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EXTENSION DEVELOPMENT



**AROUND
THE
WORLD**

Guidelines

for

Building Extension Organizations and Programs

Federal Extension Service • U. S. Department of Agriculture
in cooperation with

Agency for International Development • U. S. Department of State

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This is a report of the conference held in Washington, D. C., from June 5 to 9, 1961. This conference was organized and convened by the Federal Extension Service, United States Department of Agriculture, at the request of the Office of Food and Agriculture, International Cooperation Administration, under the provisions of the Inter-Agency Contract for consultation and support.

Effective November 6, 1961, International Cooperation Administration became the Agency for International Development (AID).

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FOREWORD

Extension education, as one of the essential agricultural institutions required for agricultural production and rural life, has been introduced to many countries during the past decade. Results have varied from successful programs in some countries to token efforts in others. Considerable evidence is building up as to the effectiveness of extension activities. Based on trials and errors under a variety of conditions, the experiences of many countries revealing patterns of effective and faulty extension administration and teaching methods are available for study.

In order to capitalize on these accumulating experiences, the Office of Food and Agriculture of ICA requested the Federal Extension Service to organize a conference of representative extension workers to appraise progress in overseas extension development to date. The conference was requested to present guidelines for strengthening extension work overseas, and to designate appropriate actions required of all cooperating agencies and institutions.

This report represents the combined experiences of the conferees and is supported by information from the field and other sources. The basic considerations and proposals contained herein are of general interest to extension people at all levels everywhere. The guidelines and suggestions should be particularly useful to the American men and women extension advisers and their national associates who are helping to build extension programs in communities throughout the world.

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EXTENSION DEVELOPMENT AROUND THE WORLD

I. INTRODUCTION AND GENERAL SITUATION

At the request of the Office of Food and Agriculture, International Cooperation Administration, the Federal Extension Service convened a conference in Washington, D. C., on "Extension Development Around the World", June 5-9, 1961. The conference considered its objectives and audience in terms of the problems faced and the progress being made in extension development throughout the world. Proceedings of the conference as a whole and of special working groups are reported herein.

Conference Organization and Objectives

The purpose of the conference as expressed in the ICA request was to: "Make a thorough going assessment of extension development overseas, to outline basic areas of extension organization and program development, and present them in a form that will lend emphasis to elements and principles which can be adapted to any given situation."

This purpose was further elaborated to include a review of progress, identification of strengths and weaknesses, development of criteria for training, and a suggestion of steps to be taken to meet current recognized needs in relation to extension development.

The Office of Food and Agriculture (ICA) also suggested that the conference should be kept small and it should include people who have had recent overseas experience in extension.

Participating in the 5-day conference were four ICA extension advisers and seven other extension people who had recently completed services as extension advisers overseas. In addition, six staff members of the Federal Extension Service, one from the Foreign Agricultural Service, and two from ICA,

Washington, all people with foreign extension experiences, participated in the conference.

Sources of information on which the conference based its findings, conclusions, and recommendations include:

1. Knowledge and experience of conference participants--Conference participants had assisted in initiating or developing extension education programs in countries of Europe, Latin America, Africa, Near and Middle East, Southeast Asia, and the Far East. The viewpoints on extension work in agriculture, home economics, and with rural youth were represented, as well as all levels of administration.
2. Questionnaire to 17 ICA overseas missions--This questionnaire was designed to provide comparable information on the status, impact, and problems of extension development in a representative selection of countries. A summary of replies appears in the Appendix.
3. Recent end-of-tour reports of extension advisers--These reports provided valuable background information and presented the points of view of a considerable number of advisers in countries not otherwise represented.
4. Foreign and domestic workshop reports, training materials, extension studies, and other pertinent information.

This report is directed to all men and women involved in extension. This conference was arranged at the request of ICA, for the purpose of strengthening extension work overseas and to assist United States extension advisers in the field. In the final analysis, the recommendations relate to the efforts of all

United States institutions and personnel concerned with the success of educational aspects of foreign programs.

Consequently, it is hoped that this report may provide a basis and some content for a more complete set of guidelines for extension development overseas. Such a set of guidelines, widely distributed, should prove useful not only to United States technicians, but to all who have responsibility for the development of extension type programs.

Definitions

In order to avoid misunderstanding and confusion, certain extension terms should have the same meaning and importance to Americans and nationals of other countries. Principal definitions are given here to develop a more universal understanding of the following discussions:

Administration is the art of guiding, coordinating, and integrating policies established for any organizational unit to effectively and efficiently achieve the purposes of the organization. Administration has two phases:

1. Structural, involving division into units of operation and areas of responsibility, assignment of duties, and definition of working relations; and
2. Functional, including policy determination, direction, and leadership required in carrying out operations. The goal of administrative leadership is to provide conditions which will permit all personnel to work at maximum efficiency.

Extension is an informal educational system. Unlike formal educational programs, extension does not ordinarily have classrooms nor does it have prescribed courses of study. Its curriculum is based on the needs of the people it serves. Extension's students are rural or village people. Its goal is to help these people attain a more satisfying farm, home, and community life.

Through extension, people learn new scientific facts in agriculture and homemaking. They learn how to apply these facts to improve their farms and homes. Extension

teaches people how to use their time, land, and money for their own greatest good and how to work with other people for the common good--locally and nationally.

Extension is concerned with agricultural production because agriculture is the source of food, clothing, and family income. It is also concerned with the use of agricultural products and income in providing better nutrition, better health, better housing, greater security, and greater satisfaction to people.

Extension teaches people how to make their own decisions--it does not order them to make changes. It may help people to find credit and teach them how to use it wisely, but it does not provide money for agricultural development. It may teach them why certain controls are necessary, but extension does not regulate the actions of rural people. It may teach them how to organize and operate a cooperative association, but it does not direct commercial operations for farmers.

Rural people will support and participate in an extension education program when they are convinced that the Extension Service operates for their benefit. As a pioneer director of extension said many years ago, "It is the function of the Extension Service to teach people to determine accurately their own problems, to help them acquire knowledge (useful in solving these problems), and to inspire them into action."

Extension philosophy is, in brief, a set of principles underlying and guiding the institutional development and operation of an extension service.

Research is conducted primarily to increase knowledge. It involves studious inquiry and critical and exhaustive experimentation, having for its aim the revision of accepted conclusions in the light of newly discovered facts. Research emphasis is in two major divisions, namely:

1. Basic or pure research is designed to increase fundamental knowledge, for example, how light affects plants; and
2. Applied research is conducted to solve problems and is usually of a practical or useful nature, for example, the development of a rust-resistant variety of wheat.

Home economics is the field of knowledge and subject matter which applies the principles of art and the social and physical sciences to home and family living. Through it, better methods of performing tasks are learned and applied in such areas as:

1. Child care;
2. Health and sanitation;
3. Home care of the sick;
4. Food and nutrition;
5. Clothing selection, care, and conservation;
6. Management in the use of resources;
7. Home improvement;
8. Community and family relationships;
9. Home gardening; and may also include
10. Poultry and small animals.

The following explanation of home economics, as made by an experienced overseas home economics adviser, may be useful in describing this vital part of an extension program.

Probably every man and woman would like to see some improvements in their way of living. Perhaps it is in the way the family is housed or clothed or fed. Perhaps it is in the management of money, time, energy, and skills in the home. Care and training of children, protection of health, and care of the sick in the home are of concern to most people. Relationships of family members with each other and of the family to the community are the foundations on which a democratic society is built.

Home economics is sometimes called the science and art of homemaking. As such it provides many valuable skills to help people bring about these improvements. It is concerned with all that affects personal and family living, especially youth and community activities.

The teaching of home economics in schools and to adults through the Extension Service can bring the findings of research to all people and help them become more productive, happy, useful citizens.

Supporting services are the additives required in effective extension operations. Extension is a type of education which produces action or change. Supporting services are the institutional and physical inputs that make it possible for change to take place.

Some examples are farm credit, cooperative facilities, fertilizers, improved seeds, pesticides, and animal vaccines. In most developing countries these essential services and materials must be provided by government since other sources of supply are not available.

Consequently, extension workers may at first need to perform the dual roles of providing education and dispensing services and supplies. A clear distinction between the two must be maintained, otherwise the entire purpose of extension education may be distorted. Supporting services and materials should eventually be provided by private industry, cooperatives, or specialized government agencies.

Problems Facing Extension

Problems of great variety face extension workers in many countries. In a keynote statement¹ of the conference, it was stressed that "All of us--ICA, the Land-Grant Colleges, the Department of Agriculture, the people of the United States and cooperating countries--have a vital stake in the success or failure of extension education. Our effort in this area is a part of the 'humanitarian war' against poverty, disease, ignorance, and illiteracy. It is also a phase of our fight for freedom in the world today and tomorrow."

Governments and peoples of many countries are looking to the United States for assistance in economic and social development. Since these countries are predominantly agricultural, they realize that agriculture must be made more efficient as a first step in economic development. They have seen or heard of the phenomenal agricultural development in the United States for which the institution of extension is given much of the credit.

¹Source--Address by R. S. McIntosh, Assistant Director, Office of Food and Agriculture, ICA--Conference discussion and other sources.

However, many officials of these countries fail to distinguish between extension education and a variety of other services to rural people. In their anxiety to bring quick satisfaction to dissatisfied people and to achieve rapid expansion of agricultural production, many governments tend to stress supply and service-type programs, and to neglect the more permanent educational phases of rural development.

Lack of understanding and patience are complicating factors. In attempting to assist developing countries, a multitude of problems must be faced. In the field of agricultural extension work, some of the more pressing problems include the world-wide demand for assistance in this area; the lack of true understanding and acceptance of extension as an educational function; and the length of time required in establishing and implementing programs. Because some officials of host countries may lack basic understanding, acceptance may be a formality.

Various problems develop in determining the type of organizational structure suited to prevailing situations. It is difficult to secure adequate support, financial and ideological, to insure success. The findings, training and retention of adequate numbers of qualified persons for various positions is a major problem. Extension without supporting research becomes ineffective.

