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Module 2: Extension Methods and Tools

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In 2012 GFRAS developed the "New Extensionist" document, which details the role that extension plays in an agricultural innovation system, and the strategies and capacities needed (at individual, organisational, and system level) http://www.g-fras.org/en/activities/the-new-extensionist.html. Based on this document the GFRAS Consortium on Extension Education and Training emerged to promote the new extensionist, mainly through training, curricula review, and research on extension.

Special thanks go to a core group of GFRAS Consortium on Education and Training.

The Learning Kit contains 13 modules designed for self-directed, face-to-face, or blended learning and can be useful resource for individual extension field staff, managers, and lecturers.

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1. Before you begin

1.1 General instruction

This module should be used in conjunction with the workbook provided. As you read through the module, you will find different visual features that are designed to help you navigate the document.

Figure 1: Icons used to highlight important information throughout the manual

The module makes use of keywords (difficult or technical words that are important for you to understand). To ensure that you receive the full benefit from the module, keywords will be marked the first time they occur and defined in a box containing the keywords symbol. Make sure that you read the definition of any words that you are unsure about.

1.2 Activities

Each session in the module will contain various types of activities to help you become knowledgeable and competent. The module contains three types of activities:

A **pre-assessment** is to be completed before reading through the module overview and introduction, and a **post-assessment** is to be completed once the entire module has been covered. This will measure the degree to which your knowledge has improved by completing the module.

Each session contains one or more **session activity** to be completed in the workbook where indicated in the module. These activities measure your ability to recall and apply theoretical knowledge.

At the end of each study unit a **summative assessment** needs to be completed. These assessments are longer than the session activities and will test your knowledge on all the work within the study unit.

1.3 Assessment instructions

Keep the following in mind before doing any of the assessments:

- All assessments are to be completed in the provided workbook.
- The manual contains all relevant information you will need to complete the questions. If additional information is needed, such as the use of online sources, facilities will be made available.
- Work through the activities in a study unit and make sure that you can answer all the questions before attempting the summative assessment. If you find that you are not certain of any part of the training material, repeat that section until you feel confident.
- The summative assessment must be done under the supervision of your trainer at the end of your learning period.

Module 2: Extension Methods and Tools

Module outcomes

After completing this module, you will be able to:

1. Describe the role of extension in innovation and development and how it has changed over the years;
2. List and explain the major extension approaches;
3. List and explain the features of different tools and select appropriate ones based on programme goals and local context; and
4. Make informed decisions and identify the appropriate approaches and tools to fit local conditions in response to changing contexts.

Module overview

In this module, you will learn about the role of extension in innovation and development. An overview of the history of extension, its development and its status as a science and profession will be investigated with the second half of the module focusing on the tools and approaches available to you as an extension practitioner, and how apply them.

Module introduction

Extension professionals must be aware of the changing tools and approaches to extension and be able to assess and select the appropriate tools and approaches to suit the conditions they work in. As an extension professional, you will deal with many challenges such as supporting farmers to adapt to climate change, helping farmers to access high-value markets, organising farmers into groups, dealing with issues related to natural

resource management and marketing. It is more important than ever before to professionalise extension services, and efforts are already underway to put standards and **certification** in place.

Certification: A process of ensuring that individuals have the skills and abilities required for a specific purpose.

Complete the pre-assessment in your workbook.

Study unit 1: Innovation and development in extension

Study unit outcomes

After completing this study unit, you should be able to:

- Describe the role of extension in stimulating change;
- Explain how different disciplines have contributed to the extension science;
- Describe how research and scientific journals contribute to the improvement of extension services;
- Explain the importance of extension as a profession; and
- Describe the role of a code of conduct in improving public confidence.

Study unit overview

In this module you will learn about the critical role of extension in the rural sector and the changing nature of the rural sector since the early days of extension. An introduction to key terminology will assist in your understanding of the second study unit. The current status of extension as a science and profession will be investigated as well as the goals for extension in the future.

Study unit introduction

The science and practice of extension has changed over the past few decades in response to new challenges. As a new extensionist who contributes to the agricultural **innovation** system, you must play many roles and use a wide variety of approaches and tools. Extension professionals have to make choices on which approaches and tools are most suitable for their needs. This module explores the role of extension in rural

innovation and **development** and how this role has changed. It also discusses the major extension approaches and tools, as well as highlights their features to help you choose the right ones for your needs.

Innovation: The process of generation, diffusion, adaptation and use of knowledge.
Development: A process where something grows to become larger and more advanced.

Session 1.1: The value of extension

Session outcomes

After completing this session, you should be able to:

- Describe the role of extension in stimulating change.

Introduction

Extension is seen as a major influence in furthering rural innovation and development. Although it was originally developed to educate farmers on new agricultural technologies, the theory and practice of extension has changed over the past five to five decades. New approaches have examined the role of extension as a link between researchers and farmers. These approaches have also added to the work of extension originally envisioned under the transfer-of-technology approach in the 1960s, which was a system based on the linear transfer of technology and knowledge from developer to user. Key insights from **participatory** research and extension, adult education, rural empowerment, farming systems research and extension, agricultural knowledge and information systems (AKIS) as well as the more recent agricultural innovation systems (AIS) have influenced and contributed to the practice of extension.

Participatory: Providing an opportunity for individual participation in an event or process.

Critical role of extension

Agriculture is critical to the livelihoods of more than a billion rural producers. There are many challenges in agriculture today as low-income farmers face a variety of social, economic and ecological difficulties such as:

- Poor infrastructure;
- Complex **agro-ecological** conditions;
- Complex and costly processes of production, processing and sale;
- Some lack of political and economic power leading to limited access to markets;
  - The role of extension is to provide access to high value markets and assist farmers in producing goods that meet continuously changing market standards and consumer preference.
- Diverse socio-economic conditions including full-time farming households and off-farm employment;
- The need for group action in some areas to enable traditional practices (like exchange labour) and soil and water conservation through the management of shared resources;
- The need for extension providers trained to address gender issues due to the high proportions of female-headed households and female farm labour.

Agro-ecology: The study of the interactions between ecological systems and agricultural activity.

The food crisis in 2008, and the resultant signing of the L'Aquila Joint Statement on Global Food Security (AFSI) at a G8 Summit the following year, highlighted the need for improved investment in rural advisory services (RAS) and promotion of extension activities.

Despite developmental efforts, rural poverty, global hunger and undernutrition—with two thirds of the world's hungry and poor currently found in the rural sector—continue. Addressing these problems requires a multidisciplinary approach. The New Extensionist movement is aimed at expanding the role of Extension and Advisory Services (EAS) within AIS in order to meet the ever-changing agricultural needs in rural settings.

Extension in the public sector

Privatisation: The transfer of ownership from the public sector (government) to the private sector (business).
Decentralisation: The transfer of power, resources and functions away from a centralised authority to scattered or private entities.
Capital: Money or goods used to generate a profit.
Private: Not part of, run or funded by government (business).

As you have learnt, extension is often viewed as a national (and global) public good that needs public investment. This is especially true in countries struggling with high rural poverty and food insecurity, but is also true in all countries where disease control and the conservation of natural resources are important. The reduction in public funding led to the **privatisation** of extension and **decentralisation** of extension in many countries. Public-sector extension services, however, remain critical. Governments such as those of some African and European countries with established RAS are able not only to provide education and training but also to assist with the provision of **capital**, equipment and the processing and sale of goods.

