

EXTENSION TRAINING



AROUND THE WORLD

HANDBOOK

Federal Extension Service • U. S. Department of Agriculture
in cooperation with
Agency for International Development • U. S. Department of State

Foreword

An earlier booklet, *Building a Strong Extension Service* (issued by the International Cooperation Administration—now the Agency for International Development), gives guidelines for establishing an Extension Service. It emphasizes the need for training many professional Extension workers.

This publication, *Extension Training Around the World*, gives you, Extension technical advisers, guidelines for developing a training policy and program. You will find that although the need for training seems most acute when establishing a new Extension Service, the task is never finished. Although this publication is addressed to extension technical advisers, the principles may be applied by anyone responsible for training programs.

Few, if any, Extension Services can employ as many professional workers as are needed to serve rural communities. An efficient staff, therefore, is important. Such a staff is the result of both continuous inservice training and replacing less effective workers.

The training policy and program which you help to develop must provide for the continuous training of additional personnel to take care of expanding services. As services expand, functions will be more specialized.

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As far as possible, the adviser or consultant remains in the background and lets his national associates conduct the training. Indonesia.

INTRODUCTION

We have used Extension work in the United States for more than 50 years to help rural people improve their methods of farming and homemaking. Variations of this form of adult teaching are rapidly spreading over the world. But it is comparatively new in many countries.

We, as well as other countries, are "exporting" our extension skills. We have several ways of doing this.

1. We send technical advisers to host countries as trainers and consultants.
2. Qualified persons from host countries go to the "exporting" country to see results of improved farming.
3. Or these persons attend agricultural schools.

The last two are called "participant training." More than 11,000 participants have had special training in agriculture and home economics in the United States, and of these 10 percent have had training in agricul-

tural and home economics extension. Participant training is important but costly, and comparatively few participants can be trained abroad.

Extension training for a staff who are to carry out the agricultural and home economics education program of a country is essential from the beginning. It must provide opportunities for all connected with it to improve their understanding and performance of Extension work.

Training of the new worker may begin before he is employed. It will help to introduce him to his new job and maintain his competence as an up-to-date, confident, and productive worker throughout his entire career.

You, the Extension adviser will guide the training in agriculture and home economics. You will help train

nationals of the host country in the philosophy of Extension education and in the methods that will help rural families to help themselves.

You are not a local worker or supervisor. The training you do will often prepare someone else to do the actual training. Sometimes you may teach certain portions of a training program for local Extension workers, but as far as possible, you will remain in the background and let your national associates be the actual trainers.

By remaining as a consultant and confidant during the actual training period, you will inspire them with courage and confidence. If, when you finish your assignment, your crops of trainers are well equipped to do certain training jobs, you have been successful.

You must think of yourself not only as a trainer of trainers but also as an adapter of basic Extension principles and methods to the culture and needs of the country where you are working. You need to be well-grounded in Extension education. Also you must look at Extension education objectively to see which of its basic values can be adapted, but not transplanted, for use in this new country.

Within the decade, 1950-60, our foreign technical assistance agencies have helped to establish Extension

educational and training programs in more than 50 less-developed countries around the world. Other countries constantly demand this service. Now under AID this is one of the most effective means of solving world food shortages and of raising the level of living of rural people.

About 1,200 agricultural and home economics workers around the world are passing on their knowledge and skills to country trainees.

These are the ways this is done:

- American technicians annually train several thousand country agricultural leaders.
- Country agricultural leaders are indirectly training thousands of assistants and local Extension workers.
- Local Extension workers are daily contacting the great masses of farmers through office calls and personal visits, demonstration meetings, visual aids, distribution and explanation of press releases and publications, and farm radio programs.

Thus, many million farmers around the world have each had an opportunity to learn new methods of farming to increase food production and improve family living conditions.

Many thousands of local extension workers around the world are daily contacting great masses of farm families. Bolivia



EXTENSION TRAINING AROUND THE WORLD

Prepare for These Differences

You, the United States adviser, will find that existing Extension organization and procedure, in the host country, will be different from that under which you received your training and experience. We can assume that governments interested in developing Extension work are convinced that improving the well-being of all people is a government responsibility.

You may find that Extension supervisors, administrators, or directors may be well trained in administrative and governmental procedures, but have little understanding of technical agriculture, home economics, adult education, or Extension principles. Some of them may have received appointments as Extension officials on a purely political basis. In spite of these inconsistencies, most Extension administrators have a strong interest in the development of Extension work in their countries.

Extension work is based on friendship, cooperation, and government support. Thus an effective Extension supervisor can lead by force of ideas rather than use his position to force obedience.

You are accustomed to working in a land-grant college or university system with resident teaching and research at your finger tips. But abroad you will find that—

- In only a few less-developed countries the Extension service is associated with agricultural colleges or universities.
- In most countries the Extension organization is part of the Ministry of Agriculture.
- In some, Extension work is carried on through farmer organizations.
- In a few, a multiplicity of Extension services exist.

It is quite common for research, college teaching, and Extension to be completely separated. Sometimes the college of agriculture is in a ministry other than agriculture. Some countries have neither colleges of home economics or colleges with home economics departments.

No one can say which Extension system is the most successful. Regardless of the arrangement, channels need to be found to coordinate the work Extension is doing with research and with the teaching in agriculture and home economics. Cooperation may need to be developed to introduce research findings into the Extension training program.

Some countries have sufficient agricultural and home economics college facilities and require college degrees

for members of their Extension staffs. Many lack these educational facilities and must employ staff members with secondary educations. Sometimes local workers with only a few years of formal schooling are employed. The educational background of local workers will influence the kind and amount of training required.

Extension education may be called community development or rural improvement. In some countries community development includes agricultural and home economics extension work, health and sanitation, literacy education, and village improvement. Sometimes community development work may be part of a different ministry than Agricultural Extension. Yet, both serve rural people.

The Food and Agriculture Organization of the United Nations sponsors programs in many countries. Foundations contribute to Extension development in a number of countries by establishing pilot projects or helping to provide training facilities.

If you find a program which has been successful over a period of years, you should study and respect it and, if possible cooperate with the officials responsible for it. Do not overlook the resources they offer.

FAO Study Group Reports

A report of the FAO Agricultural Extension Study Tour Group which visited Japan, the Philippines, and India in late 1957 says:

"The existence of strong farmer and village organizations makes it possible for the Extension Service to spread its influence over a much wider area. Various kinds of farmer and village organizations were observed in each of the three countries visited. These organizations may be broadly classified into the following categories:

1. Farmers' Cooperatives.
2. Village committees, such as Barrio councils in the Philippines, and the Panchayats in India.

"Practically all farmers in Japan are members of one or more cooperatives. In every village there is a general purpose cooperative society which handles marketing, processing, purchasing, and credit. The group observed that many of these cooperatives employed their own agricultural advisers to assist member farmers. The group felt that the employment of advisers by the cooperatives made possible the development of a close link between the cooperatives and the government Extension Service."



Where modern facilities are not available, there are different ways to do things, as demonstrated by the local agent who uses desert brush and shrubs as a mat for keeping the skin and carcass clean when butchering.

Libya.

Your Learning and Training Responsibilities

One of your most important roles as a technical adviser in a country with a new Extension service, is that of trainer of trainers. At first, you will think the job is impossible. But if you devote most of your time to teaching key persons the techniques and procedures for training, you will establish a training program that will continue after you have left the country.

As an experienced Extension adviser, you know how hard it is to find persons who—

- Know general agriculture and/or home economics.
- Know one or more special fields in agriculture and/or home economics.
- Respect and understand rural people, and want to work for a better life for them.
- Know laws of learning and principles of teaching.
- Understand Extension methods and skills and their use.

Some of the best available personnel are strong in one or more of these qualifications. But it is your job to see that the ones you train are strong in all of them.