And finally, the problems of organizational relationships must always be considered. These by no means exhaust the list of extension difficulties existing in the world today.

Progress in Extension Development

People change slowly. Those living close to a subsistence level must from necessity view proposed changes with caution. Countries in which ICA has provided extension education assistance have large rural populations. They range from Japan with a rural population of about 40 percent, to countries such as Nigeria with 80 percent of its people dependent on agriculture, and on to Laos with 95 percent of its population living in villages. The extension audience, therefore, is a large one.

Since this huge population segment is largely illiterate in most developing countries, the teaching job challenges the imagination of the most creative extension workers. The people are forced to be cautious about changes. Even a small mistake such as an error in planting can make the difference between dying from starvation and existence.

These rural people, however, have a desire for improvement. They know the world is changing, and they want some of the better things of life for themselves and their children. When they hear that extension offers them an opportunity to improve living conditions, their hopes and dreams may lead them to expect extension agents to perform miracles.

Although many of the world's farmers and their families are unable to read or write, they have intelligence, acumen, certain manual skills, and experience in decision making. They have been pitting their ability to survive against overwhelming odds to eke out a bare subsistence. The very fact that they have survived shows what sound, intellectual resources they bring to the new venture.

Extension education programs are new in most countries. Of the 15 countries responding to the questionnaire, (see Appendix), the oldest extension program is celebrating its 13th year. Programs in eight of the countries were established in their present form either in 1955 or later. This means that extension education work in most countries is less than 10 years old.

Agriculture is plagued with maladjustments. Taken the world over, the newly developing countries can parade all the known ills of agriculture. There's the one-crop economy such as coffee, and the problems or challenges involved in getting farmers to broaden their cropping pattern. There are the soil depleting practices, the lack of seed and fertilizer to upgrade production, the absence of credit, and land tenure systems which discourage improved practices. Livestock are usually of poor quality and inefficient producers of food.

Homes, like agricultural practices, have gone unchanged for centuries in many of the awakening countries. Whether built of bamboo on stilts or adobe--nestled close to the ground--the houses are small. Often one room must serve for living, food

preparation, and the eating and sleeping needs of the family. Too, animals often are brought inside the family quarters for safety at night.

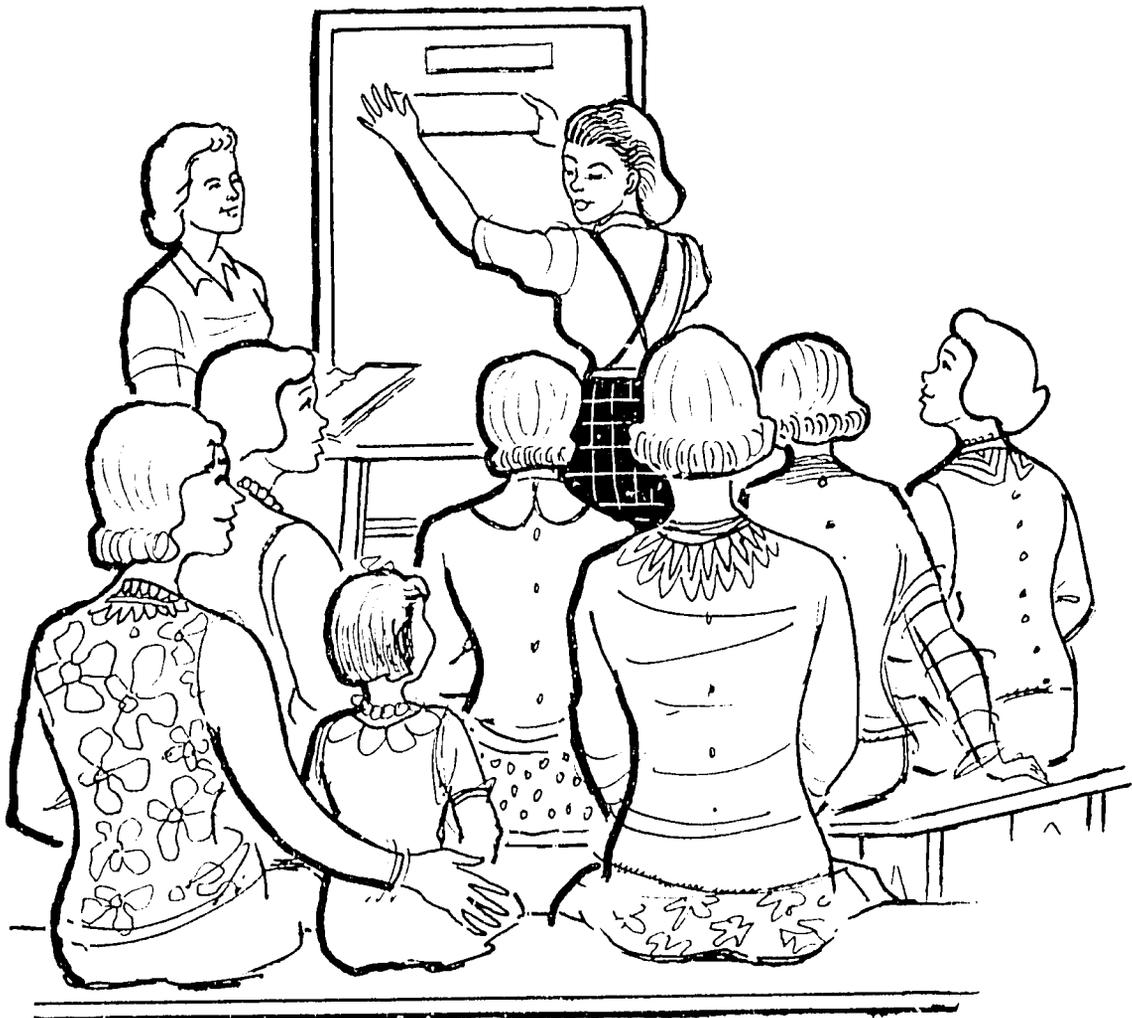
Diets in many places are inadequate. Lack of protein is the most difficult dietary shortage to overcome. Gardens, home orchards, or home poultry flocks are uncommon in many villages.

Laundry is done at the nearest stream by a large number of village women the world over. A 50 percent mortality rate among babies before they reach the age of 1 year is estimated in several countries.

Intensity of extension work varies greatly among countries. Replies from the ques-

tionnaire show that extension work is being done in some countries in a very limited area and in others practically all over the country. Estimates of the percent of total population living in areas presently served by organized extension in various countries ranged from 1.8 percent to 90 percent. Five of the countries said that 50 percent or more of the population lived in such areas. (For more on this subject, see Appendix).

The ratio of extension workers to population in areas served by extension range from 1 worker for 2,000 people in one country to 1 worker for 300,000 in another. The mean for the 15 countries is 1 worker to about 10,000 people.



II. ORGANIZATION AND ADMINISTRATION

This topic is considered in relation to the United States objectives in technical cooperation. It is assumed that this objective in respect to extension education is "to assist governments in the operation of effective and continuing extension-type educational programs that develop people and help them to raise their level of living."

Situation

Most countries in which ICA operates recognize the vital contribution which an extension-type educational program has made and can make to the economic, social, and general development of their countries. Our present concern is to see what modifications and improvements can be made to accelerate extension processes under various conditions.

Extension work has world-wide acceptance. Considerable evidence is building up as to extension's value and potentiality in many countries. It is generally accepted that the extension program must be tailored to the needs of each country. There is no one pattern. The proper approach for each country should be developed by using the essential principles of informal education, those which involve people in planning and carrying out programs.

Many countries have an established organization in the ministry of agriculture and in institutions that teach agriculture and home economics. Whatever the situation, some workable relationship must be established as a guide for proper administration and action. Many agencies have subject matter which they want to promote throughout the country. In fact, a large part of their work is really extension education. The need here is for coordination and better understanding of the jobs of specialists, both Americans and nationals.

Too many people think extension can change things overnight. Results that count will show on the farms, in the homes, and in people. More attention must be given to having a wider understanding on the part

of top administrative officials--of what extension work really is. This is needed also among USOM personnel who work on non-agricultural subjects.

Agricultural advisers should have host-country counterparts or working associates. This is an effective way of giving technical assistance and establishing a continuing extension program. This is leadership development and good working procedure. However, if a counterpart or equivalent is not provided, a dedicated American adviser should not despair, as he must necessarily play a dual role.

One should be careful not to limit the concept of what an adviser is or does. He consults with local workers, gains a knowledge of conditions and really works rather than just advising and talking. An adviser is required to be a leader, teacher, organizer, promoter, and master workman in his assigned field. This should be clear in his job description. Naturally, an adviser at the area level may do more field work or actual teaching or training than an adviser whose job in the national offices calls for work on budgets, organization, plans, and personnel.

The location of the desk or office of an adviser should be given consideration. There are some serious drawbacks to massing all Americans together in offices, sometimes several miles away from their counterparts. In some countries the chief extension adviser has an office in the USOM headquarters. This tends to isolate him from the officials he hopes to assist. In some cases host countries provide desks adjacent to the counterpart worker in the ministry. It is a good idea to use this desk as the nationals apparently want the adviser to be near and assist with their work.

Extension operations should be free from political interference. So long as extension needs appropriations, favorable laws, and official approval of various actions and expenditures, it must deal with politically-minded people. Political interference can cause personnel to be transferred or ignored, if not removed; and delays. In some cases good workers, who have been trained in

organized programs, may not be hired because untrained political favorites are selected instead.

American workers should encourage the career service idea and point out the value of well-trained personnel. At the same time it is necessary to recognize the great importance of status as it relates to jobs at various levels. Where competition for jobs is intense, jealousy and the continuing fight for prestige and survival must be taken into consideration.

Not only politicians, but also government officials are apt to interfere with agreed administrative practices and procedures. This calls for repeated conferences to review understandings and emphasize principles.