The number and types of organisations supporting farmers with information, inputs and services have increased over the last two decades. Many are **private**, non-governmental agencies (NGOs) that, while not always formally considered as offering extension services, provide advisory and other support services to farmers. These include input agencies, farmers' organisations, producers' cooperatives, agro-processors, NGOs, agri-business houses, progressive farmers, individual consultants and consultancy firms, financial institutions and media and Internet services. These extension providers use various approaches and tools to better reach rural communities.

Case study 1: Land-grant universities in the U.S.

Cooperative extension programmes between state and land-grant universities started in 1914 in order to aid farmers and assist in agricultural job creation. A recent economic study has shown that the programme has helped over 137 000 farmers stay in business since 1985. These cooperative extension programmes have led to a remarkable reduction in job creation costs. For example, over a 26 year sample the introduction of extension programmes showed that farmers invested US $265 per year on average, compared to a $100 000 investment per year to create a single agricultural job using traditional state industrial recruitment programmes.

Complete Activity 1.1 in your workbook.

Session 1.2: Extension as a science

Session outcomes

After completing this session, you should be able to:

- Describe how different disciplines have contributed to the extension science; and
- Explain how research and scientific journals contribute to the improvement of extension services.

Introduction

Systematic: Handled or occurring in a planned and careful manner.
Hypothesis: A proposed explanation for a phenomena or principle that requires further testing to be shown to be true.

A science is a **systematic** collection of knowledge on a topic that both explains it and makes predictions about it. The scientific method is the approach used to gather information, test **hypotheses**, observe and contribute new knowledge. Different branches of knowledge can be called disciplines; for instance, physics, chemistry and extension can all be called disciplines.

Contributions to the science of extension

Extension is a particular branch of science called a social science. Other disciplines fall under the natural sciences like biology, geology, physics and so on. Agricultural extension is one such aspect of extension, agriculture being the cultivation of natural products for human use. It is this combination of the natural element and the human and social elements that make extension special. Agricultural extension agents must have knowledge of **agronomy**, crops, animals and natural resources. They must also understand human nature and how people make choices. Thus the extension discipline includes elements of the natural sciences

as well as education, **sociology**, **anthropology**, communication studies and many more. It is a rich discipline with different branches.

Agronomy: The science of agricultural crop production and the production systems used.
Sociology: The study of social behaviour and society.
Anthropology: The study of human culture, its development and history.

Scientific journals in extension

Disciplines need a verified "body of literature" from which to draw and further the growth of the field. The growth of this resource needs outlets for knowledge sharing in order to contribute to the theory and or knowledge about a topic. To ensure the accuracy and validity of this resource, peer review, a method for feedback and evaluation of published work by other colleagues in the discipline, is a major part of any academic field.

An example of this form of knowledge transfer can be seen in scientific journals and periodicals that publish information relating to specific fields of study. These publications follow a strict peer review structure and make up a large proportion of the academic knowledge within a field. For example, there are a number of other documents this manual draws from and which you can see in the references section at the end of the manual. This is true of virtually all textbooks, academic works and journal publications.

The following represents a few of the scientific journals to which scholars contribute:

- Journal of Extension (JOE);
- Journal of Agricultural Extension and Rural Development;
- Journal of Extension Systems;
- Journal of International Agricultural and Extension Education;
- The Journal of Agricultural Education and Extension;
- Indian Journal of Extension Education; and
- Bangladesh Journal of Extension Education (BJEE).

All extension practitioners can contribute to these academic resources. All you need is an original research proposal that will contribute to the field, and a clearly defined goal. The best method to determine the value of your article is to visit extension conventions or annual meetings and share your ideas with your colleagues. Remember that no matter how small the project, whether it is a new teaching method or data you feel is interesting, if it contributes to the field, it is of value.

Case study 2

Imagine that you are a researcher with the Agricultural Research Council in South Africa. You have been working with small-scale farmers to teach them better nutrition practices, but when you go back to visit you notice that they are not using what you have been showing them.

You set up a research study to better understand why the improved feeding techniques are not being used. You collect information about the farmers' demographics (age, gender, schooling and so on), the local production systems and market access, existing social networks and social norms within the community.

During your research you find that the younger educated men in the community are the main group of farmers using the new practices. You decide to talk to them and find that the elders of the community are against the new practice as they are worried that it changes their people's traditions.

In doing the research you are now able to spend more time in discussions with the elders to calm their fears, leading to the adoption of the nutrition programme. You publish your findings as a journal article, which could lead to smoother implementation of extension practice among farmers of the same cultural group.

Complete Activity 1.2 in your workbook.

Session 1.3: Extension as a profession

Session outcomes

After completing this session, you should be able to:

- Explain the importance of extension as a profession; and
- Explain the role of a code of conduct in improving public confidence.

Introduction

A profession consists of a recognised body of practitioners with a common body of knowledge and a code of conduct. It is governed by a legal framework and may need formal registration and continuous professional development. However, in many countries extension is not recognised as a profession and as a result the image and professionalisation of extension in the country suffers. Such status and recognition helps to instil pride, a sense of belonging and moral behaviour, and provide a better service.

For example, there are professional associations of veterinarians, nurses and engineers. The South African Society for Agricultural Extension (SASAE) is the professional organisation for professionals involved in extension.

Professional associations

A profession is usually based on a common body of knowledge that guides and informs practice. Session 1.2 discusses extension as a science and the different contributing fields of science to the extension body of knowledge. Professional associations are not only for individuals but require registration by tertiary institutes to verify that the training they provide adheres

to the standards and code of conduct of the profession. This allows for organisations to confidently hire individuals from other countries who are trained at accredited institutions.

An example of a professional association is the Engineering Council of South Africa (ECSA), which is an organisation allowing for the accreditation of engineering programmes, registration of persons as professionals in specific fields and the continuous evaluation and development of members. International accreditation is provided via The Washington Accord standardising accreditation between signatory countries from Asia, Africa, Europe, America and the Middle East.

Many professions need continuous professional development in order to maintain a member of an association as shown in Figure 1. Once you have finished school, it does not mean there is nothing left to learn. The use of "refresher" courses, additional degrees, seminars and conferences ensure that if you receive your qualification in 2017, you will still be up-to-date with new developments in the profession years later.

Figure 1: Continuous professional development cycle

Code of conduct

In addition to the standardisation of training and professional development, a key aspect of professional associations is the establishment of a code of professional conduct. This is a very important aspect in a field such as extension which has its roots in the social sciences. The code of conduct ensures ethical behaviour among association members and helps instil public confidence in the profession.

Case study 3

A code of professional conduct should guide all professions. You have probably heard of the Hippocratic Oath sworn by physicians to abide by ethical conduct. This oath is seen as the ethical guidelines they strive towards in their day-to-day work. The following is the oath sworn by the veterinary practitioners in South Africa on the day they graduate:

I herewith solemnly declare that I will:

- Practise my profession with honesty and integrity;
- Maintain and uphold high professional and scientific standards;
- Treat my patients to the best of my knowledge and ability and never intentionally cause them harm;
- Use my professional knowledge, skills and resources to protect and promote the health and welfare of animals and humans;
- Continue to improve my professional knowledge; and
- Strive to further the status and image of the veterinary profession.

