



Food and Agriculture
Organization of the
United Nations



A decision guide for rural advisory methods

A decision guide for rural advisory methods

Soniia David and Francesca Cofini
Research and Extension unit
Food and Agriculture Organization of the
United Nations (FAO)

Food and Agriculture Organization of the United Nations
Rome, 2017

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

ISBN 978-92-5-130019-0

© FAO, 2017

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via www.fao.org/contact-us/licence-request or addressed to copyright@fao.org.

FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org.

Recommended citation:

David, S. and Cofini, F. 2017. *A decision guide for rural advisory methods*. Rome, FAO.

Contents

| | |
|--|---|
| Introduction | 1 |
| Outline of the guide | 4 |
| Some general considerations for using the guide..... | 6 |

Section 1 **Methods description sheets**

| | |
|--|----|
| Benchmarking for farm business analysis | 8 |
| Demonstrations | 9 |
| Farmer learning groups | 10 |
| Fairs, shows and rallies | 11 |
| Farmer-to-farmer extension | 12 |
| Village-based self-employed agents | 13 |
| Farmer field schools | 14 |
| Junior Farmer Field and Life School | 15 |
| Farmer business school | 15 |
| Household methodologies | 16 |
| Innovation platforms | 17 |
| Learning events | 19 |
| Courses | 19 |
| Workshops | 20 |
| Management advice for family farms | 21 |
| Mobile phone | 22 |
| Village-based information providers | 23 |
| Plant clinics | 24 |
| Radio | 25 |
| Radio campaigns | 27 |
| Radio listeners' group | 28 |
| Radio drama | 28 |
| Rural resource centres | 29 |
| Study circles | 30 |
| Study tours | 31 |
| Television | 32 |
| Video | 34 |
| Facilitated video viewing in groups | 35 |

Some tools used in agricultural extension

| | |
|--|----|
| Participatory learning and action | 36 |
| Printed materials | 36 |
| Social media | 37 |
| Games | 37 |
| Folk media | 37 |

Section 2 **Deciding which method to use**

| | |
|--------------------------------------|----|
| How to use the decision matrix | 40 |
| The decision matrix | 42 |

| | |
|---------------------------------------|----|
| References and resources | 44 |
|---------------------------------------|----|

Acknowledgements

Authors

Soniia David and Francesca Cofini, Research and Extension Unit, FAO.

Technical reviewers

Katheleen Colverson, University of Florida, U.S.A

Botir Dosov, Central Asia and the Caucasus Forum for Rural Advisory Services (CAC-FRAS)

Agustina Malvido, Instituto Nacional de Tecnología Agropecuaria (INTA), Argentina

Margaret Mangheni, Makerere University, Uganda

Patrice Djamen, Réseau des Services de Conseil Agricole et Rural d'Afrique de l'Ouest et du Centre (RESCAR)

John Preissing, FAO

Acronyms

| | |
|--------------|--|
| AESA | Agro-ecosystem analysis |
| EAS | Extension and advisory services |
| FBS | Farmer business school |
| FLG | Farmer learning group |
| F2F | farmer to farmer |
| F2FE | farmer-to-farmer extension |
| FO | Farmer Organization |
| ICT | information and communication technology |
| IP | innovation platform |
| IVR | interactive voice response |
| JFFLS | Junior Farmer Field and Life School |
| MAFF | Management Advice for Family Farms |
| NGO | non-governmental organization |
| PLA | participatory learning and action |
| PRC | participatory radio campaign |
| RAS | rural advisory service |
| RRC | Rural Resource Centre |
| SC | study centre |
| SMS | small message service |
| ST | study tour |
| TV | television |



Introduction

In today's fast-changing world, agricultural producers need support to innovate¹ as well as reliable sources of information, knowledge, skills and technologies along the entire value chain in farming, livestock and fish production. The role and functions of agricultural extension and rural advisory services (RAS) has changed significantly since the 1980s in response to the changing nature and growing complexity of agricultural and rural environment. Changes in extension have been characterized by the involvement of a broader range of RAS providers (NGOs, private sector actors, producer organizations) beyond the public sector, efforts to make rural advisory services more demand driven, with a wider focus on rural livelihood needs. The traditional production-oriented, technology transfer role of extension has shifted towards emphasizing farmer participation and empowerment, catalysing and facilitating innovation processes, building linkages between farmers and other rural stakeholders, so as to enhance market linkages, strengthen entrepreneurship and improve access to inputs and credit. Additionally, the RAS mandate has broadened from a production and productivity focus to include food security, climate change, nutrition, gender, and health, among other issues.

Despite these changes, one of the core functions of extension services remains to “facilitate the access of farmers, their organizations and other market actors to knowledge, information and technologies” (Christoplos, 2010). To carry out these multi-faceted functions, extension professionals, and their organizations, need to utilize a broad range of methods and approaches. While nearly every extension and RAS programme and project has developed guidelines on how to use and evaluate extension methods and approaches, there is a lack of detailed information and guidance on what factors need to be considered when selecting extension and advisory methods and approaches that are most suited for which purpose and content. This has resulted in a tendency by some service providers to take a “one size fits all” approach, using a single or only a few methods and approaches. Inappropriate selection and use of extension methods may limit the effectiveness of service provision, resulting in diminished impact and a failure to meet clients' needs.

This decision guide is intended to help extension professionals and their organizations make informed decisions about which extension method and approach to use for providing information, technologies and services to rural producers and to facilitate interactions and knowledge flow. Expected users include field-based rural advisors, extension managers and programme planners.

¹ Innovation is the process by which individuals or organizations master and implement the design and production of products (including technologies), processes and forms of organizations that are new to them, irrespective of whether the innovation has been used by others.

The guide focuses on the following advisory methods and their variations²:

- Benchmarking for farm business analysis
- Demonstrations: farmer learning groups
- Fairs, shows and rallies
- Farmer-to-farmer extension: village-based self-employed agents
- Farmer field school: junior farmer field schools, farmer business school
- Household methodologies
- Innovation platforms
- Learning events: courses and workshops
- Management Advice for Family Farms
- Mobile phones (mExtension): village-based information providers
- Plant clinics
- Radio: radio campaigns, radio listeners' groups, radio drama
- Rural resource centres
- Study circles
- Study tours
- Television
- Video: facilitated video viewing in groups

This collection of methods, identified through an extensive literature review, is by no means exhaustive but includes those methods that have been widely used and documented. All methods included in this guide have been implemented by different types of RAS providers, notably, public extension agencies, NGOs, private sector actors and farmer organizations. The guide also describes five tools commonly used by agricultural extension and advisory services: namely participatory learning and action, printed materials, social media, games and folk media.

² A variation is an off-shoot of a method which differs from the original method or approach while still respecting the basic principles while maintaining some aspects.

Key terms defined

| | |
|--|--|
| Extension and rural advisory services | “All the different activities that provide the information and services needed and demanded by farmers and other actors in rural settings to assist them in developing their own technical, organizational and management skills and practices so as to improve their well-being” (Christoplos, 2010). In this document the terms extension, rural advisory services (RAS) and extension and advisory services (EAS) are used interchangeably. |
| Extension and advisory philosophies | The underlying philosophy or theory about extension and RAS provision. Extension philosophies may be associated with specific extension and advisory approaches and methods. |
| Advisory approach | A style of action embodying an extension philosophy that determines the direction and nature/style of various aspects (structure, leadership, methods, techniques, resources and linkages) related to how extension and advisory services are provided (Axinn, 1988). Some approaches include participatory approaches, farmer-to-farmer extension approaches, top-down approaches, the Training and Visit (T&V) approach and group-based approaches. |
| Advisory methods | Systematically applied procedures and techniques used to provide advice and services to producers and to facilitate learning. Methods also use tools to achieve their objectives. |
| Tools | Techniques or types of “hardware” or instruments that support the implementation of extension and advisory methods. Extension and advisory tools include information and communication technologies (ICTs), printed materials (e.g. posters, brochure, calendars), folk media (e.g. drama, puppet shows, songs, proverbs) and games, among others. In the context of rural advisory services, ICTs such as mobile phones, video, television and radio are seen as tools used to implement specific advisory methods. |

Outline of the guide

This guide is divided into two sections. Section 1 provides methods sheets which describe each method, its purpose (box 1), appropriate content (box 2), assesses their reach/coverage, cost and suitability for working with low literacy populations and women (box 3). **Where a method has more than one purpose, the main ones are underlined.** The methods sheets also mention key factors that contribute to success and the challenges involved.

Section 2 of the guide provides a decision matrix to help users select the best method for their specific advisory objective.