You Can Learn from Coworkers

After you have become familiar with the organization, and before you attempt to plan a training program, you will spend many weeks in learning about the country.

When you are sent to a foreign country as an extension technical adviser, it is the usual practice for the host government to designate one of their national officers with whom you are to work. In most countries, you will find that the national officer is known as your national coworker or counterpart.

Gain the confidence of your coworker and develop a friendly working relationship with him. To do this, we suggest that you assume the role of a trainee, with the coworker serving as your trainer. This approach will usually make the coworker happy to teach you all that he can, and arrange learning situations to help you get "the feel" of things.

You, as the "expert away from home" will be expected to be competent in all fields. But what is obvious to the local Extension worker may be a mystery to you. Without meaning to, you may say or do something that will offend them. Your hosts and new friends will be patient if they feel you are sincere and trying to learn.

Field Trips Important

Field trips will be important to your learning. You should take field trips with your coworker, when possible. Your coworker may be able to arrange for you to accompany supervisors, or staff members of other departments and ministries such as health and educa-



The important job is to train trainers in each step of extension work, explain why each step is necessary, and how it contributes to the success of the program. Pakistan.

tion, as they go about their regular work. You will need to visit villages and farms to learn about problems and Extension activities. You should attend as many Extension meetings and conferences as possible. At first you should attend as an observer only.

Until your national coworker is thoroughly acquainted with you and confident in your sincerity, he may hesitate to be free and frank with you. However, if you follow the program outlined above, it will not be long until you may be able to make a few helpful suggestions to your coworker. By this time, you should understand the situation well enough to start planning the training program.

Remember, the most important job you have is to train trainers. You should help your coworker to fully understand each step in planning a training program. You should teach him steps in the procedure, why each

step is important, and how it contributes to the success of the program.

Personal Training

A trainee must learn for himself. You cannot do it for him. If the lesson seems important, he will pay attention, respect you, and make an effort to learn.

Because teaching adults is so personal, you have serious responsibilities. You must not ridicule. You should offer challenges that the trainee can meet and make the learning process a pleasant and rewarding experience.

The training period is the time for you to teach the philosophy of Extension and to build morale that will strengthen the trainee for making important decisions and for helping others understand Extension work.

Orientation is recommended for key government officials and cooperating departmental personnel when extension is in its early stages.
Pakistan.



Home Economics students learn dehydration as a part of their preservice training.
Peru.



During induction training, new agents learn how to work with farmer groups by observing an experienced agent at work.
Cambodia.

On-the-job, Extension workers at all levels get inservice training.
Haiti.



Training Programs

Four types of training programs are in general use.

Orientation training is recommended for key government officials and cooperating personnel when Extension is in its early stage of development. This is extremely important if those officials are to understand the role of the Extension Service and give support and leadership when needed. It will require your and the national leaders' ingenuity to provide this training in such a way that it will interest the officials without seeming presumptuous.

Preservice training usually refers to inschool study of subject matter, Extension principles and methods, that is completed before employment.

Induction training is usually the training provided after the worker is employed. Every Extension Service employee needs induction training. Certain information is needed by every new employee. Staff members in each group, supervisors, administrators, specialists, and agents should have training directed to the special duties of their jobs.

Inservice training is on-the-job training in subject matter and Extension educational methods for all Extension workers. It is to fill gaps in their previous training, up date their subject matter, and improve their ability to carry out the Extension program.

Inservice Training Program

The inservice or on-the-job training program is discussed first for several reasons: (1) Most countries have a staff of field workers already on the job; (2) planning an inservice program helps to reveal induction and preservice training needs; (3) it returns more immediate improvement in the Extension program; and (4) it develops talent for organizing and conducting preservice and induction training courses.

Identify Training Need

This is your first step in planning a comprehensive program. Consider—

What shows inefficient work?

- Not enough work done and too few desired results obtained.
- Too much effort for results obtained.
- Too much time spent doing chores or menial jobs.
- Not working on significant problems.
- Incorrect or doubtful information being taught.
- Lacking skill in methods.

What are the indirect evidences?

(Find out what causes these problems and decide whether training can help solve them.)

- Grievances.
- Poor public relations.
- Marked dropoffs in participation of rural people.
- Frequent changes in jobs.
- Frequent changes in program emphasis.

Identify Individual Needs

Even recently employed Extension workers recognize some of their own needs for training. Since improve-



These professional workers returned to the laboratory for special inservice training to fill gaps in their previous training and bring their subject matter up-to-date. Ecuador.

ment is an active process, you should ask the worker to make a self-appraisal of his training needs. A check sheet for field agents, supervisors, or subject matter specialists to fill out, when summarized for all workers, can be a helpful device.

The supervisor prepares the check sheet with the assistance of those supervised. It contains a list of skills which the coworker should acquire and a place to check his progress. The check sheet may also refer to local development, such as establishing demonstrations and organizing committees.

The supervisor should be conscious of his agents' training needs. He studies their job descriptions to find out what the job requires. He observes workers and appraises their attitudes, skills, and output on assignments, as well as qualifications for promotion. He is aware of any gap between what the worker should do and the worker's actual performance.

If the supervisor uses the check sheets to find out the training needs for each group of workers, an analysis of this information will also show the subjects and fields of action in which any group of workers need training and individuals need help.

The director can use the same method to determine the training needs of the supervisors and subject matter specialists.

Review Present Training

You, the adviser, should carefully review with your coworker any inservice training program underway when you arrive to find out how nearly it is meeting present needs, and what improvement can be made. If the present training program planned is local, you will want to find out if there is a national inservice training program, and check it to see what help can be secured to help local efforts. Many advantages, such as getting the help of experts, getting helpful teaching aids and information, and standardizing the whole training program, can be gained if the local efforts are closely related to the national program.



Training needs to be practical. Agents learn by doing. Here they are taking part in adapting a horse collar as part of harness for water buffalo. Thailand.

Choose Appropriate Activities

There are in-service training activities to fit different needs: (1) short-term refresher course, (2) workshop or work conference, (3) staff meetings, (4) conferences, (5) field trip or tour, (6) seminar, and (7) individual training.

These activities, with suggestions for organizing and conducting each, are described on pages 18 through 25.

Select Subjects

The analysis of training needs, even in a well-developed Extension Service, will usually reveal the need for more training in many subjects. One type of training activity can teach some subjects and other activities can deal more effectively with other subjects.

After you select the training activities, study the subjects that should be taught. Training is more effective if you teach a few subjects thoroughly than if you include too many. The following suggestions may help:

- Rank subjects by their relative importance and their immediate effect on improving the Extension program and readiness of staff.
- Estimate time required to thoroughly teach each subject.
- Select subjects for each activity planned from those having top priority. Be sure that the selected subjects can be treated adequately and that qualified teachers are available.

Select Teachers

Prepare, early in your planning, a list of teachers for different training activities. Extension staffs, in many countries, include workers with foreign training in Extension who are available as teachers.

Many other sources may be used to develop a competent staff of teachers, such as: educational institutions, private business technicians, other government departments' employees, other foreign technicians, and neighboring countries' experts or technicians.

You may find it advisable, in early training program development, to hold short training courses on teaching methods so that teachers will be familiar with techniques to be used in training activities. These courses might be held just before the training activity. They will help to reemphasize sound technical information applicable in the country. Each method taught should illustrate how to teach an improved and useful agriculture and homemaking practice.

Schedule Training Activities

When you know what training activities should be held during the coming year, tentatively schedule all proposed activities. For more effective programs, some of them should be fitted into the seasons of the year. The field staffs' seasonal work may help to determine when the training activity should be held.



Specialists when available give training in subject matter. Here a nutrition specialist trains agents to sun dry fruits. Iran.

Complete final schedules for each activity early enough so that participants and teachers can obtain necessary travel authorizations, arrange for leave from regular duty, prepare for, and make other arrangements.