The code of conduct may also be legislated in the country and thus have a legal framework, such as seen in ECSA which was established based on the Engineering Professions Act, 46 of 2000. The legal framework binds members to the code of conduct, risking loss of membership or even their professional qualification if it is broken.

Take note: An example of the Fiji extension code of conduct can be found on their ministry of Agriculture site at the link below: http://www.agriculture.gov.fj/index.php/divisions/extension

Making extension a profession

The process of making extension a profession is not an easy one but it may be worthwhile. The first step is acquiring government support and a strong group of extension professionals. It is then best to examine existing legal frameworks and see where extension may best fit in. The code of conduct, legal framework, registration requirements and process must be developed, and continuous professional development must take place.

Many countries already have professional associations. The South African Society for Agricultural Extension was established in 1966 and efforts by the association and practitioners led to extension finally being recognised as a science in 2016. This allowed extension practitioners to register with the South African Council for Natural Scientific Professionals, a legislative body providing accreditation to extension education services.

For information about the extension associations in your country see: http://www.meas-extension.org/resources/associations

A key component in extension being recognised as a profession is a thorough understanding of the role of extensionists within AIS. This allows for training programmes to be set up in order to meet specific needs and requirements with continuous development keeping the field relevant to the job at hand.

If you would like to find out more about what defines an extensionist see "The New Extensionist: Core Competencies for Individuals" published by GFRAS: http://www.g-fras.org/en/157-the-new-extensionist.html

Complete Activity 1.3 in your workbook.

Concluding remarks

Following are the key points you should obtain from this study unit:

- Agriculture and extension are critical for supporting livelihoods of millions of rural producers;
- Extension services help rural producers deal with challenges;
- Extension has had a significant impact over the years;
- Public investment in extension services is needed;
- Extension is a science with a recognised body of literature that is published in various journals;
- The discipline of extension has many contributing fields from the natural and social sciences;
- A profession requires a recognised body of work, a code of conduct and a legal framework;
- Professional associations ensure the quality of both extension practitioners and teaching institutes;
- Associations provide opportunities for further development; and
- A code of conduct is key to ensuring public confidence and respect for the profession.

Complete the summative assessment in your workbook.

Study Unit 2: Major extension approaches and tools

Study unit outcomes

After completing this study unit, you should be able to:

- Explain how changing rural conditions lead to the development and promotion of different approaches;
- List and explain the features of major extension approaches;
- Describe how reforms have affected extension services;
- Explain the privatisation and decentralisation of extension services, as well as their pluralistic nature and market-led and orientated services;
- List and explain the features of major extension tools;
- Evaluate which approaches are relevant for your specific context; and
- Select tools that are appropriate to your programme goals and local conditions.

Study unit overview

In this study unit you will learn about the development of major extension approaches as well as their advantages and disadvantages. In doing so you will learn how approaches developed based on the needs of rural communities and how extension has evolved over the years to address these needs. You will also be introduced to the principle of reforms and how they have shaped global approaches in extension with a focus on the shift from a public to private environment.

In the final half of the study unit you will be introduced to the tools of extension and how to apply tools and approaches to a variety of problems based on the needs of the target communities, as well as the resources available to the project.

Study unit introduction

The development of extension services over the years has seen the development of many different approaches and tools. As an extension provider you will need the knowledge to be able to apply these tools and approaches to your context. Developments such as privatisation, decentralisation and a shift towards pluralistic approaches have resulted in vastly different governance contexts, each with their own challenges and needs. It is up to you to develop the skills needed to identify these needs and select the best tools and approaches for the job. The use of case studies in this unit are key to understanding how these approaches and tools have been applied in the past.

To build on the principles of knowledge sharing and scientific journals within this unit, opportunities for self-study have been provided through links to additional information. It is highly advised that you use these resources so that you do not merely understand the work but master it. A thorough knowledge of how extension approaches and tools have been implemented in the past will prepare you for any challenges you may find in your work. Do not be afraid or embarrassed to rely on the work of others to further your own work. As Isaac Newton said: "If I have seen further it is only by standing on the shoulders of giants".

Session 2.1: Evolution and features of extension

Session outcomes

After completing this session, you should be able to:

- Analyse how changing rural conditions lead to the development and promotion of different approaches; and
- List and explain the features of major extension approaches.

Introduction

Extension programmes are developed with a particular **goal** in mind. There are various **worldviews** or **paradigms** on how to best achieve these goals. This brings about different extension approaches. Consider that a philosophical approach is one in which you handle a problem in a structured, **rational** and **unbiased** way. These approaches often change over time in response to new thinking and developments.

Paradigm: A model or framework of ideas.
Goal: A measurable end result that you set out to achieve.
Rational: A logical and fact-based approach.
Unbiased: Judging a situation fairly by ignoring personal views and anything that is irrelevant or not based on fact.
Worldview: A system of values and beliefs that affect how individuals see the world and act.

Evolution of extension approaches

In the following section you will learn about the history, advantages and disadvantages, and application of major

extension approaches. Because there are so many extension approaches, not all of them are covered.

Transfer-of-technology approach

The transfer-of-technology approach was originally based on the idea that technology is developed and transferred in a linear fashion, from developer to user. Scientists who had developed high-yielding varieties of maize and rice used the transfer-of-technology approach to get information, seed and fertiliser to farmers in order to increase their yield and avoid crisis. The advantages of this approach are that it is well structured, consistent and easy to implement. The disadvantages are that the approach is too simplistic, linear and focused on production. It often ignores many social and institutional barriers to adoption such as availability of input and output markets and social norms.

Feedback: A process whereby the results of a system or process are evaluated in order to improve the way it operates.
Initiative: A step taken to achieve a desired action.

The technology transfer approach has improved over the years by including **feedback** systems with farmers and researchers. The modified feedback system allows extension practitioners to provide feedback to the research groups on the needs of the farmers, resulting in solutions that target specific needs. More will be discussed on this in the systems approach section that follows.

The green revolution was a set of research, development and technology transfer **initiatives** that took place between the 1930s and 1960s that saw an increase in worldwide agricultural production. The initiatives are credited with saving millions of lives. Led by Nobel Prize winner Norman Borlaug, they not only focused on development and provision of high-yield crops but also on improving local infrastructure, management and farming techniques across the world.

Educational approach

The extension system of the United States and several other approaches are based on the concept of adult education, where the main focus is to increase the education level of rural adults. This empowers farmers to address problems on their own and teach others.

The approach uses non-formal learning, a structured learning approach aimed at the needs of a specific group of people who often have not enjoyed the benefit of formal education. Education is normally done in association with educational institutions such as the land-grant universities in the United States.

The advantages of this educational approach are:

- The creation of connections between research groups and farmers;
- The freeing up of extension practitioners through the use of institution staff; and
- Educational institutions can experience real-world applications of teaching material.

The disadvantages are that the farmers may not benefit from the teaching because of the academic language of instruction as well as the lack of practical farming experience of the institutional lecturers or demonstrators.

Systems approach

As development actors saw that the transfer-of-technology approach did not always work, they began to focus more on the entire system rather than just certain crops or production and productivity. Existing approaches now include farming systems research and extension, the agricultural knowledge and information systems approach, and the more recent agricultural innovation systems approach that emerged between the 1970s and 1990s. The systems approaches are more **holistic** and include other elements beyond production

such as marketing and management. They also tend to recognise a wider number of actors involved in extension such as the private sector, other farmers, NGOs and **agro-dealers**.