A full-time, adequately trained director of extension is essential. The host country must realize that administration should be in the hands of professionally-trained, adequately-paid persons. The staff should understand the local situation and problems and what extension can do to solve them. They should attract other well qualified persons who will choose extension as a career.

Guidelines and Procedures

Certain guidelines and procedures are essential in providing extension workers with proper direction and continuity of effort. These procedures should be helpful in establishing an extension organization and conducting its program.

Agreement should be based on cooperation. A joint program of the USOM and the host government involves objectives, operation procedures, resources, and an organization to conduct extension education. Close cooperation is essential to success.

Conferences are necessary to develop mutual understanding. In the initial stages, USOM's Food and Agriculture officer and chief extension adviser should review the overall situation and arrange the following conferences or meetings:

1. Conference with the mission director and/or deputy director and the

program officer to obtain an agreement on relevant extension policies and procedures.

2. An informal conference including the agricultural staff and representatives of related divisions to develop an understanding of extension's relationship to other USOM divisions before going to the country officials.
3. With this background, a conference should be arranged with country officials, presumably those of the ministry of agriculture. Included should be the director of extension, if one exists, and heads of agencies and divisions to discuss the situation and determine more specifically what the national problems are and what programs are under way.

At this stage, it is essential to develop a complete understanding of the country's viewpoint by listening, with a minimum of advice or suggestions. Who will make the arrangements for these conferences will depend upon conditions and the mission's policy or protocol.

Further USOM and host country conferences will be required to:

- a. Consider requests of the country officials;
- b. Analyze the problems of the country;
- c. Review the proposed basis of cooperation; and
- d. Prepare for the first steps in using mission personnel and resources to accomplish objectives.

A legal basis should be established. Before any new government agency can be firmly established, basic operating procedures should be formalized and adopted. A legal charter will provide for extension's organization and development and assure continuity of its status and financing. Sometimes new legislation is necessary to consolidate or coordinate the several lines of extension education being carried on separately, and possibly inadequately, by subject-matter workers of various divisions.

Problems of farmers are not departmentalized. Consequently, it is important to show how an extension service aids other divisions of the ministry of agriculture, as well as other ministries.

Research is essential as extension work is ineffective without facts to extend. Many countries have conducted extensive research, much of which is useful. However, the findings are either locked in files or published in technical bulletins, and are useless for extension teaching and practical farming.

Much needs to be done to bridge the gap between research and extension. Extension advisers can lean too heavily on western or American technology, especially in tropical areas. Soil problems are often deceiving.

Countries are finding it useful to study farm management through surveys of existing conditions and practices. One should become familiar with the specific recommendations of colleges, experiment stations, and university agencies of the host country and determine if they agree on recommendations.

Don't overlook the experiences and practices of the best indigenous farmers. They have learned from trial and error. Their production, often far in excess of the average, should provide useful production guidelines.

Encourage the host country to employ qualified specialists. Although the limited number of specialists may be technically qualified, they should be properly indoctrinated with the extension idea. They may need help in preparing materials, and money for translations, publications, and teaching aids.

When there are only a few specialists, they are generally found in national offices or agencies. Their usefulness may depend in part on where they are located, and to whom they feel responsible. They cannot train provincial or area workers effectively unless they know more than their subordinates about the subject and how to teach it.

Transportation for a good specialist is a "must," or his usefulness is greatly reduced. Families of national workers cannot be as easily moved in other countries as in the United States. Their family considerations, school facilities, property

interests, and other "connections" are often overpowering in their thinking and actions.

Relate administration to program planning. The best laid plans and programs can be set aside or frustrated by administrative orders. Unrealistic targets may be set for some national goals. Too much paper work on reports or special government requirements dissipate time and energy. Program planning and training must be truly related to operations as seen and directed by administrators. If these are not correlated, blind following of administrative directions will hinder fruitful work and frustrate well-trained field workers.

Encourage coordination where and as needed. Where coordination is lacking in a USOM, the mission is in a weak position to encourage coordination within the service or department of the host country. For example, if coordination is lacking between extension and research or extension and community development on the USOM side, it sets a poor example for their coworkers in the host country.

The land-grant institutional pattern in the United States exemplifies the value of coordination between research, teaching, and extension. This type of teamwork is worthy of consideration in developing working relationships between other groups. The creations of a means of coordination is of no value without the human will or desire to make it effective.

Principles of Coordination

Coordination of planning and action require mutual trust and understanding on the part of responsible persons dealing with common problems and objectives. Some of these important principles are discussed below.

It should be recognized that each is solely responsible for his own work. Too frequently, interest in coordination and integration merely means a desire on the part of A to direct B's work. Fear of loss of identity or of the subordination of one unit or agency to another does not promote mutually helpful working relations. On the other hand, appreciation that each is fully capable of managing its own affairs and must be unhampered

in discharging its obligations should increase concerted interests and actions.

Clear understanding and appreciation of functions and activities are necessary.

Complete knowledge of how each agency or organizational unit operates in discharging its functions assigned by law or by administrative decisions is basic. Better understanding of each other's work enables managing executives to consider the possible advantages or disadvantages of closer working relations.

In the solution of important problems, no one unit is fully equipped to do the job as each unit may contribute to the effective solution of the problem. The recognition and appreciation of this principle fosters harmonious human relationships and actions.

Interest in a common objective or outcome motivates coordination. Each must be concerned with the accomplishment of a common end product, or no reason exists for entering into a working agreement. The stronger the bond of interest in achieving a mutual objective, the more desirable coordinated effort becomes.

Coordination and integration must be definitely planned. The test of real interest in a common objective is the development of a suitable plan for cooperative action. The sincerity of pledges of mutual aid may be discounted when no definite steps are taken to translate words into deeds.

A clearcut, initial understanding of the objectives sought and the functions expected of each person or service reduces the likelihood of disappointment and disharmony.

Some way must be found to see that the adopted plan is carried out. Plans do not operate on their own. It is not sufficient to merely adopt a plan for coordinated action. To someone must be delegated the responsibility and facilities to insure that all function according to the prearranged plan. An effective way is to have regular periodic meetings of the persons concerned to report progress and check on their own actions.

Other Essential Elements

Successful extension programs not only require concerted planning and action, but

also involve essential personal relations and material aids.

Supporting services and materials are necessary. Many improved practices advocated by extension workers require materials or services which are difficult for the farm family to obtain. These include fertilizers, pesticides, tools and equipment, improved seeds, and better livestock.

Such physical supports often require farm credit which is essentially a production tool. These services are generally provided through cooperative and commercial channels in the United States. In those countries where these means are less developed, governments often take a hand in procuring and distributing the things needed.

Extension is education in action. As such, it should be used as a tool in promoting government and private agencies and services. American experiences point out that government handling of supplies and services is only a makeshift, at best, to speed up procurement. The ultimate and sound solution is through normal economic processes of warehousing and distribution.

There are services involving special conditions that justify government operation. These may be due to great size, such as an irrigation project or extensive operations such as soil or water testing. Service and supply programs should be developed along with the extension projects that are dependent on them.

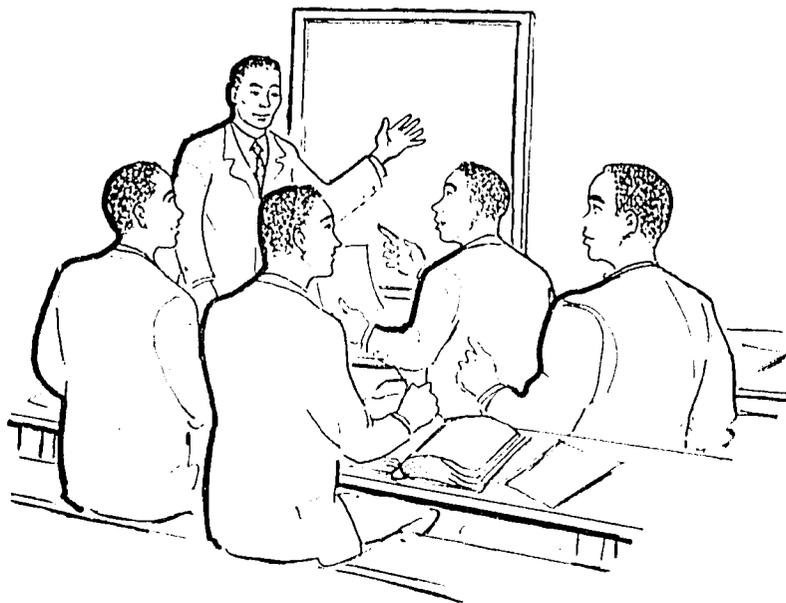
Language difficulties present serious problems. It is difficult to overstate the importance of clear communications. Even people who speak the same language often misunderstand each other. Therefore, translators and interpreters can be expected to use the wrong word or miss the correct interpretation of ideas at times. Americans may find it difficult to discuss their work on the basis of cultural traditions in other countries. Too often they have a limited aptitude or desire to learn the most common and elementary expressions of the host country, much to our loss.

Remember that words, words, words are the materials from which bridges are built between nations. Strive continuously to develop an effective method of expressing ideas to your counterpart and understanding him, and learn to distinguish the difference between common and academic words.

When one talks about extension to country workers through an interpreter, it is suggested that a simple translation of the points be prepared and distributed among the people in the audience so they may follow the speaker. Never give up trying to improve methods of communications. Use any teaching aids which will help convey ideas. Remember also that the lines of communication within the mission must be open and clear.