Arrange Details

Make advance arrangements, for programs lasting more than 1 day, for classroom space, lodging, and meals for participants and staff, and transportation for tours or field trips. Arrange for necessary clerical help. Schedule entertainment suited to the program—it may be important. Send out an agenda and program in advance if possible.

Each teacher should be asked to make a list of ma-

terials and equipment needed and to provide for obtaining them.

Select and Train Committees

Use program committees, when possible, to help plan the inservice training. It may seem easier for you to do the tasks necessary to planning and preparing the training program, but staff members can do many of them. In a country participating in the technical assistance program, one training objective is to help host staff members become more competent in planning and handling these activities. Thus, the training of committees becomes an effective training device and justifies the effort required.



Sometimes teachers from educational institutions assist in training. Korea.

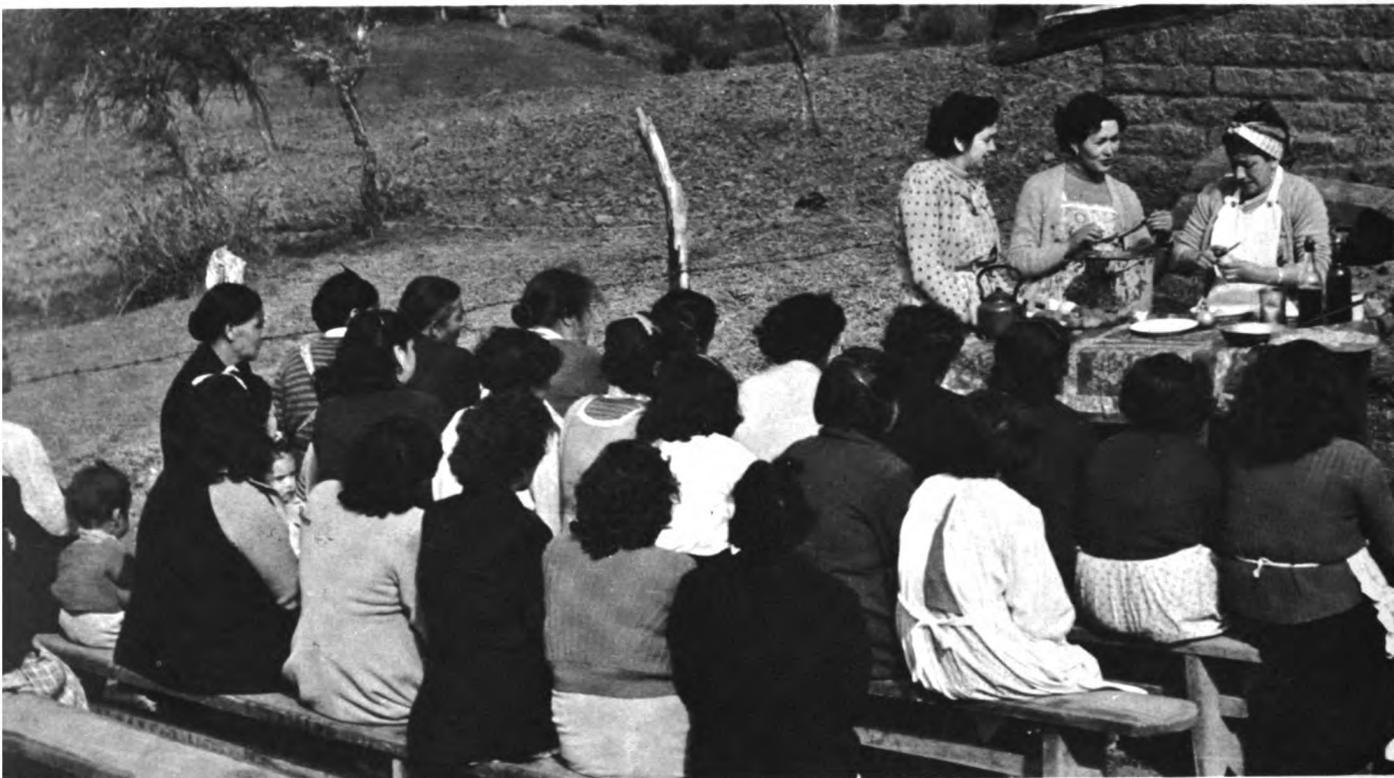
Induction Training Program

The previous training, experience, skills, and attitudes of new staff members, and what their responsibilities are will determine what should be included in the induction training program. Suggested steps for planning an inservice training program can be used for planning an induction training program.

And, (1) an analysis of induction training needs may

point out weak spots in the preservice training program and (2) an analysis of the inservice training needs may point out subjects that should be included in the induction training program.

In a country with an extension staff already in the field, we suggest that planning inservice and induction training programs should precede the planning for preservice training. Frequently, all three phases of training can be planned together.



These home economics agents are learning certain skills, during induction, that will fit them for their work with village women and girls. Chile.

Program Objectives

Know what the objectives are before planning an induction program for new workers. The overall purpose of induction training is to help new workers acquire knowledge, skills, and attitudes they need to do their job as quickly and effectively as possible. Other specific objectives are:

- Help the new worker know the history, objectives, scope, and philosophy of his country's Extension Service.
- Acquaint him with the Extension organization he has just joined, and its policies and procedures.
- Tell him what his responsibilities are to the Extension organization and the advantages of Extension as a profession.
- Tell him about expected moral conduct and behavior.
- Help him know and understand the rules and regulations that apply to his job.
- Help the new worker know the job he is expected to do and how he should do it. Train him in teaching methods and subject matter that apply to his work.
- Help him know and understand the problems of the people in the area.
- Tell him about working conditions and how to make the best of them.

- Help the worker develop a wholesome attitude toward public service.
- Train worker in practical agricultural skills required in his work, not provided through previous training and experience.

Plan Induction Training

When you have determined induction training needs, the subjects in which training is required may be divided into three classes:

(1) Subjects best handled on a group basis at headquarters or other central meeting place; (2) subjects most effectively learned by observation through supervised field training; and (3) subjects best learned through individual training.

After you classify the subjects, planning procedure is similar to that suggested for inservice training. For example, choose appropriate activities and teaching devices; select and train qualified teachers; estimate time needed for each subject; and perfect the schedules and prepare agenda for the training period.

The most effective induction training program combines classroom instruction with field observation and practice so that no unit of learning is separate from actual application in the home or on the farm.



As part of his induction training, this extension trainee tries out his skills and abilities to teach others. India.

How to combine a variety of subjects in a short course is illustrated in the following example. It might be better to limit the number of subjects and allow more time for discussion and practice of each.

An Actual First Short Course

MONDAY—First day.

Extension in USA.
Science, farmers, and a bridge.
Extension in Denmark.
Cinema "County Agent".

TUESDAY—Second day.

Extension in India.
Extension in New Zealand.
Extension in Canada.

WEDNESDAY—Third day.

Extension methods.
Plan of work for course.
Methods of approach.
Planning for exhibit.

THURSDAY—Fourth day.

Program planning.
Farm visits, office calls, and correspondence.
Method demonstration.
Cinema "Mould Board Plow".

FRIDAY—Fifth day.

Extension methods classified into groups.
Visual aids.
Cinema.

SATURDAY—Sixth day.

Radio method of teaching.
Writing news stories.
Visual aids.

MONDAY—Seventh day.

Principles of Extension.
Group discussion method.

TUESDAY—Eighth day.

Teaching methods and basic features of Extension.
Group discussion.

WEDNESDAY—Ninth day.

Working with illiterates.
Young Farmers' Club.
Club meeting and cinema, "Young Farmers' Club".

THURSDAY—Tenth day.

Attributes of a successful Extension worker.
Extension engineering.
Clubs, FFA and 4-H.
Group discussion meeting with farmers.

