. What ?

1. The problem.
2. The method to solve the problem.
3. The solution to the problem.

II. How ?

1. Exhaust group information and then the,
2. Instructor contributes by presenting :
 - (1) Results of demonstrations.
 - (2) Results of experiments, or
 - (3) Information from :
 - (a) authors (from a book).
 - (b) member of the group.

Cautions in holding group discussions meetings

1. Refrain from cutting a farmer short on his answers, questions, and comments.
2. Refrain from ignoring a member's suggestion or statements.
3. Do not hold a group too long. A good time to stop is when everyone is interested.
4. Do not try to cover too much in any one meeting. Learn to discuss the seemingly simple and small things.
5. If you are prepared to teach more, but the time has passed, do not resort to other methods. Stop the discussion and set another date to continue. Get the members consent or willingness to come back.
6. The subject is taught best when small details become part of the discussion.

Suggestions for group discussion leaders

Before going into the actual procedure of conducting a group discussion it is important that the Extension worker study a few suggestions :

- I. Getting ready is, perhaps, the workers first concern. The following suggestions take for granted that the preliminaries before the meeting are complete and the worker is now preparing for the meeting :
 - (1) Arrange members in a circle so every individual (if possible) may see who makes a statement-who does the talking.
 - (2) Provide table space, if inside and if possible.
 - (3) Encourage all to stay seated.

- (4) Start with trying to make everyone comfortable. Try to keep group from being too crowded, seated on edge of bench, etc.
- (5) See that everyone knows everyone.
- (6) Extension worker should learn names so he can call members by name during the meeting.
- (7) Have a black-board, chalk, and eraser handy and ready. If other visual aids, are to be used have them ready and in place. If any electrical equipment, check again before the meeting to see if the equipment is working properly.
- (8) Start on time, end on time, and do not hold group too long (experience best teacher). The worker should arrive in time that all arrangements are made before the farmers arrive.
- (9) In opening the meeting, emphasize that everyone is to take part. Set the group at ease.

II. Carrying on :

- (1) Make preparations before the meeting on teaching the subject. Think the question through. Be prepared for the eventualities.
- (2) At the outset set a well defined sharp question before the group which leads into the subject prepared for the meeting.
- (3) In general, do not put a question to a particular member if it can be avoided or unless you can see that a member wishes to speak.
- (4) Interrupt the speech maker-but be tactful. There are several ways to do this. One will have to learn what is the best method for him to use. Three suggestions are given :

- (a) "While on this point, let us hear from some of the other members".
 - (b) "Can we save your point until later"? or
 - (c) "Mr ——— has a good point on this subject, let us hear from him. Sri ——— would you consent to say something on the subject?"
- (5) Keep the discussion "on the track", but do not try to lead too much. That is, do not be too anxious that every word is on your subject.
 - (6) Keep one's personal remarks out of the discussion. The worker must make statements, but try to avoid arguments about the statements.
 - (7) If an angle is neglected or rushed over, bring it up "Sri Rao was telling me the other day _____".
 - (8) Keep spirits high-encourage easy, informalities, and good humor.
 - (9) Every so often draw a small conclusion, "let us see where we have been going". This is also a good method to bring a group back to the subject-back "on the track".
 - (10) Call attention to unanswered questions for future study or reference back to the person, who brought the question up.

Chapter - 18

Individual Visits (a teaching method)



The basis of all good teaching lies in effective and instructive individual visits : to the farms, homes, when the farmer comes to the workers office, or when the worker happens to meet the farmer and a discussion follows. This meeting may take place any where between the worker and the farmer, but the best place is on the farmer's land. The worker, most often,

should not be direct in his approach. He should find ways to lead into his subject or subjects. A good Extension worker will learn to ask good questions and to be a good listener. Apparently many workers believe the individual contact gives him an opportunity to tell the farmer just how to do the job (s) so he lectures to the farmer when a few well thought out questions could arouse the farmer's curiosity and indulge in him the desire to learn more. A good Extension worker does much more listening than talking when counseling his clientele. The mark of a good Extension worker is in getting the farmer to talk.

One should be very careful not to tell the farmer he is wrong, but instead he should bring up alternative points for the farmer to study about. If the worker can, in advising a farmer, give him two or more ways to do the job, let the farmer choose his method. As has been stated, there is not any value in the worker trying to impress the farmer on how smart he is. The farmer is not interested in the number of college degrees the worker has. The farmer is interested in his own welfare.

Extension is for all of the rural people. Even in visiting under-subsistence farmers a good Extension worker can help. Perhaps the first thing the worker should do is find something he can compliment this individual on. He may find that his place is clean of rubbish. He may strive to have sanitary water. He may have some kind of a latrine. There is something the worker can "pat him on the back" for. Find something and start from there. The worker should remember these people often need a word of comfort, and such a thing from the worker increases friendliness, which may be necessary if accomplishments are gained. In dealing with this farmer, the worker must lower his "sights". He should examine his land and see if all is utilized. He may find a small amount of land in the corner of the compound which vegetables

will grow in order to give his family a better diet and lower his cost of living. The farmer's first responsibility, in the majority of times, is to provide more food for his family. The worker should promote the one and two bird poultry idea more with the under subsistence farmer. Try to discover if there is any way for the family to have some meat or milk in their diet. Think about their health. The Extension worker should see that the family knows about Health Centers, Malaria control, vaccinations of different kind, sanitation means (as latrines), and their value to them. Perhaps, for the families' health a little more ventilation in the house is necessary, improved lighting, smoke-less chula, simple furniture, or better preparation of food.

Proverty problems bring on other problems for Extension workers : people in this condition usually show a lack of cooperation with Extension and even their neighbours, lack of enthusiasm for education, and a general lack of interest in roads, and other community services.

There are many reasons for Extension workers making individual visits to farmers, besides personal contact. All should be interested in their problems, soil erosion, type of soil, in showing skills when the opportunity arises, improving breeds of livestock and poultry, problems arising from having poultry and livestock such as diseases and parasites, their cure and control, castration, housing for poultry and livestock, family health problems, first aid, co-operation, farm mechanics, housing problems, village road construction, and to just make friends for Extension work.

The Extension worker should always, when making individual visits, try to leave something with the farmer. This does not mean something physical, but of mental character. Make the farmer feel there is something for him and his family.

The Essential Elements in Farm and Home Visits.

I. *Decide the place* of farm and home visits in the annual plan of work and in relationship to a particular phase of the Extension program.

The Extension worker should decide whether his time and energies are spent best in the visit method of teaching, or if there are better methods of teaching. He should decide whether the visits are for direct teaching or are needed to increase the value of his group and mass media of teaching.

II. *Clarify the purpose of the visit* : Does the worker expect to gain first hand information on the farm and home conditions, give advice, assist with the farmer's problems, arouse interest in a particular problem, or arouse interest in the people Extension is not reaching by other methods, to select leaders or demonstrators, or to promote public relations ?

III. *Plan the visit* : The worker should decide when planning his visit the purpose or his objective in making the visit. He should decide if the visit is to review previous contacts with the family, to check subject-matter the family is likely to be in need of, arrange to save time in the community, and he should consider his best approach to his teaching objective.

IV. *Make the visit* : After the worker has decided the three points above he is ready to make the visit. He should be friendly, use good tact, and use something complimentary. He must remember that he must gain the farmers confidence in him. If he has good working relationship, he must remain on good terms with the farmer. He must render service, avoid wasting the farmer's time, and he must leave a clear impression as to why he made the visit. During his counseling, he should always strive to arouse

interest and to create a desire in the people with whom he visits.

V. *Record the visit* : Every Extension worker should keep a family record card, and on this card should be entered the date and purpose of the visit, accomplishments, and follow-up recommendation. This is especially true if the farmer has made any commitments or promises. (Be sure that follow-up at the appropriate time is not overlooked).

VI. *Follow-up the visit*. This may be in a form of a personal letter, by sending him appropriate literature, by placing his name on the circular letter list, an invitation to a meeting, or to make another farm and home visit. His situation might call for all of these or a combination of two or more.

Advantages and Limitations to Farm and Home Visits

Advantages	Limitations
1. Gains first-hand information on farmers' problems and activities.	1. Uses lots of the workers time, which limits (decreases) worker's time for other teaching activities.
2. Develops good will.	2. Limits contact compared to other teaching methods.
3. Helps worker gain confidence in himself.	3. It is not always possible to make visits at an opportune time of day.
4. Contributes to the selection of better leaders and cooperators.	4. Neighbors not visited may be disappointed and accuse worker of favoritism.

- | | |
|---|---|
| <p>5. Stimulates interest and increases effectiveness of other teaching methods and the worker.</p> <p>6. Furnishes material for news stories.</p> <p>7. High ratio of "takes" to "exposures"</p> | <p>5. Workers have a tendency to visit some homes and farms repeatedly, and leave out some who should be visited.</p> <p>6. Cost about average.</p> |
|---|---|

**Suggestions for Improving Farm
and Home Visits.**

1. Have a definite purpose for the visit.
2. Scatter visits to more and different farms, including all income groups, and all parts of the worker's area.
3. Be considerate of the time of the farmer and his family.
4. Use visit to reinforce other teaching methods.
5. Arrange a schedule of visits-to save time and expense-more and different farmers in that community.
6. Use the method to reach those who are difficult to reach with other methods.
7. Leave a clear impression of the objective of the visit.
8. If the visit is for some service to the family, the worker should also make it educational.

Chapter - 19

News Stories (a teaching method)

In chapter III, it was learned the fourth most important method of teaching rural people is through News stories. This proves that news stories are effective and they are cheap when considering the improved practices adopted by the use of the method. Every Extension worker should use news stories as a method of teaching to convey certain messages to the public. It is not only good for the people who need the information, the farmer, but the general public as well. This method may be used through many medias, such as local news papers, magazines of all kinds, but more specific the literature printed for farmers to read, and etc.

The points to remember in writing a news story are :

I. The *heading* should be short, eye catching, have educational attractiveness, pleasing sound or exciting, simple words, and short words. If possible use one syllabus words.

The average reader of a news paper glances at the paper and selects the topic to read from the above points. The heading becomes the most important part of a news story simply because the body of the news

item will be read only after the heading attracts the reader enough that he has the curiosity to read the story. If the heading does not catch the eye the reader may pass up reading the article.

II. *Body of a news Story* : After a reader reads the heading and becomes interested, he reads, or starts to read, the body of the news story. He reads the first sentence and if this sentence does not hold his interest he moves on to another article which might interest him more.

This being true, the second most important part of a news story is the first sentence. In a narrative, the climax comes at the end of the story as "boy and girl marry and live happily ever afterwards", but in writing news stories this does not hold true. In a good news story the climax, or the most important item, comes first. One does this to hold the interest of the reader and to give him as much of the story as possible before he quits reading the story, if he does stop reading the article at this point. He will know a great deal about the story if he has read the first sentence.

The first sentence should contain four "W's" and possibility a fifth "W". It should answer who, what, when and where aspects of the story. If it will add to the stories clarification and add interest, the "why" aspect may also be added in the first sentence.

For a practice session, take a meeting which was held and write the first sentence. Now pick out the four "W's". If the sentence does not contain the four "W's", the sentence is not complete. One may add the fifth "W" of why.

From the Extension workers standpoint, the first sentence is the most important sentence of the story. In all probability, the editor will change the heading to fit his type and spacing, but the worker should give the article a heading with the knowledge that it proba-

bly will be changed. The worker has, in doing so, given the editor thought on the subject.

After the first sentence has been composed, the remainder of the article tells the story. The article should follow the lead of the first sentence by giving in more detail the five "W's".

The story should be :

1. Complete.
2. Concise.
3. Accurately, and
4. To the point.

III. *Composition of News Stories :*

1. The sentences should be short-that is, all except the first sentence. Many times the first sentence is a complete paragraph by itself.
2. Short paragraphs but tells the story.
3. Write, using words that people understand, people's own language.
4. Use simple words. Do not try to show how intelligent the writer really is.
5. Make the article easy to understand.
6. Use simple sentences. It is better to make more sentences than to have readers confused or quit reading, because of the lack of understanding.
7. Check to see if the story has explained the first sentence.

With just a little practice, most people can write very good news stories. Remember, the editor of the local paper is a busy man or he may not like to work

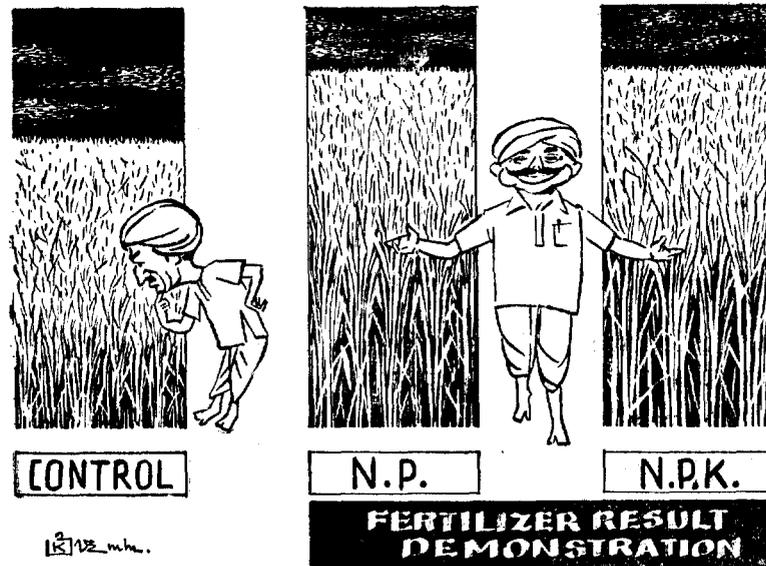
too hard. He may be only "luke warm" to your story. The balance of getting a story in the paper vs not having a story, may times, lies only in the worker writing a good story and giving it to the paper.

Many things make good reading to the public, when put in proper form. It is much like being a photographer. A photographer who makes his living taking pictures finds many good pictures to take where as a amature may have seen the scenery many times and cannot find any shots to take.

Use local news articles to teach rural people the value of improved practices.

Chapter - 20

Result Demonstration (a teaching method)



A result demonstration is a teaching method. When a result demonstration is carried on, without other teaching methods involved, the cost of the procedure becomes very high compared to the results obtained (number of adoptions of improved practices) from the method. In other words, when a demonstrator selects a piece of land, supervises the demonstra-

tion, places a board, but otherwise forgets the demonstration, as far as educational activities are concerned, the method does not receive the results necessary for carrying out the method.

For a result demonstration's usefulness to increase, the Extension worker should add other methods of teaching people. The demonstration is an excellent place to hold method demonstrations and other educational meetings. After the results of the demonstration are obtained the statistics should be used in group discussion meetings. Many times the demonstrations furnish excellent material for news stories. In the chapter "Methods of Teaching" it was pointed out that result demonstrations are classified under individual methods. This is correct provided the other methods of teaching are not used. Under group meetings "Meetings at Result Demonstration" was listed in order that the reader might differentiate between holding meetings at the demonstration and just carrying on the demonstration for educational purposes. One large question that every Extension worker should ask himself, "why am I carrying on the demonstration"? Of course, it is to educate the farmers in the improved practice demonstrated. That being so, it is the Extension worker's duty to use the demonstration in many ways to teach farmers.

A result demonstration is for the purpose of comparing the new practice to the old practice. The old practice plot is called the "controlled plot". This being true, every result demonstration should consist of two parts-side by side-the old method demonstrated and the new method demonstrated. Results of each should be carefully recorded. Care should be given so one method does not have an advantage in any way over the other. The land should be identical. The soil analysis should be the same. The two plots should be side by side and preferably under the same bundies. Everything should be done to see that one method is not favored over the other method.

Points to Remember in Carrying Out a Result Demonstration :

1. Be sure it is a new practice, as far as the farmers are concerned. If all of the farmers are using the practice demonstrated, there is not any need for the demonstration. The practice should be one which the majority of people can adopt.

2. Be sure there exist a nucleus of village interest for the demonstration. If very few people are interested and the worker has failed to arouse their interest, the demonstration stands a big chance of being unsuccessful. Determine if people are interested.

3. The Extension worker should be clear about :

- (1) Steps essential to the new practice, and
- (2) Capable of guiding the people in the steps. He has the knowledge, understanding, and skill to carry out successfully.

4. Be sure the Block staff can carry through when and where assistance is required. It is bad judgement on the workers part to start a fertilizer demonstration unless he determines in advance where the finances come from or he may even require their help physically.

5. Select the right cultivator to carry out the demonstration. This person should be interested in the practice, a man who all other farmers look to for leadership, willing to have people come to his place to observe the demonstration and, in the worker's absence, be willing to explain the results after the demonstration has been completed.

6. As has been stated, divide the plot into (1) regular practices (control plot), and (2) the plot for the demonstration of the new practice. As the two plots grow the people should be able to see the diffe-

rence and in the end be able to compare the difference.

7. Select a place where the most people will see - generally, near a road. It should also be easily accessible to visitors.

8. Encourage the people to see the demonstration. Hold meetings at the beginning, middle, and end of demonstration. Combine the meetings with method demonstrations, if possible. By all means have a few reliable farmers witness the harvest so they can give publicity of the results and not leave any doubts in the farmer's minds as to the production of the two plots. The Gram Sevak and Extension officer should be present at these meetings.

9. Have more than one farmer keep records of the two plots-if, at all, possible. The Extension workers should also keep records.

10. The sign at the demonstration should contain few words, tell the story, be attractive, and where people can read as they pass by.

As stated, unless the results are used for educational purposes, other than just holding a demonstration, the greatest value from the demonstration has not been received. Meetings should be held after the results have been gathered and the Extension worker should teach the farmers the value derived from the demonstration.

Sri P. S. V. Rama Rao, Extension Officer, Narsapur Block held a paddy result demonstration with farmer Sri Ch. Kasiviswanatham in village Elamanchili. The result of the demonstration is :

Control	Cost	Demonstration	Cost
Nitrogen, 5 pounds	?	Nitrogen, 10 pounds	?
Phosphate	-	Phosphate, 24 pounds	?
Endrine	-	Endrine, once	Rs. 5.00
Interculture	-	Interculture, twice	5.00
F. Y. M. (farm yard manure) 10 C.L.		F. Y. M. 10 C.L.	?
Agrosan		Agrosan	.06
Total cost		Total cost	
Yield 3,800 pounds		Yield 4,400 pounds	
Profit from practices.....			

There are several ways to teach this subject. There is a difference of 600 pounds of paddy in the yield. The cause of this increased production is due to 24 pounds of phosphate, 5 pounds of nitrogen, spraying, interculture, and treating of seed with Agrosan. How much did the extra yield cost? How many Rupees did the 600 pounds bring to the farmer? How much extra money did the farmer make from the use of the improved practices? How would one teach this problem to a group of farmers? First, the worker should ask a leading question. He could ask, "does it pay to use nitrogen and phosphate fertilizers, spray, and treat seed?" or "should we use more nitrogen and phosphate fertilizers, in growing paddy, than we are now using?"

The above problem should be figured (worked) out, on a blackboard, using the farmer's figures in arriving at the cost, receipts, and finally the profit from having used the improved practices.

One may use the result to prove that phosphate fertilizer is necessary.

One may ask the simple question, "how much money do we make growing paddy?" In this problem the Extension worker should go through all of the operations in growing paddy, and arrive at a cost for each operation. This gives the worker an opportunity to discuss each operation in paddy production.

Farmers seeing a demonstration is one method of teaching. Holding group discussion meetings to evaluate the results is another teaching method. Good Extension workers teach the economic value of the improved practices demonstrated through result demonstrations.

**Analyze the Essential Elements in it's use as a
Means of Extension Teaching.**

1. Analyze problem and situation from the teaching standpoint. Determine whether additional local proof is required.

2. Decide on the specific purpose of the demonstration. Determine if demonstration is needed to :

- (1) Give worker confidence in all details.
- (2) Give local people confidence in the practice and the worker.
- (3) Show practical application of scientific information.

3. Plan the demonstration :

- (1) Consult Extension Specialists.
- (2) Outline definite plan in writing.
- (3) Locate source of material.
- (4) Determine number of demonstrations needed.

4. Select the demonstrator :

- (1) Advise with local leaders.
- (2) Get suggestions at local meetings.

- (3) Select tentative demonstrators.
- (4) Visit prospective demonstrators and discuss plans.
- (5) Make final selection of demonstrators :
 - (a) Should have need and desire for demonstration.
 - (b) Cooperative, conscious of community responsibility, willing to have people see, and dependable.
 - (c) Has equipment, time, and facilities.
 - (d) Location very important.
 - (e) Not the best, not the worst farmer.
5. Start the demonstration :
 - (1) Outline definite plans with demonstrator.
 - (2) Actually start the demonstrations.
 - (3) Announce demonstration to the people.
6. Supervise the demonstration :
 - (1) Make sufficiently frequent visits to the demonstration to see that the plan is being carried out.
 - (2) Label with appropriate signs.
 - (3) See that records are properly kept.
 - (4) Answer questions.
7. Complete the demonstration :
 - (1) Summarize records and establish proof.
 - (2) Hold meetings.
 - (3) Publicize results.
 - (4) Estimate probable influence :
 - a. Have demonstrator make and keep list of those making inquiry.