The farming systems research and extension approach mentioned in the technology transfer section evolved simultaneously in Africa, Asia and Latin America. This approach is systematic, **interdisciplinary** and involves farmer perspectives. Its advantages are:

- It speeds up technology development;
- It promotes dialogue between researchers and farmers;
- It allows for adaptive research; and
- It focuses on the entire farming system.

Disadvantages include:

- It is time consuming and expensive;
- It is focussed primarily on research; and
- It is biased towards some disciplines.

Holistic: An approach in which one looks at the whole situation taking into account all parts involved.
Agro-dealer: A licensed individual or corporation that sells agricultural supplies to farmers.
Interdisciplinary: Involving different academic fields.

An example of this can be seen in the farming systems research/extension research model (FSR/E) in Figure 2 below.

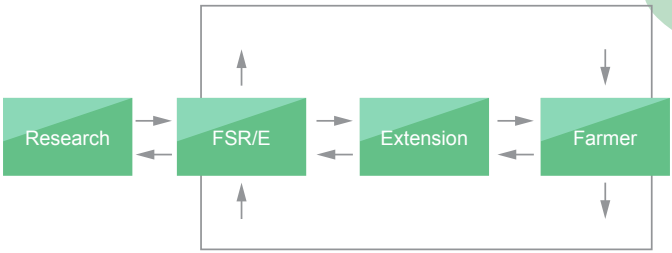

Figure 2: FSR/E model of technology transfer

The AKIS approach has evolved over time into the newer AIS model. It focused on links between research, education and extension with farmers at the middle. The newer AIS approach promoted by GFRAS, the World Bank and others can be seen in Figure 3. The diagram shows how the model is built on the AKIS model. A further look at the AIS model can be found in the Ethiopian case study at the end of this unit.

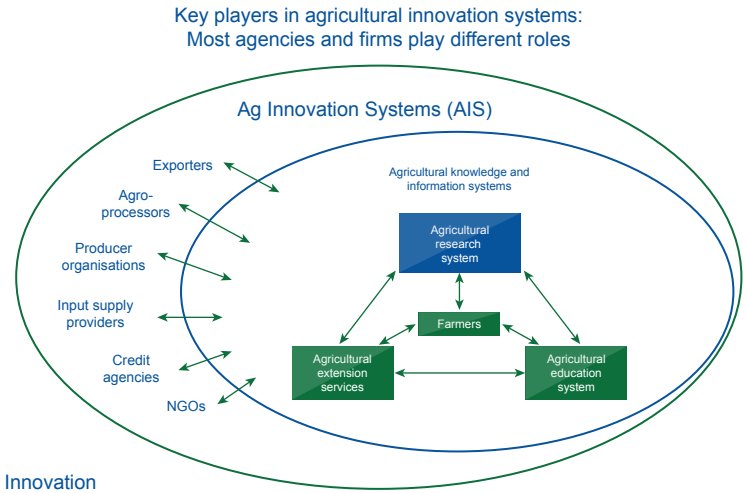

Figure 3: The relationship between the AKIS and newer AIS approaches

Commodity extension approach

Commodity extension approaches are focused on supply chains and inputs of specific products such as coffee or milk. Extension agents only focus on that commodity, oftentimes from seed to market. While this is good for business in terms of sales, it is not a holistic approach and the farmer may not have access to advice on other crops, livestock or natural resources on the farm. This system is often seen in corporate extension programmes where the aim is to promote the production of a crop of importance to a specific company or stakeholder.

Advantages include the well-developed system and the potential for high reward when input costs are considered. Disadvantages include potentially biased information, limited focus on specific crops, and control of prices. Commodity-based companies such as tobacco, tea and horticultural crops often use this approach.

Farmer participatory extension approach

Farmer participatory extension focuses on the needs of resource-poor farmers who may be involved in needs analysis, programme design, and evaluation studies. This process is similar to the FSR/E model but is neither a top-down nor bottom-up approach. It is a more inclusive approach that focuses on participatory learning and involves the engagement of all stakeholders.

An example of this approach can be seen in the farmer participatory need-based extension (FPNE) adopted by the cooperative milk unions in Andhra Pradesh, India. Figure 4 below illustrates the FPNE model as used by the Indian cooperative unions.

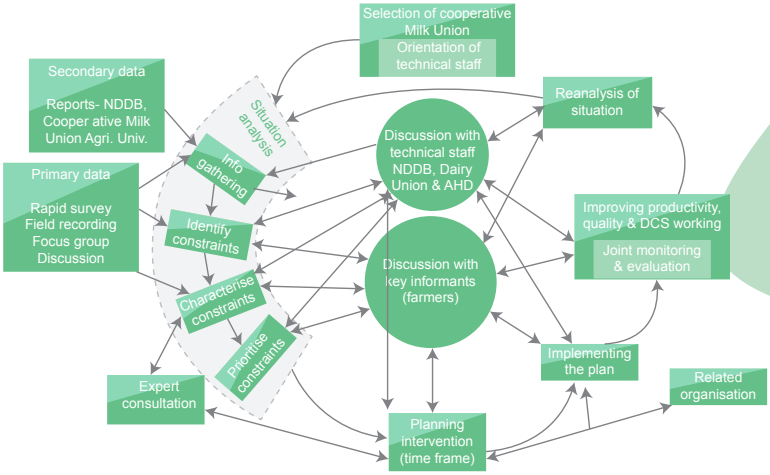

Figure 4: FPNE model used by cooperative unions in India

A link to the information on the FPNE model, which is discussed by Sabyasachi Roy and D.V. Rangnekar, can be found in the reference section at the end of the topic.

With this approach the extension service must be flexible and able to adapt to the needs of the clientele. Advantages of this approach include long-term adoption of new technologies, **capacity** development and the value of indigenous knowledge. Disadvantages include the fact that extensionists may need to develop new skills, the approach takes time and, due to its complex nature, it is difficult to assess the long-term impact.

Capacity: The training and ability of individuals.

Case study 4: Ethiopian AIS approach

Figure 5 on the next page is a simplified depiction of an AIS innovation system in rural Ethiopia showing the different actors. It is not a comprehensive representation but it demonstrates the complexity of AIS. The diagram shows several elements of the agricultural innovation system approach:

- Complex interactions among different actors such as the indirect connection between researchers, private input suppliers and unions;
- Non-linear pathways and feedback loops. This can be seen in the way research groups receive input and feedback regarding farmers from multiple sources;
- Unpredictability. The role of private suppliers, traders, financial service and exporters are diverse and require time to map and understand;
- There are numerous and different role players that do not belong just in research;

- Innovation is not just technical but a social and institutional process. This can be seen in the links between private, traditional, research and government services;
- Sustainability is related to the sustainability of a wide range of relationships and not just "sustainable extension services";
- Role of the institutional context to orient the innovation process. Research requires input from multiple sources to be able to understand the needs of the farmer;
- Necessity of understanding and fostering social networks. The complex interlinked nature of the services requires maintaining communication between multiple parties; and
- Importance of social and individual learning processes. Education of not only the farmer but all parties is required to be able to make progress. A single entity if not informed of the benefits of change is enough to halt the entire process.