Box 1 Definition of purposes of advisory methods

| Purpose | Description |
|--|---|
| Awareness raising | Providing information about an innovation which may include how it works, how to use it and advantages and disadvantages. |
| Behaviour and attitude change | Involves interventions that address and seek to change social attitudes, structures and norms at individual, household, group and community level to enhance the uptake of an innovation or practice. |
| Empowerment | Enhancing the capacity of individuals or groups to express their needs and interests to others, make choices and transform those choices into desired actions and outcomes. |
| Enhancing innovation capacities | Enhancing the capacity of producers to adapt and respond in order to realize the potential of an innovation such as a technology, a way of organizing people or doing things or institutional innovation. |
| Facilitating linkages | Linking smallholder farmers to markets and rural actors such as entrepreneurs, financial institutions, research institutions, meteorological services, private sector firms. |
| Learning | Promoting learning through instructional, consultations and/or non-formal approaches. |
| Product and information provision | Dissemination of products such as technologies, inputs and information to clients. |
| Strengthening social capital | Strengthening trust and cohesion among rural people through groups, networks, associations and other types of social organizations for the purpose of achieving social and development outcomes. |
| Technology development, testing and adaptation | Producers work with researchers, and extension advisors and farmers to develop, test, adapt and scale-up new technologies, practices, farming systems, innovations and arrangements. |

Box 2 Definition of the content of advisory methods

| Content | Description |
|--------------------------------------|---|
| Diagnosis and advice | The identification of a problem by analyzing the causes and, if appropriate, examining symptoms. The outcome of this process is advice on how to address the problem. |
| Information | Facts provided about something such as an innovation, an organization, service or an event. |
| Knowledge | Coming to a theoretical and practical understanding of a subject through an active learning process. |
| Skills | Expertise to do something. It includes technical as well as social skills such as communication, negotiation, conflict resolution, problem solving and self-confidence. |
| Technologies/practices (innovations) | Technical innovations that seek to improve or enhance agricultural systems such as seed of new crop varieties, machinery, pesticides, agricultural and natural resource management practices (e.g. land preparation, planting techniques, post-harvest techniques). |

Box 3 Criteria and qualitative indicators for assessing advisory methods

| Criteria | Description | Indicators |
|---|---|-------------------------------|
|  Reach | The number of people a method can reach (or potentially reach) directly and indirectly with given resources and within a given time frame. | WIDE MODERATE LIMITED |
|  Ease of implementation | The level of difficulty involved in applying a method from start to finish, including development of the content, recruiting qualified staff, material preparation, training trainers, etc. | EASY MODERATE DIFFICULT |
|  Cost | Cost of a method which may include staff salaries, costs for training, transportation, needs assessment, content development, equipment, inputs, etc. | LOW MODERATE HIGH |
|  Suitability for working with low literacy populations | The extent to which a method is appropriate for reaching illiterate or low literacy clients. | GOOD MODERATE POOR |
|  Suitability for working with women | The extent to which a method can accommodate specific constraints faced by women clients such as low literacy, limitations on mobility, childcare needs, cultural taboos on mixing with men or speaking in situations where there are men, lack of time due to domestic and other activities. | GOOD MODERATE POOR |

Some general considerations for using the guide

Purpose: Most methods have multiple purposes. The main purpose(s) of each method is underlined.

Costs: Although the cost of implementing advisory methods will depend on the context and will vary by country, location and year, the guide provides information on costs from the available literature to serve as a reference point.

Variations: To avoid repetition, the description of a variation of a method only mentions those elements that differ from the original method.

Suitability for working with low literacy groups and women: Indicators are defined as follows:

Good – the method easily meets the needs of low literacy populations and women with little or no need for modifications or adjustments;

Moderate – some adjustments are needed when implementing the method to meet the needs of low literacy populations and women;

Poor – the method needs to be significantly adjusted or modified to meet the needs of low literacy groups and women or is not suitable for working with these groups.

Common factors that contribute to success and challenges

While the guide mentions specific factors that contribute to success or challenges for each method, some are common to most methods. Common factors that contribute to success in implementing advisory methods include:

- Regularly updated technical content
- Facilitators or advisors with good technical knowledge and facilitation skills
- Good supervision and support of advisors
- Partnership with relevant institutions such as research institutes, private companies, meteorological services, market information systems, etc.
- The specific needs and constraints of female clients and other groups (e.g. youth, people who cannot read or write) are addressed
- Good planning and organization.

Common challenges include:

- Updating content regularly and making it relevant to clients which may include different categories of producers, processors and agripreneurs
- Avoiding creating dependency among clients by providing inputs, allowances, etc.
- Ensuring that the content of a programme is not biased toward the interests of implementers or sponsors. For example, demonstrations sponsored by agro-dealers may promote the products they sell
- Avoiding top down approaches, one-way communication that have limited involvement of clients and do not take their needs, demands and interests into consideration
- Ensuring financial sustainability.

Section

1

Method description sheets

A. Benchmarking for farm business analysis

Benchmarking is a systematic method for a farm business to evaluate its performance through a detailed comparison either with its past performance (internal benchmarking) or the performance of other similar farm businesses (external benchmarking) in order to identify best practices and improve performance. The following describes external benchmarking. The process should be facilitated by an extension adviser with expertise in farm management or by an adviser with university level training and at least introductory training in farm management economics. Although benchmarking can be used by all types of farms, including family farms producing mainly for home consumption, the method is best suited for commercially oriented producers seeking to improve profitability and competitiveness.

Benchmarking can be done with individuals but is usually conducted with a group of 20 farmers that have similar enterprises and farm size and who live in the same area. Once the benchmark learning group is set up, the facilitator organizes meetings that follow 9 steps: identify problems to be examined; identify performance indicators; identify benchmark farms (farms that are performing well); collect comparable data and information from group participants and the benchmark farms (for example, soil type, yields, prices, costs and quantities); compare performance; interpret differences; share findings and results; devise plan and implement changes; and, reflect and evaluate results.

→ **Purpose:** **Empowerment; learning; awareness raising**

→ **Content:** **Diagnosis and advice, knowledge, information, skills**



REACH: LIMITED



EASE OF IMPLEMENTATION: MODERATE TO DIFFICULT



COST: MODERATE

Costs involve the cost of training the facilitator, salary and allowances for advisors, costs of collecting data from both the learning group and the benchmarking farms materials (e.g. notebooks, pens etc.).



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: POOR

Benchmarking exercises usually needs literacy for note taking, keeping good records and making calculations. However, farm record methods using pictures and symbols are available for use by semi-literate and illiterate farmers



SUITABILITY FOR WORKING WITH WOMEN: POOR

Women may have difficulties in participating in benchmark learning groups due to literacy requirements. Where appropriate, consider forming women only benchmark learning group. Mixed-sex benchmark learning groups should ensure that the interests of both men and women members are addressed. When defining indicators, make sure to include both individual and household level indicators such as the gender division of labour.

Factors that contribute to success

- Trust and a willingness to collaborate by the groups
- Willingness of farmers to share data
- Benchmarking skills and knowledge including group formation, farm diagnosis, farm business management, technical aspects of farming
- Facilitator supports farmers to get accurate information about their farms

Challenges

- Finding common benchmarks for comparing farms
- Farmers' reluctance to sharing of information with each other
- Availability of accurate farm records

B. Demonstrations

Demonstrations, one of the most common extension methods, involve showing a technique/skill, input, practice or technology and its potential benefits to a target audience. Some experts distinguish between methods demonstrations, which show how to carry out a practice or technology, and results demonstrations which compare a recommended practice with an existing practice. This is a highly versatile method which can be used on a single occasion or over a period of time, depending on the objectives. As the location and scale are important for maximum visibility, demonstrations (also called answer plots, look-see plots) can be set up in various locations such as a farmer's field, a rural resource centre, on communal land or a school plot. Demonstrations can be led by farmers (participatory demonstrations) or extension advisors, and can be organized by different types of organizations (public extension, NGOs, private sector actors). Demonstrations are an integral part of other extension methods/approaches such as farmer field schools, video viewing clubs and community workshops.

→ **Purpose:** **Product and information provision; learning; awareness raising**

→ **Content:** **Technologies/practices; skills**



REACH: MODERATE TO LIMITED



EASE OF IMPLEMENTATION: EASY TO MODERATE



COST: LOW TO MODERATE

Costs include training of extension advisors, materials, maintenance costs and follow-up activities.



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: GOOD

As the method involves showing and verbally explaining a technique or practice, literacy is not required.



SUITABILITY FOR WORKING WITH WOMEN: GOOD

The method allows some degree of flexibility in terms of timing and does not require farmers to be literate for it to be effective. Because of women's heavy work burdens and limited mobility in some cases, timing of activities around demonstrations and the accessibility of demo plots need to be considered to improve their participation.

Factors that contribute to success

- Clear objectives (what the demonstration is about, why it is being conducted, and what it intends to accomplish)
- The design of the demonstration is simple, typically dealing with one practice at a time
- The complexity of interventions may be gradually increased
- Farmers are involved in the design and management of demonstration plots
- The plot is in an easily accessible location
- The plot has a good layout (foot paths, signboards to explain different treatments, field is large enough to be believable and the size is representative of fields in the area)
- Local authorities are sensitized about the demonstration
- Flexibility to adapt to different audiences, e.g. old-young, men-women, experienced-not experienced attendees.

Challenges

- Significant amount of time required for planning and implementing
- Plots needs to be well-maintained which should be the responsibility of community members
- Plot-to-plot variability may lead to different results.

B1. Farmer learning groups

Farmer learning groups (FLGs) involve a structured demonstration-based approach whereby groups of farmers meet regularly over a period of time on one or more demonstrations plots following a set curriculum. Learning is facilitated by a trained extension advisor(s) or farmer(s).

| | |
|------------|---|
| → Purpose: | Learning; product and information provision; awareness raising |
| → Content: | Technologies/practices; skills |



REACH: LIMITED



EASE OF IMPLEMENTATION: MODERATE



COST: MODERATE

Challenges

- Resources and time needed to develop a curriculum.