Preservice Training Program

The ideal Extension training situation is when the prospective Extension employee has received all necessary training in basic knowledge, teaching skills, and attitudes before he enters the service.

Then, Extension, during *induction training*, would only need to train the new employee in the specific duties, policies, regulations, and procedures of his new job.

And, the *inservice training* program would only need to acquaint the worker with new knowledges, skills, and procedures.

While some countries with much Extension experience may be approaching the ideal situation, we expect that it will seldom occur.

In some countries, *preservice training* is done in institutions of higher learning that offer training in agriculture and home economics. In others special training courses must be established.

The following guides taken from the June, 1961 Conference Report on Extension Development Around the World, will help you plan effective preservice training for potential Extension workers:

- "1. Work with the teaching staff to give them an understanding of Extension, and modify the curriculum to increase its effectiveness in training Extension workers. Interpret the needs of rural people to the teaching staff.
- "2. Examine the curricula of local institutions to determine which ones are best adapted to preservice training in Extension education. In working with these institutions, their attention should be drawn to the value of providing vocational opportunities such as Extension for their graduates.
- "3. Try to select that institution which has the respect of the government and local people. The acceptance of the extension program hinges on the prestige and status of the institution which is responsible for staff training.
- "4. Concentrate attention on those schools which have the potential for training future Extension workers in both subject matter and Extension teaching methods. This may apply to schools even at the elementary level.
- "5. Extension courses should be well balanced in theory and practice by providing observation and practical experiences. Such experiences should be carefully supervised.
- "6. Extension training centers have been established in some countries to provide preservice training when other institutions were not equipped for it. Such centers are usually considered temporary in nature, to be replaced by preservice training in a qualified institution of higher learning.
- "7. The training center from its beginning may serve a triple purpose of providing the site for preservice, induction, and inservice training. In countries, such as Korea, where colleges give the preservice training in subject matter, a well-equipped training center makes it possible to provide good induction and inservice training for a large staff."



Proper care of livestock is an improved practice in which extension workers should be proficient. India.

Training by Extension

In most of the countries where Extension is in the early stages of development, the Extension Service may need to set up its own center to do all or part of its preservice training until its colleges or universities include it in their curricula.

The type and amount of training needed to insure effective field work depends on the educational level of those available for employment and other circumstances. The amount of induction and inservice training needed depends on the amount of preservice training given.

Before deciding upon the nature and amount of preservice training to be given, consider—

- Educational level of persons available for employment including technical knowledge of agriculture and home economics.
- Previous training and experience.
- Knowledge of Extension philosophy, organization, methods, and procedure.
- Knowledge of and experience with human relations.
- Knowledge of cooperating organizations and agencies.
- Knowledge of youth organizations and their value and use in promoting the Extension program.
- Rural background and knowledge of rural people and their problems.
- Practical knowledge of improved farm and home-making practices and skills in performing and demonstrating them.
- Need or desire for rapid expansion of the service.
- Funds and facilities available for the preservice training program.

Short Courses Help

If the number of prospective staff members is small and the State feels there is an urgent need to get them in the field, a temporary staff of specialists can conduct a preservice training program in 2 to 3 months of short courses.

Trainees learn by seeing what to do, how to do it, and why to do it. Afghanistan.



Sometimes temporary faculties are brought together in training institutes where 3 to 6 months training courses are given. When this type of preservice training is done, it is desirable for the prospective employees to have a high educational level, including technical training in agriculture and home economics, and that they have had experience in working with people.

Prospective Extension employees need practical training in skills and approved practices they can pass on to people to use in solving farm and home problems. Instructors are usually recruited from colleges and other government services. Many have taught in institutions that use the lecture form of teaching. Others have little or no teaching experience.

In such areas, you, as a technical assistance adviser, may be training institute instructors in practical teaching methods such as demonstrations, supervised practice, group discussions, and case studies.

Special Training

Some Extension services in early development stages may lack experienced persons to plan training activities or to teach. Available staff members will need special training. You will need to help directors and supervisors plan and direct induction and inservice training programs.

Some countries are trying to expand their Extension organization quickly and are employing many field workers. In most of these countries persons available for employment lack higher education or technical subject-matter training. To correct this situation some countries have established continuing preservice training institutes with permanent teaching staffs. The training period varies from 10 to 18 months and includes classroom instruction and laboratory and field practice. Such institutes can include much in preservice training which normally is included in induction training.

India Conference

After several years of institute operation in India, a conference of principals of Extension Training centers was held in Bangalore. This conference made the following recommendations:

1. The period of training in all States should be 1 year basic agricultural training, followed by 6 months extension training, as recommended in a previous conference.
2. Training should be more realistic and emphasis should be given to the following:
 - Methods and techniques for proper approach.
 - How to conduct a village survey.
 - How to analyze problems and establish local work priorities.
 - How to plan a family and village program.
 - How to understand essential elements of village social organizations such as village panchayats, village leadership, village functions, etc.
 - Instilling in the trainees the spirit of service. Morning prayer may include inspirational talks or readings selected for this purpose.

- General knowledge. To stress this, an information room should be set up in each center with charts and maps of India and the State concerned, and other information material; and competitions should be held.

- How to plan, prepare for, and use various extension methods and media.
- How to evaluate a village program.
- How services of the technical staff may be used.
- Use methods to solve problems as a chief feature of training and teaching methods that help to develop the trainee's ability to think.

3. Practical work at the training centers should be more job-related and problem-oriented.
4. Group discussion is recommended as the main method along with lectures.
5. Closer contact between the training center staff and village workers is needed. Principals of training centers and other staff should be allowed to visit projects and to meet the trained village level workers so they can evaluate the training and know what problems the village worker faces.
6. Each training center should select one village for intensive overall development and beautification.

Training women as village level workers—There is a need for more women workers to ensure home economic activities with village families. Home science wings should be added to as many training centers as possible to train women on the following:

- Home crafts—clothing construction, knitting, and needlework.
- Nutrition—food preparation and preservation.
- Maternity care and child welfare.
- Home improvement and sanitation.
- Kitchen-cum-fruit gardening.
- Family budget.
- Family planning.
- Poultry and duckery.
- Youth activities.
- First aid and household nursing.
- Prevention of disease.

Philippines Training Curriculum

Another good example of preservice training, is the "Outline of Preservice Training Curriculum" used in the community development institutes in the Philippines.

Six Months Outline

	<i>Number of hours</i>
Orientation and barrio experience.....	376
Unit I. Understanding community development work.....	115
a. Principles of community development.....	35
b. How to communicate ideas.....	50
c. Barrio survey and program planning.....	30
Unit II. Getting acquainted with rural organizations and institutions to help community development work.....	100
Unit III. Doing community development work through groups.....	100
Unit IV. Agriculture and practical skills for community development work.....	185
a. Field crops.....	28
b. Animal husbandry.....	53
c. Horticulture.....	39
d. Farm woodlot and forest conservation.....	12
e. Drainage, irrigation, and water supply.....	14
f. Fisheries and wild life conservation.....	3
g. Barrio roads.....	27
h. Farm management.....	9
Unit V. Homemaking.....	105
a. Home management.....	32
b. Foods and nutrition.....	34
c. Health and sanitation.....	30
d. Clothing.....	9
Supervised field practice.....	240
Total.....	1,626

Trainees receive preservice instruction before starting their jobs as village home agents. Pakistan.



Training Activities

Workshop

The work conference or workshop is a valuable inservice training activity. Instruction is combined with problem solving by participants, guided and assisted by selected experts. The workshop is used to train a fairly large number of staff members in the same subject-matter or procedures. Workshops also help to train institute instructors in improved teaching methods.

Plans for a training program may include one or more workshops or work conferences. Dates, participants, and subjects to be taught, must be decided. Select teachers and secure their commitments well in advance of the workshop.