Various observations and practices are involved. Below are other suggestions and procedures which may be helpful in developing an extension program:

1. Insist that your work is educational, with a new informal approach. It also must be supported with necessary materials.
2. Where the people seem listless or hopeless, determine their chief concerns and why they are not interested in their own or family improvement.
3. Where religious beliefs seem to interfere, study the religion and get the leaders to find other aspects of the religion that may offer stimulation.
4. Keep your eye on what happens to the people on the farms and in the homes. If you can't see changes there, you are not doing the job.
5. Programs for local leaders are proving fruitful and more emphasis should be placed on them.
6. Extension should try more group projects to utilize the forces of group decision and action. This speeds up acceptance of change.
7. Find out for yourself what is going on in the field. Don't rely entirely on reports.
8. Emphasize the idea that unless extension develops people it is not developing anything.
9. Be alert to things the nationals are doing, things they planned themselves and on which they will welcome some help.
10. At conferences and workshops remember that nationals of many countries are natural born actors and love to demonstrate.
11. Elementary education and greater literacy are basic to progress. Often extension can support and utilize the literacy or general education program in a country.
12. Good organization cannot overcome inherent weaknesses such as poor research, corruption, and incompetence.



III. PROGRAM DEVELOPMENT AND IMPLEMENTATION

The success of the total extension education effort can be measured by the effectiveness of the program in rural areas. Organizing, staffing, training of personnel, and financing an extension service are means of establishing and carrying out rural educational programs.

This section is concerned with current progress in developing and executing extension education programs and with actions needed to make these programs more effective at the local level. An attempt is made to observe this development through the eyes of local extension workers.

Situation

Extension advisers are confronted with two major types of problems. One is internal in nature, while the other deals primarily with outside influences and situations.

The first category consists of problems which are educational in nature and are closely allied with extension teaching. They involve the lack of knowledge and skills, insufficient understanding of extension philosophy and purpose, lack of teaching skills on the part of the extension staff, and seeming lack of interest in improved farming and living on the part of villagers--all educational problems. They are a part of the situation that must be taken into account in planning the new extension education program. Such problems may continue to be the major object of education for some time.

The second category concerns problems outside the direct influence of extension. These are more frustrating to extension workers, both Americans and nationals. Among such problems reported from many countries are the following:

1. Lack of staff with sufficient general and technical education. In some countries extension must start with local workers having the equivalent of a 4th grade education. This greatly increases the size of the training job.

2. Cultural factors which are obstacles to overcome. Some of these mentioned in country reports are:

- a. People are not accustomed to passing useful information on to others.
- b. The custom of making political appointments regardless of qualifications is too prevalent.
- c. The ancient philosophy of being satisfied with present knowledge slows progress.
- d. Superstition may prevent the acceptance of scientific knowledge.
- e. Tribal customs and fears hinder changes and progress.
- f. Incentives to farm operators and village workers are limited.

3. Production goals are set by top government officials without consideration of the people. An example of this is one country's decision to speed up production to the point of telescoping a 15-year plan into 5 years.

4. Lack of sound technical information in the fields of agriculture and home economics--information which applies to the country, culture, and the capabilities of the people. Successful practices in one country may not necessarily be successful in another.

There is need for localized research and testing on which extension workers can base their teaching. The American hoe was tried without success in the Philippines because it was not adapted to the size of the agricultural worker.

5. Other duties of extension agents may conflict with their educational function. In many countries, extension workers have been recruited from regulatory positions and think of extension as a further projection of the regulatory function. In others, they must make tax reports, vaccinate

livestock, or they spend much of their time procuring seed and fertilizer for farmers.

6. Technical and demonstration materials which provide sound information in agriculture and home economics are lacking for use in training staff and teaching rural people. In many countries there is a scarcity of written materials--from the college textbook to the simplest "how-to-do-it" leaflet.
7. Illiteracy among farm people. Acceptance of technical information is associated with literacy.
8. Lack of adequate credit facilities to carry out improved practices. Agricultural production is not likely to be accelerated without liberalized credit.
9. Segmentation of extension services between several departments or division of one department. Home economics may be in some ministry other than agriculture. It is difficult to conduct a coordinated extension program under these circumstances.
10. Lack of coordination among agencies and organizations results in duplication of effort, and tends to develop competitive attitudes.

Guidelines

Extension experiences which have proved valuable in some countries may be modified and used as guidelines in less experienced countries. Some of the procedures listed here may be helpful in new or developing extension programs.

Involve people in planning the extension education program. All people who benefit from the program as well as those expected to help conduct the program should have a part in the planning.

Make the extension program family-based, including agriculture and home economics for youth and adults.

Begin with a limited number of extension activities. Make sure these have a high priority with local people.

Start with some phases of each area of the extension program (adult agriculture, home economics, and youth). These initial phases should create changes that people can see and can be pointed out as specific accomplishments. These changes may be small--a few poultry houses, or some farmers using hybrid seed corn. Such improvements can be seen not only by other farmers but also by government officials.

When home economics extension work started in Taiwan, home visits were made to determine needs. While improved diets and better baby care would have contributed more to improving health than the kitchen improvement project, the home economists decided on the latter because the people involved and their neighbors could easily see the changes. Improvements in health take longer and are less obvious. After women gained confidence in the home agents through the kitchen improvement project, it was much easier to attack nutritional problems.

Use the methods found effective in the early days of U. S. extension development. Don't rely on mass education in the early stages. Use result demonstrations, method demonstrations, and farm and home visits. These are not only convincing to the illiterate farmer and his family but also help to develop confidence in the extension agent.

Employ meetings to teach groups, as soon as possible, in the development of a new program. This not only makes it possible for the agent to reach more people in a given time, but also offers the advantages of group action to help bring about changes. Involve the group as far as possible in all discussions and decisions. Group participants should feel important as individuals and as members of a decision making body.

Employ teaching aids which are not beyond audience comprehension.

Develop leaders to actually teach and carry on other functions in the educational program. According to reports from 12 countries, well-trained local leaders provided valuable assistance to agents in reaching large numbers of farm people. The median for these 12 countries showed a ratio of 1 agent to 10,000 rural persons. Only with the help of leaders can one agent make an appreciable educational impression on such

a large group. The following information is from the End-of-Tour Report by Dale Anderson, an extension adviser in Iran:

The agriculture agents work in 5 to 10 villages apiece. To assist the agents in disseminating agriculture information, there are approximately 200 trained local leaders. These leaders are local village people chosen for their interest in the subject matter and their leadership abilities. Extension programs are developed by the leader committees and are based on the farm and living problems of the village. The programs in turn are forwarded to the Ostan Headquarters and the individual specialists develop their programs of work from the requests stated by the village committees.

The success of an extension service program is highly dependent on the development of local leaders. Although considerable progress has been made by some of the rural agents in this area, a great deal more effort is necessary. Leaders' training conference should be conducted to further develop the interests and leadership abilities of this group.

Start working in a very limited number of pilot areas to develop and demonstrate an extension program.

Don't expect too much too soon. Changes that last come slowly. In Human Problems in Technological Change, Edward H. Specier wrote:

"It seems possible, for instance, despite our ignorance, to support the following generalizations: people resist changes that appear to threaten basic securities; they resist proposed changes they do not understand; they resist being forced to change."

As the extension agent, who is basically a promoter of change, attempts to bring about improvements in his villages, he should be sure that what appears to be senseless resistance by the people is not involved in one of the above reasons.

In the beginning of a program, it is particularly important to allow time for people to understand the changes thoroughly and to go through the learning processes. Moving

too fast may result in failure and endanger an entire village extension program.

Remember that the rural people are not unintelligent just because they are illiterate. They have many capabilities and often learn rapidly. They can plan their programs, learn to do many difficult tasks and then teach others. Furthermore, they have been doing these things over the years. The difference is that such skills have not been applied to an extension program.

Begin with needs which people recognize and want to satisfy. For example, in a village where many of the children are frequently sick the mothers may be interested in learning what can be done to improve their health. Another instance, when a crop is threatened by pests, the farmers want to learn control measures.

Use the result demonstration as an effective teaching method. The following procedures should be observed:

1. A limited number of demonstrations should be undertaken by an extension agent as careful supervision is essential.
2. The demonstrations should be limited to practices that are most important to farmers.
3. The first demonstration with a farmer or a group should probably be limited to one practice.

Consider the different social patterns in a community. To avoid upsetting the normal relationships of people, the extension worker should try to work at a given time with those who have common interests.

For example, in improving rice planting practices, he may start first with the most interested farmers. After some of them have adopted the practice, the extension agent can then move to another group. When working with a group, he should provide equal opportunities to all farmers in that group to see the rice planting demonstration.

Determine what factors cause people of other culture to change. It would be helpful to study and learn what captures the imagination of people, what interests them, and finally what leads them to make changes.

Program Planning and Execution

Principles of program planning and execution are of no value unless they are adopted and applied. The extension worker must, therefore, develop a practical procedure assuring adherence to accepted principles.

Such a procedure may be very simple in the beginning and elaborated as more people become involved in an expanding program. In any case, since program development is a continuing and repetitive process, the procedure may best be considered as a cycle involving seven essential steps. These steps are repeated in each cycle, taking into consideration changes that have resulted from action in the intervening period.

The following is an idealized chart of steps in program planning arranged chronologically. Some of the procedures or steps may appear more idealistic than practicable. However, the whole process involves a logical sequence of operations.

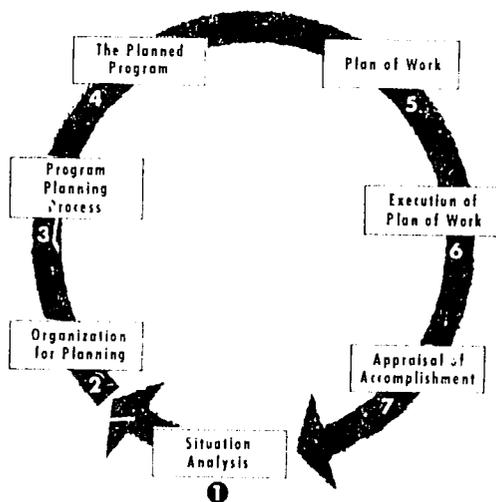
In actual practice these steps frequently overlap, that is the knowledge of the situation is further developed in each succeeding step. Also, an extension worker may have to proceed without certain situation information which would be most useful in deciding on a program. Nevertheless, effective extension workers observe these steps.