- b. Get response from those attending meeting.
 - c. Teach how to interpret data :
 - (a) Hold discussion meetings.
 - (b) News stories.
 - (c) Changes brought about by similar demonstrations.
- (5) Prepare visual aids, pictures, charts, samples, specimens, etc-for exhibits and use in other Extension teaching.

Definition of result demonstration (opinions differ) : a method of teaching designed to show by example the practical application of an established fact or group of facts. It points out through local proof, the desirability of adopting a new practice or discarding an old one. It is an object lesson which speaks for itself, influences people to change, not a method demonstration, not an experiment, not merely an exhibit.

Judging :

1. Must be under direct supervision of Extension.
2. Must be seen by people.
3. Time must elapse.
4. Some kind of records should be kept.

Kinds :

1. Single practice.
2. Multiple practices.
3. Experiment-demonstration (early demonstrations of a practice, which borders on experimentation).
4. Natural demonstrations (accidental).
5. Long-time, short-time, etc.

Applicable to subject matter :

Marketing, nutrition, clothing, entomology, agronomy, horticulture, forestry, soil conservation, etc.

Relative influence and cost :

High for those who see. Low for people. Valuable for introducing a new practice. Results made use of in other teaching methods. Cost high as so much of worker's time consumed per person influenced.

Summary of Strong Points and the Limitations

Strong Points	Limitations
1. Furnishes local proof of desirability of establishing a recommended practice.	1. Finding a satisfactory demonstrator is often difficult.
2. Is an effective method to introduce a new practice.	2. Sometimes the method arouses jealousy of other farmers.
3. Appeals to eye and reaches certain people that other methods will not.	3. Affected by many uncontrollable factors—weather, insects, diseases, etc.
4. Provides a good source of teaching information in other methods.	4. Lessens the effectiveness of other teaching methods, when unsuccessful.
5. Furnishes cost data in revising farm plans.	5. Is not adapted to many kinds subject matter.
6. Yields a high rate of "takes" to exposures.	6. Influences few people directly.
7. Aids in developing local leadership.	7. Requires considerable time to complete and make results available.
8. Establishes confidence in the Extension worker.	8. Requires a relative large expenditure per practice changed.

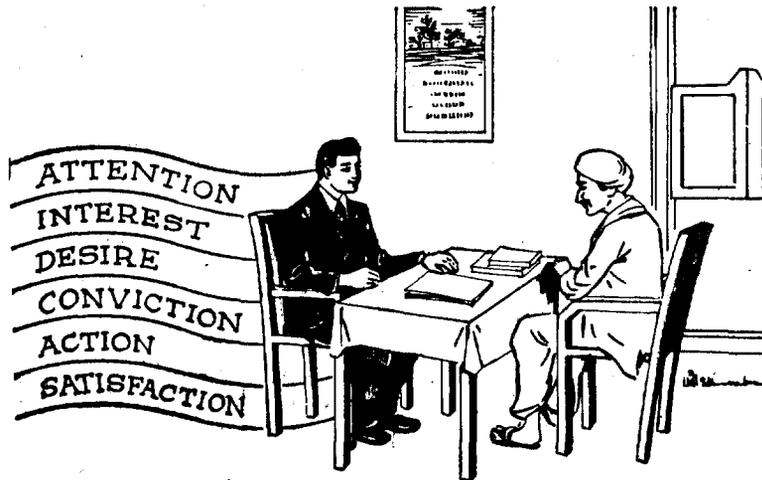
Suggestion for Improvement.

1. Do not attempt to discover new truths, but rather to prove the adaptability of those discoveries already made by research.
2. Use in teaching certain phases of subject matter, which is hard to teach well by other methods.
3. Use local illustrations of good practices rather than conduct a result demonstration whenever possible.
4. Place emphasis on quality, rather than number of demonstrations.
5. Do not repeat demonstrations needlessly.
6. Plan to prove or illustrate a definite practice or series of practices recommended.
7. Obtain a cooperative minded, reliable demonstrator, having a good location.
8. Obtain new demonstrators from time to time.
9. Have demonstration of sufficient size to command respect.
10. Mark the demonstration as soon as results are evident.
11. Insist that definite and detailed records, including cost, be kept.
12. Hold meetings at the demonstration to study progress and results, and to disseminate information.
13. Use material from results in meetings, news stories, news letters, pictures, radio, etc.
14. Analyze the reasons for failure, if any, and use results for teaching purposes, relating the causes to the failure.

Chapter - 21

Other Extension Teaching Methods.

Office calls are very important and should be treated as such. It is a pretty good sign that a farmer is interested in some problem when he takes his time and energies to visit the Extension worker in his office.



When examining the chapter, "The Importance of Different Teaching Methods," it will be found that one out of every seventeen improved practices adopted by farmers is the result of the education the farmer received on an office call.

Many farmers are not shown the courtesies which should be shown on office calls. All office workers, from the peon on up, should be given instructions on how to handle office calls. Many times farmers wait, unnecessarily, on certain individuals, which he wishes to see.

The point to emphasize is that office calls are important, it has a place in the worker's teaching plan, the cost is low and should be encouraged by all workers, keeping in mind that this encouragement should extend to only those people Extension can help or who is willing and capable of helping Extension.

An office call should give all the Extension workers in a Block an opportunity to discuss the many different problems confronting the farmer.

The points described in the chapter, "Individual Visits" apply to office calls except the worker is not on the farmer's land and he cannot apply any skills in the form of a method demonstration. However, the farmer has come to the worker and is, generally speaking, receptive to learning or, in all probability, would not be there.

There are three important differences between a worker's visit to a farmer and the farmer calling on the worker in his office :

- (1) With the office call the learner seeks out the Extension teacher instead of the teacher seeking out the learner.
- (2) The personal contact or interview is removed from the farm or home setting.
- (3) Confidence in the Extension Service as a reliable source of information, may be taken for granted, otherwise the individual would not devote the time to go to the office.

The Essential Elements in an Office Call :

1. Consider whether the office location will contribute to a large number of calls.
2. Arrangements and adequacy of office space.
3. A good receptionist to receive callers at all times of the working day.
4. The Extension worker confers with the caller :
 - (1) Cordial, sincere interest shown in visitor's problem.
 - (2) Applicable reference material, including record of previous contacts, readily accessible.
 - (3) Unhurried consideration of farmer's problem.
 - (4) Caller made to feel welcome to call again.
5. Record and follow-up calls :
 - (1) Add pertinent information to family record card.
 - (2) See that unfinished business, connected to the call, is completed as promised.

Advantages	and	Limitations
1. Caller likely to be highly receptive to learning.	1.	Office contacts removed from farm and home situation may not reflect the real problem, or accurately the existing condition.
2. Economical use of worker's time.	2.	Office callers are likely to be limited to those participating in other Extension activities.
3. Good barometer of total Extension accomplishments in the Block or area.		

7. The letter should have a personal touch.
(Use the word "you" instead of "I" whenever possible)
8. Make attractive, use illustrations-if possible.

Essential Elements in the use of Circular Letters :

1. Determine the place of the circular letter in the teaching plan :
 - (1) Is it desirable to reach many people quickly ?
 - (2) Will it convey timely information ?
 - (3) Will it persuade people to do things which will further their best interest ?
 - (4) Will it help the worker's other teaching methods ?
2. Determine the specific purpose of the circular letter and the people to be reached by the method :
 - (1) To stimulate interest.
 - (2) To give subject-matter information.
 - (3) To announce meetings.
 - (4) To gather information by simple questions.
 - (5) To gain and maintain interest of leaders.
3. Plan the use of the circular letter :
 - (1) Make letter serve a definite purpose.
 - (2) Should be important, timely, and have relationship to needs of the people.
 - (3) Decide number of letters on each subject-matter.
 - (4) Consider letters on a series basis.
 - (5) Develop a good up-to-date mailing list. Classify mailing list according to problems farmers are interested in.

4. Write circular letters and have duplicated :

- (1) Take advantage of letters from specialists.
- (2) Make attractive.
- (3) Write circular letters called for in your plan of work.
- (4) Use a courteous conclusion.

Advantages	And	Limitations
1. Can reach a large number of people.		1. Special equipment needed.
2. Can reach people quickly.		2. Too frequent use may minimize the effectiveness.
3. Can convey timely information.		3. A poorly prepared letter may give rise to the propoganda of wasted funds.
4. Can be adapted to a wide-range of subject matter.		4. Use limited to those who can read or has someone in house-hold to read.
5. Can be a reinforcement to other teaching methods.		
6. Can be read at leisure and filed for reference.		
7. Can change practices at low cost.		

In the past Blocks have spent quite a large sum of money on their many schemes, which Extension does not have any quarrel over, but too often Extension has forgotten the Extension process side while carrying out the Service side of Extension.

Radio

The use of the radio is another good method to teach the masses. Although the radio is a comparatively new method of communication, its prominence will become more and more useful, as a means to teach the masses. It may be impossible for every individual to go before the microphone and give his message. There are very good indications that radio will be a media of communication in the Extension program. The radio is already looking for good stories to tell the public. There has been several news items broadcasted about the West Godavari district and the progress it has made.

When this method is adopted and comes into "it's" own, as an Extension teaching method, it is hoped that every Extension worker will have an opportunity to have broadcast his message. In countries where it is used, it is the most widely accessible of all mass media. It has the advantage of being able to disseminate information to the largest number of people in the shortest time. It is unrivaled as a means of getting emergency or timely information to rural people.

In terms of practices adopted by farmers and homemakers, the effectiveness of radio is small compared to some of the other Extension teaching methods.

In terms of cost of influencing changes in practices, the radio shared the lowest cost with news story.

Advantages	And	Limitations
1. Can reach more people quicker than any other method.		1. Facilities not available to all.

- | | |
|---|--|
| <ul style="list-style-type: none"> 2. Ideal for emergency and timely information. 3. Cheap. 4. Reaches those who cannot read. 5. Reaches those who do not attend meetings. 6. Builds interest in other methods. 7. Can be backed up by teaching in the communities by other Extension teaching methods. | <ul style="list-style-type: none"> 2. Time generally poor from standpoint of farm listeners. 3. Frequently loses out to entertainment programs. 4. Difficult to evaluate. |
|---|--|

In giving a Radio Program

1. Select subject interesting to the people.
2. State subject clearly.
3. The leading sentence is very important. It should be ear catching, have punch, arouse curiosity in the listeners, exciting, creates desire, and tells a story.
4. Use conversational language-not a speech.
5. Tell a complete story.
6. Use local information, local people, and local places.

7. Do not use too many figures.
8. Correct time in length in order not to rush through, time of day, regularity in day and week.
9. Use a pleasing language.

Personal Correspondence

Personal correspondence is almost invariably carried on with farmers. Some farmers prefer to use this system as it saves time and expense. All personal inquiries should be handled with promptness and care. They are important communications and the Extension worker should not spare any amount of effort in giving the farmer, doing the inquiring, the information desired.

There are a few good points to remember in any correspondence to farmers :

1. Take the "you" attitude. Think about the reader's problems-not one's own problems.
2. State the message clearly.
3. Be one self. Write as one would talk.
4. Be thrifty with words.
5. Practice courtesy :
 - (1) Does the writer thoroughly understand what he is writing.
 - (2) Has the writer supplied all of the essential details.
 - (3) If writing a request, has the writer stated the request so the person receiving knows exactly what he is saying ?

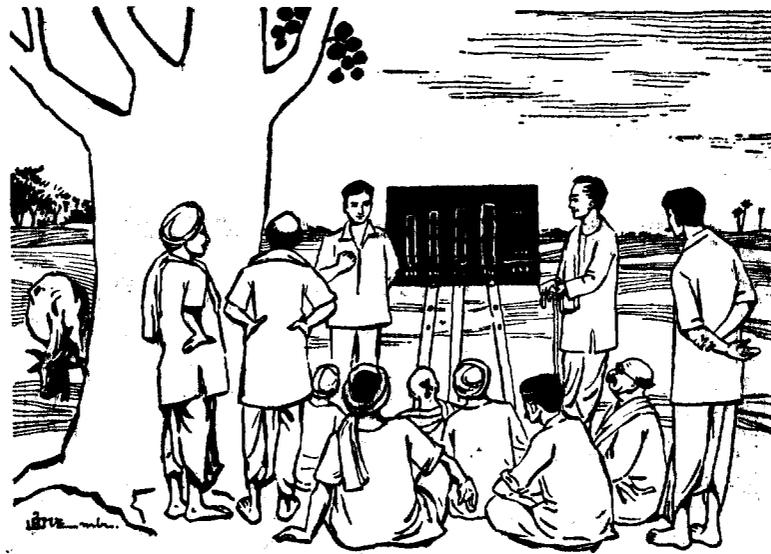
6. Do not write in such a fashion that one has to explain his answers.
7. Do not qualify the answers with "if's".
8. Do not explain the answer before giving the answer.
9. Do not hedge. Do not use expressions such as, "it appears".
10. Be neat-do not send out a letter that one will be ashamed of, because of lack of neatness.
11. Readable-short words, short sentences, and it is of human interest.

Remember that writing letters is a method of teaching. Some letters saves the worker's time and energy. A farmer may ask for certain information which one will have to say, "I do not know", but the worker should promise to try to get the correct answer. A letter may be sufficient in this case. Letter writing is important and at times very necessary.

Leader Training Meeting

A Leader Training meeting is another method of teaching. Leaders of different communities and of the Block area are called together to study problems, the solutions to the problem, and if a program planning meeting to assist in building the program. The leaders, in learning the methods to solve problems, can be a big asset in the Extension worker's success. This is one of the most important arguments in having committees. Generally speaking, they are the most progressive people and more receptive to new ideas (methods). In such meetings, the worker does not have the problem to convince people present and after

the progressive farmer is convinced, he may become one of the real good sources to use in promoting the improved practices advocated.



In general, these local leaders contribute to the advancement of Extension in three ways :

1. Adds local strength to the Extension program.
2. Increases the volume of teaching done.
3. Increases the ability of rural people to cope with new problems as they arise.

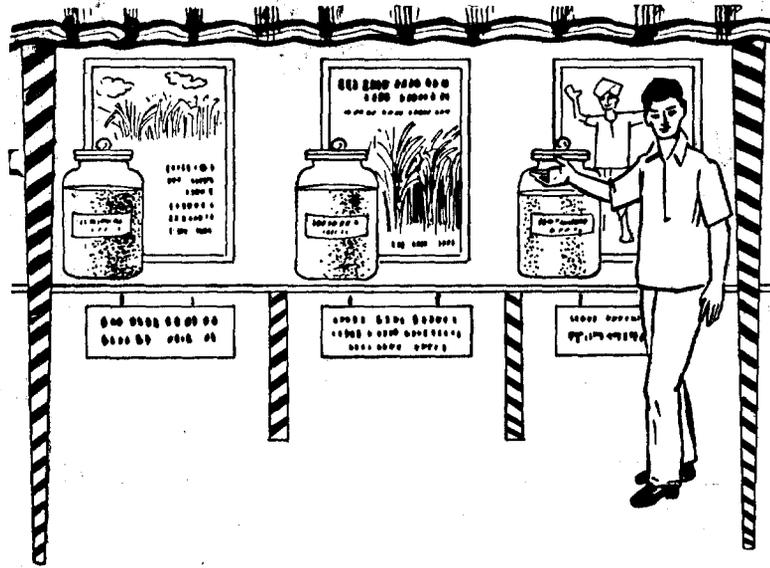
(See Chapter on Leadership)

Exhibits

Exhibits are used as Extension teaching method. An exhibit is a very expensive method to use, when considering the number of "takes", unless the worker uses visual-aids with care and, wherever possible, other

methods of teaching to strengthen the effectiveness of the exhibit.

Too often the worker is given orders to hold an exhibit when he does not have a plan or an exhibit. Too often machinery, teaching aids, etc. are mixed together without proper identification and visual aids like posters, charts, etc. to help teach that which is being exhibited.



There are a few pointers that everyone should follow in setting up an exhibit. The exhibit should have but one idea. If there is more than one idea, a partition should separate the two ideas and make two exhibits. It should be simple, large enough to make attractive, but not so large as to give an appearance of being vacant. The exhibit should be timely, something that needs to be done now.

The exhibit should be made durable so it may be used more than once and if subject to rain, etc., it will not be ruined. Attractiveness is a key word in

exhibits. Make the stall, room or wherever the exhibit is being shown attractive. Decorate the front, sides, and back-even the top. This is one item all Indians excell in but so often, when having exhibits, especially local exhibits, neglect in doing. A little crepe paper will do wonders. Use bright letters and figures. All important parts should be labelled. It should tell a story. Exhibit, if possible, on level with the eye. Do not have a pit like structure where the people are expected to look over and down to see.

Extension workers should have local exhibits where people gather and where numbers will see. Simple and effective exhibits can be made and shown. A good small exhibit may be shown in pots using the different chemical fertilizers (NPK) or combination of fertilizers. The pots may be moved from place to place. One may, in some way, exhibit many of the different improved practices advocated. At melas, where many people see the exhibit, value may be added to the exhibit with a good narrator present.

Some of the more important steps involved in Extension exhibits and the points to be considered are :

1. Consider how exhibits might contribute to the effectiveness of the teaching plan :
 - (a) Decide the events which an exhibit will be shown.
 - (b) Decide on phase of work best promoted by exhibits.
2. Decide purpose of exhibit :
 - (a) To acquaint people with better standards.
 - (b) To promote good will and understanding with non-farming people.
 - (c) To influence people to adopt better practices.

3. Plan and prepare exhibit :

- (a) Select type of exhibit.
- (b) Develop a written plan.
- (c) Locate and arrange for necessary material.

4. Stage the exhibit :

- (a) Assemble material and set-up as planned.
- (b) Make modifications to fit in with other exhibits.
- (c) Properly labeled.
- (d) Provide a suitable attention-getting device.
- (e) Have narrator present.
- (f) Arrange for literature.
- (g) Give publicity.

5. Estimate effectiveness :

- (a) Analyze attendance, inquiries, and request for literature.
- (b) Watch people's reaction.
- (c) Make inquiries after exhibit.

Advantages	And	Limitations
1. Many people may see.	1.	Relatively expensive.
2. Promotes understanding and good will of non-farming people.	2.	Few people are influenced to adopt practices.
3. Stimulates interest in higher standards and new varieties.	3.	Too many that see the exhibit are seeking recreation.
	4.	Too many exhibits do not teach improved practices.

Drama.

A wonderful method of teaching is by dramas. There has not been any statistics collected to prove the value of a drama in India's Extension teaching process, but one may be sure that dramas in India will place high in rank. In the chapter "Teaching, General", the chart gave prominence to the art of dramas. Every time a farmer takes part in any teaching situation he becomes a part of the drama whether it is by seeing, hearing, or doing.

The following is a short narrative on dramas, in terms of a play on a stage, or by puppets, or some other form of dramas which are for educational purposes.

Indians are very much adapted to the art of dramas. They can write a good local drama and they can always find actors to carry out the parts. A drama for the purpose of entertainment is good. Dramas that combine education and entertainment is much better from the Extension worker's point of view. The people who participate in the drama usually get the most benefit out of the drama.

Another way to have a drama is by puppets. Dramas by puppets can be a long affair, but usually a puppet show is used to fill in between acts, between parts of a program, etc. People enjoy short dramas with puppets, and a lot of good teaching, along with the entertainment, can be given by the method.

A short description on how to make a puppet is given in chapter 23. They are easy and cheap to make, the audience will enjoy, and the worker has fun with the method.

Field Trips, Tours, and Achievement Days.



Field trips, tours, and achievement days are other methods of teaching.

Field trips are conducted most successfully, when planning precedes the field trip or tour.

The Extension worker should determine before arranging one of the above :

1. The purpose for holding such a meeting.
2. What improved practices farmers will see.
3. The value of these improved practices to the farmer.
4. If they are practices that most farmers can adopt.
5. The route the people present will take on the tour or field trip,

6. How many "stops" will be made.
7. What the farmers will see at each stop.
8. The teaching material to be presented to the group at each stop, and how the subject is to be taught to the farmers at each place.
9. The amount and kind of material to be printed or cyclostyled.
10. Number of markers to be made (how and who to make).
11. Cost of tour and how the finances are to be raised or come from.
12. Other details connected with the teaching.
13. Approximately the time to be consumed at each stop and for the tour.
14. Determine how and when evaluation is to be made.

The extension worker should encourage attendance. He must determine how publicity, before and after, is to be given and who will be involved for the publicity and expenses-if any.

At the beginning of the tour or field trip, the worker should gather the group and explain the purpose for their being there, what they will see, route to take, leaders to follow, and his (the extension worker's) objective for having the function.

At each stop the farmers should be told what they are looking at and what to look for, the practices involved up to the date of the tour, expected value of the practices, how the practice was done and, if possible, at a stop or two a short method demonstration is not only appropriate, but desirable. Also get the farmers to do the practice.

At the end of each stop and at the end of the tour hold a question and answer session.

If the worker is going to use any equipment or material he should be sure the material and equipment is where he wants to use them, and is in working order. Do not wait until the group is at a stop and then have to arrange to get the things needed.

Immediately at the end, the worker should evaluate the success of the meeting. He may even do that with a few well prepared questions as, did you see any new practices today? If yes, what were they? Do not ask this question, what new practices did you see today? The first question is specific. The second part of the question is a check on the reliability of the answer to the first. The second question starts out by assuming everyone saw something new. This forces an answer.