Select one individual to have the overall responsibility for preparing for and conducting this activity. His duties are: (1) naming persons to serve on committees; (2) serving as chairman of program and steering committees; (3) conducting or naming someone to conduct the workshop; and (4) making general arrangements.

General Procedural Pattern

Presentation by qualified person—Where appropriate, see that this person has a mimeographed outline or summary of his presentation to give to participants for reference during the work session.

Work session—Following the presentation, assign problems to small work groups. It may be difficult for some groups to apply basic principles and concepts to solving specific problems. It may help individuals to assign simple problems to them to solve before the work group session.

Report—A lapse of time usually occurs between the workshop and the preparation of the formal report. Give participants copies of the solutions and recommendations to take home. They can make more use of them than if they received the formal report a month or two later.

Evaluation—Ask participants for a written statement giving their impressions, the useful things they learned, their opinion of topics, additional topics they would like to have had included, and suggestions for improving future workshops.

Conferences

Conferences are a valuable training activity. They deal with policies and procedures on the operation and development of the Extension service.

Objectives are to:

- Give administrators and supervisors an opportunity to inform staff members about new policies and programs.
- Encourage staff members to discuss field problems and recommend changes in policies and regulations they feel will improve the work or the organization.
- Give administrators, supervisors, and field workers an opportunity to discuss past results and possible changes.

- Stimulate administrators and supervisors to explain regulations and ways to comply with them.
- Instruct workers about related programs and organizations.

Organization provides for:

- Discussion of administrative and supervisory matters and field problems related to organizational procedure and control with the staff.
- Selection of topics for discussion and recommendations by discussion groups.
- Group discussion or question and answer sessions after topics are presented.



Conferences give administrators, supervisors, and field workers an opportunity to discuss past developments, possible future changes, and other field problems of the overall program. British Guiana.

Short Term Refresher Courses

Short courses serve several Extension training purposes. Awarding scholarships or granting leave to selected individuals to attend established short courses at universities or colleges can make them more competent, contribute to their professional improvement, and act as an incentive toward maximum effort.

In some areas preservice and induction training courses are held to a minimum to speed up the placing of workers in the field.

Training needs of field workers will not be satisfied through usual short term training activities, and the Extension Service may need to organize its own short

**Joint Staff Training Course
University College of the West Indies**

Wednesday

**Inaugural Exercises
Community Organization in Rural Jamaica
Seminar: The Department of Agriculture.**

Thursday

**The National Income
Goals and Incentives in Rural Population
Social Psychology
Seminar: The Jamaica Social Welfare Commission,
Sugar Industry, Labor Welfare Board.**

Friday

**Production
Labor and the Program
Social Psychology
Seminar: The Jamaica Agricultural Society
4-H Clubs.**

Saturday

**Economics of Agricultural Production
The Principles of Credit.**

Monday

**Distribution & Trade
Land Tenure
History of Agricultural Assistance Schools
Seminar: The Land Authorities.**

Tuesday

**Finance and Taxation
Attitudes to Farming
Social Psychology
Seminar: The Public Health Services.**

Wednesday

**Employment and Investment
Communication of Ideas
Social Psychology
Seminar: The Economic Aspect of the Program.**

Thursday

The Administrative Aspect of the Program.

Friday

**Marketing
Communication of Ideas
Social Psychology
Seminar: The Program as Solution to the Economic
Problem.**

Saturday

Seminar: Cooperative Organization in Jamaica.

Monday

**Seminar: Agricultural Loan Societies Board
Communication of Ideas
Seminar: Alternative Solutions to the Economic
Problem.**

Tuesday

**General Administration of Extension Service
Seminar: Measurement of Program Effectiveness.**

Review



A field trip, during a refresher course, taught these extension workers more about running and the benefits of an inland fish farm than they could have learned in a classroom. Indonesia.

courses. These short courses may last 1 or 2 months, and include subjects that will benefit the whole group.

Where Extension Services operate their own preservice training institutes, you may use the facilities and faculties of such institutes to hold short courses and refresher courses for field workers. Where institute instructors carry a heavy load in the preservice training program it may be necessary to ask some experienced supervisors to help teach. Other department technicians may also be asked to help lighten the regular instructors' load.

If the Extension Service is without training institutes, arrange for short courses to be conducted at a college, university or experiment station, if possible. Courses fitted to the express needs of the group to be trained should include a maximum of functional and practical instruction with a minimum of theory. Use demonstra-

tion, supervised practice of skills, field observation, and problem-solving as much as possible.

Staff Meetings

Staff meetings are useful in evaluating progress, planning action, dealing with emergencies, standardizing procedures, improving quality of work, solving personal problems, and in many other matters. Some situations are more effectively and more economically handled at meetings than through individual contacts.

Workers learn more when a fellow worker tells them about his successful experiences than when a supervisor does.

As unified action plans are developed at a meeting of staff members, the plans are usually better understood than if one person explains them to another.

Field Trips or Tours

The supervised field trip or tour can be a full fledged activity by itself or it can be a part of a workshop, conference, short course, or orientation conference. The tour is versatile and a valuable teaching device in inservice or induction training.

The old saying, "Example is better than precept," holds true in training Extension workers. Many individuals can listen to an explanation, take part in a group discussion, work out a procedure on paper, and still not be able to do the job in the field. Most of them do a good job, after they have seen it done under field conditions.

You will find the tour important if these basic requirements are met:

- Classroom and tour topics should have the same objective. If class discusses steps in laying out field demonstrations, show essential steps on the tour and allow adequate time for leaders and trainees to discuss them.
- Give careful attention to details—route, time for discussion, comfort of participants, and be sure all can see and hear. Successful tours are often rehearsed in advance to assure timing, visual aids, and successful operation of facilities.
- Provide handouts and notes to participants when they will be helpful for reference use later.

When training institutes conduct preservice training they will find periodic tours to the field helpful. Trainees see how field work is conducted, and what some of their future problems might be. The instructor will find it easier to explain how his teaching applies to the job the trainee will be doing as a field worker.

The group of trainees on tour will learn a great deal and get good ideas they can use in their work by seeing

(1) villagers digging a manure pit, and hearing how the project was planned, started, and organized; (2) a woman's club in work session; (3) a recently laid out crops demonstration plot, with the seed bed being prepared; (4) a village council considering a new project; or (5) a method demonstration in progress.

They will also learn from seeing improvement successfully completed or practices adopted but not as much as the tour activities described above. Some examples of successful improvements or practices adopted are (1) a house that has been whitewashed; (2) an exhibit of articles made by a home demonstration club; (3) a field planted with improved seed; or (4) a compost pit filled with manure and waste.

Individual Training

Several types of individual training will add value to the Extension training program. Some are especially important in countries where Extension is in the early development stages. Following are some of these types and suggestions for their use:

Apprenticeship—This is used in long established Extension Services. While a recently established Extension Service is not likely to have such a training program, some modification of it may produce good results in training new workers.

This training will provide the new worker with an opportunity to observe some of the procedures in operation and learn something about the problems ahead of him. He should also have a chance to put what he learns about various Extension activities into practice.

To conduct this program, select staff members with experience and who are good teachers to be trainer agents. Give these agents special instructions about preparing a training plan that will provide specific goals



Supervised field trips are valuable in training. Agents understand a problem better by seeing what is being done to solve it. Pakistan.



This is learning by doing. All workers take part in making a manure dump. Pakistan.

for the apprentice to achieve during the training period, that may last a year. Apprentice training of new agents must be supervised, and frequent interviews between the supervisor and the trainee are essential for greatest success.

The following excerpts from the 1955-56 Annual Progress Report of Agricultural Extension Adviser, Lamar R. Fort, Liberia, constitute a worthwhile example of a training program:

"The Agricultural Extension training program was usually carried out at the pilot stations. Although men who operated each station were paid for their labor, they were considered as trainees and were kept in training from 1 to 3 years before they were transferred to areas where they could give extended service.