Situation and analysis (1) All subsequent steps are dependent upon the situation. In fact, the whole purpose of extension education is to permanently change selected elements of the situation--farm income, family

nutrition, rural leadership, and land use, for example. Those involved in planning the local extension educational program need the best possible understanding of the situation in respect to the following elements:

1. Agricultural resources and current farming patterns and practices;
2. Economic factors--credit, markets, price structure;
3. Local culture--family system, needs, values and desires;
4. Socio-political system--formal and informal systems of government;
5. Peoples' abilities and individual resources--their skills, understanding, and intellectual development;
6. National development programs and goals;
7. Channels of communication through which people obtain information, exchange ideas and make group decisions; and
8. Other governmental and nongovernmental development programs which are active in the community, and the role of extension education in relation thereto.

Professional extension leaders at state and/or national levels require a broad understanding of all the above elements in the



state of national perspective. More detailed knowledge is required of such elements as:

1. National development programs and goals;
2. Facilities for training extension workers;
3. Present and potential resources available for use in extension education;
4. Potential needs for extension education in relation to economic and social development programs and goals; and
5. Sources of technical information and advice within and outside the country.

Organization for planning (2). Effective organization provides a means of involving people in the program planning process. Involvement of people is a basic element of extension education. Participation helps to arouse interest, and those helping to determine a program will usually do all they can to make it succeed. Involvement of people also results in better programs. Successful programs take into account local knowledge, habits, materials, and experience, in addition to the technical subject matter.

Extension education may have an influence on many other institutions and organizations such as religious groups, schools, research agencies, and social organizations and services. Close liaison with these groups at all stages of extension program development and implementation encourages cooperation and reduces friction.

Extension education in a community, province, or country will eventually affect very large numbers of organizations, groups, and individuals. Not all of them can be involved from the beginning. A problem, therefore, is to determine whom to involve in the program planning process, and by what means. The following steps are suggested as a general guide:

1. Identify and counsel with:
 - a. Existing leaders--both formal and informal;
 - b. Cooperators in previous extension or related rural programs if any; and
 - c. Individual citizens having useful knowledge, understanding, or interest.

2. Consult with other professional workers in agriculture and home economics such as:
 - a. Formal or informal planning committees;
 - b. Tribal councils and other official bodies;
 - c. Commercial and cooperative organizations; and
 - d. Administrators of programs in related fields.

Program planning process (3). The ideal program planning process includes a sequence of steps carried out in consultation with the groups and individuals mentioned in the preceding section. It is necessary to:

1. Identify wants and needs. Rural people are ready to undertake programs which they believe will satisfy their wants, although they may not be aware of all their basic needs. For example, they may want a higher price for the rice they produce, not knowing that it is possible through use of better varieties and cultural practices to obtain much greater yields and a fair profit at existing prices.

Consultation with specialists and other technically trained people will point up the more basic needs and ways of satisfying these needs. It is the job of the extension worker to bring this technical information to the attention of rural people for their consideration. This may cause people to change their minds as to what they want, and provide a basis for a sounder program more acceptable to the people.
2. Determine relative importance of various recognized needs, and decide on priorities. This must be done in consultation with the people whose cooperation is required in conducting the program.
3. Identify the problems involved in satisfying the needs given high priority.
4. Determine possible solutions of problems or alternative courses of action. Solutions may come out of the experience of the people themselves or they

may be suggested by the extension agent or specialist.

5. Agree upon objectives. This is a joint function of extension workers and the rural people involved. In order to be of value, objectives must:

- a. Identify needs and wants;
- b. Specify the specific behavior changes to be sought;
- c. Identify the people involved, indicate the changes to be made and the subject matter to be used;

d. Select those objectives that are practical in terms of staff, materials, and other available resources; and

e. Meet the test of most of the following criteria:

- Is the proposed change at the top or near the top in the recognized desires or needs of the people?
- Is it a change that is important to many?
- Will local leadership give full support?
- If carried out as recommended, is it certain to work?
- Have "off-the-farm" hurdles to success been cared for?
- Is it practical and simple enough for people to adopt and carry out?
- Is it practical and possible for professional staff to give adequate guidance?
- Can it be used as a teaching medium for others?
- Can the program, where carried out, be used as an example of what extension can do?
- Are the results readily observable and able to be accomplished within a relatively short time?

f. Prepare statements of the objectives:

- For the persons or groups that were involved in determining the program;
- To incorporate into the written program; and
- For use in informing interested and concerned persons and groups.

The planned program (4). A planned program should be recorded in written form and copies made available to all cooperating groups. This is necessary to avoid later misunderstanding as to what was agreed and to serve as a criteria for measurement of achievement. A good written program will normally contain:

1. The names of persons who planned the program and the procedure followed;
2. A situation statement of needs, interests, and identified problems;
3. Statement of agreed objectives; and
4. Provision for coordination with other groups, agencies, and organizations.

Plan of work (5). The plan of work is a primary tool of the extension worker which he prepares for his own use as an aid in attaining the objectives of the program. A plan indicates specific action to be taken, by whom, when, and where, and what accomplishments are expected. It includes a list of the required resources and how they are to be procured.

The following are some guiding principles which may prove helpful in preparing and using a plan of work:

1. It is based on the planned program and includes the extension methods and other means to achieve the stated objectives.
2. The plan of work should be revised as needed to reflect progress and changes in goals and objectives.
3. It should include necessary procedures to accomplish program objectives, establish calendars of activity, and designate responsibilities.

4. The total extension job specified in the plan must be practical in terms of staff, time, and other available resources.
5. The annual plan of work should be realistic in terms of possible accomplishments--these to be limited to a few improved practices which can be observed readily by the people and the extension workers.
6. It should incorporate appropriate evaluation procedures to appraise changes in the people reached.

Execution of the plan of work (6). Program action is the "heart" of the extension education process. It is here that people learn improved skills, gain knowledge, and are led to change their attitudes.

The first requirement for successful program action is sound technical knowledge on the part of the extension worker. For example, he should know the kind and amount of fertilizer most effective in rice production. The second is the use of extension teaching methods suited to the subject matter and to the people involved. For example, the result demonstration is effective in showing illiterate farmers how they may use fertilizer to increase rice yields.

The value of advance planning of each program activity cannot be over estimated. This includes making sure that all involved know their responsibilities and how to carry them out--advance preparation of teaching aids, checking on supplies and equipment to assure their availability well in advance of the time they are needed, and special efforts to make each activity a useful learning experience for all participants.

It is usually easy to find a few individuals in a community who will change their practice under close supervision and guidance of the extension worker. The real test of an extension program is the extent to which improved practices, skills, and attitudes are adopted by the masses of rural people.

Some examples of effective extension work appear in the Appendix. These demonstrate the potential. But, in most developing countries, only a small portion of the rural population has been exposed to any form of extension education. There has been little appreciable effect, either upon the economy

of the country or upon the level of living of the people. Extension education as a broad public service cannot be justified on the basis of its value to 5 or 10 percent of a country's population.

In an advanced country, there are many channels through which people obtain new knowledge on a mass basis. Vocational schools, newspapers, radio, television, farm journals, commercial advertising, salesmen, fieldmen, and many others contribute. In primitive cultures a single government agency lacking adequate financial resources, may be faced with this and many other tasks.

The great challenge to extension educators under these circumstances is to find and develop channels of communications to reach the masses of rural people with a practical educational program, and to do it within the resources available for this purpose.

Reports from a cross-section of countries provide examples of widespread adoption of certain improved practices in limited areas. Carefully prepared case studies should show the factors responsible for success under existing conditions. Such studies should provide useful information in planning and applying these practices on a nationwide basis in other countries with similar situations. Much more study is needed to determine the processes through which people of varying cultures receive new knowledge and are influenced to change practices and attitudes.

Appraisal of accomplishment (7). Periodic evaluation in terms of objectives of the program provides a basis for continuous improvement. Plans for evaluation need to be included in the plan of work. This may involve an accurate description of the situation existing at a given time, a record of changes proposed and accomplished, and the periodic description of the situation as it changes with time. Educational methods may also be evaluated to determine their individual and collective influence in inducing change. The results of such evaluations are useful only as they are used in planning future programs.

The foregoing seven steps discussed in sequence list logical procedures in starting and executing successful extension programs. They should serve as useful guides to all extension workers.

IV. STAFF DEVELOPMENT

A well-trained competent staff is essential to successful extension work in any country. Such staff includes not only extension workers who have direct contact with the families in the villages, but also specialists, supervisors, and administrators of the extension program.

Situation

Countries around the world are moving forward in staff training and staff development. Many have organized extension training centers teaching both subject matter and extension methods, with courses varying in length from a few months to 2 years. More preservice training is being provided through the addition of extension courses in the agricultural departments of some colleges. Home economics teaching is being established at the college level in a few countries.

Increased emphasis and attention is being given to induction training for new workers and to planning and organizing inservice training. Training conferences, workshops, and seminars are being conducted on an organized basis in many countries, the length of time varying according to needs and opportunities.

Training outside the country continues to be a major contribution to staff development. In the fiscal year 1960-61, 262 participants from other countries came to the United States to study cooperative extension specifically. In addition more than 1,000 participants studied extension methods as a part of other technical training and many studied in other countries.

Extension training is being broadened. The 15 countries which replied to a questionnaire sent to USOMs, reported some training had been given in extension philosophy and values, organization and administration, supervision, teaching methods, program development, leadership development, and evaluation. However, all these countries reported a need for more emphasis in most of these areas. Obviously the lack of well-

trained staff continues to be a major problem facing countries in developing effective extension programs.

Problems in training and staff development vary from country to country. Those reported below represent some of the most significant problems of general concern:

1. Career service is not an established policy in personnel administration. There is need for a system of rank and promotion. Appointments often are made on a political basis rather than on merit and training. Insecurity of tenure leads to many problems. More favorable working conditions should be developed.
2. There is lack of adequate technical training in agriculture and especially in home economics.
3. Staff members with formal subject-matter training often lack the practical experience essential for doing an extension job.
4. Well-organized, appropriate staff training is lacking at the various operational levels.
5. Insufficient understanding of extension philosophy and principles generates poor working relationships within the staff and also with other agencies and groups.
6. Lack of facilities, equipment, and space for staff training presents major problems.
7. It is difficult to find men and women willing to live and work in villages.
8. Women are often faced with traditional and religious restrictions which make it difficult for them to work in a professional capacity and on an equal basis with men.
9. Low salaries, inadequate office space, lack of transportation and working materials are inhibiting factors in the recruitment of qualified personnel.