C. Fairs, shows and rallies

Fairs, rallies and shows are public events organized by extension providers (government agencies, NGOs, input dealers, lead farmers, etc.) and research organizations to showcase and create awareness about agricultural technologies and innovations and obtain feedback from farmers. Fairs and shows tend to last longer than rallies (a few days to weeks) and are organized around stands or exhibits. While fairs and shows require much planning and publicity, rallies may be spontaneous, attracting people with a banner or announcement. All three types of events focus on a topic or theme (e.g. innovation, technology, trade, knowledge-sharing, learning), attract large numbers of people, may award prizes (fairs and shows) and involve entertainment such as drama and music. Videos may be shown at these events and printed materials distributed. Fairs, shows and rallies connect farmers to a range of RAS providers and research institutions, allow them to ask questions and receive feedback about innovations and issues, and link them to other farmers.

| | |
|------------|---|
| → Purpose: | Awareness raising; product and information provision |
| → Content: | Information; technologies/practices |



REACH: WIDE TO MODERATE



EASE OF IMPLEMENTATION: EASY TO MODERATE



COST: LOW (RALLIES) - HIGH (FAIRS)

Costs for fairs may include renting the venue and facilities, publicity and transportation for farmers.



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: GOOD

As public events involve face-to-face interaction with experts and extension providers, there is little need for literacy skills.



SUITABILITY FOR WORKING WITH WOMEN: MODERATE TO POOR

Does not require literacy skills, flexible to allow for adaptation to different audiences. Women may face constraints in attending certain public events due to difficulties they face in travelling away from home because of work, domestic and childcare responsibilities, cultural restrictions on travelling and taboos about mixing with men in public.

Factors that contribute to success

- Good planning, publicity and organization
- Accessible location
- Good representation of service providers to avoid bias toward any one category
- Sponsors cover some of the costs

Challenges

- Fairs are time consuming to organize, may involve challenging logistics and are expensive. One approach is for extension providers to get involved in broader events such as annual farmer days or community events
- It is difficult to monitor the impact.

D. Farmer to farmer extension (F2FE)

Farmer to farmer extension (F2FE) refers to approaches involving farmers themselves as agricultural advisors working with public, private or NGO extension organizations. Farmer extension advisors are also referred to as community-based extension workers, lead farmers, community knowledge workers, and volunteer-farmer trainers depending on their role and whether or not they are compensated. They are typically not formally employed, but may be reimbursed for expenses. Farmer advisors tend to be motivated by access to new knowledge and information, social recognition and altruism.

Activities carried out by farmer advisors include training, advising, monitoring and organizing meetings, demonstrations and field days. Farmer advisors are locally recruited and selected by an extension organization working with local authorities and communities based on their knowledge, farming expertise, ability to communicate, trustworthiness and availability. They are usually trained on technical topics, extension methods and approaches, facilitation and communication skills and receive follow up training, in addition to periodic backstopping from extension staff. F2F methods are often used in conjunction with other methods and approaches such as farmer field schools, ICT-based approaches and demonstrations to increase reach.

| | |
|------------|--|
| → Purpose: | Product and information provision; learning; |
| → Content: | Technologies/practices; information; skills |



REACH: MODERATE



EASE OF IMPLEMENTATION: MODERATE



COST: LOW TO MODERATE

Costs may include training costs, equipment for farmer advisors (motorcycle/bicycle or transportation costs, clothing, stationery, mobile phones and airtime), supervision and backstopping costs.

The cost for training and backstopping farmer advisors for a dairy project in Kenya was roughly US\$ 160/year (Kiptot, Franzel and Kirui, 2012).



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: GOOD

Farmer advisors have a far-reaching knowledge of the local context, culture and practices, including language, so they can communicate more effectively with farmers.



SUITABILITY FOR WORKING WITH WOMEN: GOOD

F2F extension offers an opportunity to involve more women in RAS which is important in situations where women prefer to engage with female advisors.

Factors that contribute to success






- Select farmer advisors in consultation with farmer organizations, local authorities and communities to ensure ownership and accountability. Local institutions should also be involved in monitoring and evaluating farmer advisors.
- Strong technical backstopping and monitoring to ensure quality.
- Where farmer advisors are not paid, efforts should be made to enhance their non-economic rewards.
- Ensure that farmer advisors have adequate transportation.

Challenges

- The use of F2F extension is not recommended for practices and innovations which require a high level of technical expertise/knowledge or involve high-risk investments decisions (e.g. treatment of livestock diseases, siting of water control structures).
 - Farmer advisors often have high expectations of financial and non-financial rewards
- Integration of farmer advisors into extension organizations helps with sustainability but often leads to a contractual working relationship between the two parties which may change the voluntary nature of advisors' work.

D1. Village-based self-employed agents

In this variation of the F2F extension approach, farmer advisors are selected and trained by an organization to sell inputs and provide technical advice to farmers for a fee.

| | |
|---|--|
| → Purpose: | Product and information provision; learning; facilitation of linkages |
| → Content: | Technologies/practices; information; skills; diagnosis/advice |
|  | REACH: MODERATE TO LIMITED |
|  | EASE OF IMPLEMENTATION: MODERATE |
|  | COST: LOW Costs may include training of farmer advisors, follow up and monitoring their performance. |
|  | SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: GOOD As this approach involves face-to-face interaction with agents, there is little need for literacy skills. |
|  | SUITABILITY FOR WORKING WITH WOMEN: GOOD The approach is flexible with regard to when agents meet clients, offers the opportunity to hire female agents and does not require clients to be literate. |

Challenges

Due to the nature of the cost recovery/earnings basis, non-production innovations (natural resource management, market access) may not be as high a priority unless designed clearly.

E. Farmer Field School

Farmer Field School (FFS) is a participatory group-based approach that can be considered as both an extension method and a form of adult education. A field school typically involves a group of 20–30 farmers who meet regularly over a period of time (typically a crop cycle, if crops are involved) guided by a trained facilitator (typically an extension advisor or farmer). The focus of an FFS is farmer empowerment through building farmers' capacity to make well informed decisions about their farms and farm enterprises based on improved knowledge and understanding of biological processes, the agro-ecology and wider context in which they live. Field schools also seek to strengthen social capital and social skills (e.g. creativity, punctuality, work ethic, public speaking, and willingness to work with other). FFS follow a set curriculum determined by the priority constraints identified during needs assessment. FFS do not promote recommendations, but provide options for considerations; farmers are encouraged to experiment on their own farms and make their own decisions based on their observations and knowledge. FFS principles have now been applied to a wide range of topics including soil management, livestock management, forestry, climate change, sustainable land management, among others.

FFS are typically implemented by public sector extension programmes, NGOs, projects and farmer organizations. Research institutions and other sectoral agencies may also provide support to FFS programmes.

→ **Purpose:** **Empowerment; enhancing innovation capacities; learning; strengthening social capital; behaviour and attitude change; product and information provision**

→ **Content:** **Knowledge; diagnosis/advice; technologies/practices; skills**



REACH: LIMITED

Field days and farmer-to-farmer extension approaches can help to increase the diffusion of skills and technologies/practices.



EASE OF IMPLEMENTATION: MODERATE TO DIFFICULT



COST: MODERATE TO HIGH

Costs, which vary by topic and length of the FFS cycle, include needs assessment, curriculum development, master trainer and facilitator training, costs of running field schools (e.g. materials), supervising facilitators and follow-up costs should be related to institutionalization. The average cost of FFS is \$56 per participant.



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: MODERATE

Agro-ecosystem analysis (AESA), a cornerstone of the FFS methodology, involves drawing and writing. Effort needs to be taken to ensure that there is a good mix of literate and non-literate participants. Although experimental learning is particularly suitable for non-literate farmers, specific efforts need to be taken to specifically target the poorest farmers who tend to have low levels of education. To fully benefit from FFS, participants need to have basic skills in reading, writing and numeracy.



SUITABILITY FOR WORKING WITH WOMEN: MODERATE

Women may face some constraints in participating in FFS due to the time required for this approach, the timing of sessions (in some cases, early in the morning), literacy issues and the group nature of the approach which calls for interactions in mixed groups. Special effort needs to be taken to address these issues (e.g. consulting women participants, forming women only field schools).

Factors that contribute to success

- Availability of an FFS curriculum
- Regularly backstopped of facilitators by master trainers and technical experts
- Clear understanding of FFS concepts and procedures by all stakeholders.

Challenges

- FFS have a higher cost per farmer compared to several other extension methods and are unlikely to be cost-effective at large scale (see review by Waddington and White, 2014)
- It is difficult to maintain a high quality of facilitation and supervision when FFS operate at scale
- It is often difficult to obtain sustainable funding for FFS where there is limited institutional support.

E1. Junior Farmer Field and Life Schools (JFFLS)

JFFLS, a form of FFS which focuses on both agricultural and life skills, are designed specifically for young people. The approach may target specific vulnerable groups such as orphans, internally displaced persons, refugees, young returnees and young demobilized soldiers. The curriculum tends to focus on topics such as agricultural skills, entrepreneurship, civic values, peacebuilding and protection, HIV/AIDS awareness and prevention, gender sensitivity, psycho-social and business skills among others. The JFFLS approach may include an employment-oriented component which encourages and supports young women and men to participate in existing farmers' or women's cooperatives through which they can access resources and market their produce more easily. The schools are facilitated by extension advisors, teachers and social animators. Children/youth learn by observing, drawing conclusions and making informed decisions.

→ **Purpose:** **Empowerment; learning; strengthening social capital; behaviour and attitude change**

→ **Content:** **Knowledge; diagnosis/advice; technologies/practices; skills**

E2. Farm business school (FBS)

FBS is an adaptation of the FFS designed to build small farmers' business management skills to help them managing their farms profitably. The approach relies on simple decision support tools, checklists and strategic questions and addresses business and marketing problems and opportunities.