"They were taken in at the several stations as students in the field of agriculture. Some specialized in the techniques of raising chickens; some in the practice of preparing chicken feed compounds; some studied vegetable growing. Others were interested in the practical methods of producing tree crops, such as citrus fruit, cocoa, coffee, and oil palms. At each station, the Agricultural Aide, who worked under the supervision of the Agricultural Extension Adviser, supervised and kept records on the work of each trainee. The trainee was given basic and practical training in the agricultural activity in which he was interested. When he had performed the activity to the extent that he could do it efficiently without supervision, he was then given a transfer to a private concession or to an institution where he could give larger service.

"In a number of cases the trainee retired to his own farm and started producing crops by improved methods of culture and the use of improved varieties. During the past year, 12 trainees completed training in stations in the four areas of operation. Six of them went to their private farms while the others went to work for private organizations. One was a poultry raiser. Two were tractor operators. The remaining three were interested in producing tree crops.

"Ten others were nearly ready to go into the broader fields of service. Most of the absentee farmers were beginning to turn their attention toward the government training centers (nurseries and demonstration projects) for obtaining men who could oversee their farms. Some farmers and institutions have sent their own men to these government training centers and paid their expenses in order to give them special training for the jobs they were to do. The training program at the nurseries and demonstration projects has proven to be one of the most worthwhile efforts in the whole Agricultural Extension Program."

Counseling by Supervisors—If most of the trainees are fairly successful, the supervisor should give individual counsel to the few workers who are weak in certain fields. If he takes a backward trainee to the field with him, he can give him special instruction and answer questions that the worker might not want to ask before the group. The trainer should be a friend and helper, give advice, and patiently help the worker with key operations.

Plans of Work—An example of supervisors' plan of work follows:

PLAN OF WORK FOR THE SUPERVISOR OF THE HOME ECONOMICS PROGRAM—GREECE

Activities	Methods used	Responsible	For whom	Place	Time
1. Attend monthly meetings.	Discussion on various subjects, special meeting with chiefs and home agents. Instructions on subject matter, information visual aids.	Supervisor.	Chiefs and home agents.	Dir. of Agriculture.	Jan. 1-2. Feb. 5. March. April. May. June. July. Aug. Sept. Oct. Nov. Dec. Jan. 3. Feb. 4.
2. Village visits.	Instructions to home agents. Explanation of printed material. How to use a projector. How to use visual aids.	Supervisor.	Home agents.	Home agent sectors.	
3. Visits of community officials.	Cooperation with village officials.	Supervisor.	Community officials.	All villages in the inspection.	
4. Planning of annual conference (collecting data on results of the program).		Supervisor.			
5. Office work.					
6. Training of home agents in nutrition.	Talks, demonstration, posters, visual aids, meal preparation, printed material.	Supervisor, specialists of the central office.	Home agents.	Kavalla.	May 6.
7. Training in first aid.	Talks by physicians, demonstrations, posters, practice in nursing in a hospital.	Supervisor, physician, nurse.	Home agents.	Kavalla.	July 7.
8. Training in child care.	Talk by pediatrician, practice at child care station.	Supervisor, pediatrician, head of nurses, nurses.	Home agents.	Kavalla.	Oct. 8.
9. Training in organization of local exhibits.	Projection of slides, pictures of various exhibits, posters.	Supervisors.	Home agents.	Dir. of Agriculture.	April 9.
10. Training in evaluation.	Examples, charts.	Supervisors.	Home agents.	Dir. of Agriculture.	May 10.
11. Cooperation with local specialists, Mr. Voinis.	Preparation of mimeographed material.	Supervisor, local specialist.	Home agents.	Dir. of Agriculture.	April 11.



This agent practices her new skills under the trainer's supervision.
Tanganyika.

Help by Fellow Workers

Some workers may not know how to perform a certain task. In this case, ask a worker who knows how to perform this task to help one who does not.

You must be sure, however, that the person helping is merely advising and guiding the other person, so that the less able person will take the lead and will not "lose face."

Seminars

The meaning of "seminar" is a group of students doing research under the direction of a professor, in a particular line, and on which they make reports. Each member has an assigned problem and his report is reviewed for the benefit of the group.

"Seminar" has a more liberal use now. It is used for group activities where individuals present summary reports on certain problems and phases of the general

Foreign Country Training

The early work of organizing and getting a program into operation will be made easier if directors, key administrative personnel, and subject-matter specialists receive training in another country with a well developed Extension organization.

Technical assistance programs of the Food and Agriculture Organization of the United Nations, and the U.S. Agency for International Development, and some private organizations help to provide this type of Extension training.

Encourage key personnel, particularly if they can adapt what they learn to meet local needs, to take advantage of these educational opportunities.



Trainer uses visual aids to help trainees from several countries learn more easily.

topic under discussion. The reports are based on studies of existing material. Such seminars are useful in professional improvement of Extension workers.

Hold seminars at places that participating Extension workers can reach easily to help assure regular attendance. Also have sufficient materials for study available for all members.

Before arranging a seminar for Extension workers, decide upon the subject for study. Assign one or more problems to each member of the group. Prepare a schedule of these periodic group meetings, giving dates each report is due and when group discussion will be held.

Keep the group interested by holding meetings at least once every 2 weeks. Sometimes weekly meetings are advisable. In early meetings, before individual reports are prepared, qualified persons could lead discussions on various phases of the subject or related subjects that will be of interest to the group.

Seminars should be a valuable training activity for preservice training institute faculties.



An expert teaches extension trainees, from countries in South East Asia, how to estimate age of trees. Philippines.

The Teaching Process in Extension

Extension training is teaching and learning. Much of Extension training interrupts field work. It is important, therefore, to select teaching methods that will fulfill the training purpose as completely and thoroughly as possible in the shortest length of time.

To select the best teaching methods, you must understand the teaching and learning process. Some of these are:

- Present material that the learner can understand and relate to his experiences. Also do not present it at too fast a pace for him to absorb. As he learns, the individual's capacity for learning is enlarged.
- The teaching must make sense to the learner in relation to his wants and set of values. Make frequent appraisals to be sure that you haven't "lost" the pupil.
- The learner must participate. No one learns for him. If material is presented in several ways, learning is speeded up.
- More learning will take place when the student realizes the importance of learning. Inducements properly included, such as some recognition, will increase learning.
- It is not enough to retain what is learned, but it should be adapted and used in solving real problems. The lesson then has meaning and importance.
- Learning is speeded up when pleasant emotions are associated with it. Individuals are not uniform in their emotional reaction. The alert instructor makes more satisfactory progress by watching for signs of emotional response.
- Teaching is not easy—it requires sympathetic understanding of the learner's problems, and plenty of patience and perseverance to be effective. A lazy instructor is not a successful teacher.

The Case Study

A case study or case story is an account of an actual experience. It involves real people, problems, plans, and decisions, as well as the consequences of the decisions. The format for most case stories gives the (1) *situation*, including the problem; (2) the *plan* for solving the problem; (3) a *sequence of events* section; (4) *the outcome*, and (5) *an analysis*.

For teaching purposes, however, the analysis section is usually omitted. Students or participants make their own analysis to avoid being influenced by the writer's analysis.

The case study can be used effectively in preservice, induction, and inservice extension training. It is effective in classroom teaching, workshops, short courses, and individual training. You can use it, or variations of it, in group discussions following field observation tours and when you want to furnish trainees with real life experiences, especially when they cannot gain these experiences in the field.

The case study is a refreshing and convincing teaching method. Here specific examples of situation are faced, solutions tried, and results obtained. The reader finds case studies lively accounts of actual situations.

The case study is not an example of good or poor administration or operational procedures. Rather, the solutions should serve as a springboard for further thought. Larger studies can compare different situations; and principles will grow out of these stories as their numbers increase.