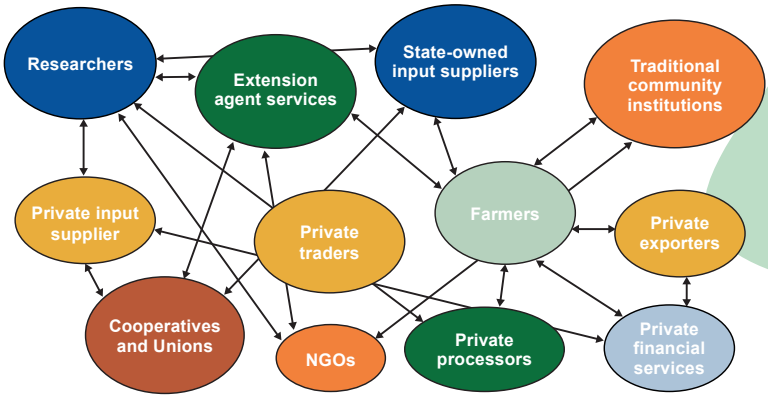

Figure 5: AIS approach in Ethiopia

Complete Activity 2.1 in your workbook.

Session 2.2: Reforms in extension

Session outcomes

After completing this session, you should be able to:

- Describe how reforms have affected extension services; and
- Explain the privatisation and decentralisation of extension services, as well as their pluralistic nature and market-led and orientated services.

Introduction

The prevailing **economic theory** of the 1980s and 1990s, which was influenced by **international developments** at that time, saw markets as the primary force that could remedy economic and developmental problems as opposed to government intervention. At the same time, critiques of existing models of excessive civil services, including government extension, held that the outcomes and impact did not necessarily justify the high administrative costs.

Economic theory: A theoretical look at current economic models and analysis of economic problems.
International development: A look at the level of development of nations.
Policy: A set of principles or rules guiding the behaviour of an organisation in order to achieve a goal.

Around this time institutions loaning countries money for development such as the International Monetary Fund and the World Bank started to introduce structural adjustment programmes. These were **policies** that came with new loans that encouraged economic reform such as privatisation and **deregulation**.

The criticism of the existing model of extension in many countries led to various types of **reforms**. These are discussed below. According to Rivera (2007), there are four main reform developments related to funding and delivery by public and private agencies.

Reform: A change that improves institutions or processes.
Deregulation: The removal of laws that ban or limit certain economic activities.

Privatisation and withdrawal of the public sector

Privatisation involves the shifting of some or all of the ownership and control from government to the private sector. Privatisation results from the desire to minimise the role of government due to:

- Central government failings or complex local issues;
- Inability of government to finance services; or
- The implementation of an **ideology** that sees democracy as best served when certain functions of government are shifted to the private sector or handled at a local level.

An **ideology** is a set of preferred ideas on how economics and politics should work that influences the policies enacted. For example, the fear of 'big government' forms part of an ideology that seeks to see more power transferred to citizens and the private sector.

The need and implementation of privatisation is highly dependent on the government in question and is a process that can take several years to complete. As you have learned in Session 2.1, there is no approach applicable to all situations. It takes time for private extension entities to become familiar with the needs of rural farmers, determine the best approach and set up the required support infrastructure in order to transfer responsibility from government services.

Case study 5: Privatisation in Chile

This section provides a brief overview of privatisation in Chile, the first and longest running example of extension privatisation. When reading through this section, pay close attention to how the system changed, the reasons it changed and the role of the public and private sector in extension.

1978–1983

Privatisation resulted from government cost-cutting and reduction in government employees in 1975 based on the suggestions of Professor Milton Friedman. In 1978 the government provided grants to small farmers in order to hire private extension providers. This formed part of the Technical-Entrepreneurial Assistance (ATE) programme in which government supplied funding initially with the hope that farmers would eventually be able to cover the costs themselves. However, by 1983 the system had failed because the programme covered only 6% of farmers and farmers were not able to carry these costs on their own.

1983–1990

The economic crisis in 1981–1982 resulted in reforms of the ATE programme. Two new programmes were established, the Integral Technical Assistance Programme (PTTI) and the Basic Technological Transfer Programme (PTTB) aimed at farmers with less than five hectares of land. The services and funding of both programmes were considerably improved (the funding came from the Instituto de Desarrollo Agropecuario (INDAP)). The coverage also increased from 5% to 10% of small farmers. However, the scheme had some major shortcomings:

- It was highly technical and had a short-term focus;
- There was a lack of PTTI integration with INDAP;

- Projects did not have a clear end goal for farmer independence;
- There was no feedback system for farmers; and
- There was no independent evaluation of the effectiveness of the programmes.

1990–2000

In 1990 Chile became a democracy. Rural poverty reached 50%, so programmes aimed at decreasing rural poverty were given priority. From 1990 to 2000:

- Coverage increased to 20% by 1997;
- Research and training programmes were created to prepare women for farmer management roles; and
- Additional territories such as the semi-arid north were included in the programme to reach the poorest farmers.

Eventually reforms of the PTTI and PTTB and the introduction of new programmes saw marked improvement in extension systems and better levels of control as well as feedback from local farm leaders.

2000 to present

In this period several developments arose:

- Democratic elections of members of extension programmes were introduced;
- INDAP was reformed with a focus on production and development; and
- There was coordination of various programmes due to the Investment Development Programme.

Privatisation in Chile is still undergoing many changes and has faced many difficulties during its implementation. The benefits, however, are evident in the reduction of rural poverty and increase in rural production levels.

For more information on privatisation in Chile and other countries, refer to the work by G. Alex and W. Rivera on privatisation of extension systems, located at the link below: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2005/04/05/000090341_20050405102736/Rendered/PDF/318910Extension1Reform1V21final.pdf

Decentralisation

Decentralisation is the transfer of power, resources and functions away from a centralised authority to private entities. It should be noted that decentralisation does not always refer to a complete handover of power, as you saw in the Chile case study.

The transfer process is systematic and occurs in the following steps:

- Initial transfer of some decision-making functions and managerial responsibilities to the private sector;
- The shifting of responsibility for programme planning and implementation, ability to set goals and manage funding; and
- Full accountability and responsibility for financing or co-financing of projects.

In addition to the above steps, consideration needs to be given to encouraging public participation, increasing the representation of rural people and expanding the role of local government, private firms, institutes and NGOs.

Decentralisation occurs in a specific pattern. Transfer begins at the state level and proceeds down to the municipal level over time, allowing for the gradual transfer of responsibility to the private sector while also accounting for the needs of local farmers.

For more information on decentralisation, refer to the work by G. Alex and W. Rivera on Decentralised Systems, located at the link below:
http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2005/05/03/000160016_20050503132521/Rendered/PDF/318900Extension1Reform1V1.pdf

Market-led and market-oriented services

Market-oriented services focus on the principle of market orientation, which is broadly based on:

- Customer satisfaction; and
- Competitive marketing of products.

In most instances companies are market-led—that is, they provide a product based on the needs of the customer.

Looking at these terms from an extensionist viewpoint, market orientation is needed to ensure that:

- Farmers are able to produce a marketable product;
- The necessary tools are available for processing and good farming practices are observed such as fertilisation, pest control and crop rotation; and
- Farmers have access to a market for their crops.

Market-led extension provides services focused on linking farmers to the market, often to improve their income. This type of extension often also extends to other actors in the value chain as you saw in the Indian dairy union example.