→ **Purpose:** **Learning; empowerment; behaviour and attitude change**

→ **Content:** **Knowledge; skills; diagnosis/advice**

F. Household Methodologies

Household methodologies refer to a series of participatory methodologies and processes that seek to empower households and strengthen the capacities of individuals or groups to make their own choices and transform choices into desired actions. The methodologies, which include household mentoring, gender action learning system, men's campfire conference, among others, may differ in terms of focus, cost and duration of activities. All household methodologies are applied in a time-bound manner at household or group level by group facilitators (initial contact for group-based approaches), a community-based peer facilitator (individual from the community who is motivated and skilled to support the change process) or mentor (volunteer or extension adviser who supports household mentoring). Implementing organizations are responsible for selecting, training and backstopping facilitators and monitoring the process.

Household methodologies have been used for planning action on crop and livestock management, decision-making around resources such as land, making investments, selling farm produce, managing natural resource at community level, climate smart agriculture, gender and intra-household decision making.

→ **Purpose:** **Empowerment; learning; strengthening social capital; behaviour and attitude change**

→ **Content:** **Knowledge; skills**



REACH: MODERATE TO LIMITED



EASE OF IMPLEMENTATION: DIFFICULT



COST: MODERATE TO HIGH

Costs include training facilitators, review meetings, exchange visits and refresher courses for facilitators and project managers, mobilizing communities and leaders, and outreach events for advocacy and policy engagement.

Household mentoring activities in Uganda cost around \$27/household which included preliminary costs for design, training of trainers and household mentors, mentoring activities (mentors' monthly allowances), supervision and monitoring (authors' calculations from costs mentioned in IFAD, 2014).



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: GOOD

Tools and strategies are available to allow the full participation of illiterate farmers.



SUITABILITY FOR WORKING WITH WOMEN: GOOD

All household methodologies seek to address gender inequality at household level, including women's lack of power in household decision-making, by tackling underlying social norms, attitudes, behaviours and systems. The approach uses both male and female mentors.

Factors that contribute to success

- Facilitators selected in consultation with communities/groups to ensure acceptability and credibility
- Incentives for facilitators including financial incentives, equipment, tools and other resources
- Local authorities are involved in awareness-raising activities so as to create a supportive environment for transformative change
- Partner with extension services, private sector actors and development partners for sustainability and impact
- A critical mass of engaged households is crucial to sustain positive changes.

Challenges

- Complex implementation process
- A group based approach makes it difficult to reach the most vulnerable households
- Weak households may become dependent on the facilitator/mentor and may be reluctant to graduate from mentoring.

G. Innovation platform

Innovation platforms (IPs) is a method for bringing together diverse stakeholders such as farmers and other rural people, traders, food processors, service providers, researchers, government officials etc. to identify solutions to common problems/challenges, implement activities to achieve common goals and negotiate or coordinate actions. This method is commonly used by agricultural research organizations, development agencies, NGOs and local and national governments. IPs can be temporary or permanent and can be established at different levels: local, national or sectoral level such as a value chain or an economic sector. They may deal with a single topic, such as a specific commodity, or with multiple, broad topics related to, for example, natural resource management, improving decision making, outreach and targeting of interventions.

After a stakeholder initiates the IP by identifying the broad focus and the stakeholders to be invited, IPs follow these steps: refine the focus and identify bottlenecks/problems and opportunities based on data and information gathered; identify options to address the problems and opportunities; test and adapt solutions; find opportunities to develop capacities needed by the IP members; implement and scale up the innovation if it is successful; analyse and learn from inaccuracies/mistakes. A key requirement of IPs is competent, neutral facilitation by either staff of the organization which initiates the platform or an externally hired person.

The role of the facilitator involves managing communication, handling conflict and power dynamics, documenting and reporting on activities and processes, developing capacities and supporting and advocating for institutional change.

→ **Purpose:** **Enhancing innovation capacities; empowerment; technology development, testing and adaptation; strengthening social capital; facilitating linkages**

→ **Content:** **Technology/practice; skills; knowledge; information**



REACH: LIMITED



EASE OF IMPLEMENTATION: DIFFICULT



COST: MODERATE TO HIGH

Costs vary depending on the activities involved but may run up to \$1000 a year (Posthumus, H. and M. Wongtschowski, 2014). Costs may involve training and the salary of the facilitator, cost for renting the venue, transportation and refreshments for participants, communication costs and, if necessary, funds for experimenting with new ideas



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: MODERATE

IPs bring together to a range of stakeholders to discuss and address issues so literacy skills may not be necessary to participate. Facilitators need to be skilled in managing power dynamics between diverse participants and ensure that low social status or socially excluded groups have a voice.



SUITABILITY FOR WORKING WITH WOMEN: MODERATE

As IPs bring up power issues, strong, gender-sensitive facilitation skills are needed to include women's voices. It is important to understand gender relations at household and community level before forming platforms. IPs should take women's schedules into consideration when organizing meetings.

Factors that contribute to success

- Include diverse stakeholders involved with the issue concerned
- Build on previous partnerships and initiatives when forming the platform
- Address shared problems, not just the agenda of the initiating organization
- Neutral, competent facilitators
- A sense of ownership, willingness to engage and trust by participants
- Regular monitoring and evaluation of activities by participants to encourage learning

Challenges

- Difficult, time consuming and sometimes costly to implement
- Competent facilitators who are neutral may not be available
- Social and institutional conflicts, lack of political will, and power structures can hinder the growth of innovation platforms
- IPs take a long-term perspective and therefore short-term tangible outputs may be necessary to motivate participants

H. Learning events

Agricultural extension activities rely on structured learning events such as courses and workshops. While learning events differ by the degree of structure and interaction among participants and with the trainers, they are all led by a facilitator or trainer (or a team of facilitators/trainers), usually an extension advisor, community worker or technical specialist. Learning events for producers and other rural actors typically use classroom, field sessions or a combination of the two and rely on methods such as demonstrations, group and individual exercises and role plays. They may consist of a one-time event or multiple events held periodically for the same participants. Learning events vary in length and may be residential. They need to be well planned in advance, and the timing (duration, season) should be carefully considered to address the objectives and ensure good participation.

→ **Purpose:** **Learning; product and information provision; behaviour and attitude change**

→ **Content:** **Technologies/practices; knowledge; skills; information**



REACH: MODERATE TO LIMITED



EASE OF IMPLEMENTATION: EASY TO MODERATE



COST: LOW TO MODERATE

Costs vary by the length of the event, venue and other factors and include salaries, allowances and accommodation for facilitators/trainers, equipment and materials, food and refreshments and participants' travel and accommodations.

For example, the cost (including staff salary) of a community workshop was US\$ 26/farmer (Bentley, 2007).

Factors that contribute to success

- Use of adult learning principles
- Opportunities to put learning into practice after the event and a plan for follow up.

Challenges

- Provides a one-time opportunity for learning and interaction so results or impacts may be unclear
- Attendance by some participants may be motivated by per diems/allowances.

H1. Courses

Courses tend to be structured and intentional in nature (i.e. learning is the main goal rather than an incidental outcome). The learning objectives and agenda are usually set by the organizers and methods include lectures, individual and group exercises and discussion. While courses are not usually strongly participatory, the active involvement of participants is critical. Ideally, courses for small-holder producers should be designed around adult

learning principles which recognize that learning is most effective when it is based on experiences, reflection, addressing immediate needs, self-responsibility, participation, feedback, empathy and takes place in a safe and comfortable environment. Some courses can lead to certification.



REACH: LIMITED



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS:
MODERATE TO POOR

Literacy and numeracy skills are often a requirement.



SUITABILITY FOR WORKING WITH WOMEN: MODERATE TO POOR

Higher rates of illiteracy among women, the formal nature of courses, the need to travel to course locations, the length of courses and the lack of childcare may constrain women's participation unless special efforts are made to address these issues.

H2.

Workshops

Workshops are a highly interactive form of learning event where participants engage in discussion and activities. Case studies, role plays, brainstorming, and discussion are tools frequently used in workshops to engage participants and facilitate learning. Extension-related workshops usually include field-based activities to provide visual and hands-on experience.



REACH: MODERATE TO LIMITED



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS:
MODERATE TO GOOD

Although workshops are interactive, literacy and numeracy skills are often a requirement. Multimedia aids (e.g. pictures, film, drama, songs) can be used with low literacy groups.



SUITABILITY FOR WORKING WITH WOMEN: MODERATE TO POOR

The flexible and interactive nature of workshops encourages female participation. Factors that may limit women's participation include selection criteria which favour men, low literacy, accessibility of the venue, duration and time of the workshop, lack of childcare and the involvement of both sexes, as in many cultures women are hesitant to speak in public especially if males are present.

I. Management Advice for Family Farms (MAFF)

Management Advice for Family Farms (MAFF) is an advisory approach to help producers improve their decision making and farm management including, for example, better crop management to improve food security, calibration of input use to reduce production costs, household budgeting to avoid debt and more efficient household labour use. Typically, farmers (one member per household) meet in groups every two weeks facilitated by an extension advisor or farmer facilitator. A MAFF cycle lasts on average 3 years and is implemented through six steps: 1. Diagnosis to identify farmers' needs; 2. Organizing group training on selected agricultural practices; 3. Management training (crop-season planning, grain stores management, cash flow planning, revenue–expenditure accounts, etc.); 4. Individual on-farm advisory visits; 5. Analysis of technical and economic results at both plot level and farm level by groups (computer based, in some cases); and 6. Self-planning of the next cropping season based on past results and desired objectives. The learning process is based on exchange of experiences, self-analysis of farmers' economic situation and production outputs, field visits, on-farm experiments and formal training. Training covers topics such as planning the cropping season with technical and economic data, how to manage food stocks, and decision-making based on book keeping results. MAFF uses other extension methods such as demonstrations.

| | |
|------------|--|
| → Purpose: | Empowerment; learning; product and information provision; behaviour and attitude change |
| → Content: | Knowledge; technologies/practices; diagnosis/advice; skills |



REACH: LIMITED



EASE OF IMPLEMENTATION: MODERATE TO DIFFICULT

COST: MODERATE TO HIGH

Costs include salaries and allowances for advisors and MAFF managers, development of tools and methods, implementation and back-stopping activities.