This has been a successful method of teaching law, medicine, business administration, and public administration for many years. During the last few years it has been useful in teaching the philosophy, principles, and procedures of Extension work.

In the case method you will be not only a discussion leader but you will be more. You will encourage trainees to think through problems for themselves and develop their own conclusions.

You will help the student "live" the case as much as possible. What is wrong with the decision? What should have been done differently?

One thing is certain. You will be more than a referee. You should raise questions, draw out the students, point up the problems objectively, and make sure the case is covered thoroughly. It is important that you avoid being dogmatic. The wise teacher realizes that he does not have all the answers.

In many countries, personnel and facilities are not available to prepare formal case studies for training use. This does not mean that you cannot use this method of teaching. If formal case studies are not available, you can have members prepare cases about experiences they are familiar with for use in teaching.

Problem Solving

In problem solving you will present the principles, concepts, or technical explanation of the subject under consideration. Then relate them to a real life situation with problems that need solving, so that trainees can use the information or principles being taught. You will define the situation's problems, bring the problems out in group discussion, or assign individual trainees to define the problems.

After problems have been discussed by the group you will ask the trainees to list alternate solutions. The trainees will then select the solution that fits the situation best, either in group discussion or individually.

In teaching a principle-involving procedure, have the trainees prepare a step-by-step outline of a plan to get people to adopt the solution.

Problem solving can be used in workshops, classroom teaching, preservice training institutes, or short courses; or by a supervisor in an individual worker's training. Formal case studies or familiar situation may furnish the trainees the material they need for problem solving.

Functional Teaching

Functional teaching is a term that describes a combination of several teaching methods you can use to develop skills needed for doing practical jobs. It uses lectures, demonstrations, and group discussions. And gives the trainee an opportunity to practice the activity being taught.

Functional teaching is particularly valuable in teaching new skills or practices which the worker is to pass on to the people. Some examples of the types of skills or practices which can be taught by this method are: (1) seedbed preparation, (2) treatment of poultry for extermination of parasites, (3) construction of garments, (4) transplanting of rice, (5) spraying for the control of household insects, and (6) making of a smokeless stove.

You can use this type of teaching for preservice training or inservice refresher courses. It teaches workers certain skills and how to teach others the same skills.

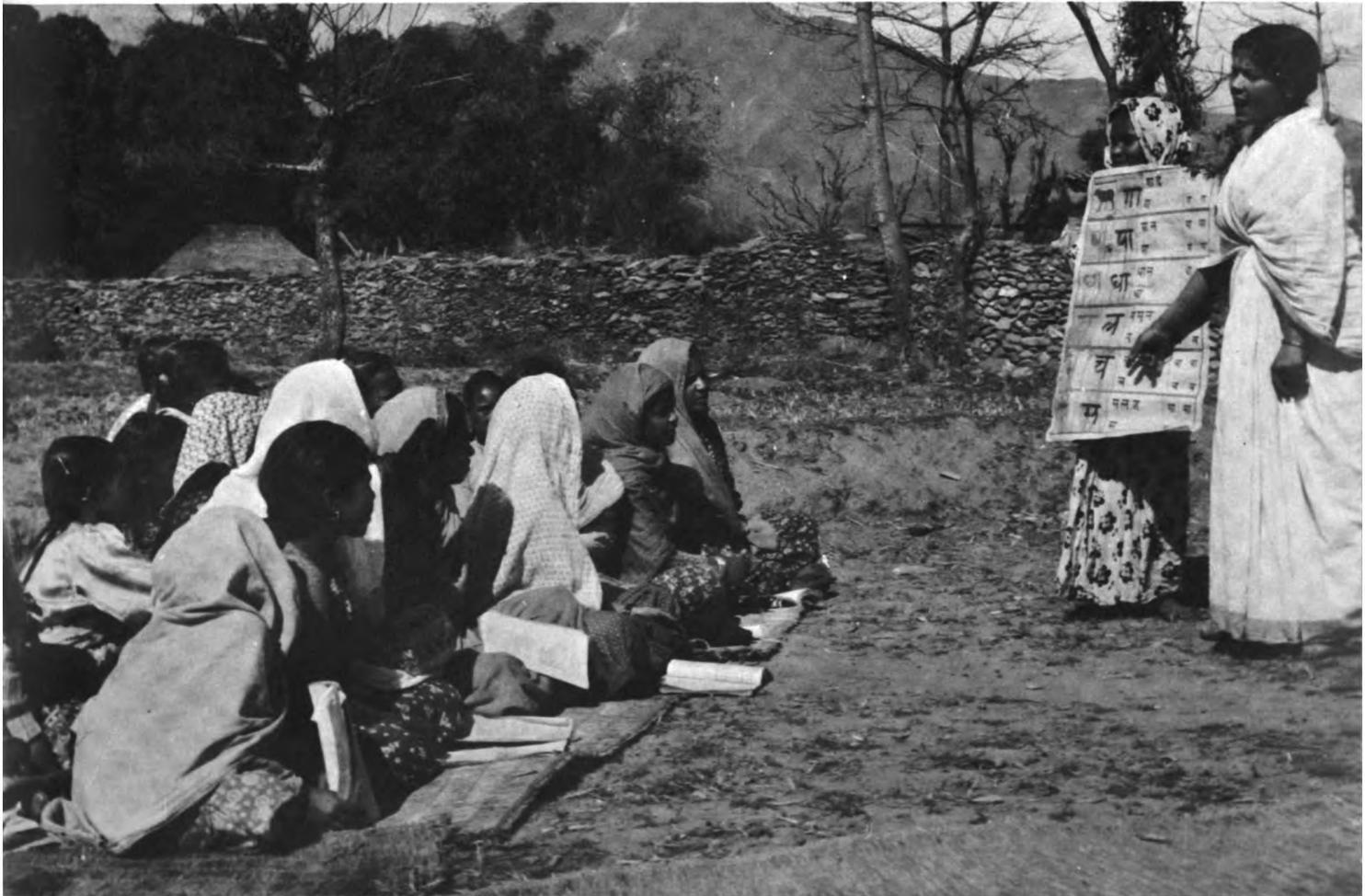
Functional teaching steps are:

1. *Explanation* (lecture and group discussion)

- Objective.
- Value and use of the skill or practice.
- Brief technical background.
- What benefits accrue from adopting the practice.
- What materials and equipment are needed to carry out the practice.
- The steps in performing the skill. Discuss the steps. Emphasize important points.

2. *Demonstration*

- Discuss the demonstration materials and equipment and their skillful use.
- Write the main demonstration steps in front of the group or give a mimeographed copy to each individual. Underline the important points.



A new village worker learns how to demonstrate by practicing on her neighbors. Nepal.

- Give the demonstration and explain each step, calling attention to the key points.

3. Practice

- Give each trainee an opportunity to practice the skills, explaining the steps and correcting mistakes. If the group is large and the equipment and materials limited, divide the group into smaller groups, each with a set of equipment.
- For further practice divide the class into teams of two. One member should explain the step and the other perform it. Ask the rest of the class to be the audience and suggest improvements. Emphasize perfection in performance rather than speed. As performance is perfected, speed will come.
- When each trainee understands what to do you should give him an opportunity to practice until he achieves the desired degree of skill.

4. Test and Critique

- Following the practice period give both a written and performance test. Follow tests with discussion.

Remember Extension training should be tailored to fit the needs of the trainees. This is also true of functional teaching. The outline for functional teaching is for use when workers have little or no knowledge or skill in the practices being taught. If the trainees are skilled in many of the manipulations or are familiar with the technical background involved in the practice, shorten or omit some of the steps.