Pluralism

Addressing the needs of a rural community comes with many challenges such as the differences between poor (financial) and resource poor (material) farmers, different farming practices (crops, livestock or fisheries), production or subsistence farming, and local or export oriented markets.

Pluralism is the recognition that the cooperation of a number of extension providers, approaches and services from different sectors are needed to address the varying needs of rural farmers. Pluralistic extension systems recognise that in order for a system to work you need the cooperation of multiple groups.

In modern extension the need for partnerships between NGOs, private and government organisations as well as collaboration with farmers has become essential. The involvement of government agencies is required in order to create national policies to coordinate and safeguard the interests of rural communities. This can be seen by looking back at the Chilean case study, where you saw that the system eventually evolved into one consisting of multiple programmes working together under the Investment Development Programme.

A more in-depth look at pluralism published by the Royal Tropical Institute and GFRAS is available at the link provided: http://siteresources.worldbank.org/INTARD/Resources/335807-1330620492317/8478371-1330712142266/Module3-TN1.pdf

Complete Activity 2.2 in your workbook.

Session 2.3: Features and purpose of major extension tools

Session outcomes

After completing this session, you should be able to:

- List and explain the features of major extension tools.

Introduction

There are more tools or methods for extension than can possibly be covered here. You will learn a few of the major tools. Tools should not be confused with approaches. Consider an approach as a set of steps you take to achieve a goal and tools as what you use to take those steps.

Many people are preoccupied with tools, favouring the newest or most widely used tools, without thinking about whether they help them to achieve their objective. It is often useful to follow the maxim that "form follows function", so select tools that are best suited to your approach and goals.

Since a major part of extension is the promotion of knowledge flows among different actors in the agricultural innovation system, communication is a core competency essential for the correct implementation of extension tools. Before starting any extension activity, the following aspects need to be considered:

- The source: where the information or idea being communicated comes from;
- The message: what the main idea or message being communicated is;
- The channel: how the information is distributed; and
- The listener: the group of people who will receive the information.

Mass media

Mass media is a powerful tool; broadcast and digital media in particular are able to reach millions of people. It is important when choosing a method that you take into account the target communities' access to media and its level of and access to education and technology. The use of imagery in media such as pamphlets allows information to be distributed across languages and even to those who cannot read. A short and simple message can often have more impact than a wordy or complicated one.

Media tools are tools used to store and deliver information. Mass media has the potential to reach large audiences. It can be divided into the following categories:

- Broadcast media such as radio, film, music and television allowing for long-range transfer of information;
- Digital media such as the Internet and mobile communication requiring access to computers and mobile phones. It includes social media sites such as Facebook, Twitter, YouTube and others, all of which can be used to great effect to raise awareness and spread information;
- Outdoor media in the form of large advertisements placed on large buildings or in key locations;
    - Print media where information is spread through physical objects such as pamphlets, books, magazines and newspapers; and
    - Events and public speaking, which are considered forms of mass media but discussed separately in this document.

In Africa the use of cell phones has increased significantly. Countries such as South Africa and Nigeria enjoy cell phone access equivalent to that of the United States, and Africa's mobile market is exploding. Mobile money, where someone can send money to another person and pay for services using credit stored on his or her cell phone, has been used by the Nigerian government extension services to send support payments to an estimated 14 million farmers. The infrastructure that makes social

media and other services via cell phone and computers possible is referred to as information and communication technology (ICT).

Videos may help meet the challenges of spreading information to farmers and reaching the poor and marginalised, as well as women and young people. Video can be more effective than text as it can be entertaining, visually show the application of the subject matter and it can be made in many local languages. Some drawbacks to video is that it requires power, equipment and labour, so it is more costly to make than a flyer, poster or other printed material.

In order to effectively use media the following needs to be taken into account:

- Access: what forms of media does the client have access to;
- Usage: how are the clients using the media, are they listening to the radio station you intend to broadcast on, are they able to use the mobile software platform required, how frequently do they access the media; and
- The message: is the message being sent informative, easy to understand and well presented.

Additional information on communication practices can be found on the FOA site at:
http://www.fao.org/docrep/t0060e/T0060E05.htm

For more information see:

- http://www.g-fras.org/en/good-practice-notes/6-video-for-agricultural-extension.html
- GGP Note #17: mExtension - Mobile Phones for Agricultural Advisory Services
  http://www.g-fras.org/en/savoirfr/global-good-practices.html?download=349:ggp-note-17-mextension-mobile-phones-for-agricultural-advisory-services

For more information see:

- GGP Note #11: Navigating ICTs for Extension and Advisory Services
  http://www.g-fras.org/en/savoirfr/global-good-practices.html?download=351:ggp-note-11-navigating-icts-for-extension-and-advisory-services
- GGP Note #16: Web Portals for Agricultural Extension and Advisory Services
  http://www.g-fras.org/en/savoirfr/global-good-practices.html?download=356:gfras-ggp-note-16-web-portals-for-agricultural-extension-and-advisory-services

Case study 6

Mass media has already been used to great success in fighting HIV/Aids in South Africa. For example, television soap operas such as Soul City educate viewers on the risky behaviours that could lead to the contraction of the virus through relevant storylines. MXit, a mobile messaging app used widely in Africa, has been used to spread information about Aids in order to fight popular misconceptions.

Demonstrations

Demonstrations are a key extension tool, especially when teaching practical methods. Crops or practices can be demonstrated in a farmer's field, on a research station or at an agricultural show. While demonstrations can be worthwhile and persuasive, there are several drawbacks. One is that people have to be there to see the demonstration, which might impose travelling costs on them and be inconvenient. The other is that because of the format of the presentation, the audience might not be confident that they can do the same thing because either they do not have the resources or they think you

have a special skill they do not have. One way to deal with this is for farmers to have demonstrations on farmers' fields.

Demonstrations can be divided into two types. Results demonstrations in which, for example, the benefit of newer methods are shown over that of older or more established methods. Method demonstrations, unlike results demonstrations, do not focus on demonstrating the value of a method but rather providing groups with the skills to implement them. Method demonstrations are typically done after results demonstrations once a community has been shown the value of a new approach.

The training and visit system

The training and visit system (T&V), based on the transfer of technology paradigm, employed different tools such as regular training of extension staff and regular (once in a fortnight) field visits by contact farmers. The approach promoted by the World Bank, was also put in place to address lack of professionalism and to improve accountability of extension. Advantages of the T&V include regular farm visits, continuous training for agents, and a sense of professionalism by extension. Disadvantages were that it was top-down, rigid and unsustainable. It was and still is implemented by many government extension services in developing countries.

Individual and group activities

Originally T&V used an individual approach where one extension agent visited a single farm household. It was then found to be more cost-effective to train groups of farmers. Extension tools are thus divided into individual (one-on-one advisory services via face-to-face communication, telephone or Internet) and group approaches. Group approaches, which may include demonstrations in person or mass media, can also be used in key extension tools like farmer field schools.

For more information on the application of individual and group teaching methods, refer to the FAO document at the link below: http://www.fao.org/docrep/t0060e/T0060E07.htm#5. Extension methods

Farmer field schools

Farmer field schools essentially use an adult education, participatory, group-based approach. While many would term them an approach, they are included here in the tools section because it is a specific methodology, obviously with an underlying educational approach. Farmer field schools are used in over 90 countries around the world for many different types of training, from integrated pest management to business management. Farmer field schools are especially good for teaching complex practices that require practical application.