10. More and better training is needed for specialists and leaders.
11. There is need for extension workers with a higher educational background. In some instances those at the local level cannot read or write.
12. Too little opportunity exists for advanced study such as sabbatical leave.

Guidelines for Training

The accumulated experiences in extension staff training and development in some areas point out certain successful procedures which may be useful in less experienced countries. It is hoped that the following such procedures or guidelines will be of assistance to all country extension officials as they move forward in establishing effective training and staff development programs.

A country staff should be recruited and trained to carry out definite extension functions. These deal primarily with:

1. Administration, leadership, and management;
2. Program planning, execution, and evaluation at all levels--in the village, the province or state, and in the ministry; and
3. Personnel management and staff development.

The country staff should be small in the beginning. This is necessary because of the big job involved in training staff members in the meaning of extension, how to study the situation, and how to work with people. The staff would need to be expanded at all levels as the program develops, consistent with good administration and country resources and needs. In the beginning, the staff at the national level may perform several functions such as supervision, training, and the work of technical specialists.

However, to insure the development of a sound program, it is important to employ enough supervisors to give needed training and guidance to village workers. With the

limited formal education of local workers in many countries, a supervisor should be responsible for fewer agents than in countries where agents have had more adequate training in subject matter and methods. Supervision must be more intensive in these situations.

Subject-matter specialists are needed. Serious consideration should be given to the need for specialists as each subject matter area assumes importance in the extension program. Usually the number of different kinds of subject-matter projects is limited at first and expands as the program develops.

For example, if improved rice production and the marketing of rice were two of the major projects in a country, one specialist may necessarily have the responsibility both for production and marketing in the beginning.

As the program expands there may be need for a specialist for rice production and another for marketing. Only subject-matter specialists can assure that the technical information is sound and the methods used are applicable and effective.

A well-planned and organized training program needs to be developed. It should include such essentials as:

1. A written training policy approved by administrative personnel and understood by all staff members;
2. A clear statement of the purpose and scope of training;
3. Plans for determining training needs and priorities;
4. Plans for identifying individual workers who need training;
5. Outline showing how the training program is to be conducted;
6. Assignment of responsibilities for training,
7. How staff is to be involved in planning and carrying out training; and
8. Provision for evaluation of staff training.

An adequate training program has special characteristics. It should be:

1. Official--supported by written administrative policy and procedure;
2. Purposeful--directed toward definite objectives with provision for evaluation;
3. Cooperative--planned by trainer and trainees together;
4. Well oriented--based on individual needs and allowing for individual differences;
5. Dynamic--directed toward improving the ongoing educational program;
6. Flexible--adapted to change in personnel, and emphasis in program content;
7. Comprehensive--helpful to each staff member in developing personal satisfaction and improvement of extension's functioning;
8. Continuous and long-lived--available throughout professional life of personnel;
9. Developmental--directed toward answering the maturing needs of individual extension workers;
10. Well organized--planned to achieve continuity, sequences, and integration in experience of learner;
11. Imaginative--able to use most advanced thinking and try new approaches;
12. Efficient--capable of using the best natural and human resources; and
13. Scientific--based on scientific information.

Some areas of competency are important for all extension workers. This applies to administrative and supervisory personnel as well as village workers. While each employee will have special training needs according to his own job requirements, some general information is needed by all in the following areas:

1. Extension Service--extension objectives, organization and policies, office management, business procedures, personnel responsibilities, qualifications, evaluation at all levels;
2. Human development--developmental process of people, behavior patterns, group dynamics, group interaction, understandings, and skills needed in human relations;
3. Program development--program determination, execution, and evaluation. The role of the extension workers, use of lay leaders, and the involvement of people;
4. Educational process--principles of learning, learning processes--how to motivate people--methods and techniques;
5. Social systems--basic reference groups (family, community, church), power structure, control group, how to identify local culture (social, economic, etc.), how to identify and develop leaders, group processes, social action;
6. Communication--oral communication (speaking, counseling, face-to-face contacts), written communications, mass media methods; and
7. Research and evaluation--measuring the effectiveness of ongoing programs, value of experimental approach (pilot projects), methods of measuring progress and results and of assisting people to evaluate their efforts.

In addition to general training for all staff members, special instruction is needed for each segment of the extension staff. The following groups need the types of training indicated:

1. For specialists
 - a. Role of the specialist;
 - b. Intensive training in the subject-matter specialty;
 - c. The specialist's function in extension program building;

Staff Development

- d. Effective techniques in extension teaching;
- e. Working relationships with other staff members; and
- f. How to analyze and interpret economic and social data.

2. For supervisors

- a. Role of the supervisor;
- b. Broad training in technical agriculture, home economics, and in their application to current rural problems;
- c. Public relations;
- d. Personnel selection, interviewing, counseling;
- e. Job analysis;
- f. Personnel management, evaluation, and training; and
- g. Program development and supervision.

3. For local extension workers

- a. Training in applied agricultural and home economics science at a level high enough to merit the confidence of local people; and
- b. Skills in demonstrating improved farm and home practices.

4. For administrators at all levels

- a. Role of the administrator;
- b. Principles of coordination and direction; and
- c. Personnel management and development.

5. For secretarial and clerical extension workers

- a. Meeting the public and giving out information;
- b. Office housekeeping; and
- c. Records, reports, and filing.

Several elements of staff development are recognized as essential for maximum effectiveness in the development of an extension program. These include the different procedures involved in recruitment, selection, and employment, also incentives which are discussed in the order stated.

Recruitment is the concern of all working in extension. Everyone should be encouraged to look for good personnel--persons who will be a credit to the organization. In order to recruit successfully, several procedures should be considered--criteria on personal qualifications desired of employees, recruitment notices, application forms, and job descriptions.

1. Criteria on personal qualifications include:

- a. Familiarity with the region;
- b. Acceptability to those being served;
- c. Aptitude and potential competency in extension work;
- d. Ability to work with people to gain their confidence;
- e. Willingness to live in the area to be served and to work under existing conditions;
- f. Health to do the job;
- g. Acceptance of the idea of devotion to public service;
- h. Ability to work with associates and with other agencies;
- i. Ability to motivate people to action;
- j. Ingenuity--ability to improvise and adjust;
- k. Experience and training in the technical subject matter to be used; and
- l. An educational level consistent with the working situation.

2. Recruitment posters or leaflets have been developed by some countries to

inform prospective agents about services in this new field. India has printed both posters and small, simply-worded leaflets about the work of the Gram Sevika (women village workers). Other countries have told in well-illustrated booklets some of the activities of agents.

3. An application form helps the applicant and those recruiting to envision the qualifications an extension worker needs, and promotes organization stability and status. It helps to place employment on a merit basis and frees it from political pressures. An application form also serves as a screen device.
4. Job descriptions need to be prepared for all types of extension jobs, based on local conditions. Key factors to consider in writing job descriptions are to:
 - a. Arrange jobs in logical order;
 - b. State separate jobs clearly and concisely;
 - c. Begin sentences with functional active verbs such as teaches, tests, performs, makes, assists, leads, and organizes;
 - d. Use quantitative words where possible (how much, for example);
 - e. Use specific rather than vague words (avoid such words as perhaps, strive for, and should be);
 - f. State duties as duties (say teaches rather than should be able to teach);
 - g. Avoid generalizations (be positive and specific);
 - h. Determine or estimate the percent of total time spent on each activity and indicate whether duties are regular or occasional;
 - i. Limit use of the word may with regard to performance of certain duties (such words as routine, daily, periodic, and occasional, if well defined, will make the meaning more specific and clear).

Selection and employment of competent people is essential. To make satisfactory selections and encourage employment of qualified workers, certain factors should be considered, namely:

1. Setting up a career service plan as rapidly as possible. It should provide for:
 - a. Employment and promotion on merit rather than political appointment;
 - b. Salaries commensurate with other government agencies and private industry; and
 - c. Care of personnel in case of illness or accident.
2. Establishing personnel records. It will be the function of administrators to decide who is responsible for these and what records are to be kept.
3. Training in interview techniques for those responsible for interviewing personnel. This may include:
 - a. The kind of preparation needed for the interview;
 - b. How to describe the job;
 - c. Obtaining complete and accurate information;
 - d. How to ask questions;
 - e. Taking notes;
 - f. Length of the interview;
 - g. Interpreting the information; and finally
 - h. Evaluating the applicant.

Incentives should be employed to stimulate initiative and productivity. Employees should be encouraged to strive constantly to improve their own performance. Without elaboration, the following incentives have been found helpful in accomplishing this objective:

1. Participation in planning;
2. Participation in conducting programs;

3. Awards or certificates;
4. Commendatory statements; and
5. Public recognition by press, radio, and other means.

Types of Training

The training of extension personnel is one of the most important aspects of a successful extension organization. Training is usually a continuing process involving all extension personnel periodically or as needed to keep them abreast with the technical and human problems they face. The three principal categories of training--preservice, induction, and inservice--are now discussed in the following sections.

Preservice training is usually defined as in-school study of subject matter, extension principles and methods prior to employment. It is a long-time program and involves outstanding educational institutions of the country. The following guides will be helpful in planning effective preservice training for future 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 observations 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.

Induction training is usually thought of as training provided after the worker is employed. Such training is considered here as that part which begins the first day the new worker is on the job and continues through his first year of employment. In some countries, where there are no institutions of higher learning to provide preservice training, induction and preservice training become so blended that it is hard to say where one leaves off and the other begins. In both cases, the government may be providing the training and maintenance for the prospective staff members while they are being trained.