Another way to evaluate the tour is for the worker to evaluate the meeting :

1. Did the tour come off as planned ?
2. If not, what were the reasons ?
3. Determine how to correct mistakes in order that the next meeting will be a better one.
4. Did the meeting show the farmers how it will be to their advantage to adopt the new practices ?
5. Were the practices important to all ?

An achievement day is as the name implies. An achievement day meeting is held for the purpose of giving public recognition to worthwhile accomplishments.

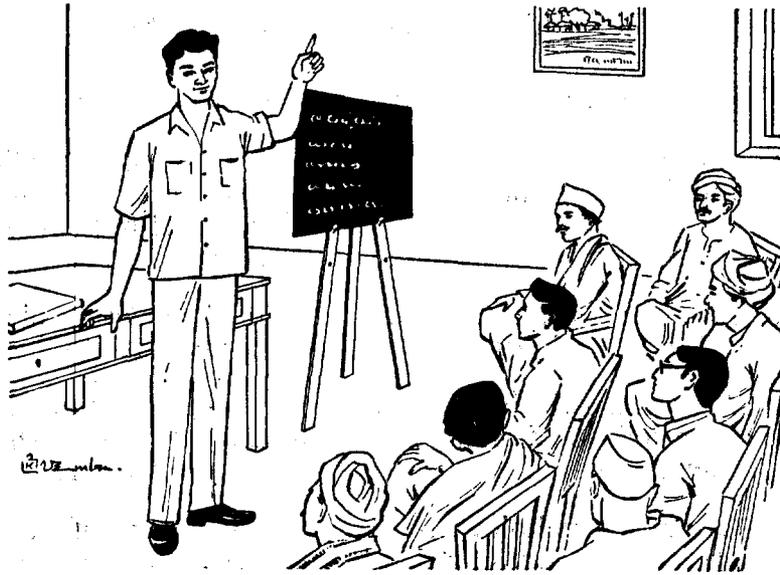
An achievement day can be given in many ways. It can be a tour, field trip, discussion meeting, show,

exhibits, meeting devoted to reports, luncheon, dinner, banquet, or a meeting to honor an individual or a group of people. It can be a combination of the above. Mainly, an achievement day is for the purpose of presenting to the group the value of improved practices. He should keep the group as close as possible to this theme. The farmer's achievements in the fields of politics, religion, etc., are not parts of the subject. His activities, as a leader, in projects dealing in "uplift" of the community might be good provided it does not run into other achievements on other subjects.

Advantages	and	Limitations
1. Reaches a large number of people.		1. Wide interest of audience may create a difficulty teaching situation.
2. Adapted to practically any subject.		2. Available meeting place may be hard to find.
3. Recognizes the basic urge for social contacts.		3. May require an undue amount of work on the Extension worker.
4. Group psychology stimulates conviction to act.		4. The holding of the meeting may become the objective rather than the purpose of teaching.
5. Has news possibilities.		
6. Effective in influencing adoption of many practices at a low cost.		

Study Courses.

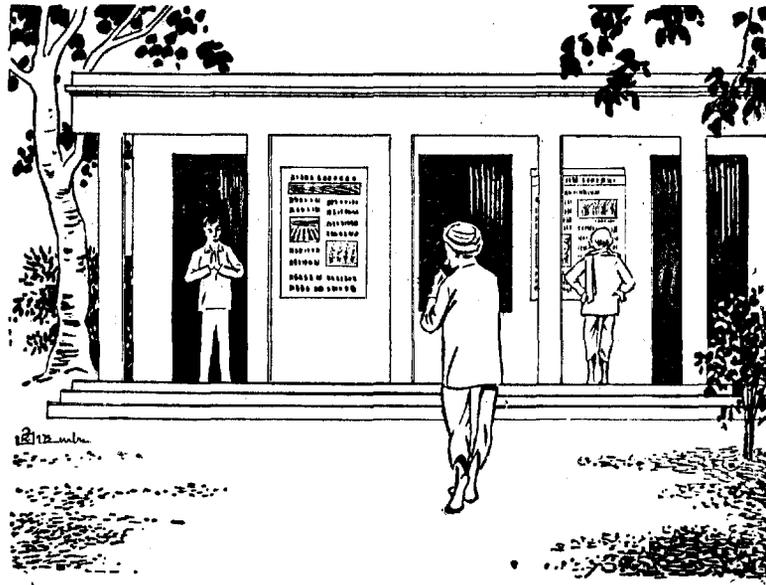
Study courses can be of value in an Extension educational program. Many Extension workers use study courses in their Extension program. The courses may go by many different names as, short courses, leader training, etc. A study course to be successful must be well planned. One should know something about the people who are to attend. If the course is for young people a great deal of time can be



spent on practical work. If the course is for older people, one must be careful not to include too many physical activities. The work-periods must not be too long. The course should be organized to discuss subjects which the majority or all of the people are interested in. A study course is especially good for leadership training. People must be interested in what they are taking and it has to be voluntary on the learners part.

Wall Newspaper.

A Wall newspaper is a communication process that generally is developed on a large scale—that is, several copies are printed. It takes machinery and equipment to produce, but where they have been used they are excellent teaching devices. They are regular newspapers, except they are printed for the purpose of



just tacking on a wall or notice board, where people may read. As people must read from a distance, the print has to be of a large size. The paper, generally, has but two to three subjects and is illustrated by pictures or drawings. The paper might cover but one subject taking the steps of a practice in chronological order with drawings illustrating each step.

Melas

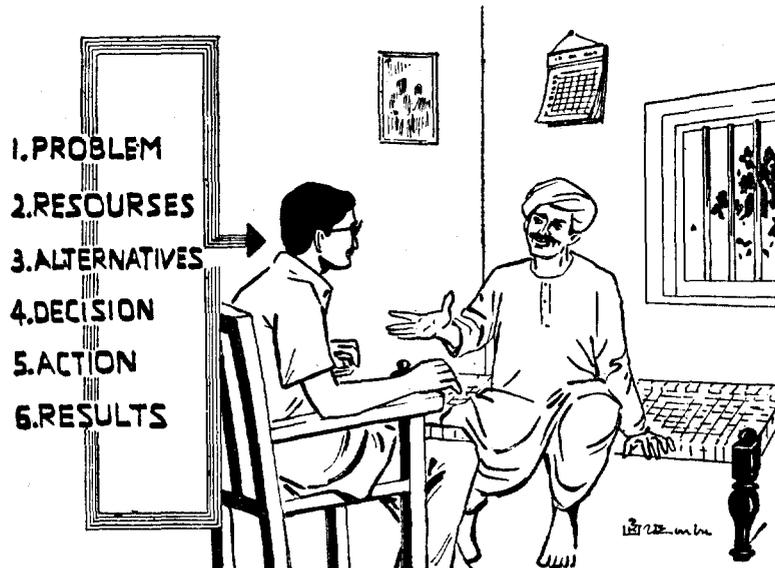
Throughout India, there are thousands of melas of all description. People love Melas, because they have an opportunity to enjoy life where fun is the principal target and the cares of every day life is set aside for the time being.

Melas are, however wonderful places to carry on Extension work in the spirit of the Mela. In some communities the song and dances are built around a central theme of some improved practice or it tells the story of certain crop production as paddy. Pictures can be on display. Small exhibits may be arranged. Slides and cinemas are often used.

There is no set procedure for giving education at Melas. Each worker is on his own to invent methods to teach at such functions. However, they are important enough and many Extension workers are taking advantage of the meeting to further his cause to Extension.

Chapter - 22

Counseling



Counseling is not a separate Extension teaching method. It is a procedure which should be used in all the teaching methods. However, correct counseling is so important and there is so much to the procedure that proper perspective must be given to the subject.

The counseling procedure, of course, is used more in some of the methods of teaching than in other methods. However, the principle is used in nearly all

the methods and a worker who can counsel well may use the procedure to his advantage in all the methods.

When a farmer comes to the worker's office (office calls) or in his direct contacts with him, as home visits, the good Extension worker will do most of his teaching through good counseling. There may be very little or no counseling in showing a cinema. A good group discussion is mostly the ability to counsel well. An office call should practically all be in the form of counseling.

1. Counseling is an educational tool that good supervisors use when counseling with subordinates. It is an educational tool that good Extension workers use in Extension teaching especially on direct contact. Counseling is the ability of the counselor to pool experiences with the counselee. It is an interview but a well planned approach to the interview.

2. Counseling is centered on the needs and problems of the counselee (client). It is the counselor's ability in having the client think with him. It should lessen anxiety and it should improve the outlook of the individual or group.

3. Good counseling requires that the *client make the decisions*. He decides through the learning process. It is the Extension workers job to be sure the client has the necessary facts in order to make his decisions wisely.

4. Good counseling is based upon the Counselor's ability to predict and of his knowledge. One cannot expect to be a good counselor on a subject which he does not know anything about.

5. A good counselor must know his client. He must know the clients skills, abilities, and resources available to him. He should know the clients life goals. The counselor will ask questions probing the trend of the client (where he is) until he has a good

working knowledge of the client. In this probing, if the counselor (Extension worker) senses a resistance, which the client does not express verbally, he may ask him why he is resisting.

6. Counseling requires a friendly informal atmosphere. The counselor must first of all be a good listener.

7. The counselor must help the client discover the cause of his problem and make diagnosis before attempting a solution.

8. The client must be led to select the best possible solution to his problem. First, the counselor must have the client consider all alternatives to the solution, the good and bad of each alternative, and then the *client* must decide which one is the best solution for him.

9. The counselor should give all encouragement possible to the farmer. Give him a chance to "talk out" his problem, but seek to avoid hasty ill-advised conclusions.

10. The counselor should never argue, use coercion, or make the final decision.

Good Extension workers use the counseling procedure more than any other procedure. Even so, most workers are very poor in the procedure. This, it is believed, is due to the fact that they have never given much thought to the subject.

Good Counseling Principles depend on Three Important Items.

1. The counselor must be a *good listener*. He should show an interest in listening. He must be sympathetic in his listening (a sympathetic listener) and he must not interrupt.

2. The counselor must learn to *ask good questions*. He must get to the bottom of the problem-the why and how. It must be remembered that in Extension farmers can solve their own problems, if the worker can do these things well. Above all, learn to ask questions which lead into several alternatives for solving the problem (several ways to do the job).

3. A worker may *solve problems* by counseling (problem solving). He must ask leading questions. He must learn to lead the farmer to make his own decisions from the discussion of all alternatives, and he must learn that good counseling involves a series of systematic approaches, such as problem solving, problem analysing, and decision making. Each of these, the learner (farmer) is guided by the teacher.

Problem Solving in Counseling

When a client (farmer) comes to the Extension worker with a problem, the following steps should be considered in counseling. The learner (the farmer) should be guided through these steps by the principles above :

1. *The problem* : Do both (the counselor and counsele or Extension worker and farmer) really understand exactly what the problem is ? Each must know exactly what he is discussing.

Identifying the difficulty, or problem, or need that causes a person to feel that something should be done so that both understands, is very important. Whenever a situation causes people to be disturbed or upset, there is a need for counseling, community wide, family wide, or individually. Extension workers should be skillful in discovering these feelings of dissatisfaction in order to focus further analysis on specific aspects of the situation in which lies the specific concern.

Discovering the focal point of trouble requires getting facts which will pinpoint the true nature of the problem, its scope, and its importance. It usually entails careful scrutiny of attitudes, beliefs, values, habits, prejudices, and the like, in addition to the body of information commonly called facts.

2. *Resources available* : Resources must be discussed. This may involve people, land, cattle, and finances. Both, the worker and the farmer, must understand what can be done.

3. *Alternatives* : Both, the worker and the farmer, must know and understand the problem, and both must understand the resources available to solve the problem. How can the problem be solved? Is there only one way? How many ways? Discuss all the ways (alternatives) to solve the problem.

In this step ideas about plans of action must be developed that offer possible solutions to the difficulty. At this point Extension workers must provide real leadership. It is often easy to supply the solution, but difficult to reach a truly joint decision about how to solve the problem.

4. *Decision* : After all alternatives have been discussed *the farmer* should be guided to *select* the one method which most nearly fits his situation.

Evaluating alternative plans of action requires the ability to project probable consequence of each suggested course of action, if it were taken. It involves determining the probable value of each idea. It involves a decision about which kind of action is most likely to succeed.

Without this ability, the situation is much like the blind leading the blind. If the blind is attempting to lead one which has excellent sight, the results could be even more disastrous.

Summary

Good counseling involves the following six steps :

1. *Problem*, identify so both parties understand.
2. *Resources*, identify all resources available to the farmer.
3. *Alternatives*, discuss all the ways to do the job.
4. *Decision*, guide the farmer to select the best method for his solution.
5. *Action*, lead and help farmer into action.
6. *Results*, follow through.

Missed Signals in Counseling

The statement has been made that one should learn how to ask good questions. Below is a list of a few "missed signals in counseling." In other words, a few things not to say or ask :

1. "What can we (or I) do for you ?"
2. "That is not such a terrific problem".
3. "Tell farmer how, go to files for literature, etc."
4. "We have never done it that way".
5. "We do not have the time".
6. "It will not work".
7. "That is not our problem".

8. "Don't move too fast".
9. "It will mean more work".
10. "Let us wait and see".
11. "Yes, but
12. "It will not work out".
13. "Why something new now ?"
14. "Let us think it over for a while".
15. "It is alright in theory, but can you put it into practice ?"
16. "It has been the same for 20 years, so it must be good

Counseling - Listening

It has been said, in the above, that good Extension workers are good listeners. They are sympathetic listeners.

Scientific research has indicated that two months after hearing a person talk, the average listener will remember only approximately 25% of what was said. One's thinking is influenced more through what one hears than what one learns through any other means of personal communications.

Surveys have indicated that 9% of communication time is spent in writing, 16% in reading, 30% in talking, and 45% in listening. Therefore, good listening is very important ; it is essential if a two-way communication is to take place.

Good listening is a compliment to the person speaking, and listening can make better relations for

everyone. The person who is carrying on a conversation with someone else or just day dreaming while a person is talking is not only being impolite, not able to understand, but is placing the person doing the talking in a very unfavorable position. The very act of sympathetic, comprehensive listening will often solve the other person's problem. If a person knows he has a good listener, he will share his thoughts more freely, which in turn, makes it easier for the Extension worker to help him with his problems. It is very often the case that a person doing the talking will be able to reach a desirable solution himself.

There are ten bad habits in listening, which one can overcome or, at least, improve upon :

1. *Erratic listening* : The average person thinks 400 words per minute, while the average talker says 125 words per minute. The listener's mind has a little spare time so it wanders away from the speaker. When the mind is again concentrating on what the speaker is saying he has missed part of what the speaker has said-often an important point and he may have missed the main text of the speech. How much one learns depends a great deal on his ability to avoid erratic listening.

2. *Fact listening* : If one says, "I get the facts" he is, in all probability, a poor listener. This person is most apt to concentrate on the first two or three facts and miss the remainder of what the speaker said. One should go after ideas instead of a series of facts.

3. *Emotional deafness* : There are certain words or phrases which bothers everyone. A farmer may make a statement and because of some emotional disturbance, the counselor begins to think of that word and misses what the speaker has to say.

4. *Supersensitive listening* : The person speaking may happen to step verbally on one's mental toes.

This causes him to stop listening. He may even go so far, in his thinking, as to begin a plan to get back at the speaker. In the meantime the speaker has continued and main points of his talk may have been missed. Try a little self control and hear him out.

5. *Avoiding difficult explanations* : One goes out of his way to keep from hearing things which are difficult to understand. This is bad, for there is always a time coming when one will have to listen and will be bored to tears.

6. *Premature dismissal* : One often has to listen to someone talk on some subject which he does not like. As a result, he thinks of other things that appeals to his likes and is more to his ego. One should remember that even the most boring person may and can have good ideas to offer. It is so often not the good speaker who has something worth while to say.

7. *Criticizing the speaker as to delivery and appearance* : As an example, assume that a person very shabbily dressed and tongue tied walks into the office. One may be immediately against him and cannot hear a word he has to say. Still, he may have the key to success. Give him a change.

8. *Pretending attention* : One may make himself comfortable and turn his eyes to the speaker and not hear a word that is spoken. Who is he fooling? Only himself. Listening requires energy and the speaker knows or unconsciously knows whether one is listening.

9. *Yielding to distractions* : In this day of noises, mass communication, etc., it is, at times, hard to concentrate on what the speaker says. If one is a poor listener, to begin with, this makes listening very difficult. Keep the mind busy with what the speaker has to say.

10. *Pencil listening* : Some people feel that the only way they can learn is by taking a lot of notes.

They can be so involved in this physical act that they are only half listening.

Listening can be a source of knowledge. It can be good business. It is an art that anyone can learn with a little effort. When a farmer comes to the Extension worker for counseling, make him comfortable, at ease, and be a good listener. It does not matter how busy the worker is, he should show that he is prepared to listen.

The two main points of good listening are sympathy and silence. Silence is difficult because talking feeds the ego and listening does not.

Evaluating my Effectiveness in Interviewing

	Yes	No	Comment
1. Did I identify the problem, discover the resources, bring out the alternatives, and lead the farmer to decide ?			
2. What results do I expect ?			
3. Did I free farmer from tension which could block clear understanding ?			
4. Did I help farmer grow in self-understanding ?			
5. Was the real problem identified ?			
6. Was a possible and satisfying course of action planned ?			
7. Were other resources identified and used ?			

8. Was a plan for follow-up made ?
9. Was a record of the interview made ?
10. Was the plan of action carried out ? (To be checked later)

Extension worker.....Block.....
 Date..... Farmer.....

Counseling by
 DR. J. PAUL LEAGANS

The ability to counsel requires the skill to help individuals :

1. Identify their problems.
2. Discover focal points.
3. Determine alternative solutions.
4. Evaluate possible solutions and make decisions about them.

“Without this competency, Extension workers cannot help people analyze their own problems effectively. The skill to counsel is basic to guidance. It is often said that Extension’s central theme is to help people learn to solve their own problems. Unless Extension workers are skillful in counseling they cannot help people discover their problems and work out useful solutions to the problems. It is a relatively easy task to supply an answer, but a vastly more difficult one to supply leadership that truly helps others arrive at good decisions.”

Chapter - 23

Visual Aids.

(Extension Teaching.)

The following visual-aids are important for good teaching by Extension workers :

Blackboard.

Flannel graphs.

Charts, graphs, and posters.

Cinemas.

Slides.

Photographs.

Notice boards.

Flash cards.

Film strips.

Bulletins.

Pamphlets.

Leaflets.

Puppets.

Flipbook.

Visual-aids are aids that Extension workers use to help them do a better job of teaching. Visual-aids are never a teaching method within themselves. Too often,

especially teaching with a cinema, teachers of every profession expects the cinema to do all the teaching. Aids are something, some prop, something that can be seen, something added by the teacher to help farmers visualize the problem, the important points, etc., in order to make more vivid and learning easier. Not only is learning easier with visual aids, but more is learned. It helps to give a better understanding to that which is being taught.

Blackboards.

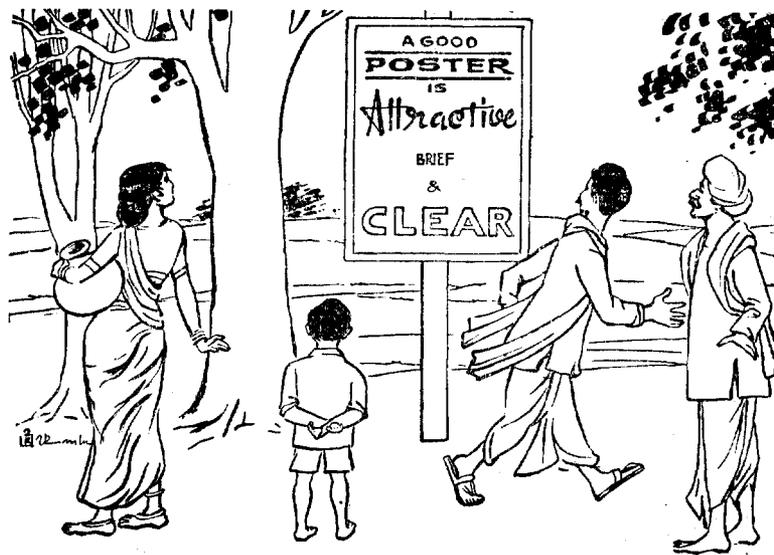
Of all the visual-aids, the author would list the blackboard as the most important. Especially is this true when one arranges his teaching for the blackboard's use. Many times this phase of aid has been brought up when discussing the subject of visual-aids. In influencing people to adopt improved practices one of the more important points to remember is that all are interested in Rupees (money). From every angle possible, the Extension worker should, with the help of the learners (farmers), show in Rupees, the value of an improved practice. This kind of teaching calls for a blackboard or other aids prepared in advance. There are other ways to approach different individuals, but this is one way the worker may be sure the farmers will be interested. Use the blackboard. At least, write the title for discussion on the board. List in chronological order, on the board, the more important points of the subject as they are taught. These help in drawing conclusions from the farmers, it helps the teacher summarize the subject taught, and it emphasizes the most important parts to be learned.

Posters, Flashcards, and Charts.

I. A *poster* is a device for getting people to attend a meeting, draws people's attention to certain subject-matter, to impress and sell an idea, or fact, encourages more information, and encourages action.