The average cost of MAFF programmes in Africa is US\$20–80/farmer per year which includes the salaries and operational costs of facilitators, training of facilitators and supervision. Costs may decrease significantly when farmer facilitators are used (Faure *et al.* 2015).



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: POOR

Skills are needed for book keeping, making observations and taking measurements. Appropriate tools for illiterate farmers are being developed.



SUITABILITY FOR WORKING WITH WOMEN: POOR

Women may find it difficult to participate in MAFF because of literacy requirements, the method's focus on one household member and constraints related to the time required for group meetings. If a man attends the meetings, he may not pass on information to the women in the household.

Factors that contribute to success:

- Organizations with the capacity to adapt and implement the method.

Challenges

- Initial set up and piloting costs are high
- Long implementation cycle
- MAFF is more appropriate for working with well resourced, literate farmers who are able to keep records
- The focus on individuals gives little emphasis to the economic activities and priorities of all household members, therefore allowing for only a partial analysis of household economics.

J. Mobile phone (mExtension)

The mobile phone is a two-way communication tool that can be used to provide extension and advisory services. MExtension facilitates product information dissemination to remote, disperse locations in a timely manner at low cost through several approaches, where mobile connection is available. Farmers can call tele-centres or e-kiosks (facilities equipped with computers, internet, telephone, fax, printers) to get technical, weather and market information by phone or text message (SMS). They can subscribe to SMS alerts (sometimes for a fee) to get regular advice on topics of their choice or get information through Interactive Voice Response (IVR), a system which allows a computer to provide messages over the phone using voice and tone input. Extension and farmer advisors can call farmers to provide information. Mobile phones, both conventional and smart phones, can be used with other communication tools such as web portals, mobile apps, videos, radio, images and animated images. mExtension requires content development, infrastructure (e.g. internet connectivity, maintenance of infrastructure) and, in some cases, human resources to respond to SMS and calls. SMS can also be used by extension organizations for monitoring purposes such as tracking data from the field (e.g. crop monitoring and client satisfaction) by sending out questionnaires via SMS and mapping the data.

→ **Purpose:** Awareness raising; facilitation of linkages; product and information provision

→ **Content:** Information; technologies/practices



REACH: WIDE TO MODERATE



EASE OF IMPLEMENTATION: EASY TO MODERATE



COST: MODERATE TO HIGH (DEPENDING ON THE TYPE OF SYSTEM)

Costs include setting up and developing the infrastructure, developing/customizing the content of the information product, operationalizing the system, staff training, publicity, training clients and maintaining the infrastructure.

**SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS:**

GOOD (for IVR) TO POOR (for SMS)

**SUITABILITY FOR WORKING WITH WOMEN: MODERATE TO POOR**

As women generally have less access than men to mobile phones and have lower literacy rates, some mExtension approaches may not be appropriate for reaching women.

Factors that contribute to success:

- Good mobile phone network and internet coverage
- Significant number of farmers own or have access to mobile phones
- Clients are aware of the services
- Free or minimum charges for services
- Obtaining feedback and using it to adjust the services
- Partnership between the service provider and relevant knowledge partners (e.g. research institutions, meteorological services, market information systems) is important for quality assurance and for regular updating of content.

Challenges

- Limited network coverage
- Clients may not know how to use mobile phones to seek and receive information or lack literacy skills to be able to use certain services.

J1.

Village-based information providers

Some extension organizations employ local people to provide information and advice using mobile phones and, in some cases, a variety of e-tools. One variation of this approach involves providing information providers with a mobile phone preloaded with applications that the provider can use to look up information on a range of topics (e.g. crop prices, weather information) requested by clients. Providers may also be equipped with laptops connected to the internet and digital cameras which allows them to show images or videos, take photographs, and use the internet and mobile phones to seek advice from extension advisors.

Providers deliver information to clients through a combination of mobile phone and letters. Providers may charge for their services.

→ **Purpose:** **Product and information provision; awareness raising**

→ **Content:** **Diagnosis/advice; technologies/practices; information**

**REACH:** LIMITED**EASE OF IMPLEMENTATION:** EASY TO MODERATE

**COST: LOW TO MODERATE**

Costs may include training of providers, equipment for providers, regular maintenance of equipment, supervision and backstopping costs.

**SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: GOOD**

As this approach involves face-to-face interaction with information providers, there is little need for literacy skills.

**SUITABILITY FOR WORKING WITH WOMEN: GOOD**

As this approach uses person-to-person interaction and may use women as information providers, it offers good opportunities for reaching women.

K. Plant clinics

Plant clinics draw on the idea of health clinics by providing a place where farmers can consult a plant “doctor” (an extension advisor or agronomist) about plant health problems. During a plant clinic session, held in public places (e.g. busy market centres, rallies, field days), plant “doctors” provide advice to farmers based on available information/literature and diagnosis (e.g. by looking at samples), often giving them written instructions about the prescribed treatment. Clinics may collect data about farmers as well as the problems observed and the advice given, which provides evidence for informed decision making and can be used for disease surveillance purposes. Plant clinics can also help researchers to identify priority research areas. This method can be used in combination with plant health rallies, mass extension campaigns and radio to reach more farmers.

→ **Purpose:** Awareness raising; product and information provision;

→ **Content:** Diagnosis/advice; technologies/practices; information; knowledge



REACH: MODERATE TO LIMITED



EASE OF IMPLEMENTATION: MODERATE

**COST: MODERATE**

Costs include organizing consultative meetings, planning activities, staff salaries, training of staff, publicizing the clinics, the cost of furniture and basic equipment for clinic sessions (photographs of symptoms, reference literature and hand lenses) and technical backstopping of “doctors”.

The average cost of running a plant clinic in Uganda was estimated at \$36 per event which included allowances for clinic staff, transport of furniture and tents, labour to help set up the tent, coordination and publicity (Danielsen and Mutebi, 2010).

**SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: MODERATE**

Plant “doctors” often provide written instructions on the recommended treatment which calls for basic literacy skills.

**SUITABILITY FOR WORKING WITH WOMEN: MODERATE**

Women may benefit less from this approach than men because they may be less likely to have heard about clinics, face difficulties travelling to the clinic venue, have less time to wait, may not understand “doctors” who only speak the official language and may be unable to read written instructions.

Factors that contribute to success

- Plant clinics are run in the same location on a regular basis to build client confidence
- Publicity is crucial for reaching farmers.

Challenges

- Maintaining the regularity of clinics
- Plant clinics often rely on the commitment of individual plant “doctors” which is problematic for long-term sustainability
- Gender-related and literacy constraints need to be addressed.

L.**Radio**

While radio (including FM stations, community and rural radio) can be used as a tool in extension, radio can also constitute the centre component of an extension approach. Radio can be used as a one-way or two way communication channel to broadcast RAS content using different formats such as radio campaigns, on-farm interviews, drama (soap operas) and live talk shows. Radio is often combined with other ICTs such as mobile phones, which allow farmers to provide feedback and ask questions during call-in programme, portable voice recorders (e.g. Mp3 recorders), and IVR which allow two-way communication with the target audience (e.g. pre-broadcast information such as market prices, weather forecasts and re-caps of previous broadcasts).

As a two way communication channel that is often broadcast in local language, radio provides a medium for farmers to interact among themselves individually or in groups and with technical experts and institutions (e.g. extension advisors, entrepreneurs, research organizations), thus contributing to demand-led RAS provisioning. Radio broadcasters as key actors need to be trained on technical issues in agriculture, on how to identify needs and communicate effectively with producers, as well as on how to use communication technologies.

→ **Purpose:** **Awareness raising; product and information provision; learning; facilitating of linkages; behaviour and attitude change; empowerment**

→ **Content:** **Information; technologies/practices; knowledge**



REACH: WIDE TO MODERATE

Reach will depend on the format used and whether the station involved has national or local coverage.



EASE OF IMPLEMENTATION: MODERATE TO DIFFICULT

The ease of implementation is largely determined by the format used (e.g. use of a single format such as an interactive talk show is easier to implement than a radio campaign). In general, activities include selection of the radio station, preparation of the programme/content, training of broadcasters and listeners, broadcasting and monitoring.



COST: LOW TO MODERATE

Costs include staff costs, production equipment, training of staff, technical backstopping by agricultural experts, programme production costs and airtime, which will vary by the type of station.

A radio programme in Bolivia which broadcasted six, three-minute scripts on potato bacterial wilt cost \$840 and reached an estimated 2000 farmers (\$0.42/farmer) (Bentley *et al.*, 2007). A four-month radio programme on teff in Ethiopia cost US\$0.38/farmer (Rao, 2015).



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: GOOD

Use of local language in radio programmes helps target farmers who have limited education.



SUITABILITY FOR WORKING WITH WOMEN: GOOD

Radio programmes should target their content to address women's activities and crops. It is important to ensure that the timing of broadcasts fits women's schedules. The use of pre-recorded MP3 versions of programmes and organizing women into listening groups may improve their access to radios and mobile phones.