The induction training period is an extremely important time for the new worker. The success that he and others desire during his first year of employment is likely to come only if he understands what is expected of him, feels he is an important part of the extension service, feels secure in his work, and receives deserved recognition. An induction training program may include:

1. Brief orientation at the headquarters office under the guidance of the supervisor to become acquainted with the organization; and
2. Field experience under the direction of experienced workers. A written

guide suggesting reading and activity assignments, with a place to record accomplishments, will help both the new employee and the trainer to make the learning experience more complete and satisfactory.

The supervisor should work with the new extension agent and trainer to personalize the guide. This guided observation and participation with experienced workers may well last 4 to 6 weeks. The training area or county should be selected on the basis of the ability and attitude of the trainer agents, and they should be instructed how to work with trainees.

During this training period new extension workers should have opportunity to experience some of the things they will later be expected to know, such as:

- Making simple and informal surveys;
- Making and using visual aids;
- Preparing and giving a method demonstration;
- Observing result demonstrations; and
- Making farm or home visits.

In Costa Rica, trainees are required to do things which demonstrate their skills. For example, a home extension agent makes a flannelgraph, a demonstration set of steps in "patching", and similar teaching aids.

3. Visits to nearby counties or villages to observe agents as they conduct one or more phases of an extension program in which they are particularly proficient. This enables the trainee to see various kinds of programs and the different approaches being used.
4. Study assignments. While "learning by doing" is the most effective method of training, the combination of studying and doing is valuable. It also teaches the new agent how to use resource material.
5. Group training in subject matter and methods. The new worker is not trained until he has developed the knowledge, skills, and techniques that will enable him to be an effective ex-

tension worker. It is necessary to provide group training based on the needs of the agents. For example, these may include:

- Youth organization and projects;
- How to work with women in groups;
- How to control certain insects;
- How to dry vegetables and fruits;
- How to treat seed; and
- How to help people recognize their needs.

6. Personal conferences with the supervisor to appraise progress and plan specialized training needed, and
7. A final evaluation session with the supervisor at the end of the induction training to analyze progress, give recognition, and plan for any additional training needed.

Special consideration must be given to those who are responsible for training the new agents. The trainer extension agents must be willing to give sufficient time to the trainees in helping them to understand the various job requirements. The trainer agents obviously need special experience and instruction for this responsibility.

Inservice training is needed to refresh extension workers at all levels. It is aimed at filling in the gaps in previous preparation, bringing subject-matter training up to date, developing ability to carry out the extension program, and stimulating continued professional growth of extension personnel.

1. There should be a well-planned and organized program for inservice staff training at all levels. The planning process should identify training needs and procedures such as:
 - a. Analysis of job;
 - b. Analysis to determine program emphasis and needed changes;
 - c. Evaluation of performance;
 - d. Survey of individual workers to determine their interests and ideas

of own training needs (extension workers should be involved in this identification); and

e. Problem-orientation of training.

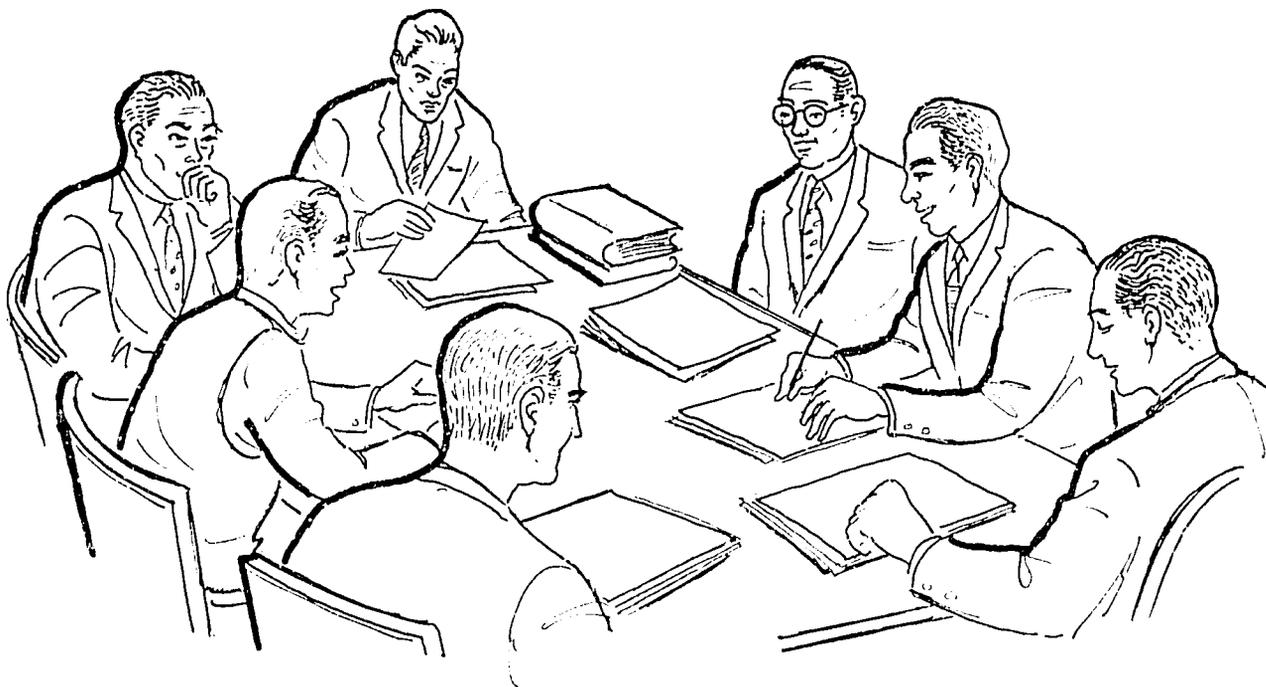
2. Inservice training should be adapted to the needs and responsibilities of individuals and groups.

a. Individual training includes personal counseling, and self-help study under the direction of the supervisor, and supervisor participation in program evaluation and individual performance; and

b. Group training to meet common needs can be accomplished through workshops, short courses, conferences and seminars.

3. Inservice training involves priorities and time tables. All existing channels of communication through which training might be achieved should be considered. Since more training needs will come to light than can possibly be undertaken in any year, it will be necessary to arrange them in order of importance to the program and to the individuals concerned, and concentrate on the most important ones.

Inservice training should be continuous throughout the period of employment, but spaced according to needs as workers mature on the job. While up-dating technical subject matter is a continuing training need, workers are generally concerned at first with organization and methods of reaching people. Later on, they become involved with program development.



V. SUGGESTIONS AND RECOMMENDATIONS

From the preceding discussions dealing with various aspects of overseas extension programs and problems, pertinent suggestions or recommendations are summarized and directed to involved individuals, agencies, and institutions. Some of the recommendations are interrelated and apply to more than one group or category.

Suggestions to Extension Advisers

Extension workers fill the important role of working with the administration and people. They realize that:

It is important to start the program correctly. In starting extension, it is essential that it be related administratively to one ministry or institution. A full time director of extension should be appointed as soon as field operations justify it. A potentially large program may start in small ways and areas. As it develops the required division heads and specialists may be added. Experience with field organization and development will identify persons with qualifications to serve in administrative and technical capacities.

A capable counterpart is needed to make the adviser's services more effective. The offices of both should be near or combined.

A well-rounded staff should be trained and properly deployed for an extension organization to become fully effective. Staff members who are competent to discharge the following functions will be required:

1. Leadership and management, including:
 - a. Direction;
 - b. Supervision; and
 - c. Training and development of personnel.
2. Program planning and evaluation:
 - a. Formulation and clarification of objectives;

- b. Planning programs to achieve objectives (jointly with people involved); and
 - c. Evaluation of results of these programs.
3. Personnel management, including:
 - a. Job analysis and description, job evaluation, pay administration;
 - b. Recruitment, employment, employee evaluation and placement, employee relations; and
 - c. Personnel records.
4. Financial management and control, including property.
5. Technical subject-matter support--in all areas of agricultural endeavor including farm family living and youth development.
6. Supporting services for instruction, such as:
 - a. Visual aids, charts, exhibits, publications, and other materials for mass media education; and
 - b. Evaluation of extension teaching methods.
7. Local field work--local agents who can provide educational leadership to farm families in helping them solve their problems in farming, family living, and youth development.

Agricultural production should be related to general development. National and family economic development and any rise in the level of living requires (1) increased efficiency in production and an expansion in over-all production and (2) those public or private services designed to improve standards of living. These include more general education, improved facilities for health and sanitation, better roads and transportation, dependable communications, and credit and marketing facilities. Therefore, the quality, scope, and continuity of these services depend upon the revenues derived from production.

There must be a balance between production of wealth and its consumption, particularly in countries where agriculture is the predominant source of national income. Extension will profit in these cases where national governments and ICA allocate their resources and coordinate those programs concerned with raising revenues. Production programs should complement and keep pace with other extension activities which are designed to raise living standards.

For example, village or community programs may require as much effort and attention to revenue-producing program, agriculture primarily, as to all those concerned with education, public health, credit, markets, and facilities. These considerations are helpful in comparing the position and importance of extension work to general community development.

A recruitment procedure should be established. When the extension service of the host country has to recruit new or replacement personnel, it is wise to adopt a standard procedure or routine. Such a routine ties administration to training and operations. It further helps in dealing with influential people who want jobs for their friends.

To illustrate this point, consider the method used in country X. A man comes to the director and asks him to hire a friend. The director smiles and says: "Sure, send him in. We'll have him interviewed by our personnel committee which talks with every prospective employee. Then if they recommend him, he goes to our preservice training school for 6 months. He will get free board and room, but no salary while in training. Then every man who completes the school is put in a job for a 3-month trial before permanent employment."

Such a routine eliminates the incompetent and lazy ones before employment.

Close working relations among extension advisers and other technicians are important. A basic principle of extension teaching is to involve as many of your associates and farm people in programs as possible. All will benefit by such an arrangement.