A true poster is designed for people on the move. It says in effect, "Hey there....." and then gives the passerby a brief but impressive message. People do not, as a rule, study posters. They look at posters the same way as they look at other objects-trees, birds, houses, cows, or other people. A brief glance is usually as much as the average gives an object-long enough to only identify. If something about the object catches his attention or stimulates his interest, the passerby will look at it longer.

Since a single glance may be all the poster will get, the message must be simple and clear. Details and wordy sentences do not have a place on a poster.



Suggestions for designing a poster

1. Decide who is to be the audience :
 - (a) Decide what *to tell them*.
 - (b) Decide what the poster should tell them *to do*.
2. Put down on a sheet of paper words and rough pictures which express the message simply and clearly.
3. Try to put the message into few words- a concise striking slogan.
4. Rough out the slogan in small scale.
5. Other suggestions :
 - (a) Use plain, bold lettering and lines :
 1. Black on yellow.
 2. Dark green on white.
 3. Dark red on white.
 4. Dark blue on white.
 5. White on dark blue.
 6. Black on white.
 7. Yellow on black.
 8. White on dark red.
 9. White on dark green.
 10. White on black.
 - (b) Remember : too many colors add confusion.
 - (c) Allow plenty of space.
 - (d) Do not crowd letters, words, or illustrations.
 - (e) Large size (20 × 30 inches).
 - (f) Timely topics.

Posters should supplement-not replace other communication methods. They are often used to "spearhead" or introduce a campaign. They may be used to reinforce educational efforts after launching.

In general, the greater the number of posters in an area, the greater the impact.

Posters should support one point-not an entire subject. They will support local demonstrations, local exhibits, etc.

A poster should have three divisions :

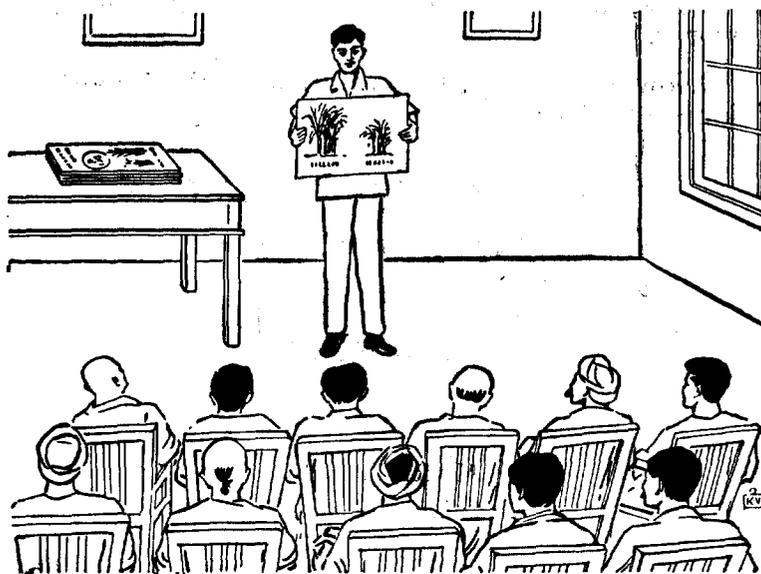
1. Announce the purpose. Is it insect control, use of fertilizers, Sesbania, etc?
2. Sets conditions in which to accomplish the goal which may be an improved practice or a local demonstration.
3. The last part either gives recommended action or inspires action.

An excellent poster showing the three parts :



Posters should be planned for the people who are to do the job. Place the poster in a good location for people to see and will attract the eye. Place where other things are attractive and inviting.

Flashcards



II. Flashcards have an easier job to do than posters or charts. Flashcards are usually made to aid in a lecture or a group discussion. They are brief messages on poster board cards, displayed to emphasize important points in a presentation (a teaching situation). They are usually arranged in a series, in chronological order, for the purpose of putting across a message shared with other cards. The cards are to help the teacher dramatize a point-to focus the attention of the farmer on a specific point.

A series of flashcards fastened together in a manner that each card may be turned over easily, makes a good flip book.

The pictures, to put on the flashcards, may be simple drawings, cartoons, large photographs, or even large illustrations cut from magazines or newspapers. Make sure that illustrations are large enough for your audience to see. Words may be needed to supplement

the illustrations so as to give full meaning. The best flashcards, however are those that need few words or no words.

Below are flashcards used to show the importance of flannelgraphs :

FLANNELGRAPHS CAN

POINT UP FACTS ABOUT

Y. F. C. WORK

MARKETING

HOME MANAGEMENT

NUTRITION

CONSERVATION

GARDENING

LANDSCAPING

The colour scheme of flashcards should be the same as given for posters.

Charts and Graphs

Charts and graphs tell more of a story than a poster or flashcard should attempt to do. They can do this only if placed in places where people have time to read and study.

A chart or graph can expect to get results only if displayed in exhibits, at meetings, in classrooms, in offices, and other places, where people are likely to linger. Although a chart or a graph should be attractive, they need not have the impact of posters or flashcards-especially the poster.

A poster, in many ways, is a device for getting people there. Flashcards, charts, and graphs are visual-aids to use after the people are there.

In Extension work, the workers are constantly concerned with changes. Extension's basic job is to bring about change in people's knowledge, in their attitudes, and in their skills (practices).

Agriculture itself is characterized by change. Crop yields vary from one year to the next. New experiments prove that one must discard the old for the new. Whether conditions are different this season from last season. Cost of production is higher or lower.

During a teaching situation it is often useful to be able to show or compare changes which have occurred ; or to show various relationships ; or to bring to life facts which, while important, may by themselves lack dramatic appeal.

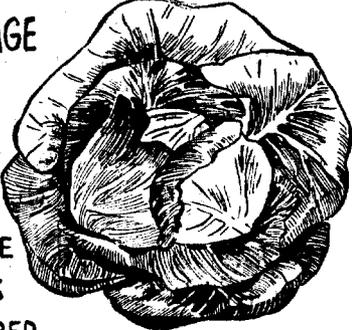
Charts and graphs may often help communicate these difficult and often dull subjects into interesting and effective teaching.

When a subject is presented by a series of flash-cards and when all the cards are in place on a flannel-board or some other similar object, the cards end up as a chart.

A chart must look easy to understand and must be easy to understand :

**WHEN CHOOSING CABBAGE
LOOK FOR HEADS THAT:**

- ARE SOLID
- ARE HEAVY FOR ITS SIZE
- LACK DAMAGED LEAVES
- ARE WHITE, GREEN OR RED
(AVOID YELLOW LEAVES)
- HAVE BASE OF LEAVES
FIRMLY ATTACHED TO STEM



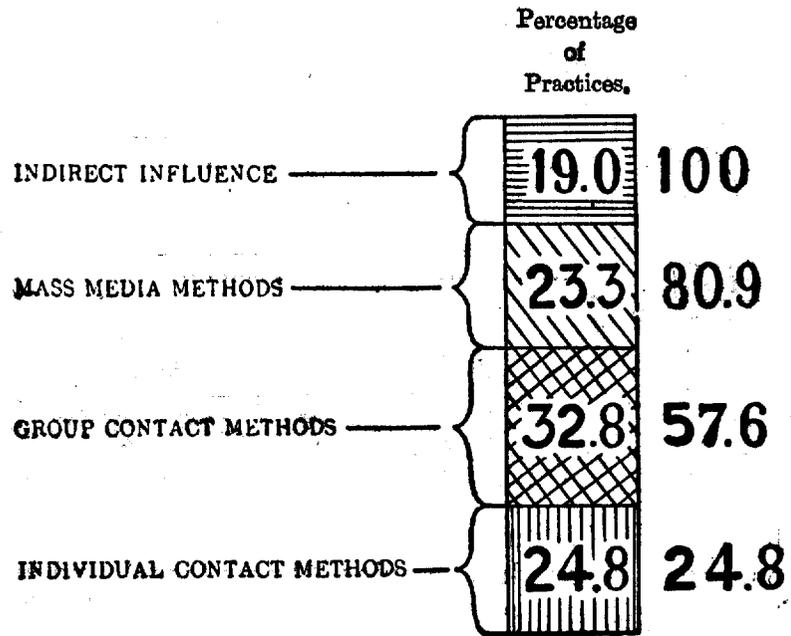
LETTERING should dominate the above horizontal chart.

Pictures can be added inside a chart or graph to illustrate what is being conveyed.

A person who is not too adept in drawing may cut a picture out of a magazine, seed catalogue, etc., and paste on the chart. To make charts one needs a little vivid imagination and initiative.

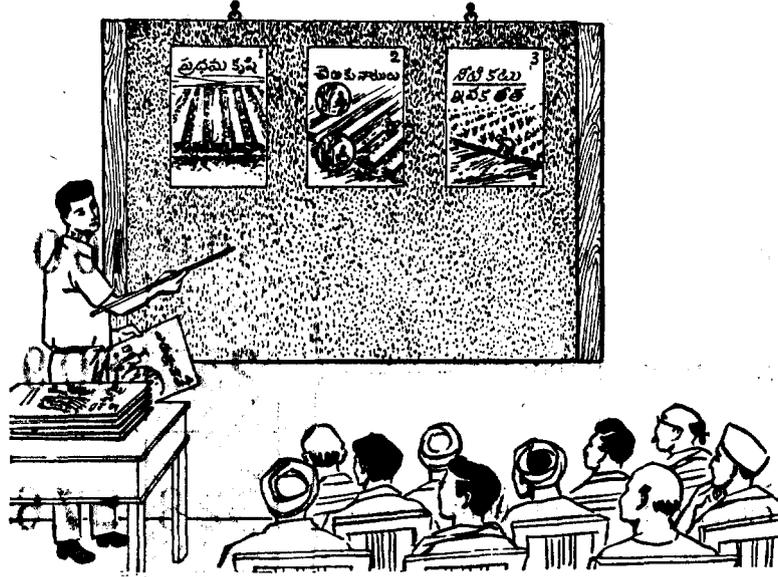
THE CHART

Value of Extension Teaching Methods.



Flannelgraph

Flannelgraphs are becoming more popular all the time as a visual-aid in teaching. A flannelgraph is easy to make. One needs only a flannel piece of cloth and a stiff board. Of course, if one wishes to move the board about a lot or carry it with him it should be light and strong like a good piece of plywood. The



flannel can be put on the board for permanent use or one may carry drawing pins (thumb tacks) and just tack the cloth over the board, when required. One may use posters, charts, graphs, photos, or any material on a fairly stiff piece of paper. Cardboard material is best.

On the back side of the paper, pieces of very coarse or rough pieces of sandpaper will be glued on. The

coarser the sandpaper the more adherent power the paper has. The sandpaper grips the flannel and holds the teaching aid in place. Instead of sandpaper one may use flannel cloth glued on the back. Flannel against flannel has very good adherent qualities. If none of these are available very coarse khadi cloth makes a good substitute, but one will find the holding power a little less than sandpaper or flannel against flannel.

The appeal of the flannelgraph is in its action and suspense. In some ways it is like a drama. It has a story to tell. It has a background or setting. It has parts which may be moved about-the actors.

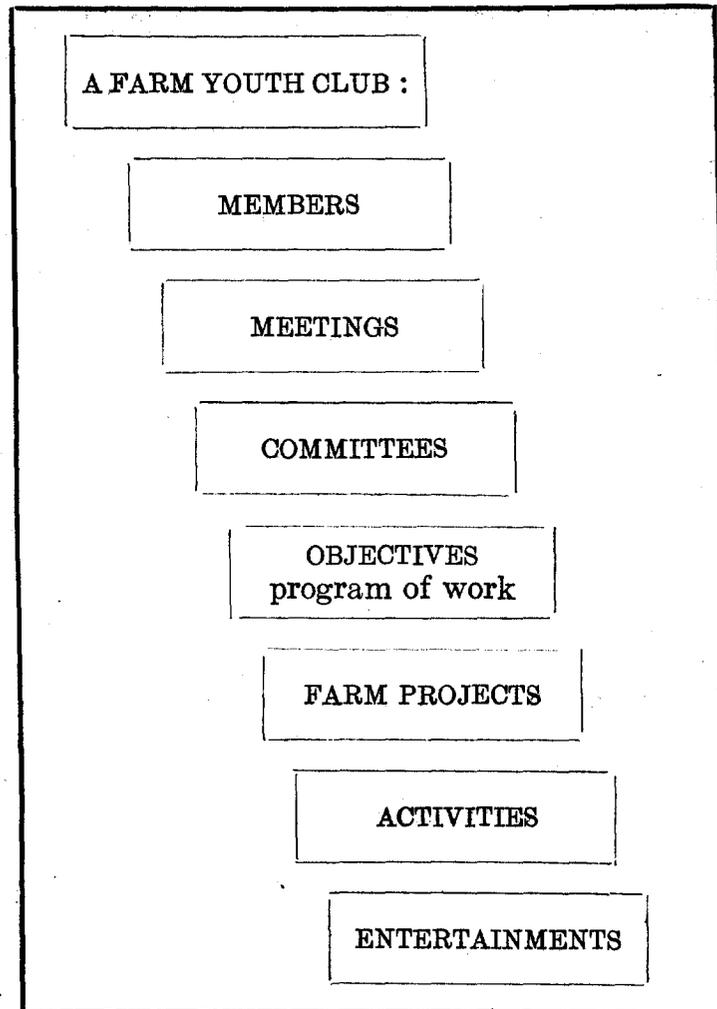
Like a drama, the story unfolds before the eyes. One can see and hear, thereby, stimulating more of the senses. The action of the moving parts attracts the eye. The suspense of unfolding holds your interest.

Some Extension workers who travel on foot or bicycle prefer to take along with them only the flannel cloth. When they arrive they borrow a blanket, a piece of rough woven cloth, or perhaps a mosquito net. This is draped over an up-turned table, bed, fence, or it is attached to a wall for support.

Tell the story in as few words as possible, simple words, one idea, bold letters, everyday living pictures, timely topics, and large enough for the audience.

One should study the graph to determine if it adds to, catches the eye, helps audience to understand, helps classify subjects, and helps hold the audience.

The flannelgraph below gives the broad outline of a young Farmer's Club and the important points covered in the discussion :



Motion Pictures

A motion picture is a very good visual-aid to teaching. There are those that classify motion pictures as a method of teaching, but they go too fast, tell only a small amount about the more important points and do not, generally, have time to go into any details. Statistics show that using movies without the aid of other teaching methods will not accomplish the purpose.

The best use of a motion picture comes after the teacher has had a full discussion on the subject. It is used to back-up some of the points brought out during the discussion. A good time to show a cinema on growing paddy is after the group has discussed the techniques of growing paddy. He may teach several hours, at different times, and then follow-up with the cinema. At best the Extension worker should :

1. In the beginning explain the film. Tell the people what they will see, what to look for, and the finer parts of the film. It is needless to say, this requires the worker pre-viewing the film, outlining the contents, discovering what the film does show, and what the film does not contain to be complete.
2. Prepare the people for the educational value of the cinema.
3. Show the cinema.
4. Follow-up with what they saw. If time permits and the groups interest still remains, it is good to hold a discussion session on what they saw, and whether the film told the complete story.

The above is for educational films. Films for entertainment is for another objective other than teaching and, in most cases, Extension workers show such films to attract large numbers of people to the meeting. People everywhere enjoy good cinemas.

Film Strips and Slides

Slides and film strips are excellent teaching aids. The big difference between motion pictures, slides, and film strips is, there is not any narrative (talking) with the slides and film strips and the verbal teaching is left to the teacher for the explanation of the pictures. In many respects, slides and film strips are better to use as aids than the motion picture. The picture may be held for any length of time and the teacher may have as much time as he desires to explain fully the story.

In using slides and film strips, one should use practically the same technique as with the cinema. The big difference lies in the ability to hold the picture as long as it requires to teach a specific subject. They are, however, used best following a group discussion on the subject. Slides and film strips are excellent aids which enables the teacher to repeat what he has taught, but in a different form-not just repeating words. In a previous chapter the value of teaching the same subject several different ways was stressed.

Photographs

Photographs may be used effectively, especially in such places as notice boards, classrooms, lectures, group meetings, etc. However, photographs, as a visual-aid, is an expensive method and cannot be advocated too often for that reason. Photos are especially useful to show farmers about other farmer's achievements. It may be a photo of a demonstration, a field of paddy, or some other crop, as ; cocoanuts on trees, sugarcane, etc. Photos taken of places familiar to the local people are more effective than those of other places.

Photos may replace flannel-graphs, flashcards, etc. They are good, but care must be exercised because of the expense. In most cases, the willing Extension worker will find that it pays to use his own resources and talents.

Literature

There are many kinds of literature. The Extension worker is more concerned with bulletins, leaflets, pamphlets, booklets, and handbills.

Leaflets and pamphlets are made for farmers. A good leaflet or pamphlet is written in the local language. They are easy to understand, void of technical terms, have good illustrations, and are simple. Bulletins are written for a person with a good working knowledge of the subject and they contain a great deal of technical information. They are mostly written for the specific purpose of being read and studied by professional people. They are for Extension workers, primarily.

Literature should be handled with care, or the aid becomes too expensive to use. Literature is not made to pass out to everyone who happens to come along. They are made for the individual who is seeking knowledge. It is not good teaching when an individual asks the Extension worker a question for the worker to hand him literature and tell him to read. That is not what the farmer is after. He wants comments, suggestions, and perhaps a discussion on the subject. It is a an opportunity for good counseling. After the worker helps the farmer clear up his doubts and problems, then is a good time to give the farmer the literature dealing with the subject. Even then the worker should point out important parts of the pamphlet, circular or whatever the literature is. A good point for any worker to remember is that

a farmer likes to be noticed, given preference, and counsel on his problem (s). In doing so the worker should refrain from doing anything that appears to be getting rid of the farmer or appears to be giving him second preference.

Flipbooks

The flipbook combines some of the advantages of the paper pad, black-board, flannelgraph, and flashcard discussed previously. It is used to develop a story or a lesson in a progressive, step-by-step sequence which makes learning easier.



A flipbook can be made by fastening paper (or flashcards) between two hinges in order that each page may be folded over after the discussion is completed on that part. Some place large rings to hold together and use the portable blackboard as an easel (stand) for the book.

The Extension worker has decided to teach proper fertilizing of paddy and wishes to use a flipbook in his teaching. How many important points are there to proper fertilizing paddy? He then sketches a picture, or cuts out a picture, or uses a photo, etc. for each step. He then places these in chronological order, as he prefers to teach, binds them together as a book and he has a flipbook.

One advantage of a flipbook over flashcards or flannelgraphs is, they are together and they are not so easy to lose or misplace. If you have to carry the material any distance they are easier to carry, and one does not have to carry so much equipment as with a flannelgraph. If the flipbook pages and drawings are large enough they approach the effectiveness of a flannelgraph.

Notice Boards



Many villages of the world have yet to be introduced to their first bulletin board (notice board).

Yet, this simple device can perform a vital link in the Extension communication system. It may attract attention, stimulate interest, deliver a message, and produce action.

In far too many instances, where the notice board is used, the method is given third or fourth treatment. The board may be over-crowded with material which does not teach, placed in out-of-the way places, not kept up-to-date, has old material, items become loose and ragged, etc. In other words, where attempts are made for the aid it has not been given a chance to prove it's worth.

A well-located board can work for Extension almost constantly: announce meetings, promote programs, and teach new methods, and practices.

The most common mistake with notice boards is to pack them so full of information that nothing stands out.

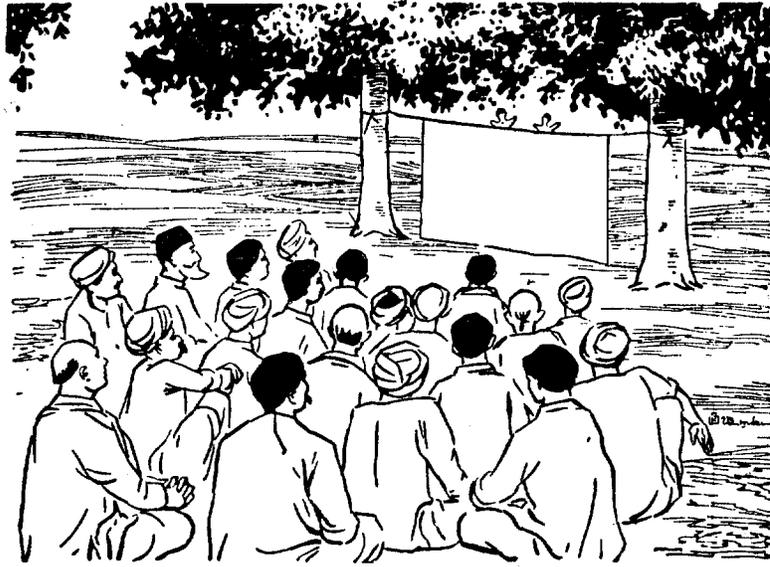
A good notice board will become the gathering place for the villagers.

Puppets

Almost all of the advantages of plays apply also to puppetry, another form of drama. In this art small figures representing people and manipulated by unseen humans, act out their surprising life like dramas on a small portable stage.

In some places the Extension workers found it effective during a show to have a puppet strike up a conversation with a leading farmer and ask him about his practices. Others learned by listening to the conversation. A good act is for the Extension worker to sit in the audience and carry on a conversation with the leading puppet about local farming problems and recommendations.

A crudely made puppet, when played in a lively way, can hold an audience.