Factors that contribute to success

- Partnerships between radio stations, farmers, extension providers, research institutes and other agricultural value chain stakeholders
- Use of a format or combination of formats appropriate for the content and targeted population
- Use radio in combination with other ICTs (e.g. mobile phones) to create a two-way flow of communication and with other extension approaches and tools (e.g. printed materials, demonstrations) to achieve multiple objectives
- Train radio station staff on relevant aspects including development of programmes, use of mobile phones to call listeners or receive calls-in, voice-based systems, use and maintenance of equipment, and technical content
- Train/inform listeners on how to intervene during sessions through the use of calls (received and call in) or how to record messages

- Engage community members in the development and implementation of radio programmes as radio presenters, correspondents, or facilitators, which enhances local ownership and sustainability
- Find sustainable funding sources to maintain independence and objectivity in the content of programmes e.g. on-air advertisements, charging for SMS sending greetings and prayers during the programme.

Challenges

- Radio stations often lack the capacity to work with extension advisors and other agricultural development actors due to their lack of knowledge in agriculture
- Using a variety of radio formats to address complex issues may make implementation complex and costly
- Content of the programme might be biased by the type of station. Commercial and private stations may be more inclined to broadcast programmes sponsored by agro-dealers, while government radio stations may promote interventions of national relevance and not address local issues.

L1. Radio campaigns

A radio campaign involves a systematic, organized strategy to achieve a goal through use of multiple radio and other formats (jingles, messages, call-in programmes, SMS, mini dramas etc). This approach may involve farmers in the design of the campaign, in programming and providing feedback. By using different formats and incorporating other extension approaches, radio campaigns are suitable for achieving a variety of objectives including promotion of new crop varieties or labour techniques, alerting farmers to a pest or disease problem or the impacts of climate change.

| | |
|-------------------|---|
| → Purpose: | Awareness raising; product and information provision; learning; facilitating of linkages; behaviour and attitude change; empowerment |
| → Content: | Information; technologies/practices; knowledge |



REACH: MODERATE TO WIDE



COST: LOW TO MODERATE

Costs include staff costs, production equipment, training of staff, technical backstopping by agricultural experts, programme production costs, airtime, which will vary by type of station, and publicity content.

L2. Radio Listeners' group

This approach involves interaction between a network of listeners' groups each consisting of 15-40 farmers (existing or formed for this purpose) and radio stations. The groups, who are equipped with radios, recorders, and sometimes mobile phones, identify and discuss issues of relevance to them. These discussions are recorded by a facilitator and in some cases club members carry out interviews themselves with other community members. The programmes are aired by the partnering radio station with the objective of raising awareness about the issue. In some cases, the radio station shares the group's discussion with appropriate experts and policy makers and those discussions are also aired and listened to by the groups. The clubs provide a platform for accessing information about a range of issues including services, market access, prices, agricultural innovation, raising awareness about issues such as gender-based violence, and also provide a two-way communication flow between the community and development actors, which is expected to lead to concrete interventions initiated by the groups.

→ **Purpose:** **Awareness raising; empowerment; behaviour and attitude change; product and information provision, facilitation of linkages; strengthening social capital**

→ **Content:** **Information; diagnosis/advice; knowledge; skills**



REACH: MODERATE TO LIMITED



COST: MODERATE TO LOW

In addition to staff costs, cost include production equipment, training of staff, technical backstopping by agricultural experts, programme production costs, and airtime which will vary by type of station and publicity done, costs for facilitation and training of facilitators.

L3. Radio drama

Radio drama (also called soap operas) are a series of stories broadcast over a period of time to inform farmers about agricultural interventions and issues in an entertaining way. Drama can be combined with other extension tools such as printed materials. The development of the drama should be done in consultation with the target group to ensure that the audience can identify with the characters and the messages. Listeners may be organized into groups to listen to programmes.

→ **Purpose:** **Raising awareness; behaviour and attitude change; product and information provision**

→ **Content:** **Information; knowledge**



REACH: WIDE



COST: HIGH

The main costs involve pre-production research, cost of production, advertising and promotion costs, air time.

M. Rural Resource Centre

Rural Resource Centre (RRC), also referred to as farmer training centres or agricultural centres, is a community-based approach for providing agricultural and RAS that has been used for decades. A RRC is a physical location set up to improve farmers' access to technologies, knowledge and training and to promote farmer innovation, interactive learning and networking. Centres typically have demonstration and research plots, nurseries, a training hall, a small library, office space and sometimes accommodation for visiting farmers. They offer various services including training (sometimes for a fee), sale of inputs (e.g. seeds, seedlings) and farm products, advice on technologies and innovations through demonstrations, access to ICTs and linking producers to market. Centres may be multi-purpose (e.g. "tambos" in Peru), focus broadly on agriculture (crops, livestock, beekeeping, fishing ponds, processing etc) or may have a specialized focus, for example on agribusiness development (Songhai Centres) or agroforestry. RRCs may also address social issues of interest to the community such as human hygiene, land access and citizenship. Typically staffed by extension advisors, RRC may be run by public sector extension organizations, farmer organizations or NGOs.

| | |
|------------|---|
| → Purpose: | Technology development, testing and adaptation; product and information provision; learning; enhancing innovation capacities; facilitation of linkages; strengthening social capital |
| → Content: | Technologies/practices; skills; information; knowledge |



REACH: MODERATE



EASE OF IMPLEMENTATION: MODERATE TO DIFFICULT



COST: HIGH

Costs include land, infrastructure, staff training, operational and backstopping costs. Some centres recover some of their costs by charging for services.



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: GOOD

The interactive nature of this approach does not call for literacy skills.



SUITABILITY FOR WORKING WITH WOMEN: MODERATE TO POOR

This approach relies on face-to-face interaction and demonstration of practices/ technologies which favors women. However, women may not have the time to travel to the RRC due to work, childcare and domestic responsibilities or may face other difficulties travelling (lack of funds for travelling, cultural restrictions on travel, etc.).

Factors that contribute to success

- Effective management
- Technical teams that have both technical and functional capacities and are motivated
- Engage in activities that generate income to sustain the centre
- Work with formal and recognized institutions (FO, NGO and grassroots organization) to create legitimacy
- RRCs should be in a location that is accessible to large numbers of farmers.

Challenges

- Initial investments (land and buildings), operating and backstopping costs are high
- Offering new services to meet farmers' needs.

N. Study circles

A study circle (SC) consists of 5 to 20 people, often members of farmer organizations, who meet regularly to learn and improve their knowledge on topics of common interest. The implementation of a SC varies, but common principles underlying the method are: equality, democracy, experience, cooperation, freedom and the right to set objectives, continuity, planning and active participation. Groups are self-governing and are led by an accepted, sometimes trained leader, who may be a farmer or extension advisor. The role of the facilitator, who is not expected to be an expert, is to help focus and structure dialogue while encouraging a sense of group ownership. The group decides on the frequency of meetings, but a cycle normally lasts three to four months. A SC can also engage in field visits to enhance learning. SCs are useful for strengthening farmer organizations, providing a platform for demand-led RAS and encouraging community empowerment and development. The method is useful for working with any group of people including youth.

| | |
|------------|--|
| → Purpose: | Empowerment; product and information provision; strengthening social capital; behaviour and attitude change |
| → Content: | Knowledge; technologies/practices; skills |



REACH: LIMITED



EASE OF IMPLEMENTATION: MODERATE



COST: LOW

Costs include training of facilitators, payment of facilitators, where needed, study materials, rental of the meeting venue, if necessary.

According to Chipeta (2016) if a facilitator works with 10 SCs, each with 10 participants, the cost of starting and running an SC is US\$4–6 per participant.



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS:
MODERATE-GOOD

Reading and basic numeracy skills are often required.

**SUITABILITY FOR WORKING WITH WOMEN: MODERATE-GOOD**

Literacy requirements may not favor women. Women only study circles may be appropriate in situations where women are not comfortable in mixed sex groups.

Factors that contribute to success

- Well-developed focus area and strategy developed by the group
- On-going support of facilitators

Challenges

- Preventing study circles from becoming classes where farmers learn from a trainer
- Ensuring that participants lead the process and learn from each other.

O. Study tours

A study tour (ST) (also called field or motivational tour) consists of 5 to 20 people visiting a location outside of where they live (in the same country or in another country) with a specific learning objective. This method can be used for many purposes including visiting producers' fields, fish ponds or other agricultural sites, to find out about their practices, visiting a research station, laboratory, rural enterprise, processing plant or rural resource centre to learn about a new technology or practice. A tour can last from a day to several weeks and be organized in different ways (for example, in some cases participants live with local farmers). Where the tour covers producers' fields or sites, it provides an opportunity for producers to share experiences, practices and ideas. Extension advisors are often responsible for planning and organizing tours which includes handling logistics (travel, food, accommodation). Study tours may be sponsored by companies, research institutions, projects, farmer organizations or farmers.

| | |
|-------------------|--|
| → Purpose: | Learning; awareness raising; product and information provision; facilitate linkages |
| → Content: | Information; technologies/practices; knowledge |

**REACH:** LIMITED**EASE OF IMPLEMENTATION:** MODERATE**COST:** MODERATE TO HIGH

Costs include planning and organizing the study tour, transportation, meals and accommodation

**SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS:** GOOD

Since this method exposes participants to real life situations and usually involves interacting with people, there is little need for literacy skills.