The extension adviser should see that participants receive all available training in their own country before being sent out of

the country for additional training. Home training is economical, is done under local working conditions, develops training facilities which the country needs, and, if properly conducted, will attain many of the results derived from expensive training in the United States or elsewhere.

Suggestions to Mission Directors

The mission director has several functions which are important to the success of the extension effort. They include:

1. Preparation for the initiation of an extension program;
2. Allocation of responsibility for programming;
3. Stimulation of country planning which grows out of a sound program planning process (this should involve USOM and ministry officials, and others involved in setting up an extension service);
4. Organization of division of agriculture in USOMs along institutional or functional lines in order to clarify relationships and increase staff effectiveness; and
5. Responsibility for the coordination in USOM of similar programs. (Note sections 1-5 in the following paragraphs).

Suggestions to USOM's

The USOM's have the overall responsibility of gearing technical assistance activities, within their jurisdiction, to the recognized needs of host countries. It is essential, therefore, that USOM and host government officials understand the meaning of extension and coordinate their organization and activities to accomplish agreed objectives.

Following are important institutional elements in the agricultural development of any country.

1. Organization and administration of a ministry or department of agriculture;

2. Strengthening of research;
3. Strengthening of informal education (extension);
4. Providing a favorable situation for agricultural development through legislation or ministerial decrees; and
5. Development of supporting services such as credit, markets, and agricultural production equipment and supplies.

The USOM agricultural staff must assist with all five of the foregoing suggestions. All technicians, regardless of their vocational fields should understand and support the programs of other technicians, being responsible at the same time for their primary assignments.

Country training should be provided when possible. Every advantage should be taken of training opportunities at home where problems and conditions are familiar. This is particularly true in technical and production programs.

Participants need more orientation. USOM's should give participants more orientation on the objectives of their United States study before they depart. Likewise, there should be more follow-up to encourage the participants to use the acquired information upon their return.

Suggestions to Host Countries

The success of technical cooperation depends largely upon the desire of the host country for help and its capacity to provide favorable operating conditions for joint programs. The following provisions by the host country are essential to a successful extension operation.

A well-trained and adequately-paid extension director with permanent status is essential in the development of an extension program.

Extension operations should be free from political interference. All personnel should be employed on a merit basis.

A career service idea should be developed and supported.

The host country should provide professional personnel and facilities which are essential to a successful extension program.

Extension seminars should be held by host countries for their officials. Extension work is a new type of education and for this reason is not well understood. Government officials in related agencies need to develop a thorough understanding of extension principles, techniques, and objectives as they are expected to cooperate in carrying on work in the villages. Many may have no idea of the extension approach--its methods and adult educational process--and little concept of involving people. Some government workers have limited respect for the native intelligence of village leaders.

In order to overcome this lack of knowledge about the extension service, it has been found that a series of seminars, or conferences can be very effective. Such seminars are held for 1 to 3 days under favorable conditions. High ranking officials from all related government services are invited and urged to come to the first such seminar. This would constitute a comparatively small, select group.

Later, following the seminar for top officials, several key representatives from various departments of the ministry or from related agencies will be invited to seminars. By this arrangement, all involved officials at various levels should gain the proper perspective of extension.

The seminar programs should be interesting and convincing. The philosophy, objectives, methods, and mutual concerns should be explained in a manner that will encourage friendly cooperation and intelligent understanding. Skits, music, exhibits, demonstrations, and well-qualified speakers with visual aids should be used. Such seminars should develop mutual understanding and concern of rural improvement programs and effect coordination. They should also help to change apprehension about the extension service into an intelligent understanding.

APPENDIX

Summary of Questionnaires on Overseas Extension Activities

Questionnaires were sent to missions of 17 representative countries in various parts of the world to obtain tangible information on extension activities. The following information was requested of each country:

- Type of programs being conducted;
- Impact of extension on people and production;
- Youth work activities;
- Home economics activities;
- Methods used in program planning;
- Methods used in evaluation of extension activities; and
- Ratio of extension workers to rural people.

Fifteen of the countries responded, answering all or a part of the questions raised. Because of the nature of answers, the results are presented in general statements rather than statistically.

Extension-type programs now being carried out: The scope and nature of extension programs in cooperating countries vary greatly. Some have fairly mature extension organizations which reach a sizable percent of the rural people, while others are just beginning.

Impact of extension on people and production: Most countries have programs in crops and livestock. For example, the chain system of distributing the offspring of sheep, goats, swine, and poultry is working satisfactorily in many countries. Some of the other accomplishments mentioned in this report, as described in the following paragraphs, were extracted from questionnaires of the various countries.

Improved breeds have been introduced. Pest and disease control practice are being adopted by an increasingly large number of farmers (Colombia).

Fifty percent of farmers assisted have doubled yields in rice, corn, and beans. Onion production tripled. Half of the people assisted by extension are now producing and eating vegetables and fruits the year round.

Seventy-five percent of dairymen assisted are controlling dairy cattle parasites. Trench silos are now being used. A number of commercial poultry installations have been developed. Numerous small poultry projects have been started with adults, boys, and girls (Honduras).

Sixty to 70 percent of farmers are using improved varieties of seed (one province in Libya).

An island-wide campaign was organized to control the rice borer. One thousand farm and 4-H Club advisers assisted in educational work with farmers on use of insecticides. As a result, the pest was held in control and the fall rice crop was much larger than originally forecast (Taiwan).

Swine and poultry 4-H projects were organized. Monthly training meetings were conducted for agents on feeding, sanitation, and pasture programs.

Method demonstrations were established in rice and vegetables with field days--tours. Many farmers are following improved practices (Vietnam).

Extension demonstrations of improved varieties and better cultural practices were held. Farmers gathered in meeting to discuss problems. Keen interest was generated in the potential of hybrid corn using United States seed (Kabul Province--Afghanistan).

Farmers are producing 220-pound hogs in 6 instead of 18 months. There is widespread adoption (Brazil).

Youth work activities: The 4-H type of club has been found an effective way to meet and interest young people. Projects through which boys and girls learn skills that

improve agricultural production or home living are the core of this phase of extension work. This is similar to the early days of extension work in the United States. Some results reported by countries are:

- Colombia574 clubs with 9,050 members
- Costa Rica4,800 members in 4-H Clubs
- Honduras59 clubs, 913 members with 617 individual club projects in agriculture and home economics
- Jamaica592 clubs with 29,000 members
- Philippines4,708 clubs with 115,828 members
- Taiwan5,277 clubs with 65,334 members

Home economics activities: Women like to meet in groups to learn new skills and knowledge. Many countries report successful clubs for women where they learn such things as better ways to care for their babies, how to select and prepare food for their families, or how to make improvements in their kitchens. Taiwan, with 10,000 organized in home improvement clubs, and the Philippines, with 46,670 women in 1,804 rural improvement clubs, are examples.

The subject matter used in the most successful of these club meetings involved helping rural women solve basic problems. Often programs have started with baby care, a field in which all mothers are concerned, as many of the babies die in infancy.

Personal contact is the most effective method for teaching young people, as well as their parents. Visits by agents to the home or the field are very important, especially in the early stages. So many skills must be taught that the method demonstration, with its convincing evidence, has proven a natural tool for extension workers. Result demonstrations are being used over the entire world. Seaman A. Knapp's statement that "What people hear they often doubt, what they hear and see

they may accept, but what they do themselves they cannot doubt", is proving true repeatedly today.

Methods used in program planning: Costa Rica reports that five extension councils have been developed to date and that they plan to develop more. The loyalty and understanding built up in such councils is illustrated by an incident from a Near East country. Farmers from one community had worked with their new agent to plan an extension program. When a change in government led to some mob action against government offices, these committeemen stood in front of the agricultural agents' office and said: "You can't destroy this. It is ours." Any extension worker feels he has achieved considerable success when the people he works with say the program is theirs.

Methods being used in evaluating extension programs: Iran provides an example of a country keeping records to indicate progress. This country reports the following changes:

	Number Demon- strations	Attend- ance	Adop- tion
1. Food pro- duction	5,222	52,542	80%
2. Clothing	4,217	47,763	85%
3. Fertilizer...	2,109--	(Consumption in- creased from 35,000 to 50,000 tons)	
4. Wheat seed improve- ment	4,217--	5,761 tons dis- tributed	

Ratio of extension workers to rural people: The 15 reporting countries estimated that the total population served by organized extension in their respective areas varied from 1.8 percent to 90 percent. Five of the countries reported that 50 percent or more of the population lived in areas served by extension. The relative percent of people influenced by the extension program is unknown. (Information on the ratio of extension workers to the population is presented on page 5 of the text.)

Conference Participants

The participants of the conference were selected because of their extension background in the United States and overseas. They worked as a group on problems and procedures of a general nature. As three subcommittees or working groups, they discussed and reported on the three major topics: "Extension Organization and Administration", "Program Development and Implementation", and "Staff Development for which the conference was convened.

Organization Committee

- A. H. Maunder, Federal Extension Service, USDA - Chairman
- G. G. Gibson, Specialist in Agricultural Extension,
Chief, Agricultural Institutions Branch, ICA
- Katharine Holtzclaw, Home Economist, Agricultural Institutions Branch, ICA
- Sue T. Murry, Extension Educationist, Foreign Educational Branch,
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- Helen Strow, Extension Educationist, Foreign Educational Branch,
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- C. A. Svinth, Director, Extension Service, Washington State University
- Leona MacLeod, Home Economics Extension Adviser, Korea, ICA
- Glenn Lehker, Extension Entomologist, Purdue University, Indiana

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Group 3. Staff Development

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- Katharine Holtzclaw, Home Economist, Agricultural Institutions Branch, ICA
- Mary Louise Collings, Chief, Training Branch, Division of Extension Research and
Training, Federal Extension Service, USDA
- Madison Broadnax, Extension Adviser, Sudan, ICA
- Nellie Watts, Retired, State Home Demonstration Leader, Ohio State University
- Sue T. Murry, Extension Educationist, Foreign Educational Branch,
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