There are several kinds of puppets and there are several ways to make puppets. The description of how to make a puppet below is one of the easiest to make and will do all that is required of a puppet :

1. Roll a piece of cardboard around your finger. Glue it into a firm tape, which fits the finger. This is the neck of the puppet.

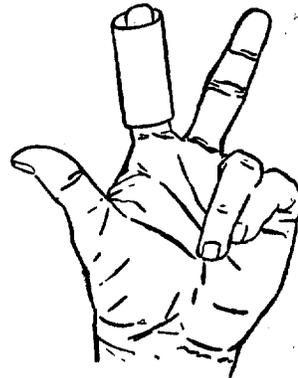


FIGURE I

2. Crumple a piece of newspaper into a ball the size of the head you wish to make. Press the ball over and around the tube, on your finger, roughly shaping it to form the stuffing of the head.



FIGURE II

3. Take a piece of paper (brown wrapping paper or some tinted paper) and cover the crumpled newspapers in such a way that one side of the ball (where the face will be printed) is free of wrinkles and folds-make all folds come to the back and sides of the head. Tie the paper in place around the neck with a piece of string.

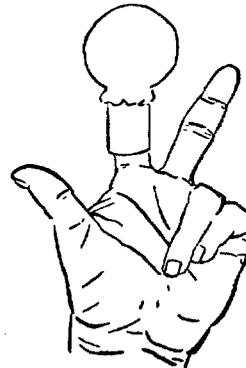


FIGURE III

4. Paint the face-on smooth side of the head (ball) :
- (a) Large black eyes and eyebrows, and very few eyelashes.
 - (b) Red lips forming large mouth.
 - (c) A few lines for the hair.

(Do not attempt to paint all features. A few bold features are more effective than details).



FIGURE IV

5. Take a piece of bright colored cloth and sew (stitch) to form a long tube. Length: from thumb past elbow.

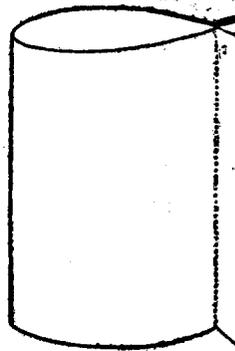


FIGURE V

6. Put the head inside so that the back of the head is towards the seam and the head is upside down.

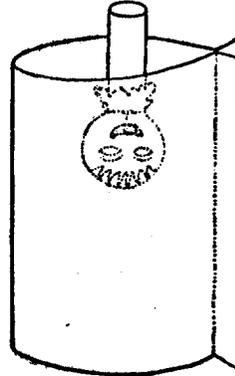


FIGURE VI

7. Tie the cloth on the neck with a piece of string. Tie firmly but do not close (pull cardboard together for the finger must be in the tube) the opening of the tube.



FIGURE VII

8. Turn the cloth other side out, so that the head is exposed.

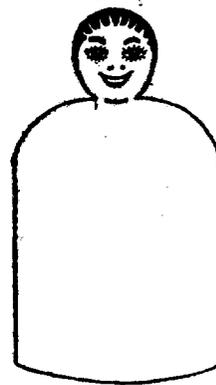


FIGURE VIII

9. Cut slits for the thumb and middle finger. The thumb and middle finger should stick out enough to look like arms.

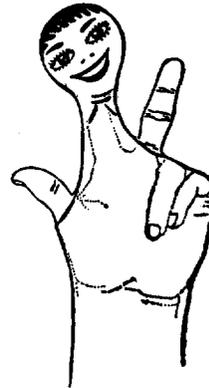


FIGURE IX

The puppet is now ready. Give it a name. If the puppet is a man, put a pugree or cap or paint a mustache.

If the puppet is a woman, drape a piece of cloth over her head no need to place over the body. Paint sign on forehead or at the parting of the hair.

Practice with the puppet. Bring it to life. Practice. Work a puppet on each hand. Identify one self with the puppet. Change the voice to fit the character. The right and left hand puppets will have different voices.

Chapter - 24

Leadership

Developing leadership in a community is a very difficult subject to discuss, yet it is one of the most important aspects of Extension teaching. There is not any concrete and tangible advice which Extension workers can follow to develop leadership. It is Extension's job, however, to be on the alert for true leadership and then exert an influence, by teaching, in the development of the individual leader.

Leadership camps have been one of India's best teaching. As it happens in many cases, they just give Extension an opportunity to teach, which is highly commendable in that aspect alone. However, the people who have attended these camps have, far too often, been anything but leaders in their communities. The observation has been that the situation has improved considerably and any improvement is commendable.

Even though leadership is hard to describe and there are few concrete advices and practically no rules to follow on leadership, an attempt will be made to give the reader a little "food for thought" on the subject.

First, one should have a meaning of leadership. Leadership is a process of an individual directing, influencing or controlling the thoughts, feelings and

behavior of other human beings. Another definition of leadership : leadership is the activity of influencing people to cooperate toward some goal which they find to be desirable.

There is not any simple process in selecting real leaders. This requires all the skills one has in *good human relations*.

Extension people are lax on the purpose of selecting leaders. Extension usually selects leaders by :

1. Election-this method has not proven too successful.
2. Asking friends of a particular person.
3. Consulting Young Farmer Club members.
4. Selecting on the basis of the individual's interest in the problem.
5. Surveying communities for leaders for a specific purpose.

Leaders become leaders through different means. Along with the ways to select leaders, it might be important to consider a few ways people generally become leaders :

1. *Individuals become leaders through their position*-through their name or title. Consider the M. L. A. (Member Legislative Assembly) sitting along side an ordinary Extension worker at a large gathering ; both make speeches. Whose speech carries the most "weight"? This applies on down from the Block Development Officer to individuals in a community. However, Extension must consider many other factors in selecting leaders. Generally speaking, the man with a big title makes a good leader for certain functions, to complete documents, etc., but he probably will not function as a committee member only. He may not be the man for an individual Young Farmer's Club, but he may be good for the committee on all youth activities.

When Extension workers start selecting leaders they should also consider or give thought to the "role" of man. The role of the Block Development Officer and the role of an Extension officer are two distinct and separate roles in life. Each to be successful, must live up to the role which his title implies. People, to be successful, must live up to the role they have acquired and this often includes particular leadership ability.

2. *Leaders are elected.* If the Extension worker does not know of a good leader for a particular job, he may have to depend upon others to elect a leader. If the worker knows of a good leader, he should appoint him to that position.

3. *Leaders may become leaders unintentionally.* This happens through their concern for others. For example, a person who is always promoting friendship or doing good deeds for his neighbors becomes, unintentionally, their leader. These are the ones Extension loves to find. Extension needs these people.

4. Leaders may be appointed. If appointed by the Extension worker he should give much thought to the individual's qualifications before making the appointment. If a committee appoints, the individual's qualifications should be discussed among the members before the appointment is made.

Qualifications of a Leader.

Before one selects a person for leadership, he should consider a few qualities of a leader :

1. A good leader is a good teacher.
2. He must like people.

3. He must know the subject in which he is to exert leadership. However, if he has the other qualities, he may be taught subject-matter. This should be the objective in leadership camps.

4. He must have kindness, be sympathetic, and have the ability to understand problems.

5. A good leader is trusted and respected by the people.

6. He has faith in people and in their ability.

7. He is willing to share the credit of good work with the people.

8. He has followers in all sections of the community.

9. He is willing to consult his followers.

10. He is eager to learn, willing to work, and sets an example.

11. He is truthful, dependable, and impartial.

12. He knows the local needs and conditions.

13. He has the service motive in improving the conditions of the community.

14. He is successful in his field of activity.

15. He is progressive and faces failures calmly.

Below are some people who should be selected :

1. Select members of the Gram Panchayaths, co-operatives, and other elected bodies in whom people display confidence.

2. There are caste groups. Select representatives of each group in whom the people have faith.

3. There are interested groups in villages. Select a representative from each.

4. There are traditional leaders. Do not pass them by entirely.

5. Young and progressive people, who have a desire for advancement, should always be associated.

A Leader Likes :

1. To belong to groups. A person who is shy or does not like to be a part of a group, in all probability, will not make a good leader.

2. A leader is not different in desires from other people. He wants and enjoys security.

3. The leader wants and enjoys recognition from others, and from the work he is doing.

4. A leader wants response from other people, and he exerts leadership through the responses he receives.

5. A leader is not afraid of new experiences and enjoys the new experiences which he is able to gain through Extension. These new experiences may come through several channels. For ill : he enjoys the new experience of leadership or he may enjoy the financial benefits he has, or is having, through some improved practice he has adopted.

Leader Training.

The idea of leadership training is to get together and learn a lot of technical information. However, for good leadership a person needs a lot of training other than technology.

Leaders should be Taught :

1. A lot of technical information.
2. He should be taught a lot about Extension : what the Block can do and cannot do financially, what tools the Extension worker has to use, a great deal about the local situation (facts about the Block or the area he is in), the role of Extension workers and the role of a leader, how to teach, the need for increased production, better health and sanitation, what improved practices will be good for the people, Extension communication, and how each works (teaching methods). Many items which should be taught are not technical.
3. The man who has assumed leadership responsibilities should learn why and how the followers do things.
4. He should be taught a lot about himself-Self Knowledge.
5. He should have an understanding attitude, and he is sympathetic with the people in their reluctance to accept new experiences.

Leader training, on the part of the Extension worker, is a continuous process. Much of the training is done on the man-to-man basis.

Meeting Type of Training.

As India is sponsoring meetings for leadership training, a few comments on this type of training is a fitting subject. It should be said, however, that it does not matter whether the training is Government sponsored or not, the training should go on.

1. Training time should be spent on the present experiences and the past experiences. The teacher should be equipped with a lot of facts. He may discuss :

- (a) What has been accomplished in India, in the state in which he lives, in the district, and finally in the block.
- (b) The leaders should have a pretty clear picture where they expect to go and how to reach this point in "uplift".

2. The group should be made aware of the need for good teaching and personal relations :

- (a) Lead them to see the need for doing a better job-it's value to them and to others.
- (b) Give good training and rather comprehensive training.

3. In teaching technical subject-matter to leaders, the teaching should have two parts :

- (a) The subject-matter.
- (b) How to teach the subject-matter.

For a 3-day school, teaching subject-matter should occupy only half of the training time. Remember, it is much more important the leaders see the need of these things. A good time to teach needs is while the leaders are together. They can discuss among themselves, formulate judgements, and come to decisions, Technology may be taught anytime.

4. Teachers (officers, Village Level Worker's, and others) should have aids-particular in relation to the subject-matter discussed.

One should always be aware, with leaders that they may not be able to accept your teaching methods. This aspect is very important to the Extension worker, for the worker and leader should accept as their main purpose that of teaching. They must strive for more and better teaching.

Leadership Personality

There are two important questions on leadership :

1. Why do some people lead and others follow ?
2. What is the nature or leadership ?

Man is equipped with a brain ; his mental functions are more advanced than those of other mammals ; he is capable of thought processes, but his actions are primarily governed by instincts, reflex actions, and habits. He reacts, in some way, to the changing situations.

The individual, as such, cannot exist in a society. He has to be a part in one form or other of his human associations, which satisfy basic needs like security, recognition, recreation, etc., which are difficult to be attained in individual existence. He also develops his own individual pattern of behavior in the group.

Thus, every individual has a personality. This personality is the sum total of all these behavior patterns. It includes the behavior in beliefs and feelings of the concerned individual.

The factors which influences the development of personality are :

1. Heredity characteristics.
2. Social and natural environments.
3. The experiences of the individual.

Normally, a leader is an individual with a highly socialized personality. He reflects the aspirations of the group to a great extent. The number of leaders in group is the index of development of the personality of it's members, as also the extent of socialization of the group concerned. Where leaders are few in number, the members are less socialized and are often jealous over the group control.

Most people are followers ; some have traits of leadership and sometimes emerge from the group as successful leaders. A leader is also a follower. The new leadership educates and leads and does not dominate and dictate. It aims at satisfying by improving what already exists instead of destroying it.

Leadership is a work of cooperation and understanding ; it has a clear goal which the people have set and they, the people, wish to reach. Therefore, this process of formation of a group around an interest of one of it's members, who expresses their goal or standard best, leads to his functioning as a leader in obtaining their objective.

A Good Leader :

1. Is known by the personality he enriches and not by those he dominates and captivates.
2. Is known as the person who helps others discover themselves in the achievement of their aims, which have become significant to them.
3. Is known by the qualitative growth of the leader and individuals as a group.

In the village communities leadership is based upon experiences, the wisdom in, and ability to guide human conduct according to traditions. Such leadership often, is not aggressive for the individual's advancement.

Why should Extension Work through local Leaderships and the Group System ?

Extension is education, and education is the product of changes in human behavior. These changes are sought in knowledge, skills, and attitudes of individuals and groups of people concerned.

New ideas, experiences, and information are accepted and adopted more readily by individuals and groups when they go through their neighbors and particularly through their leaders. Therefore, the process of education is more effective when local leadership is used.

The worker has a large range of clientele. Reaching and maintaining contact with them, directly, is limited by him physically. The only reliable, alternative method of ensuring the spread of new ideas is working through leaders that function.

The aim of Extension is to develop in the people the ability of self-help. This means that the people and their local leaders will have to take ever increasing interest and responsibility in conducting their own affairs. This is possible by associating local leaders, and through them, the local people in Extension.

The above may be Summed up in this Manner :

1. To put across new ideas in such a manner as to be accepted with the least resistance.
2. To have local people with information and experiences who can carry on with the least amount of dependence on Extension workers.
3. To develop local leadership which takes increasing responsibilities in conducting their own affairs-the peoples affairs.

It is a Good policy on the Extension worker's part to be able to identify Leaders even though he may not use them.

A study of the groups-leader-follower system is essential. Even the keen and well trained Extension worker will meet with limited success, if he fails to

appreciate the group rivalries in the villages and inadvertently identifies himself with one of the groups. He should, therefore, identify factions, groups, and study leaderships and institutions in order to :

1. Avoid association of the program with one faction or another in a village.
2. Avoid the mistake of inadvertently choosing an undesirable or unsuited person as a leader.

Use of Leaders.

Association of local leaders in Extension activities would serve to develop and train them. Since they are not paid it is necessary they are given credit for the work they do :

1. Recognize the leaders in public places.
2. Take their counsel on important issues.
3. Give them ever increasing responsibilities. They can do a lot in arranging meetings, selecting subjects for discussions, etc. When the worker holds a meeting in the leader's community, let him be the chairman for the meeting. This will give him prestige.
4. Encourage the leader to develop his own ideas and hold meetings of his own.
5. Invite him to attend meetings and tours.
6. Encourage leader to lead visitor groups.
7. Visit leader's community and encourage their work.

Essential Elements.

A few general principles or guides to the successful use of voluntary leaders in Extension teaching :

1. Consider how the use of local leaders might increase the effectiveness of the teaching plan :

- (1) Analyze present function of voluntary leaders.
- (2) Examine your subject-matter solutions to problems from standpoint of teaching through local leaders.
- (3) Inventory potential leaders among the rural people of the area in terms of specific subject-matter practices to be taught.

2. Decide upon specific duties to be performed by local leaders :

- (1) List jobs which might be performed by local leaders :
 - (a) Determining Extension program.
 - (b) Arranging for teaching activities.
 - (c) Teaching subject-matter.
 - (d) Checking progress and accomplishments.
- (2) Select specific jobs to be performed, which :
 - (a) Local leaders can do about as well or better than Extension people.
 - (b) Will increase the number of people influenced.
 - (c) Will strengthen leadership locally.

3. Be constantly on the alert for future leaders.

Two Kinds of Village Leaders :

Extension people must be able to judge :

1. The one who has authority.
2. The one who has influence.

It is often that a villager who has the ability to influence people the most effectively is not recognized as a leader. People never think of him as a leader. It is odd, but often true that the real leader does not know he has such influence.

As a worker makes personal contacts in a community and as he discusses farm problems with the different individuals, he should make mental notes as to how often a certain farmer's name is brought up by others. A farmer whose name comes up often is the real leader.

Survey for Leaders.

It has been mentioned that one way to select leaders is by a survey. One must be warned, in making surveys, to do it in such a way that others do not know what he is doing. For example, if one goes to the villagers and asks who are the leaders, one may not get the kind of men desired ; but if he asks the village people who would be good for doing a certain job, he may find them all recommending one or two names. One may ask, "who should I get to help me select a meeting place for demonstrating a new plow?" The names which occur the most often are likely to be the natural leaders. By going to the people the second time with this question, "who should I get to help me decide on the improved seed for next year's crop" ? the names which appear in both surveys will be more reliable.

Dr. J. Paul Leagans of Cornell University states that the ability to involve local leaders includes the skills necessary to :

1. Identify key leaders.
 2. Provide adequate training.
 3. Get the leaders to work on significant tasks.
 4. Maintain continued participation.
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Chapter - 25

Young Farmers' Club

An Extension program is not complete until it involves Young people. Young Farmers' Clubs help Extension workers in many ways :

1. A Young Farmer's Club is a good way to get practices adopted by adult farmers through indirect influences.
2. Members of the club and the club are good publicity agents for Extension.
3. Working with farmer's sons and daughters is a good way to get closer to the farm families in order to teach more to adult family members.
4. Training the men and women of tomorrow in being good citizens, leaders, and better farmers.
5. Members of the club become demonstrators when carrying out their farming enterprises.

The Young Farmer's Club organization, the individual club organization, may be done in many ways. To keep a club alive and healthy calls for activities from every member. In order to give more members prestige and to involve more activities the club should have the following office bearers :

President.
Vice-President.

Secretary.
Treasurer.
Reporter, and
Advisor.

An opening and closing ceremony should be worked up to encourage all to take part-especially all the officers.

Additional officers elected sometimes by the club are :

Parliamentarian.
Sergeant of Arms.
Second Vice-President.

There cannot be more than one President of a club. Most often a member is elected Second Vice-President, as a show of appreciation by the club members for some outstanding achievement in the club by that member.

A good example of a well rounded club may be compared to a wheel with the component parts :

Wheel	Vs.	Club
1. Hub of wheel-the center of the wheel which keeps the remaining parts of the wheel going.		members. meetings. objectives. committees. officers. projects.
2. Spokes-the part of the wheel which makes it large or small-the part which separates, but holds together the hub and the rim.		Activities.
3. Rim-the outer perimeter of the wheel - the part that the wheel runs on.		Interest.

Members of a club: The member is the most important item of a Young Farmer's Club. The members should be of an age which will be interested in club work. The word young implies the member will be a youth. The most applicable age is between 12 to 18 years. If a member is under 12, he is too immature to make decisions wisely and often does not use his best judgement. If he is 18 or over, he begins to grow out of the youth stage. At this stage in life he is ready to enter College, go into a profession, become a full pledged farmer, or loses interest in club work.

A member should be a farmer's son or he should be interested in farming and farm life. Besides the consent of the youth, to belong to the club, the club should have the consent of the youth's parents. The parents should understand what the objectives for having a club are, the qualifications for joining, and what is expected of a club member, before the youth is accepted as a member.

Meetings are for leadership training, for education, entertainment, and to decide and plan on a program of work, and how the club will carry out their program. A club cannot function, as a club, without meetings to discuss their projected activities.

There may be too many meetings and there may be too few meetings. Too many meetings wear the members out-they can "meet to death". That is, meet so often until it kills the club. In the beginning the club might meet twice a month or until such time it becomes well organized. After that time, once per month is usually often enough. If more meetings become necessary the President can always call a special meeting. The most important thing to remember is, at every meeting there must be a pre-arranged and prepared program. There are far too many meetings without any program or any cause to meet. This will cause the death of any club, because the members sense and resent such meetings.

Each and every meeting should be well organized and properly conducted to be effective.

Objectives are goals or targets of the club. It is their program of work. Objectives should be stated in terms which all the club members understand their own language (not objectives and language of other people). They should be of such a nature and decided on in such a way that the club members feel obligated in carrying out. All objectives should be proposed by the members, discussed during a meeting by the members, and voted on by the members. They vote to adopt a proposed objective or to reject with the majority of the members present deciding the question. Even after determining with each member his willingness to have a farming project the item should be voted on by the club, so that it becomes an objective of the club.

The following are a few suggestions which a club may choose from in selecting their objectives :

1. Each member to have, at least, one farming project.
2. Promote better farming at home and in community.
3. Club strive to have a common project.
4. Club to hold a regular meeting once per month.
5. Use an opening and closing ceremony at each regular meeting.
6. Honor fathers at one meeting.
7. Each member keep cost of production records on their projects.
8. Strive to inspire national feeling of pride in community.
9. Promote better health and sanitation in the community.

10. Promote crop and livestock competition among the members and with other clubs.
11. Promote competition (activities) with other clubs.
12. Club to take part in exhibits or melas.
13. Each club member cooperative with home, club, and community,
14. Every club member to be an active member of, at least, one committee.
15. Each committee to make regular reports to the club for their consideration. Number of times for such reports to be decided by the executive committee.

Optional Objectives

16. Promote sports among the members.
17. Promote art among the member.

(Add or subtract objectives as desired by each club. A club might prefer an entirely different list of objectives. The club may reword the objectives. Whatever the decision, the club should select and decide on their program of work).

Committees : Committee work has responsibilities in a club that corresponds very closely to the responsibilities of the spokes in a wheel. Committee responsibilities holds the club together through the interest manifested in the work. Committee members take pride in seeing their recommendations carried out to a successful conclusion.