Group Discussion

Nearly all Extension training deals with principles, policies, regulations, procedures, skills, and practices which the staff member is to use in day-to-day duties. It is important that each person has a working knowledge of and thoroughly understands each subject taught. Group discussion stimulates individual thinking and will give you an opportunity to learn what needs further explanation.

In a lecture session the learner tends to memorize the main points without applying them to the job he has to do in the field. Given an opportunity for discussion he will be better able to apply the information to his own job.

Use group discussion to:

- Encourage staff members to use their knowledge and experience in developing procedures that will use accepted principles.
- Give the trainer the advantage of the worker's field experience.
- Bring out field problems and suggested methods to use in solving such problems.
- Make clear hard-to-understand points.
- Stimulate individual thinking.
- Improve relationships between administrator, supervisors, and workers.

Group discussion should be used in nearly all Extension training activities. Study the principles of group discussion and follow them as closely as possible. Two of the most important principles are:

- (1) Give each person in the group a chance to express himself;
- (2) Guide the discussion but do not inject too many of your own opinions.

Demonstrations

The demonstration is an effective teaching method and should be used whenever possible. The learner retains much more of what he learns if he sees the operation performed or illustrated by an interesting demonstration than if he merely listens to the explanation.

Extension workers use two types of demonstrations in their teaching program in the field, the result demonstration and the method demonstration.

A *result demonstration*¹ is one that puts an improved practice into use in the field or in the home. Results obtained from the improved practice are compared with results obtained from other practices under the same conditions.



Result demonstrations are effective in training. These trainees see the difference between crops grown from improved seed and those grown from locally produced seed. Indonesia.

¹ See special USDA manual "Result Demonstrations" AH-123 for a detailed treatment of this subject.

Extension workers use result demonstrations widely and effectively to influence farmers and homemakers to use recommended practices. These demonstrations require an extended period of time to secure results.

A *method demonstration* is showing others how to do a specific task. Its objective is to teach workers many needed skills. It can be given in a short time, can be used by the teacher or trainer in induction and inservice activities.

A strong point in the demonstration method is that seeing, hearing, discussing, and doing stimulates the worker's learning.

To Insure A Successful Method Demonstration

Use the following steps:

1. Preparation

- (a) Outline the demonstration step by step. (Note: A step is a logical part of the progress and accomplishment.)
- (b) Set opposite each step the key points of emphasis.
- (c) Assemble the necessary equipment and have it in its proper place before the time the demonstration is to be given.
- (d) If you are not skilled in giving the demonstration you should rehearse it until you can do it well.

- (e) Check the arrangements and be sure everyone in the group will be able to see and hear.

2. Conducting the Demonstration

- (a) Explain the value and use of the skill or practice to be demonstrated.
- (b) Place an outline of the demonstration on the board or give the trainees a copy to follow.
- (c) Present the demonstration. Explain each step carefully. Perform each step slowly and repeat it if possible. Emphasize key points and tell why they are important.
- (d) Invite help or participation from the group, if possible.
- (e) Ask for questions.
- (f) Summarize.

3. Method Demonstration Break-down

A sample outline for a method demonstration follows:

- (1) Practice: Treating seed grain.
- (2) Materials needed:
 - (a) Homemade mixer (a small metal drum, tight barrel or tight box fitted with a shaft and crank).
 - (b) Mask or clean cloth to prevent inhaling dust.
 - (c) ½ ounce of cerasan for each bushel of grain to be treated.

A Sample Method Demonstration on Treating Feed Grain:

IMPORTANT STEPS IN THE JOB	KEY POINTS
Put 1 bushel of seed grain in mixer	
Scatter ½ ounce (one level tablespoonful) of Ethyl Mercuric Phosphate (cerasan) on grain.	Tie dry handkerchief over mouth and nose or wear a dust mask, as the dust is poisonous. Do not use over ½ ounce to the bushel of grain.
Fasten cover of mixer securely	
Turn crank of mixer slowly 20 to 30 revolutions	Mix thoroughly
Store treated grain in bin or pile	Leave for 24 hours. Keep dry. Protect livestock from poisoned grain.
Repeat with additional grain—	—til all seed is treated
Sow within 2 or 3 days is possible	—to prevent reinfection. Do not feed treated seed to human beings, poultry, or animals. It is poisonous.

Applicable to all small grains (wheat, oats, barley, rye).

Method Demonstration Outline

A method demonstration outline used at a home economics extension workshop at Saigon, Vietnam, in May, 1958, follows:

Subject of Demonstration: Cooking river fish in coconut milk.

Why subject is important:

- (1) Fish is readily available; (2) inexpensive; (3) strength-giving; and
- (4) coconut is also another plentiful food, and gives variety to fish-cooking.

Job Breakdown Sheet for Method Demonstration

IMPORTANT STEPS IN DEMONSTRATION	KEY POINTS
	Important reminders that make the work easier to do, special information.
1. Arrange materials on work table	Materials must all be together in convenient place.
2. Select a good fish, such as ca-loc. Fish about $\frac{1}{4}$ kilo.	Fish must be freshly killed: flesh firm; eyes bright.
3. Carry fish home in banana leaves	Keep fish moist, so that it will not dry out and spoil.
4. Clean fish	Use thin knife. Don't bruise skin.
5. Cut fish	Cut in "two finger" size pieces.
6. Cover fish	Fish must be kept clean from flies and insects.
7. Heat sugar in pan until it is yellow.	Keep heat low; too high heat will produce a burned flavor.
8. Drain milk from coconut	
9. Add coconut milk and nuoc-mam and bring to boil.	Stir slowly.
10. Add fish	
11. Add seasonings, such as garlic and red pepper.	
12. Cook until fish is soft—about 45 minutes, and until it is brown on top.	Cook slowly—simmer.

Role Playing

Role playing brings an assumed situation to life. Assign the parts of the different characters involved in the situation to members of the group. Then they act out their assigned parts in the assumed situation.

You can use role playing to give the trainees experience in human relations skills and in working out acceptable solutions to problems.

To illustrate: (1) One trainee might play the part of a village worker and several others play the parts of village leaders. (2) The situation: A village that has not participated in extension work and that does not

have an extension council or planning committee. (3) The worker's problem: Gain leaders' support for organizing a village extension council.

The trainee, acting as the village worker, explains the extension program and the value and functions of a council. The others present all the objections they can think of and the village worker tries to overcome these objections with convincing arguments.

Other situations that you can use for role playing are: (1) A village worker convincing a farmer he should be a result demonstrator; (2) organizing a woman's home improvement club; (3) selling village leaders on a tree planting program; or (4) interesting a village council in a new project.



In role playing group members play roles in a farm visit. The agent talks to a farmer and his son about advantages of a tree planting program. Colombia.



Other group members observe and listen to questions and answers. Colombia.

Panel Discussion

Select three or four of the more experienced workers to serve as a panel to discuss the subject under consideration. General discussion by the whole group can follow the panel's discussion.

Or have several workers study a subject before the

meeting and conduct a panel discussion before the group. And, if a subject has several phases, have several experts serve on the panel, each to speak on a different phase.

Panel discussions help to liven up the meeting and many times will hold the interest of the group more than individual talks.



The director is the leader in all phases of the extension program. Here the director leads while the adviser serves as consultant Iran.

Summary

- Staff training is essential in a successful extension program.
- Training is the administration's responsibility.
- Knowledge of one's job responsibilities is essential to job satisfaction and performance.
- The teacher and supervisor must know people, their needs and urges, their hopes and aspirations, and the motivations which will produce desired results.
- Praise gets more results than criticism.
- Threats and punishment should be the last resort.
- Learning is a personal problem and cannot be done for another.
- Rates of learning are not uniform.
- If the learner has not learned, the teacher has not taught.
- The more varied the stimuli appealed to in a learning situation the greater will be the learning. Hearing, seeing, and doing will produce more results than hearing alone.
- Recognition for good performance may be public, whereas criticism had best be given privately.



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