Experience-based learning is a critical element of farmer field schools with farmers spending extended periods of time gaining practical and theoretical knowledge. Teachers at farmer field schools require different competencies than most extension agents that often include special training to become field school instructors. The intensive training over a long period requires considerable human and financial resources. Therefore, farm field schools should be reserved for empowerment, complex practices, building social networks and so on.

For for information refer to GGP Note #2: Farmer Field Schools
http://www.g-fras.org/en/savoirfr/global-good-practices.html?download=230:ggp-note-2-farmer-field-schools

Theatre

Theatre is a useful tool to get key messages across in a powerful visual way that will be remembered. While it has been used for

some time for HIV/Aids messages, it is now being used more for climate change and raising awareness about **environmentalism**. Theatre is effective because it is entertaining, reaches multiple age groups and education levels and is likely to be remembered. The downside is that it can be time and resource intensive.

Environmentalism: A movement concerned with the protection and improvement of the environment.

Figure 6: Entertaining theatre productions are a way to spread information

Innovation platforms

Innovation platforms are made up of various actors who communicate, co-operate and share tasks to carry out activities needed for innovation to take place. Innovation platforms allow stakeholders such as farmers, researchers, traders and government officials to come together and discuss problems and find solutions. This tool can be empowering for farmers but needs to be structured to allow all stakeholders to be heard. Such engagements often require much time and effort to manage and are not always practical, especially when there is a large number of stakeholders. In such cases, it is good practice to have each group select a representative to act on its behalf.

For more information refer to GGP Note1: Innovation Platforms available on the GFRAS site.

For more tools please see the GFRAS global good practices initiative at www.betterextension.org. This includes tools for integrating gender and nutrition into your "extension toolbox".

Global Good Practices (GGP) Initiative

For more information on current tools and approaches you can access the continuously updated GGP notes found on the GFRAS website at http://www.g-fras.org/en/ggp-home.html

The Global Good Practices (GGP) Initiative was started by GFRAS partners to provide a knowledge platform for practitioners, in which theoretical and practical know-how on extension and practical experiences is collected and systematised in an easily accessible and usable form as a public good. It is aimed at field extension agents and managers.

Complete Activity 2.3 in your workbook.

Session 2.4: Selecting the appropriate approaches and tools

Session outcomes

After completing this session, you should be able to:

- Select approaches that are relevant for your specific context; and
- Select tools that are appropriate to your programme goals and local conditions.

Introduction

In Session 2.1 you learned about the evolution of different extension approaches and their features. In Session 2.2 you learned about reforms in extension, while Session 2.3 taught you about extension tools. This unit will assist you in making decisions about which approaches to use in your specific context and how to apply them. Remember that an approach is a broad philosophical framework, and tools are the specific methods or mechanisms you use to achieve a goal. If the approach is the house, the tools are the bricks.

Social capital: The level of social relationships between people who work and live in an area.

Selection of approaches and tools

The target clientele will determine which approaches and tools are appropriate. Important factors to consider include the connectivity of the clients and their literacy. If there is low connectivity, it might not help to use ICTs. If **social capital** is low, a farmer field school may not be a good idea as tensions could rise among farmers. It is important to understand your target group. Three important groups of people are women, youth and disadvantaged groups.

Women

Often, women's roles as farmers are underestimated. This is because women have traditionally been involved in subsistence crops, leading to the assumption that they do not work on commercial crops. Women are often expected to take care of traditional gender roles such as child care, cooking and cleaning, with farming left to men. This has changed in recent times due to the migration of men in particular to more urban areas in search of work, leaving female-headed households responsible for farming.

Group-based approaches are ideal in these conditions as they allow women to demonstrate that they are able to perform the same role as men. Method demonstrations, and training and visit approaches, are especially important in order to help women learn skills and methods they may historically not have been allowed to take part in.

Youth

Educating the youth in rural communities can be key in ensuring the long-term success of extension initiatives. The youth of a community represents its future as many will one day taking over from their parents. A young mind is more open to learning new concepts so it is important to educate them on issues such as climate change, conservation, the importance of education and healthcare, to name a few.

The use of entertaining and exciting methods in the form of video, theatre and other ICT tools are recommended to engage with the youth and ensure a lasting impression. Many an adult who has grown up with the desire to help others and conserve our world owes it to a single memorable moment in their youth.

Disadvantaged people

The key role of extension is improving the lives of disadvantaged people in rural communities. These disadvantages are often seen

as a lack of infrastructure, education and healthcare. The use of media tools, for example, is dependent on clients having access to cell phones, radio and television, as well as having adequate literacy levels. In many cases these conditions are not met and it is required to use theatre or demonstration-based methods that are not dependent on these limitations.

Additional considerations need to be given to the mobility of your clients, with the travel and visit system more appropriate for communities that are widely spread and lack transportation. In many cases innovation platforms can be used to involve all stakeholders to assess the available resources in a community, helping to select the appropriate tools and methods for the context.

Potential scalability

Whenever starting a project you need to ask yourself whether there are expansion goals. Establishing a farmer field school for a very small community may not seem like a good use of resources unless you are planning to expand to neighbouring communities. By starting off small you are able to set up programmes and build capacity with a manageable number of farmers before expanding the scope of the programmes to others.

Larger operations often require different approaches and tools than smaller ones, often requiring collaboration between different extension service providers to be successful.

The key step in any scalable approach is raising awareness of what you are doing. You will be able to raise more funding or support for expansion activities if people are aware of the work being done. The use of social media sites such as Twitter, YouTube and Facebook can be used to spread awareness and reach investors internationally. For national awareness the use of mass media such as television and radio commercials can be a great way of reaching people.

Case study 7

The case study below describes the Enhancing Food Security and Increasing Incomes in Northern Mozambique (FSI) initiative funded by Global Affairs Canada. It describes the approaches and tools used to meet project objectives.

FSI is a large multi-group rural development project that focuses on interventions related to food security, such as:

- The introduction of conservation agriculture to improve crop yields of food, cash crops and localised support for the agricultural value chain;
- The improvement of livestock management practices;
- The provision of training in nutrition practices and food conservation, often facilitated through community nutrition groups;
- Supporting households to establish home gardens;
- Preparing nutritious foods;
- Working to promote greater availability of improved seeds; and
- Working with community-level institutions such as village development organisations and community health workers to deliver nutritional messaging on the importance of exclusive breastfeeding.

FSI has a strong market development component as well, with support being directed mainly towards the sesame, maize and handicraft value chains. The project has worked to establish a number of community-based groups, including farmer field schools, producer associations, sales commissions and community-based savings groups to facilitate improvements in social capital and to begin integrating producers more fully into the market so that they will increase their incomes (which should again reinforce household food security).

There are specific considerations that must be made when selecting the approach and tools for the specific conditions they will be applied in. In the following sections these considerations are dealt with separately.

For more information on producer organisations, refer to the following link:
http://www.g-fras.org/en/savoirfr/global-good-practices.html?download=352:gfras-ggp-note12-the-role-of-producer-organisations-in-ras

Approach selection

Project goals

The approach you use depends strongly on the project goal. Are you trying to improve food security, link farmers to the market or empower women? Some approaches are better able than others to achieve these goals, and you must adapt the approach to your stated goals. The table below outlines common goals and possible approaches that can be used to achieve them.