There is very much to committee work and the corresponding responsibilities in a club, if interest in club work continues, with the individual members.

Each member must be made to feel that his duties are important and that his success is appreciated by all.

Every objective adopted by the club should have a standing committee of three members. Every member should be on, at least, one standing committee. He may be on more than one committee, but care should be taken so favoritism is not shown. Other members will resent this action unless they themselves, by vote, place the individual on the committees. The committee members should be appointed by the President, or by the executive committee. If the President wishes for other members to help share this responsibility, he may call a meeting of the executive committee for that purpose.

During the year there will be many temporary sub-committees. Let us take an example: The club has adopted the objective, "to honour fathers once during the year". The standing committee now has the task of determining when to have the function, where the function will be held, and the type of function most appropriate for honoring the club fathers. The standing committee makes these recommendations to the club in the form of a motion-after being thoroughly explained to the club. There will now be any number of sub-committees formed within the club to carry out this function. To name some of them: invitations arrangement, decoration, program, menu, and welcome committees. Each of these will now decide how to carry out their recommendation and these will be presented to the club for action (to be approved or disapproved). If disapproved, the committee now has the task of presenting new proposal or the President may dismiss the committee and appoint a new one.

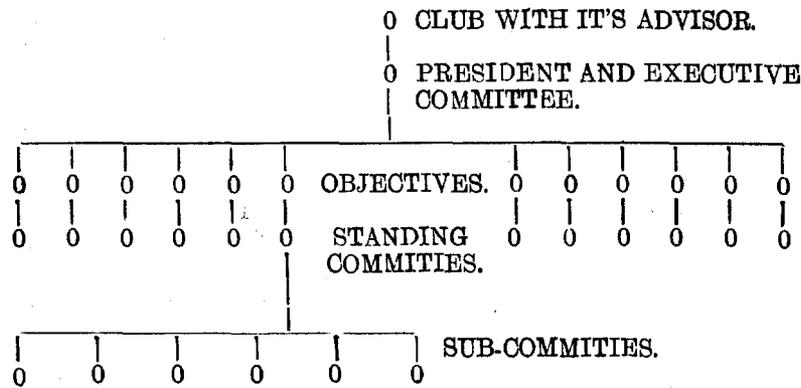
Each objective of the club should be handled in the above order. It is the responsibility of the advisor to create an interest in the club member to complete each objective selected by the club. Therefore, it is highly important that the correct number of objectives be

adopted. If there are too many, the club will not be able to complete or the objective will be "half" done. If there are too few objectives the activities of the club will be so few in number until the member becomes discouraged through inactivity and will drop out.

Many members drop out of clubs the first year because the club has not shown in him the proper interest. He must be made to feel important to the club. This can only be accomplished through his activities. It is very important to see that every member belongs to, at least, one standing committee and several sub-committees. Each member should be given, at least, one important appointment during the year.

Every committee must have a chairman and he is responsible for the committees actions. He must see that his committee functions and he must see that his committee steers the work through to a successful conclusion.

Committee Organization of a Club will be in this form :



Office bearers : As stated, there can be any number of officers. There should be a President, a Vice-President, Secretary, Treasurer, Reporter, and advisor. In the begining, the advisor appoints a nominating

committee. This committee will decide who will make the best officer for each position. The nominating committee will then present the list to the club and the club, by vote, will determine their acceptance or rejection.

There are several other ways of doing the above. Each office may be voted on at a time, nominations coming from the floor. The nominating committee may propose several names for each office, place these names on a sheet of paper, give each member a sheet and he will vote for his choice. If any one, nominated on the ballot, receives a majority of votes he is elected. If he does not, there will be a run off between the two who received the most votes. There are other ways which the club may use for the process.

A brief summary of each office bearer's duties.

- Advisor* : to advise the president and club on all subjects relating to the club.
- President* : to see that the club functions and all activities are carried to a successful conclusion. He is the presiding officer on all items, including all meetings. He is the head of the organization.
- Vice-President* : he will assist the president in any way possible, and especially on those requested by the president. He is the presiding officer when the President is absent.
- Secretary* : is the third man. He is next after the President and Vice-President. He keeps a running record of all meetings, and sees that the records are approved by the club.

Treasurer : maintains all accounts and is ready at every meeting to give a running account of all money belonging to the club.

Reporter : is responsible for the publicity of the club.

A special committee may be appointed at any time by the President for any item needing attention of the club.

A program committee be a permanent one, as a standing committee, or the President may appoint one for a specific length of time. It may be advisable for the President to appoint a committee at each meeting, for the next meeting. This method gives more of the members an opportunity to function on the program committee, it gives members more activity, it promotes leadership, and it reduces the "gripes" about poor programs.

Projects : Projects are the most important part of Young Farmer's Clubs. Projects should be judged on quality-not quantity (or size). It is not the size, but how good the projects are. Many clubs have only common projects. Individual projects produce more learning, to the individual club member. The member will be more interested in his personal project than a common project. Common and individual projects may answer the need of the club. The advisor must be very careful not to allow his club to be over enthused and try to do too much. He must remember that the completion of objectives is important.

There are many types of projects that club members may select as their project. To name a few :

1. Paddy production.
2. Any crop for production.
3. Chicks for pullet production.

4. Developing pullets to laying hens.
5. Hens for egg production.
6. Poultry for breeding stock.
7. Heifer for developing.
8. Cow for milk production.
9. Vegetable production.
10. Vineyard production.
11. Fruit production, etc,

Cleaning an irrigation channel, ditch cleaning, building a latrine, building a road, etc., is *not* a project. It may be part of the club activities to accomplish one of the club's objective. For illustration, getting a village to build a latrine may be part of the objective, "promoting community health and sanitation". However, this depends on whether the club selected this item of work in the objective-not just the wish of the advisor or some other person.

Holding a meeting: Meetings should have several parts. The order of business should be :

- Opening ceremony.
- Reading of the minutes of the last meeting.
- Approval of minutes.
- Treasurer's report (if any).
- Reports from committee.
- Delegates report (if any).
- (Unfinished business-from last meeting (s)).
- New business.
- Program.
- Closing ceremony.

The program is handled by the program committee. All the other items are handled by the President.

The President request the different committee chairmans for their report. The report may be oral or it may be read. In either case the report goes into the minutes as a record of the action taken and as a record for the club. This information may be needed later and the minutes become official for club use.

The program may or may not be in the minutes, except who the program was given by and if any visitors spoke and the title of his subject. The program may be in any form : educational, entertainment, lectures, debates, etc. Do not get the words business and program confused. Business includes committee reports, how the club will do things, minutes of meeting, delegate reports, etc. The program is outside of the club's business, something to learn, enjoy, and to develop fellowship.

Rules for Conducting a Meeting

Some of the more important rules to follow during a meeting are :

1. Address the President and be recognized before speaking.
2. Do not speak or talk without the permission of the President.
3. Rise to speak.
4. If two members rise at the same time only the member whom the President recognizes, should speak. The other member should sit down immediately.
5. Do not speak to another member unless you have the floor.
6. Bring all proposals in the form of a motion.

7. If a motion is moved, another member must second the motion or the motion dies for the want of a second. It takes two people to make a motion.

8. A motion may be amended by :

- (1) Adding words.
- (2) Striking out words.
- (3) Striking out and adding words.
- (4) By substituting—a different motion, but on the same subject.
- (5) By dividing the motion into two or more motions.

9. Amendments must be voted on first. Then, if carried, the original motion as amended. If the amendment is defeated, the original motion is voted on without the amendment. If the amendment is carried, a vote is taken on the motion as amended. If passed, the motion becomes a law of the club. If the vote does not pass the motion as amended, then the original motion is voted on.

This may sound complicated, but it is easy when one treats the amendment as a separate motion to be voted on first. If passed, the original motion will read as amended. If the amendment does not pass, the club acts on the original motion as it was in the beginning.

10. A motion may be laid on the table, by a majority vote, for its discussion at the next meeting.

11. If leaving the meeting before adjournment, always tell the President why, for courtesy, and walk behind group.

12. If President wishes to join the discussion, he should first hand over the chair to the Vice-President, take his seat in the audience as a member get

permission to speak from the presiding officer (now the Vice-President), and then speak. He will remain in the audience until that business is complete (voted on), and then resume his Presidency.

13. All business is voted on by the club members.

14. Results of voting is always announced by the President and made part of the club record (in minutes of meeting).

15. If a member has a doubt as to the outcome of a vote, he can always request the President for a recount-even by another method of voting.

Youth Clubs Vs. Young Farmer's Clubs

Too many times in the past and too many people are confused about the two different types of clubs. Youth Clubs may have as their objective, if they have a program of work of their own choice, any subject that fits their desires. In most cases Youth clubs are organized to promote community services. This is good and Extension does not have any quarrel with the philosophy, but our first and foremost job in Extension is to produce enough food and fiber for the Nation of India. This being so, our foremost responsibility is to develop leadership in agriculture, education to young men who will be adult farmers, and to increase production. Young Farmers' Clubs have this objective and the clubs can be a very valuable asset in the future of India.

THE FOLLOWING TWO CHAPTERS STRESS THE IMPORTANCE OF THE SUPPORTING OPERATIONS TO THE EXTENSION PROCESS. THE CHAPTERS CONTAIN INFORMATION ON THE FOLLOWING SUPPORTING OPERATIONS: WORK PLAN, CALENDAR OF WORK, EXTENSION EVALUATION, AND EXECUTION OF THE PLAN. THE SUPPORTING OPERATION OF IN-SERVICE TRAINING IS EXCLUDED IN THE TWO CHAPTERS BUT THE SUBJECT HAS BEEN DISCUSSED SUFFICIENTLY IN THE PROCEEDING CHAPTERS.

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Chapter - 26

Extension Program Planning

Program planning is not something new to India. The Central Government and the state governments do a great deal of planning on their five year programs.

There are three terms that all should become familiar with, and be able to use in their correct meaning :

1. A *program* is the act of building a long time (projecting) program.
2. A *plan of work* usually refers to a plan of activities for a period of time, usually one year.
3. An *Extension plan* is, therefore, a plan which contains the proposed activities of a given area in Extension. It contains the what, who, where and how aspect in order to accomplish the Extension program. It is a schedule of activities, Extension activities, listed in chronological order, based on the needs of the program which has been planned.

What is Program Planning

Program planning is the process of working with people in an effort to recognize the unsatisfactory situations (problems) and determining possible solutions

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(objectives, goals, targets, etc.) to their problems. An Extension annual plan is the process of taking these objectives and planning activities in Extension which will solve the problem (s).

Whether an Extension worker has a program or not, he should have a plan of work and he should exert his energies towards working the plan - "plan your work, work your plan."

Principles of Program Planning

1. A sound program should be based on the *felt needs* of the people, and careful analysis of the local situation including problems and resources.

2. The people who benefit from the program should assist in it's development.

3. The objectives and solutions must offer satisfaction to the participants.

4. The program should have priorities and attainable goals.

5. The program should start where the people are and with what they have.

6. The program should have a plan of action.

7. The program should be comprehensive, embracing the interest and needs of all ages, groups ; not all problems can be tackled at the same time.

8. There should be permance with flexibility in the program to accomodate revisions, long-range situations, and short-time changes.

9. The evaluation of results should guide revisions.

10. The program should be a continuous process, it is a teaching process and a coordination process.

Program Vs Target.

Many times the Blocks will show one their targets as layed out by the State Department of Agriculture or targets as given to them from some other department, as their program. This is much better than no program, if the targets are applicable to the area. However, in so many cases, the people had no part in building the program, or a very small part in it's building.

Plan Vs Program.

Extension plans contain the how, when, and who aspect. A common problem may be used as an example: The people have selected the problem of increasing paddy production. How the Extension worker may lead the people to increase their paddy production is his plan of work. This plan should include all of the teaching methods which he plans to use in leading the people to increase their production, who will be involved, where to take place, and when to do the activities (the teaching by the method to be used). This "when" aspect gives the worker a calendar of work which he may follow. A calendar gives him something which he can make detail plans from for accomplishing each activity.

A target has been sent down from the Department of Agriculture or the people have as part of their program, the building of so many compost pits. How will the Extension worker approach the problem? What activities (teaching methods) will he use? Who will carry out the activities? When will each of these activities be carried out? In answering these questions, the worker has made a plan of work and he has formulated a calendar of work. All that is left is writing these down in some form and then the process of carrying them out.

**Why local participation (local people)
in program planning ?**

I. Group planning makes the best practical program possible :

1. It increases the responsibility of local people and renders the program more acceptable to the people :
 - (a) Increases the responsibility of local people and makes the program more acceptable to them.
 - (b) Assures that the program is based upon the local situations and needs.
 - (c) Provides for group thinking, which has values beyond that of individual thinking.
 - (d) Balances and correlates different parts of the program and promotes unity of purpose.
2. Group planning expedites action of the program by :
 - (a) Starting an educational process.
 - (b) Creating interests of local people in carrying out the program.
3. Group planning will stimulate growth :
 - (a) Group planning broadens the opportunity of Extension work for service.
 - (b) Provides for the personal growth of Extension workers and the people who participate.

4. Group planning makes possible the assistance of local people in evaluating the program :
 - (a) Participants in the program planning will be interested in the reaction of the community (people of the community).
 - (b) It provides a vehicle for planning evaluation procedure.
5. Group planning stimulates the people's interest, which they could never get otherwise (espre de core). The interest of the people is the Extension worker's concern.
6. Group planning is a good vehicle (method) for teaching people. It gives Extension a wonderful teaching opportunity-and that is Extension's primary job.

Program Planning Terms.

No Extension worker should be told, definitely, just how to build a program (long-time). Some workers may prefer one term and another worker another term and both may add up to the same thing.

In program building, however, there are, at least, two parts to its building and a excellent program can be made from the use of the two parts :

1. Situation.
2. Objectives.

Both of the above parts are very important. The people must see their needs. As previously stated, if the people do not understand a need, then the worker must teach the need to the people, until it becomes a felt need of the people-they see their needs.

In presenting and teaching the situation as it exists, at this time, to the people and giving them facts about the possibilities of improving is teaching the needs of the people.

Gathering data and presenting this data in a way the people will understand is, perhaps, the greatest challenge to Extension in the whole process. Data gathering or collecting is the first item to be accomplished in the process and it consumes, in most cases, the most time. In order to present the data in a way the people will understand the situation as it exist and the people made to feel the need for improving their situation is, perhaps, the workers most important task. Collecting data is the responsibility of the Extension worker. The workers should engage the services and cooperation of local people in data collecting. What data is necessary, how to collect, and who is to help collect data are decisions to be made by the worker. The worker must be able to interpret correctly, wisely, interestingly, and in a manner people will understand.

After the people fully understand their situation as it exists today, they should be lead to select objectives for themselves. The worker may call the objectives goals, targets, etc. The people may wish to make only recommendation or conclusions to the situation for improving. Any of the above are objectives of the people.

Program planning (long-time projecting of a program) is as simple as described above. One should remember that the wording of objectives is not the important thing. The importance lies in the people understanding their situation, setting goals, (objectives) for themselves, and it gives Extension that all important teaching opportunity. It requires; patience with people, understanding of procedure (how the worker is going to get the PEOPLE to plan the program), understanding of the value of the procedure in terms of education, and work.

The first attempt at program planning may not, in your opinion, be too successful, but if one has the courage and conviction in its ultimate success, in a period of time (3 to 5 years) results will be forthcoming.

How to do Program Planning

(Organization)

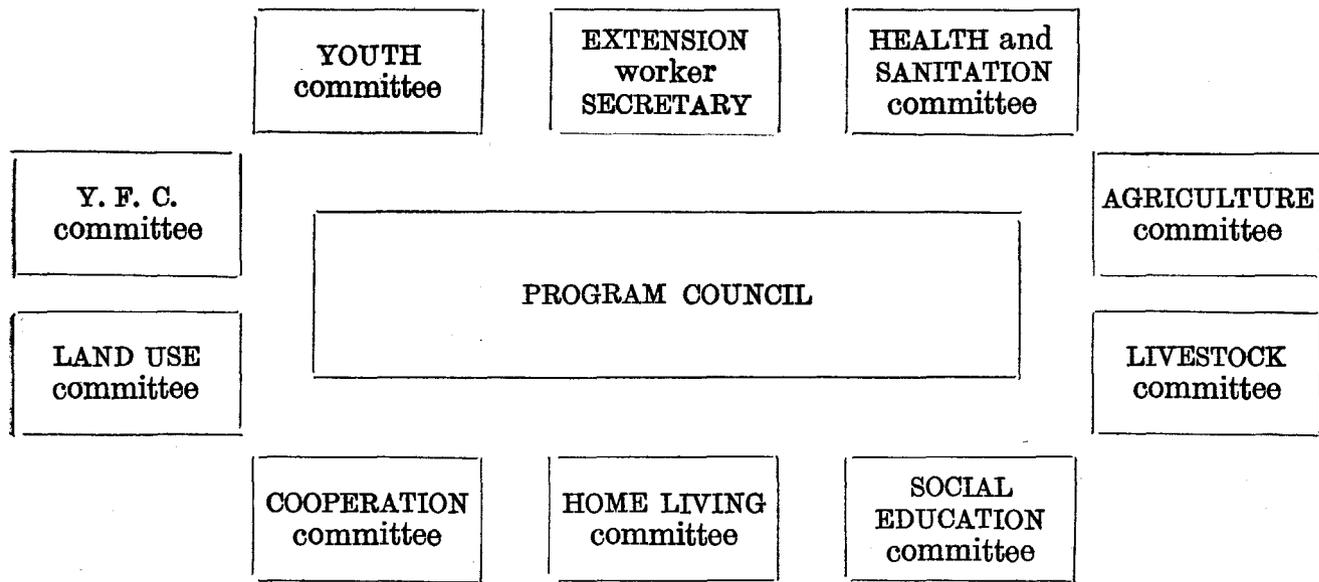
There is not any set plan or way to carry out program planning (program projecting). One should be hesitant in giving a recommended machinery (organizational set up) for program planning. Perhaps, to start, the organization should be very simple. The main item is to involve people. The following answers must be provided before starting the procedure :

1. The number of meetings.
2. The reason or objective of each meeting.
3. Who, what particular people, will attend each meeting.

4. Will local people gather data to present the situation.
5. What data to collect.
6. How data will be presented.
7. Who will present the situation. The worker may use local leaders.
8. The organization necessary.
9. How will the people be lead to select objectives.
10. Will the proceedings be cyclostyled and given the people. How will you advertise the results to the people who participate ?
11. How will evaluation of results be made ? Who will make ?

One might remember, to have the people's sympathy, interest, and understanding is worth people's participation. How can they fully understand what you are doing unless they become part of the planning ?

The diagram below gives one form for organizing the set-up to follow in program planning. The area being planned may have more committees than this shows, or it may have fewer committees. The Extension worker may not want the program to cover so many fields of activities. In that case, committees like cooperation, home living, health and sanitation may be left out entirely.



The different committees will be represented at the council by their chairman.

Provisional 1-30-30

Steps in Organization and Planning :

I. Appoint a steering committee. Instead of calling it a steering committee it may be called Executive committee. The number of members is immaterial except there can be too many people for good discussion or to come to concrete decisions.

II. A meeting of the steering committee to explain the purpose of the meeting, approve the remaining organization, select people for committees, agree on the number of meetings, the objective for each meeting, and set dates for the meetings. Their specific responsibility is to steer the remaining meetings, functions, committee work, and organization through to a successful conclusion-a good workable program.

III. To be a little more specific in the use of remaining machinery or organization, it may be appointing people to collect data on the existing situation, setting up committees, appointing committee members unless the Extension workers wishes to assume this responsibility, set dates, meetings, objective for each meeting, and agree on how the results of the program planned will be communicated to the people.

IV. What ever is the best plan for selecting people for the committees, that plan should be used. If the Extension worker is familiar with the area and believes he can select the best people for each job, then he should do the selection. If he is unfamiliar with the area, then he may have to depend on the steering committee to select the people.

If the planning is to cover a Block, the workers should see that the selection of people represent all the areas within the Block. He should balance the number against the village workers circuit. A good person should be chairman of each committee.

The steering committee should not have over twenty people. All others should have three or five-not under three and not over five. There should not be four on a committee. An odd number is always best. The chairman can always break a tie vote with his vote, in case of odd numbers.

V. Each committee will meet. The situation should be studied by the committee. After careful study and full discussion, the committee should decide on the program (long-time objectives) to solve the problem (s).

VI. All committees will do the same as above. After all committees have met, discussed the situation as it pertains to their subject, and decided on objectives, each chairman will meet as a council member on the steering committee. At this meeting each chairman will present the situation and give the recommendations (objectives) for solving the problem (s) as decided upon by his committee. The council will discuss, revise, add to, take out, etc. as the council decides best.

VII. There should be one more meeting-the big meeting where, at least, each committee member is invited, and perhaps other people, who will be of value to the program. If it is village planning, all of the village people may be invited. The morning of this meeting should be occupied with the committee giving their report the final "touch" for their presentation to the body of people. The meeting may be in the afternoon. At the meeting reports will be read, discussed, and passed on, by vote, with all the people.

VIII. The Extension worker should be the Secretary at all meetings, and collect all reports after being accepted. These should be gone over, given shape and enough copies made for, at least, each committee member-more if possible.