**SUITABILITY FOR WORKING WITH WOMEN: MODERATE TO GOOD**

This method does not require farmers to be literate for it to be effective. But women may not have the time to participate in tours due to work, childcare and domestic responsibilities or may face other difficulties travelling (need to get permission from their husbands, cultural restrictions on travel etc.).

Factors that contribute to success

- Good planning and organization
- Focus on a specific topic or theme(s)
- Identifying appropriate locations to visit.

Challenges

- Selecting participants that have similar interests, speak the same language and at the same time ensuring a good mix of different types of participants (if appropriate)
- Managing group dynamics.

P.**Television**

Television (TV) offers a mass media channel for providing information and stimulating rural producers' interest in innovation through visual and auditory means. TV conveys a sense of importance and legitimacy, whether programmes are transmitted through national government stations, community stations or private stations. The use of television in extension involves two distinct activities: production of the programme and broadcasting. Formats for television-based RAS by public and private sector organizations include documentaries, participatory programmes and "edutainment" programmes such as shows, contests and dramas which use entertainment to educate. Broadcasts may consist of a single programme or a series, varying in length from a few minutes to an hour or more. The impact of TV for extension purposes may be enhanced by organizing facilitated watchers' groups.

TV can be combined with other ICTs tools such as mobile phones to create a two-way communication flow (e.g. by asking questions during live TV shows), printed materials and field demonstrations. Multi-media "edutainment" programmes such as Shamba Shape Up in Kenya involve farmers, TV personalities and experts and feature on-farm demonstrations, discussion and question and answer sessions in combination with SMS and printed materials.

→ **Purpose:** Awareness raising; product and information provision; behaviour and attitude change

→ **Content:** Information; technology/practice



REACH: WIDE (where extensive national TV networks or rural TV stations exist)



EASE OF IMPLEMENTATION: MODERATE (when using existing TV programmes); DIFFICULT (when both production and broadcasting of programmes are involved)



COST: HIGH (for producing all types of TV programmes); MODERATE TO HIGH (for broadcasting)

Costs for producing and airing television programmes include inputs, field work expenses, pre- and post-production expenses including scripting, studio recording, editing and airtime, and salaries. If viewing groups are organized, the training, backstopping and salaries of facilitators should be considered.



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: GOOD

As an audiovisual medium, the use of TV in extension does not require literacy skills



SUITABILITY FOR WORKING WITH WOMEN: GOOD

Because television involves sound and visual images, it does not require literacy to be effective. Important gender related considerations include making the content of programmes relevant to women (e.g. choice of topic, characters shown), using local languages, forming women-only viewing groups to ensure that women can view programmes and ensuring that programmes are shown at a convenient time for women.

Factors that contribute to success

- Existence of TV networks that reach rural areas or rural TV stations
- Regular availability of electricity or other source of power
- Relevant content presented in local language in an easy to understand way
- Publicity on the broadcasting of programmes
- The timing of broadcasts should take into consideration the preferences of target groups.

Challenges

- TV programmes are expensive to produce and broadcasting airtime may be costly
- On its own, TV allows for a only one-way communication flow
- The content of programmes broadcast through a national TV network may not be relevant for local communities and the use of a national or official language may limit reach
- Private companies may pay for and broadcast programmes to sell their products.

Q.

Video

Video (a recording made digitally or on video tape) provides an audiovisual medium for one-way communication flow that can be effectively used to disseminate information, knowledge, and innovations and stimulate new ideas. As a visual medium, video allows for action which takes place over a long period to be compressed. Video can be produced by film professionals or by farmers trained on basic film-making working with film professionals (e.g. farmer learning videos made with farmers and participatory videos made by farmers). Experience shows that, particularly where the content has a technical focus, video produced in one country or location can be used effectively in other countries or cultural contexts.

Video is recorded in a format (DVD or computer files) which can be easily and cheaply reproduced, usually in local language, for distribution through TV, mobile phone networks, RAS providers, online video portals, e.g. Youtube, or specific online video portals designed and sustained to support agricultural innovation and disseminate knowledge, or directly to farmers. It can be used as a stand-alone tool disseminated in an unstructured manner including broadcasts through TV, video halls, and screenings at organized events (e.g. village meetings, rallies) or as part of a structured approach. The use of video with little or no facilitation is most appropriate when practices or technologies close to what farmers do and know are involved. Video can be used with other methods and approaches such as plant clinics, fairs, shows and rallies, demonstrations and printed materials.

→ **Purpose:** **Product and information provision, learning; behaviour and attitude change; enhancing innovation capacities; awareness raising; technology development, testing and adaptation**

→ **Content:** **Technologies/practices; knowledge; information; skills**



REACH: WIDE (unstructured approaches) TO LIMITED (structured approaches)



EASE OF IMPLEMENTATION: EASY (unstructured approaches) TO MODERATE (structured approaches)



COST: LOW TO MODERATE

Costs vary, depending on whether videos have to be produced, who is involved (e.g. film professionals, farmers), the type of equipment used as well as the approach used for reaching farmers (i.e. a structured or unstructured, mass production of DVDs).

Farmer learning videos can be duplicated, distributed and screened without facilitation for US\$0.50 per farmer (Bentley *et al.*, 2015).



SUITABILITY FOR WORKING WITH LOW LITERACY POPULATIONS: GOOD
as an audiovisual medium, the use of video in extension does not call for literacy skills



SUITABILITY FOR WORKING WITH WOMEN: GOOD

As most videos tend to be short, this approach accommodates women's busy schedules but the timing and venue of video screenings or broadcasts should be convenient for women. Organizing women into viewing "clubs" may improve their access to video.

Factors that contribute to success

- Involve farmers (including women and youth) at all stages in the development of video (identification of the topic, script development, as actors) to ensure relevance and credibility
- Videos should be no longer than 20 minutes
- Use local language
- Use of skilled facilitators, while not always necessary, is helpful for mobilizing communities for screenings, providing technical advice and emphasizing the credibility of the practices and may help to enhance learning
- Strategic alliances for video production encourages a sense of shared ownership over the end-product.

Challenges

- Producing videos is relatively expensive and time consuming
- On its own, video allows for a one-way communication flow. When used for training, video should be combined with face to face methods such as demonstrations
- Equipment to screen videos and a power source in areas not connected to the national grid may be necessary
- Finding ways to service equipment and resolve equipment breakdown.

Q1. Facilitated video viewing in groups

A structured approach to using video involves organizing groups of 15–20 farmers to meet regularly over a set period of time to watch and discuss videos. Sessions are organized by a facilitator, typically a farmer or extension advisor, and revolve around discussions and field demonstrations on the learning topics. Facilitators are trained to follow a curriculum. Illustrated printed materials may also be used. Facilitated video viewing is most suited for practices/technologies requiring hands-on training.

→ **Purpose:** **Learning; product and information provision; behaviour and attitude change**

→ **Content:** **Technologies/practices; skills**



REACH: LIMITED



EASE OF IMPLEMENTATION: MODERATE TO DIFFICULT



COST: MODERATE TO HIGH

Costs involve developing a curriculum, training and backstopping facilitators and may include the cost of video viewing equipment and printed materials.

Six-month-long video viewing clubs on cocoa integrated crop and pest management cost US\$78 per farmer (Muilerman and David, 2011).

Some tools used in agricultural extension

Participatory learning and action (PLA)

Participatory learning and action is an approach for learning about and engaging with communities to identify needs, plan, monitor and evaluate interventions. Extension advisors need to be skilled in facilitating the use of PLA tools to support extension methods and approaches. Tools include:

- Transect walks: walks across an area made together with local people with the objective of producing a map showing resources, land use systems and other features of the landscape.
- Wealth ranking and well-being ranking: used to understand through a participatory process, perceptions of wealth and inequalities, identify local indicators of wealth, well-being and poverty and rank households by wealth categories.
- Visioning: used to support communities to develop a vision of the future in pictorial form.
- Mapping: a participatory exercise which allows local people to produce a map of a location showing resources, land use systems and facilities.
- Timelines: used to show events or processes by displaying items sequentially along a time-based line.
- Calendars and activity profiles: a visual way for local people to show “who does what and when”.
- Ranking: captures the opinions, beliefs, concerns and priorities of local people by ranking categories of what is being looked at (e.g. technologies, constraints, crops).
- Semi-structured interviews: guided conversations to collect information about a topic.

Printed materials

As an extension tool, printed materials provide information to producers and other local people in written and/or pictorial form as:

- posters
- brochures
- leaflets
- bulletins
- comic books/strips
- booklets
- guidebooks
- newspapers
- calendars, among others.

Printed materials are used in conjunction with most extension methods and approaches.

When considering using printed materials, extension providers should take into account the cost, availability of a designer and facility to print the materials, and how the materials will be distributed. In designing the materials, it is important to have information about the literacy levels of the target audience and language(s) spoken to determine which format to use and the degree of emphasis on text versus pictorial content. Where possible, different types of producers (men, women, youth, etc.) should be involved in the design of printed materials to ensure that the content meets their needs and can be easily understood. Draft materials should always be pre-tested with target users.

Social media

Social media are web-based media that create a two way flow of information between service providers and producers by allowing users to create, share and retrieve digital content. Social media tools include:

- Social networking platforms such as Facebook and Twitter
- Messaging platforms like WhatsApp which allows group messaging and sharing of any form of content
- Fora, an on-line website which provides a meeting point for exchanging ideas and views on a particular topics
- Blogs, a regularly updated website or web page, typically one run by an individual or small group, that is written in an informal or conversational style
- Wiki, a website or database developed collaboratively by a community of users, allowing any user to add and edit content.

Producers: share comments, feedback and experiences with other producers and with service providers; seek advice from extension and research experts.