Table 1.1: Checklist table for approaches and goals

Goal	Approaches
Promote a technology or practice	Transfer of technology, farming systems
Help farmers adapt to climate change and other risks	Transfer of technology with participation and education
Improve food and nutrition security	Transfer of technology, education
Link farmers to market	Commodity, education, farming systems
Empower women	Participation, education
Provide education and training	Education, AKIS

Governance and structure

Some countries such as the United States and India have strong linkages with research and education. In such cases it may be easier to use educational approaches. Some countries have privatised services (Netherlands and New Zealand), or special commodity extension (Kenya and Malawi) that encourage the use of private extension approaches. Other countries still have ministries of agriculture (much of Africa and Asia) where the approach you select depends on current government initiatives.

Sustainability

If you are concerned about the **sustainability** of a project or programme once financing is no longer available, you should consider empowering approaches that allow for the building of local capacity and social capital (such as farmer field schools or participatory approaches in general). Relatedly, the amount of time you have is an important factor. It will affect whether you can produce videos, run demonstrations, or set up farmer field schools. Innovation platforms and group approaches can assist in creating relationships between farmers and other stakeholders.

Sustainability: The practice of ensuring that the use of something does not result in it being used up or destroyed.

Tool selection

Capacities required by extension providers

The capacity of the personnel will determine which tools you can use. For example, if your approach involves teaching farmers business skills or adapting to climate, your staff would need special knowledge. The farmer field school method usually involves a long training period over a crop-growing season. To use empowerment approaches, you need special support and community development skills.

It takes a long time to strengthen the capacity of extension personnel, and once this is done they will require continuous professional development. This needs to be built into your programme.

Costs

Cost, capacity and time represent the major limiting factors to the selection of tools and approaches, with costs often being the greatest limitation. Before starting any project a budget needs to be set up to ensure that the tools and approaches selected are achievable based on the funding available.

You need to be flexible in your approaches. If your project requires you to reach a large number of people, a mass media approach will be needed. If television proves to be too expensive, you can choose other media that better fit your budget such as radio, billboards or flyers. If used correctly, mass media approaches can be the most cost-effective approach when you consider the amount of money spent to reach a single person.

In general, group-based approaches should be considered if working on a budget as individual approaches represent a greater time and cost investment per person reached.

For more information on extension method selection refer to Chapter 9 of the applied extension manual found on the Bangladesh Department of Agriculture site linked below:
http://dae.portal.gov.bd/sites/default/files/files/dae.portal.gov.bd/publications/435fe031_883a_43af_864c_1240c7da0fbf/Extension_Mannual_Chapt9.pdf

Complete Activity 2.4 in your workbook.

Concluding remarks

In this module you have learnt:

- Approaches were developed to meet specific goals;
- Approaches change over time;
- The transfer-of-technology approach grew from a linear to a nonlinear systems approach;
- The educational approach provides non-formal learning to those who often lack formal education;
- The systems approach is an interdisciplinary approach that has given rise to the popular AKIS and AIS approaches;
- Farmer participatory approaches allow for increased flexibility in the face of highly complex situations but at potentially higher skill and time requirements;
- Reforms were enacted to improve efficiency, effectiveness, and sustainability of extension;
- Reforms have affected the structure and composition of extension over the years;
- Key reform efforts include privatisation, decentralisation, market-led or oriented services, and pluralism;
- Tools need to fit the purpose of the extension programme and help achieve programme goals;
- Major tools include mass media, individual and group methods, demonstrations, training and visits, farmer field schools, theatre, and innovation platforms;
- A combination of tools and approaches are often needed to achieve the programme goal;
- The selection of tools and approaches begins before active extension activity in the community;
- Selection of tools and approaches are based on project factors such as time, budget and scalability; and
- Community factors such as resources, finance, technology and literacy levels determine which tools and approaches you use.

Complete the summative assessment in your workbook.

Complete the post-assessment in your workbook.

Glossary

Word	Definition
Agro-dealer	A licensed individual or corporation that sells agricultural supplies to farmers.
Agro-ecology	A look at agriculture from an ecological point of view, taking into account the interactions between nature and agricultural activity.
Agronomy	The science of agricultural crop production and the production systems used.
Anthropology	The study of human culture, its development and history.
Capacity	Refers to the training and ability of individuals.
Context	The events, ideas and conditions that make up the situation you are dealing with.
Decentralisation	The transfer of power, resources and functions away from a centralised authority to private entities.
Deregulation	The removal of state regulations which place restrictions on certain economic activities.
Development	The process of something grows or changes to become larger and more advanced.

Word	Definition
Economic theory	A theoretical look at current economic models and analysis of economic problems.
Environmentalism	A movement concerned with the protection and improving the health of the environment.
Feedback	A process whereby the results of a system or process are evaluated in order to improve the way it operates.
Goal	A measurable end result that one sets out to achieve.
Holistic	An approach in which one looks at the whole situation, taking into account all parts involved.
Hypothesis	A proposed explanation for a phenomenon or principle that requires further testing to be shown to be based in truth.
Initiative	A step taken to achieve a desired action.
Innovation	The process of generation, diffusion, adaptation and use of knowledge.
Interdisciplinary	Involving different academic fields.
International development	A look at development on an international scale concerned with the level of development of nations.
Paradigm	A theory or group of ideas about how things should be done.
Participatory	Providing an opportunity for individual participation in an event or process.
Peer review	The evaluation of work by individuals with the same competence and field of study.

Word	Definition
Policies	Principles and rules guiding the behaviour of an organisation in order to achieve a goal.
Private	Economic body that is not part of the government.
Privatisation	Changing from public (government) to private control or ownership.
Rational	A logic and facts-based approach.
Reform	An action which improves institutions or processes through change.
Social capital	The level of social relationships between people who work and live in an area.
Sociology	The study of social behaviour and society.
Sustainability	The practice of ensuring that the use of something does not result in it being used up or destroyed.
System	A number of connected parts or activities working together to achieve a common goal.
Systematic	Something handled in a planned and careful manner.
Unbiased	Judging a situation fairly by ignoring personal views and anything that is not based on fact or not relevant.
Worldviews	Refers to how society sees the world based on their attitude and personal knowledge.

Abbreviations

Abbreviations	Definition
AIS	Agricultural Innovation Systems
AKIS	Agricultural Knowledge and Information System
RAS	Rural Advisory Services
NGO	Non-Governmental Organisation
GFRAS	Global Forum for Rural Advisory Services
FSR/E	Farming Systems Research/Extension Research Model
FPNE	Farmer Participatory Need-Based Extension

Resources

The following resources were used in writing this manual.

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Other modules of the New Extensionist Modules are:

1. Introduction to the New Extensionist
2. **Extension Methods and Tools**
3. Extension Programme Management
4. Professional Ethics
5. Adult Education for Behavioural Change
6. Knowledge Management for RAS
7. Facilitation for Development
8. Community Mobilisation
9. Farmer Organisational Development
10. Value Chain Extension
11. Agricultural Entrepreneurship
12. Gender in Extension and Advisory Services
13. Risk Mitigation and Adaptation

Other related modules developed by GFRAS are on:

- Evaluation of Extension Programmes
- Policy Advocacy for RAS