IX. Follow-up. Each committee, including the steering committee should meet, at least, twice per year to determine the progress being made in the program, revise, add to, etc., as their evaluation warrants.

How to Plan :

1. Decide who will be at the meetings.
2. Decide number of meetings.
3. Decide meetings objectives or goals.
4. Outline the meeting message.
5. Decide if information needed available, and will the people believe the information.
6. Use idea, words, etc., familiar to the people.
7. Place message on level with people.
8. Select methods of presentation, and prepare the presentation.
9. Select meeting places.
10. Make a last minute check.
11. Decide how people to be invited will be invited.
12. Have a plan to evaluate the meeting.
13. Follow your plan.
14. Follow up with enough meetings to keep program active.

Ten reasons why a program is necessary :

1. To ensure careful consideration of what is to be done and why.
2. To have that statement in writing for general use, which eliminates confusion, vagueness, and ambiguity.
3. To furnish a guide against which to judge all new proposals.
4. To establish objectives toward which progress can be measured and evaluated.
5. To have a means of choosing :
 - (a) The important problems from the incidental.
 - (b) The permanent changes from the temporary.
6. To give continuity during changes of personnel.
7. To prevent mistaken the means for the end.
8. To avoid waste of time, money, and energy, and to promote efficiency.
9. To aid in developing leadership and self reliance of local people.
10. To bring about a greater awareness with the participants of the situation existing, of the resources available, and by their own ability solve the problems. It also serves an educational purpose.

Apart from being educative, program planning may also be a lesson in cooperative, in democratic way of group thinking, planning, and action.

During Committee Meetings :

1. Give the situation, state the facts, discuss fully, and decide how to solve-set objectives.
2. Identify, with help of the people, the problem(s).
3. List all alternatives, good and bad.
4. Discuss each alternative.
5. Decision. Which one or which combination of ways is best.

The final results will look something like the plate below (Hypothesis) of one commodity :

Situation	Objectives
1. 600 acres of paddy.	1. Increase paddy production to average of 3,000 pounds in 5-years.
2. 400 acres irrigated paddy.	2. At least, 75% of land in green manure in 5-years.
3. 200 acres paddy depends on rain.	3. Increase compost pits to 1600 in 5-years.
4. 300 acres could be irrigated by small tanks.	4. Increase seed multiplication scheme to supply area in 2-years.
5. Two tanks not in use (needs repairing) which would irrigate 65 acres.	5. Establish a cooperative society in every village.
6. 1800 pounds, average production.	6. Control insects on all paddy.
7. 600 farmers are cultivating paddy.	
8. 450 farmers control insects.	
9. There are 600 compost pits.	

10. 500 acres in green manure.
 11. Average manure, 3 cartloads.
 12. 400 farmers use improved variety of seeds.
 13. Chemical fertilizers are used on 600 acres.
 14. Average chemical fertilizer used 8-10-2.
 15. 550 acres in lines.
 16. 300 farmers supervises transplanting.
 17. Treated seed planted on 400 acres.
 18. 300 acres had an average of 10 lbs. of nitrogen added as side dressing.
 19. 100 farmers would have planted improved seeds, if available.
 20. 500 farmers prepared a farm plan.
 21. 100 farmers followed their farm plan.
 22. 150 farmers did not receive credit in time.
7. Establish result demonstrations to show value of individual practices.
 8. 10 demonstrations to show value of seed treatment.
 9. A committee to be formed to help insure adequate credit on time.
 10. A committee to promote minor irrigation.
 11. Educational programs on value of chemical fertilizer.
 12. Educational program on farm planning.

Perhaps two or three of the most important crops should be handled as above. The remainder of the crops may be handled in one group.

Annual Plan.

Through the process of program planning a large number of large objectives were projected by the people, for all Extension workers to exert leadership in accomplishing. From the program, an annual plan should be made by each Extension worker. It is now Extension's job to accomplish the objectives planned by the people.

A plan of work is an outline of activities (teaching methods) so arranged as to enable efficient execution of the program. It answers the question of what, why, how, when, where, and by whom the work is to be done. The plan should be arranged in chronological order, according to time, when each step of work is to be done. This is the Extension worker's calendar of work.

The Extension worker now selects a few members who participated in the program planning and with them he should go through the objectives in the program, select priorities (those to be worked on first) to formulate his annual plan.

After the priorities have been decided on, they should decide the most appropriate time, month of year, for the worker to carry out the Extension methods in solving the problem. In other words, each month of the year, there will be problems listed, which the Extension worker should use teaching methods in solving. He should study these priorities, project his thinking and formulate plans on how (Extension methods) to do the job.

After this list is made out, he should select the very most important problems for special emphasis. An Extension worker cannot do justice to all the problems, so he selects a few for his special emphasis. There are many ways to do this type of planning. The following form is very simple, easy to understand, and an acceptable one to follow :

SUGGESTED FORM FOR ANNUAL PLAN ON SPECIAL EMPHASIS PROBLEM (S).

PROBLEM AREA : INCREASE PADDY PRODUCTION.

Problem	Solution	Extension Objectives	Methods	Calendar	Cooperative Group
Only 50% of farmers use improved paddy varieties.	1. Make seed available.	1. Cultivators to learn value of planting improved paddy varieties.	1. Determine amount of improved seed available.	January 19 —.	Extension cooperation officer. Agriculture dept. block officials, paddy specialist, agriculture extension officers, and village level workers.
	2. If necessary, establish a seed farm	2. Farmers to learn value of cooperation and value of multiplication scheme	2. If seed not available, cooperative society for variety multiplication.	Organize in february 19 —.	
	3. Education on value of improved seed.		3. Result demonstration and group discussions.	February March and April	

Stating Objectives.

As the objectives in the program are made by the people, the participants in the program building, they are apt to be simple, and in most cases given in numbers. For illustration: the people will say, "increase paddy production to 3,000 pounds by 1967" or "grow green manure on 75% of the land" or "100% of farmers plant improved paddy varieties". This is a good way for the lay people to state their objectives and they know by these terms exactly how much improvement they expect.

Annual Plan Objectives.

The annual plan is for the work to be done by the Extension worker and the meaning of the objective is significant for the type of work he is to do. One should analyze the above objective, "increase paddy to 3,000 pounds per acre" from the worker's viewpoint. This is very good for the people's objective, but is not so good for the worker. The question is, how will the Extension worker increase paddy production? The people see the need for an increase in their production. The answer to this problem for Extension is through Extension methods. Extension teaches the people how to produce 3,000 pounds of paddy per acre. Therefore, the Extension worker's objective to the problem should indicate such action will take place by stating his (the Extension worker's) objective as, "farmers to learn the value of improved seed" etc. Since the farmers are to learn, he must teach. He must create learning situations for his people through the Extension methods, so they may have the opportunity to learn the value of whatever is to be taught.

Solving problems is not accomplished by merely making a plan or just because decisions have been made. Building the program is another teaching

opportunity and the people must be made to feel they are responsible for the final results obtained and the risk involved.

Program building is another problem solving technique and its use is to help people reach a decision relating to their problems and actions. Good "problem solving" assures the best information for finding a best solution.

What Follows Planning?

Planning is not the end, but the beginning of greater service to the people.

At regular intervals planning committees review progress and, as is warranted, make additional recommendations.

The worker should indicate to higher levels the major problems, voiced by the people.

Follow program planning by specific attack on major problems. (Give special emphasis).

Things to think about in Program Planning.

1. Follow the leader.
2. Look to the amount and kind of background material local committees should use in making decisions.
3. Thoroughly explain your planning procedure to the local leaders.
4. Keep public informed.
5. Give credit where credit is due.

The people should help collect data. This, in all probability will call for a survey. Surveys are tools for obtaining information and for developing people. A survey is useful only to the extent the information secured becomes a basis for decision-making about objectives and program activities.

The Extension worker should determine what data he wishes to present to the people and make survey forms to fit the information desired. The people can and will help in their survey, if the worker has done a good job in teaching them the value and what the reasons are for collecting data.

Program planning is a wonderful teaching procedure and the people become interested when they know Extension is interested in them.

Chapter - 27

Evaluation in Extension.

Six Keys to Evaluating Extension Work.

(Taken from Bulletin of United States Department of Agriculture, Federal Extension Service.)

Evaluation is a vital part of Extension Teaching :

Extension, through its many educational programs and activities, is attempting to bring about changes in what people do, and changes in their knowledge, interests, understandings, attitudes, and skills.

Extension evaluation is the process of determining the extent and the way these changes are accomplished. One needs to evaluate teaching methods and results in order to complete any educational work. This evaluation work will reveal "how you are doing". One then has evidence of results of his work.

In the first part of this book it was emphasized the importance of each kind of Extension teaching method. In the chart, method demonstration was shown to be the best method of teaching because more people adopt improved practice because of the result of this teaching method than any other. However, assuming there is an Extension worker who never uses method demonstration as a teaching method, if one were to evaluate this worker's teaching methods, method demonstration

would never show up in the evaluation because the method was not used. This does not mean that method demonstration is not good-it means, in this case, the method has not been used. The method has not been given a chance.

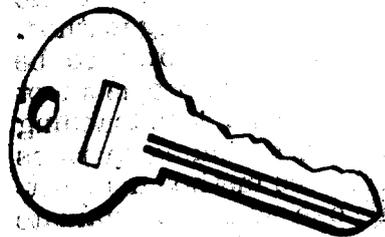
Well planned for changes in people occur with expected frequency or speed, considering the effort put forth, the workers may feel confidence in their work. On the other hand, if ~~planned-for-changes~~ occur too infrequently or only unplanned changes occur, all should realize the need to reorganize or modify the plans to assure desired evidence of success.

A worker should evaluate small pieces of his work, such as letters, talks, and farm visits just as carefully as his program. It is often more practical to evaluate educational work "in pieces" than to try to evaluate the results of a total program after it is completed.

It is important for Extension workers to determine the results of an educational effort in a reliable and objective manner. Otherwise one may come to wrong conclusions. Such conclusions may give approval to inadequate work rather than suggest where improvement is needed. Unreliable evaluation might even show effective educational work as being ineffective.

There are six principal keys to open the doors to reliable and objective Extension evaluation. They are:

Statement of Objectives :



- I. State the objective of an action (teaching method) or activity to be evaluated in terms of behavior changes in the people who are to do the learning.

This is the first key to reliable evaluation. The worker needs to decide the changes in people that he is to help bring about. Determining whether or not these changes occur is the process of evaluation. It is therefore important that one carefully defines and clarifies these planned-for changes at the beginning, in the statement of objectives. For example:

THIS Farmers to learn which paddy variety is best adapted to his village area.

NOT THIS To inform farmers about paddy varieties which is best adapted.

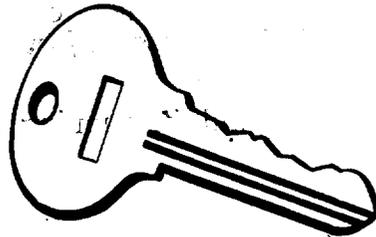
NOR THIS To hold meetings on paddy varieties for farmers of this area.

In the first statement, behavior changes in the learner is stressed; in the other two statements, the activity of the Extension worker is emphasized. One can evaluate whether the farmers learned the desired specific information.

From the second question the worker will only find out if he has given out the information.

From the third question, only the Extension worker's action concerning a teaching method is included; the learners are not mentioned. Determining whether a person held a meeting is very incomplete educational evaluation.

Source of Evidence:



II. Only those people whom one tries to reach can provide proof of success or failure.

The Extension worker's teaching activities (teaching methods) should be planned to reach those

people whom he wants to reach, and to make learning possible for them.

Some kinds of learning can result from a number and variety of teaching methods, while others require particular teaching methods. For example, a person may learn the importance of a balanced diet through reading, listening to talks, participating in discussions, and other ways. The worker knows very well that a farmer cannot learn to operate a plow without actually plowing with it.

The teaching methods the worker used determines which people could have been influenced to learn. These people, by their performance, are the only ones who can provide evidence of teaching success.

To determine who might have learned something from Extension teaching, one needs to know three things :

1. What Extension can expect from the different kinds of teaching methods.
2. The possible chain reaction which the teaching of certain kinds of information can set up.
3. Whether or not the learners have the facilities to practice and acquire skill in what has been taught.

Suppose the worker defines incorrectly the people who can expect to provide evidence of the degree of success of his teaching. This mistake may cause evaluation to unduly emphasize lack of success just as often as it may over emphasize success.

Objective : farmers to acquire skill in running a mouldboard plow.

Teaching methods :

1. Lectures.
2. Method demonstration.
3. Practice period.

Those who can provide the proof of success are :

THESE.....Those farmers attending a meeting. Also neighbors who *have* watched a member carry out the practice and could have asked questions and *had* a mould-board plow to plow with.

NOT THESE.....All members of village.

NOR THESE.....All farmers in the area.

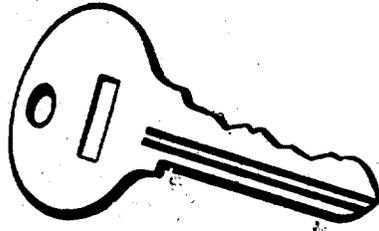
A review of one's program and plan of work will enable him to identify where success or failure may have occurred, and those people to whom he can go to obtain information about his success or failure.

The worker can examine each phase, activity, or job with these questions in mind :

- What was the educational objective ?
- What subject matter was taught ?
- What teaching methods were used ?
- Who could have been influenced to change ?
- What kind of change can be expected ?

Answers to these questions leads directly into the next steps (keys) of evaluating Extension work.

Representative Sample :



III. Those persons who actually provide the evidence of success must be representative of all whom the worker tried to teach.

Extension workers usually reach more people than they can collect evidence from to provide proof of their success or failure. They also teach more things than they have time to check on. Therefore, it becomes necessary to get information from only a part of the people about part of the things taught.

When one gets information from only part of the people, he is "sampling" his "population". He must first describe his "population" being sampled as in key 2. From this "population" he selects those from whom he will collect information.

There are two ways of selecting people from whom to collect evidence so that these people will be representative of the total group which the worker tried to reach :

1. Use the *total* group of people who could have learned what was taught as the source of evidence. This sometimes is too large a number to reach with resources available.
2. Use a random sampling method. Give every person in the total group an *equal chance to be selected*.

Choose every "nth" (3rd, 7th, etc.) name from a list (of people, farmers, etc.)

Be sure the list included *all* names of the group (population).

Select a sample large enough to assure that most of the characteristics of the total group will be represented. This causes less error and allows for adequate analysis of the information.

If the total population is 100 or less, one should get evidence from all the group ("population"). Here is an example of a "population": an Extension worker teaches 30 farmers how to control paddy stem Borer.

The group or "population" of his teaching is that 30 farmers. In this case, to evaluate his efforts, he would use these 30 men to evaluate his teaching effort. On the other hand, his territory and area is so large that he had to teach paddy stem Borer control in several places to 300 farmers. The worker would use the random sample method on the 300 farmers: take the complete roster of the 300 who attended the meetings, select every 3rd person on the list, and use this 100 farmers to make the evaluation of his teaching.

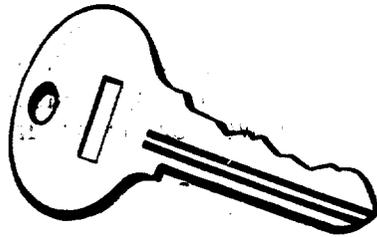
Reliable sample :

THIS.....Every "nth" name from list of farmers (300). See that every farmer selected answers questionnaire.

NOT THIS.....Questionnaire given to all, use those which are returned.

NOR THIS.....Collect evidence from farmers who attended whom you just happen to see on other Extension work.

Appropriate Methods :



IV. The methods of obtaining evidence must be appropriate to the kinds of information being collected.

A fourth key to effective evaluation : remember the method used to collect evidence depends on the kind of evidence, and on the resources one has to collect the information.

Evidence of educational success is that which tells whether or not learning has occurred. For each

desired behavior change, one must determine whether the things he can see, or hear, or feel will tell him the change has occurred. Some times evidence is in the form of action carried on by the people. At other times it might be the product resulting from some action or it may be what the farmer passes on to someone else.

One can use personal observation to obtain evidence of changes in behavior, such as knowledge, attitudes, appreciation, and understanding. Otherwise one must use a questionnaire or tests filled out by the farmer.

Behavior Change to Evaluate :

Farmer to learn to be more interested in his village.

THIS.....Recorded observation of what he does in his village before and after learning.

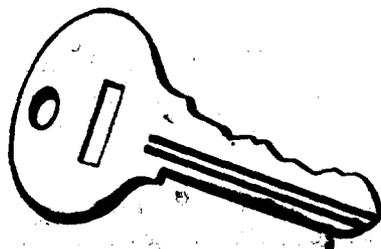
NOT THIS.....Ask him if he is more interested in his village.

NOR THIS.....Ask him what he has done in his village.

The behavior change used above is one of attitude change. Attitude change is indicated by what a person does, not by what he says.

A personal interview, with or without a questionnaire, is the most reliable information. If getting information from a large number of farmers, secure the services of some other Extension worker or train two or three good farmers.

Reliable Questions :



V. Word questions carefully so as to obtain reliable, unbiased data.

A question is reliable if asked in such a way, and under such conditions, that one has faith in the answer. When asking questions about a tour :

THIS.....Did you see any new improved practices on the tour ?

Yes..... No.....

IF YES, what are they ?.....

NOT THIS.....What new improved practices did you see on the tour ?.....

NOR THIS.....Didn't you think the tour was helpful ? Yes.....

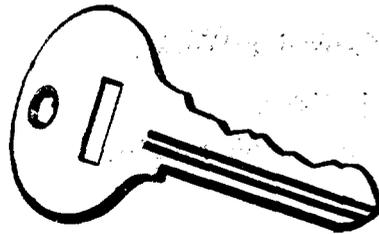
No..... Do not know.....

The first part of the first question is specific. The second part of the question is a check on the reliability of the answer to the first part.

The second question starts out by assuming everyone saw something new. This forces an answer.

In the third question the correct answer is implied, and the meaning of the word "helpful" is obscure.

Plan to use Results :



VI. Decide how the analysis will be made and how the results will be used before the evaluation is made.

Do not collect evidence just to be doing something. Evaluation includes studying the results and using the analysis to see where changes need to be made.

If one has done his sampling properly, he can apply percentages and averages to the total group from which the answers were given. In the example, 30 farmers were taught stem borer control and 10 controlled (poisoned stem borers). This makes 33% of the farmer taught changing their behavior (or attitudes) in controlling insects. If 20 farmers observed damage and would have controlled, stem borers, if necessary you have changed the behavior (attitude) of 66% of the farmers present.

Are these percentages high, low, expected, or unexpected?

What has the worker done to make it high or keep it so low?

How should the worker change his methods of teaching or his plan of action (program) to bring about a different amount of change?

When the statistical data and other information collected during evaluation have been summarized, analyzed and used, two results occur:

1. The program fits the need, and
2. The worker is more efficient as an Extension worker.

When One Evaluates Extension Work:

He does so in terms of objectives.

He bases it on evidence from people taught.

He records the evidence.

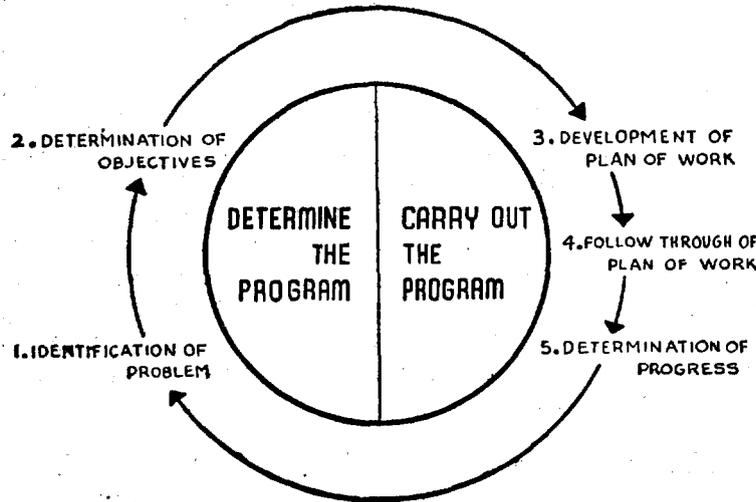
He uses the findings.

THE FOLLOWING FOUR CHAPTERS, WITH THE SUMMARY OF THE BOOK, ARE GOOD ADVICES AND POINTERS FOR EXTENSION WORKERS TO STUDY AND THINK ABOUT. THE CHAPTERS DESCRIBE EXTENSION FROM THE BEGINNING TO THE END, WHICH IS THE EXTENSION CYCLE, TO THE EVERYDAY USE OF THE MANY TEACHING METHODS USED BY WORKERS IN THE FIELD OF EXTENSION.

Chapter - 28

The Extension Cycle.

In the preceding chapters of this book there has been a great deal of discussion on the numerous Extension methods as related to Extension education. The following diagram may reveal to you the importance, in sequence, of steps in a cycle of Extension that may be expected to result in progress from a given situation to a more desirable situation :



I. The IDENTIFICATION OF THE PROBLEM is determining where one is now-what is the situation

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today? In the chapter, program planning, a great deal of discussion was given to the first part of the Extension cycle - the identification of problems. No Extension worker can do a good job unless he knows and understands what the problems are of the people he is to work with. The first duty of any Extension worker is to identify the people's problems.

II. *Determination of objectives.* The next most important job is to learn what the people's goals are. He should determine the people's objectives (goals). Perhaps these objectives have never been brought out. They have, in all probability, never been written. They may have never been expressed. Yet, every individual has a goal. It may be only to live a little better. What will they have to do in order to live better? In most cases, he will have to produce more in order to make more money. Here is an example: the situation in paddy production today is two thousand (2,000) pounds per acre, but the people plan (set their goal) to produce three thousand (3,000) pounds per acre by 1968. What do the people have to do in order to produce 3,000 pounds per acre by 1968? The 2,000 pounds per acre is the situation today - it is where the people are. They want to produce 3,000 pounds per acre by the end of the next five years. This difference in production today and what they want and expect to produce is where the Extension worker fits into the program. It is his job to help the people reach the place they wish to be, which is 3,000 pounds of paddy per acre. The difference in these two is Extension's work. Extension must teach them how to reach this goal. The Extension worker teaches through the many Extension teaching methods.

III. Development of a PLAN OF WORK. A plan of work is developed in order to reach the goal (objectives) determined necessary and desirable by the PEOPLE. This plan of work determines when to use certain teaching methods, how to use the method, date:

of teaching, and where to teach. The plan involves Extension teaching methods, and a calendar of work.

IV. To FOLLOW through on a plan is necessary if people become changed in behavior. "Plan your work, work your plan" is the follow-through process.

V. EVALUATION is a continuous process. Every worker should know whether he is making progress materially and mentally with his people. He should know something about how good his individual teaching methods are. He should, at least, know if he is succeeding or failing in his attempts to help the people make progress.

Good Extension involves all five steps in the Extension cycle. It is true, the more education and experience the worker has should make him more qualified for the task which is before him. This does not mean that a man without a lot of both cannot contribute to the progress of his people. On the contrary, every worker can lead his people to make progress. Every worker should, however strive to do more and better work. The leaders must provide the initiative, inspiration, and leadership in developing the partially qualified worker into a good worker.

MEANS :

- | | |
|----------------|--------------|
| 1. EVALUATION. | 3. PLANNING. |
| 2. DECISION. | 4. ACTION. |

Chapter - 29

Extension Methods.

(In Everyday Use.)

Man's progress is made on the basis of :

1. What he *knows*.
2. What he *thinks*.
3. What he *can do*.
4. What he *actually does*.

Man gains his ability to deal with his resources through :

1. What he *sees*.
2. What he *hears*.
3. What he *does*.

The process of gaining these abilities - whether formal or informal-is called education the world over.

The people's concern is with a special form of education which, in recent years, has come to be called Extension education.

The Role of Extension Education :

One needs to recognize that it is not man's technology or his physical resources alone, but what he does with them, that is of importance to his progress. What man does with his resources depends largely on

the nature and extent of society's investment in his educational growth. This is particularly so in many newly developing countries of Asia interested in promoting progress among their masses of rural people. Emerging from acceptance of this idea is a concept of ways to help rural people learn to improve their level of living by aided self-help through education. This concept is commonly expressed by the term "Extension Education".

Rural development is not a matter only of plans and statistics, targets and budgets, technology and method, material and professional staff, or agencies and organizations to administer them. Rather it is effective use of these as an educational means for changing the minds and actions of peoples in such ways that they "help themselves" to attain economic and social improvements. Hence, the process is one of working WITH people, not FOR them ; of helping people to become self-reliant, not dependent on others ; of making people the central actors in the drama, not the stage hands or spectators ; in short, helping people by means of education, put useful knowledge to work for them. This process is the essence of Extension education.

People can be led, by the educational process, to make substantial and permanent improvements on their farms, in their homes, and in their communities. Programs without first the emphasis on achieving the educational change in people that activates and trains them to help themselves, cannot in the long run be successful. Therefore, the educational role of rural development work must be sustained for this is the only action that will attain the objectives through a sound and enduring means.

The Human Element :

When technology and educational instruments for disseminating the technology are available, the key to rural development is the human element, not material aid. It is education of the people to DO THINGS FOR THEMSELVES, not governmental attempts to do the job FOR THEM that makes enduring changes in a society. The determinant of success is not merely a progress designed to promote change among rural people, BUT THEIR RESPONSE TO IT ...

There are two aspects to progress that people must think about :

1. People's program with government aid.
2. A Government program with people's aid.

The first of these approaches implies aided self-help. The second implies the government doing things for the people. The first places importance on people's responsibility; the second, on government responsibility. The first leads to self-reliance; the second to depend on others. The basic means for attainment of the first is education of the people in ways of farm, home, and village improvements. To be basically sound, change in social and economical growth must emerge from the people's own decision to act, and must be achieved through their own efforts, using their own resources to the maximum and government aid to the minimum.

The above requires changes in people. To secure this change requires education on Extensions part. Extension must therefore mobilize the resources and focus it's attention on changing people through the educational process. Today ignorance about better methods is a burden that societies cannot afford. Man's future depends on his ability to master these things in order that he might live a better life.

Form and Process:

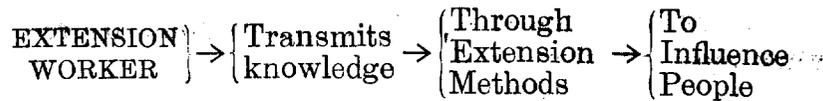
Wherever proper educational approaches have been made, it has been found possible to change people in four broad areas :

1. CHANGES IN WHAT PEOPLE KNOW-their knowledge of themselves, of their society, and of their physical environment.
2. CHANGES IN WHAT PEOPLE CAN DO-their skills, mentally, and physically.
3. CHANGES IN WHAT PEOPLE THINK AND FEEL - their attitude towards themselves, toward their society, and toward their physical environment.
4. CHANGES IN WHAT PEOPLE ACTUALLY DO - their actions related to factors determining their own welfare.

The people exposed to the program should be changed in one or more of these four areas.

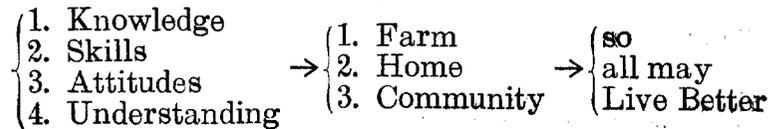
Extension Process and Method.

Extension must start with the Extension worker. He transmits knowledge through the many Extension teaching methods in order to influence people to change their knowledge, skills, attitudes and understanding so the people will improve their farms, home, and community so all may live better.



To
Change :

In order to
improve their :



There are a few terms that all Extension workers should think about and understand :

1. Extension.
2. Extension education.
3. Agricultural Extension.
4. Government Aid.
5. "Uplift" or development.
6. Service vs. process.
7. Supporting services. People must have facilities in order to move forward : Example: fertilizers, insecticides, etc. That are economical to use and they should have the facilities at the right time.
8. Change in people is a requirement in order to raise their standard of living :
 - (1) Farm.
 - (2) Home.
 - (3) Family.
 - (4) Community service :
 - a. Schools.
 - b. Roads.
 - c. Sanitation.
 - d. Health, etc.

All of these things, somehow and in some degree must move simultaneously.

↓

In all these changes, PEOPLE must be involved.

↓

To meet their needs.

↓

In order to be effective.

Effective teaching requires three major items :

1. Telling
 2. Showing →
 3. Doing
- { Any one of these actions alone
will not accomplish Extensions
objective-change in PEOPLE.

To accomplish the three major items of effective teaching Extension must teach a subject several times in several ways. The methods in Extension teaching are :

- Method demonstration.
- Result demonstration.
- Meetings, including group discussions.
- Dramas, melas, songs, etc.
- Personal contacts as home visits.
- Printed material.
- Visual aids, etc.

The essential role of the Extension worker is to teach. His principle job is to create LEARNING SITUATIONS that create and guide :

1. Instructor - Extension worker.
2. Subject matter - technology.
3. Teaching material - Blackboard, charts, etc.
4. Physical facilities - place to meet, Make farmers comfortable and provide atmosphere for learning,

For the learners - the people.

Change in Behavior.

Steps in teaching :

- I. Interest.
 - (1) Give information.
 - (2) Creative activities.
 - (3) Appeal to Values.
- II. Desires.
- III. Action.
- IV. Satisfacation.

If what the worker is doing cannot be grouped under one of the four teaching steps he is not doing Extension work.

Chapter - 30

Nine Qualities for Extension Workers.

(Does not include personal qualities. III : tell the truth)

1. *Basic grounding in the physical and social sciences of significance to life in the village.* In other words, every Extension worker should know as much about his subject as possible. A good worker is always learning and he is always doing some in-service training. One cannot teach fertility of the soil unless he is versed in a good number of subjects : such as chemical fertilizers, the required plant nutrients, compost manure making, green manure, and what each kind of green manure adds to the soil, etc. No one person knows everything, therefore a good Extension worker does a lot of studying (in-service training).

2. *Familiarity with reliable sources of important information.* Know the channels of communication, both up and down. Know the Extension set-up. Know where and how to get the kind of information desired.

3. *Understanding of the background, philosophy, objectives, policies, and organizational set-up of the Extension Department in which one works.* If one wants an insect identified, control measures, etc., how does he get the information ? There are always problems arising and a good worker will know whom to go to or how to go about getting the desired information.

4. *Skills in applying the principles of psychology and education to Extension teaching, supervision, and administration.* In other words, can a worker do a better job of teaching than he is now doing? Does he understand how best to carry out each individual teaching method in Extension? In teaching adults or youth, does he understand the psychology of human beings well enough to get the most out of them? How should a worker hold and lead a group discussion to a group of farmers? How would he appeal to them to do a better job? Skill is a thing one develops by application and good teaching is definitely a skill.

5. *Understanding of the processes by which village people and Extension workers, in cooperation, can analyze local problems, arrive at potential sound solutions, and develop a local Extension program.* Extension programs are made for the people and by the people. The worker must have the people's help to do good in his work. People work best when they become part of the program. To become part of the program they must share in its building. Extension cannot make progress outside of the people - only with people.

6. *Ability to organize village people and stimulate leadership among them.* Give the leaders something to do. The worker should not believe that he alone can do the job. Show more trust in people than one really believe they deserve.

7. *Knowledge of the problems and procedures of adult out-of-school youth education.* Along with the Extension process (education) that has been discussed for the adult, do not forget the men and women of tomorrow, the youth of the nation. They should be organized, as many as possible, in organizations for the good of the nation as well as the good for the individual youth. A well planned and well supervised Farm Youth Club can be a great asset in helping the workers accomplish his long-time objectives.

8. *Skill in organizing, interpreting, and presenting basic economical, social, technical, and scientific data, and their implications in village life.* No one can be too good a teacher. Study the problem, interpret for the villager research, and learn to present in an orderly, and interesting manner. A worker cannot tell the people to do a thing. He must convince them first that it is to their advantage and then lead them into accepting the practice.

9. *Understanding of the techniques and processes of evaluating the effectiveness of the Extension program.* Evaluation is something that should go on all the time. One can evaluate in numbers like increased number of acres, increased average yield, etc. One can get a lot of evaluation in attitudes from close friends, neighbors and relatives. If one holds a group discussion on the control of paddy Stem Borer, he can determine pretty well how many of the group are watching for the Stem Borer and how many controlled the pest. Evaluation of one's work is the worker's responsibility and he should have records to show his progress - if for nothing else, other than for his satisfaction, and to help protect his job.

Good Pointers and Advices to Extension Workers.

Curiosity.

There is one quality in Extension workers which will finally separate the merely satisfactory worker from the successful worker. This quality is Curiosity. If a worker is to be more than just a satisfactory Extension worker, he must have something of the "why" and "why not" that marks the good research man. Do not accept what appears to be obvious, but always question and seek truth for one's self.

Education in India, in many cases, did not require the student to ask questions, to seek new answers; the student was required to memorize that which many previous had memorized as the truth. The good Extension worker looks for new and better ways. The essential difference between the good and the better, often is the Extension worker's curiosity, a questioning mind, combined with a lot of other questions which make good Extension workers.

A good Extension worker possess curiosity. He finds out just what makes one farmer so much better than his neighbors. He wants to know "what makes the watch tick", and what makes one field of paddy yield more than another field. Curiosity helps one to learn and in learning we become better Extension workers.

Leaders and Teachers.

1. A LEADER helps individuals and group release their creative energy towards achieving group purpose.

Every worker should lead the PEOPLE to see their NEEDS, the solution to those needs, and lead them to adopt the improved practices, which will make them a better living.

2. A LEADER understands problems and interest of the PEOPLE. A good Extension worker understands the problems of the people and the interest of the people.

3. A LEADER relates problems with knowledge. There are workers who try to relate problems without himself fully understanding. Gain the necessary knowledge and learn to relate with enthusiasm.

4. A LEADER transmits. He changes human behavior. When the farmer changes from the old practice to the new practice he has changed in behavior.

Good Advices

1. Good Extension is an educational process - the workers teach.
2. Extension personal, a corp of teachers.
3. If there has been no learning, there has not been any teaching, "no learning, no-teaching".
4. Extension workers use a number of teaching methods, a lot of initiative, has knowledge, good judgement, etc.

To be successful use :
 - (1) A maximum of doing.
 - (2) A minium of lectures.
 - (3) Lots of illustrations.
5. Extension workers are not class-room teachers and there is a vast difference between the classroom teaching Vs. Extension teaching.
6. Extension workers must know and understand a lot on the subject of how people learn.
7. Extension workers must be convinced that their welfare is tied up in the success of the program.
8. This applies to all workers, but it applies more to the worker who has supervision over other workers: show more confidence than one believes they deserve.
9. Skill is a thing one develops by application.
10. Tell the truth. Do not "beat around the bush". If a worker does not know the answer he should say he does not know.

11. One does not know everything. Study a little each day as in-service training.
12. Be wiser than one's word. One should not try to tell all he knows. Farmers are capable of finding out how much the worker knows.
13. Know subject-matter. Do not try to teach that which one does not know. He should not try to show others that which he cannot do himself.
14. Remember, a record is good for :
 - (1) Evaluation of of one's work.
 - (2) To leave for one's replacement.
 - (3) For one's pay - required.

Twelve (12) Attributes of the Ideal Extension Worker.

The following attributes were compiled by
Dr. Arthur Mosier, Cornell University :

1. Abounding faith in :
 - (a) The importance of the work the Extension worker is doing.
 - (b) The practices he is advocating.
2. Infinite tact, in meeting situations.
3. Unlimited patience, in over-coming farmer's (people's) inertia.
4. Endless good nature, in the face of all trials.
5. A saving sense of humor - when nothing else will meet the situation.

6. A large vision - of the work to be done.
7. The ability to lose gracefully - and to rebound after each defeat.
8. Indomitable courage - in standing for the right.
9. Grim determination - to see the work put through to it's completion.
10. Contagious enthusiasm - to inspire local leadership.
11. Unquenchable optimism - in spite of all discouragements.
12. Unreserved belief in the - importance of the rural life to the nation.

It is good for all workers to review the twelve points, from time to time, to see if he is standing up to the mark of a good Extension worker.

For the Supervisor :

Show the subordinate that he is trusted in making his own decisions :

1. Keep bureaucracy off of his back.
2. Project him so that he may go about his work with a minimum of interference. Defend him when necessary.
3. Do not require meaningless reports, detailed performance goals which make a seasoned liar out of a man.
4. Remember, praise is a much greater motivation force than criticism.

Important Definitions.

- Extension Education :** is an applied science consisting of content derived from research, accumulated field experiences and relevant principles drawn from the behavioural sciences synthesized with useful technology into a body of philosophy, principles, content and methods focussed on the problems of out-of-school education for adults and youth.
- Learning :** is a process by which an individual, through his own activity, changes his behavior.
- Teaching :** is the process of arranging situations that stimulate and guide the learning activity towards goals that specify desired changes in the behavior of people. Teaching consist of providing situations in which the important things to be learned are called to the attention of the learners, their interest developed, desires aroused, and action promoted.
- Teaching Methods :** are the devices used to create situations in which communication can take place between the instructor and the learner.

Learning situation : is one in which all the elements necessary for promoting learning are present, namely, (1) instructor, (2) learner, (3) subject-matter, (4) teaching material and equipment, and (5) physical facilities.

Learning experiences : is the mental and/or physical reaction one makes through seeing, hearing, or doing, the things to be learned, through which one gains meanings, and understandings of the material to be learned.

Chapter - 31

Characteristics of a Good Teacher.

1. He knows his subject-what learning he wants to bring about.
2. He knows the people being taught and wants them to make progress.
3. He knows how to teach effectively.
4. He must like people.
5. He must like to teach.
6. He must have a good attitude.
7. He must keep an open mind.
8. He must be an interesting person.
9. He must have an exceptional wide and intellectual interest.
10. He must have a good sense of humor.
11. He must have ability :
 - (1) A good memory.
 - (2) Lots of will power.
12. He must have kindness (sorry for his mistakes, displeased with his failures).

Essentials in Adult Learning.

1. Adults learn best when they have a desire to learn.
2. Adults learn best when they have a clear goal.
3. Adults learn best when they put forth an effort to learn.
4. Adults learn best when they receive satisfaction from that which they have learned.

A Good Learner - Centered Situation.

1. When there is a motive for learning-associated with need.
2. When there is a good class climate (good humor, easy formality, etc.)
3. When the instructor talks with, not at people.
4. When the objectives are clearly stated (clarified).
5. When the audience can see and hear.
6. When the people are accustomed to regularity : start on time, stop on time.
7. When the learners have an opportunity to express their needs.
8. When the learners are recognized.
9. When the learners are made to feel important.
10. When Extension can get the learners to practice.
11. When teaching techniques used are suitable to the subject and to the audience.

An extremely good learner - centered situations is when people come to the Extension worker.

**Extension Workers should know the
"Wants" of People.**

One essential in adult learning is the desire on the farmers part to want to learn. Good teaching motivates desire by teaching the need for an improved practice. The instructor (Extension worker) appeals through those things, which people want to gain, want to be, want to do, and want to save :

People want to Gain :

Health.
Time.
Money.
Popularity.
Improved appearances.
Security in old age.
Praise from others.
Comfort,
Leisure.
Pride of accomplishment.
Advancement : better life.
Increased enjoyment.
Self confidence.
Personal prestige.

People want to be :

Good parents.
Sociable and hospitable.
Up - to - date.
Creative.
Proud of their possessions.
Influential over others.
Efficient.
"First" in things.
Recognized as authorities.

People want to do :

Express their personalities.
Resist domination from others.
Satisfy their curiosity.
Appreciate beauty.
Acquire or collect things.
Win other's affection.
Improve themselves generally.

People want to Save :

Time.
Money.
Work.
Discomforts.
Worry.
Doubts.
Risks.
Personal embarrassments.

Extension workers must be always teaching people ~~the~~ **NEED** for their adopting improved practices. They do this through things that **PEOPLE** want. **All** ~~the~~ "wants" will not work with all the people. An individual is more susceptible to one of the "wants" than another person. However, the accumulation of money will help place the individual in a position to satisfy his "want" whichever is his greatest desire. Therefore, in most cases the teaching of a need through greater profit generally motivates people faster than any of the other "wants".

Summary.

Extension education stimulates people to make changes which result in better farming and home-making. The Extension cycle includes :

1. Developing a sound program related to the needs of people.
2. Preparing an intelligent teaching plan.
3. Carrying out the plan systematically.
4. Appraising progress and making indicated revisions in the program or plan.

Wise selection and use of teaching methods directly influence the Extension worker's accomplishments. The method used in Extension falls into three use classifications :

1. Individual contact.
2. Group contacts.
3. Mass media.

The indirect spread of information from person to person which develops from using various teaching methods must be recognized.

Understanding of the educational process and its implementation is basic to the intelligent selection and use of teaching methods.

Motivation largely determines the rate and amount of learning. Field studies indicate a wide difference in the influence of the various Extension teaching methods upon adoption of farm and home practices (evidence of the change in behavior of individuals).

Of the 81 practices in 100 adopted as the result of various teaching methods, 25 were credited to individual contacts, 33 to group contacts, and 23 to mass media of communications. The indirect influences from the direct teaching efforts accounted for 19 of the new practices being adopted.

When relative cost of teaching methods as well as relative effectiveness are both considered, news stories and radio are the cheapest methods of influencing changes in behavior (practices adopted). Next are circular letters, office calls, general meetings, and literature.

The farm and home visit and the method demonstration meetings represent about average returns per unit of cost.

Result demonstrations are about half as effective from a cost standpoint in influencing adoption of practices as the average of all methods.

The cost of influencing the adoption of practices through exhibits is 17 times greater than news stories or radio.

Mass contact as a group influence adoption of practices has the lowest cost, next group meetings and last, or the highest cost, compared to influencing adoptions, are direct contact methods.

The use of several (about 5) different methods to tell essentially the same story is of the utmost importance in Extension teaching, if coverage of clientele is important.

Such factors as age of the adult, farm population, size of farm, tenure status, and location of the farm or home has little bearing upon the adoption of Extension recommended practices by farm people.

The percentage of people adopting improved farm and home practices increases significantly as the amount of formal educational training of farm people increases.

The higher a person's socio-economical level, the more likely he or she is to adopt the practices advocated by Extension.

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