RAS organizations: generate information on farmers' needs and demands; compile feedback from producers for wider dissemination; promote their organization and network with other organizations locally and internationally.

The use of social media by extension providers should be guided by a strategy that defines the use of this tool in relation to the organization's mandate. Social media requires a moderator to manage and update the content, as well as ensure quality control of information and posts. Some uses of social media include:

Games

In agricultural extension, games are used to better understand farmers' perceptions and decision making, and to enhance social learning by local people and "outsiders". They include:

- Role plays and board games which allow farmers to express their preferences, especially about sensitive topics. They are also used to create awareness and encourage behaviour change.
- Simulation games show how people react to threats, uncertainties and new opportunities and make decisions based on their knowledge, experiences and priorities by simulating situations. They are often used in the context of natural resource management.

Since extension advisors mainly use existing games, it is important to pre-test the game with the target audience to ensure it is appropriate for the purpose and cultural context.

Folk media

Folk media are forms of entertainment such as drama, songs, storytelling, puppet shows, proverbs and riddles, some of which are based on traditions. They can be used in conjunction with extension methods and approaches to convey information, create awareness and change behaviour in an effective and entertaining way. Folk media can be transmitted via ICTs (radio, television, video) but also directly to audiences. The involvement of local people as actors and performers increases the credibility of the information and attracts attention.

When considering using folk media, it is important to consider which format is most appropriate for the content, the costs of content development and production, and develop a dissemination strategy.

Section 2

**Deciding
which
method
to use**

How to use the decision matrix

The decision tool is in the form of a matrix laid out on two pages. Follow these steps to make a decision about which method to use to meet your extension objectives:

Step 1 | Read through all the method description sheets to become familiar with the various methods.

Step 2 | Answer the following questions with regard to your planned activity:

- What is my main goal/purpose with regard to extension and advisory services? What am I trying to do? (see box 1 on page 4 for definitions of goal/purpose)
- What type of content is involved in what I want to do? (see box 2 on page 5 for definition of content)
- What is the literacy level of my clients? What do I need to consider if I want to work with clients who cannot read or write?
- What proportion/percent of my clients are women? What do I need to consider if I want to work with female clients?

Step 3 | Once you have answered these questions, go to the decision matrix.

- Find your primary purpose in the “Purpose” column.
- Identify the content of your intervention in that row. The corresponding row in the third column suggests which methods are most suitable for your purpose and content. Methods are represented by codes (A, B, C, etc.), as listed below.

Codes used in the decision matrix

| Method | Code | Method | Code |
|---|------|-------------------------------------|------|
| Benchmarking for farm business analysis | A | Management advice for family farms | I |
| Demonstration | B | Mobile phones (mExtension) | J |
| Farmer learning groups | B1 | Village-based information providers | J1 |
| Fairs, shows and rallies | C | Plant clinics | K |
| Farmer-to-farmer extension | D | Radio | L |
| Village-based self-employed agents | D1 | Radio campaigns | L1 |
| Farmer field schools | E | Radio listeners' group | L2 |
| Junior farmer field and life schools | E1 | Radio drama | L3 |
| Farmer business schools | E2 | Rural resource centres | M |
| Household methodologies | F | Study circles | N |
| Innovation platforms | G | Study tours | O |
| Learning events | H | Television | P |
| Courses | H1 | Video | Q |
| Workshops | H2 | Facilitated video viewing in groups | Q1 |

Step 4

Go to the second page of the decision matrix and look up the letters corresponding to possible methods identified in step 3. For each method, answer the following questions with regard to your planned activity:

- How many people do I want to reach?
- How much/which resources (e.g. funds, human resources etc.) do I have for extension/advisory services?
- Does my target population include a high number of people with low literacy?
- Does my target population include women?

Review the reach/coverage, ease of implementation, cost and suitability for working with low literacy populations and women. Re-read the method description sheet if necessary. Assess the method based on your situation and make an initial decision about whether the method is appropriate. Go through the same process for each method identified in step 3.

Step 5

If possible, do further reading on those methods that were the top options (see the references). Consider creating your own method/approach based on a combination of elements from different methods/approaches. Analyse your context in terms of:

- Resources available including funds, staffing, capacities of staff, curricula, extension tools etc.
- The policy environment and the context in which you are working.
- Information about your target group(s) including language, cultural characteristics, age, socio-economic status etc.
- Availability of partners such as radio stations, research institutions, NGOs etc.
- Experience and good practices in the country with your proposed method.

Step 6

After analysing your context, make a final decision about the method you will use.

Step 7

Evaluate the effectiveness of the method chosen to make adjustments if necessary.

Decision Matrix

| Purpose | Content | Methods |
|--|--------------------------|--|
| PRODUCT AND INFORMATION PROVISION | INFORMATION | B • B1 • C • D • D1 • H • L • L1 • L2 • L3 • M • O • P • Q • Q1 |
| | TECHNOLOGIES / PRACTICES | B • B1 • C • D • D1 • H • J • J1 • L1 • M • O • P • Q • Q1 |
| | KNOWLEDGE | not applicable |
| | DIAGNOSIS / ADVICE | D1 • J1 • K |
| | SKILLS | not applicable |
| AWARENESS RAISING | INFORMATION | C • J • J1 • K • L • L1 • L2 • L3 • O • P • Q |
| | TECHNOLOGIES / PRACTICES | B • B1 • C |
| | KNOWLEDGE | not applicable |
| | DIAGNOSIS / ADVICE | not applicable |
| | SKILLS | not applicable |
| TECHNOLOGY DEVELOPMENT, TESTING AND ADAPTATION | INFORMATION | G |
| | TECHNOLOGIES / PRACTICES | B • B1 • E • M • Q |
| | KNOWLEDGE | G |
| | DIAGNOSIS/ADVICE | not applicable |
| | SKILLS | G |
| LEARNING | INFORMATION | A • D • D1 • H • L • L1 • M • O |
| | TECHNOLOGIES / PRACTICES | B • B1 • D • D1 • E • E1 • H • I • M • Q • Q1 |
| | KNOWLEDGE | A • E • E1 • H • I • L • L1 |
| | DIAGNOSIS/ADVICE | not applicable |
| | SKILLS | A • B • B1 • D • D1 • E • E1 • E2 • F • H • H1 • H2 • I • M • Q • Q1 |
| STRENGTHENING SOCIAL CAPITAL | INFORMATION | G |
| | TECHNOLOGIES / PRACTICES | G |
| | KNOWLEDGE | G |
| | DIAGNOSIS/ADVICE | not applicable |
| | SKILLS | E • E1 • F • L2 • M • N |
| EMPOWERMENT | INFORMATION | G |
| | TECHNOLOGIES / PRACTICES | G |
| | KNOWLEDGE | A • E • E1 • F • G • I • L2 • N |
| | DIAGNOSIS/ADVICE | A • L2 |
| | SKILLS | E • E1 • F • I • N |
| ENHANCING INNOVATION CAPACITIES | INFORMATION | not applicable |
| | TECHNOLOGIES / PRACTICES | not applicable |
| | KNOWLEDGE | E • G • M • Q |
| | DIAGNOSIS/ADVICE | not applicable |
| | SKILLS | E • M • O |
| FACILITATION OF LINKAGES | INFORMATION | C • D1 • J • L • L1 • L2 • M • O |
| | TECHNOLOGIES / PRACTICES | E • E1 • M |
| | KNOWLEDGE | not applicable |
| | DIAGNOSIS/ADVICE | M |
| | SKILLS | not applicable |
| BEHAVIOUR AND ATTITUDE CHANGE | INFORMATION | I • L1 • L2 • L3 • P • Q |
| | TECHNOLOGIES / PRACTICES | not applicable |
| | KNOWLEDGE | E • E1 • H • H1 • H2 • I • L1 • L2 • L3 • N • Q1 |
| | DIAGNOSIS/ADVICE | not applicable |
| | SKILLS | not applicable |



| Methods | | PAGE | REACH | | | EASE OF IMPLEMENTATION | | | COST | | | SUITABILITY FOR WORKING WITH LOW LITERACY POPULATION | | | SUITABILITY FOR WORKING WITH WOMEN | | | INITIAL DECISION | | |
|---------|---|------|-------|----------|---------|------------------------|----------|-----------|---------|----------|------|--|----------|------|------------------------------------|----------|------|------------------|---------|----|
| | | | WIDE | MODERATE | LIMITED | EASY | MODERATE | DIFFICULT | LOW | MODERATE | HIGH | GOOD | MODERATE | POOR | GOOD | MODERATE | POOR | YES | NO SURE | NO |
| A | Benchmarking for farm business analysis | 8 | | | ● | | ● | | | ● | | | | ● | | | | | | |
| B | Demonstrations | 9 | | ● | | ● | | | ● | | | ● | | ● | | | | | | |
| B1 | Farmer learning groups | 10 | | | ● | ● | | | ● | | | ● | | ● | | | | | | |
| C | Fairs, shows and rallies | 11 | ● | | | ● | | | Rallies | Fairs | ● | | | | | ● | | | | |
| D | Farmer to farmer extension (F2FE) | 12 | | ● | | | ● | | | ● | | | | ● | | | | | | |
| D1 | Village-based self-employed agents | 13 | | ● | | | ● | | ● | | | | | ● | | | | | | |
| E | Farmer field school | 14 | | | ● | | ● | | | ● | | | ● | | ● | | | | | |
| E1 | Junior Farmer Field and Life School (JFFLS) | 15 | | | ● | | ● | | | ● | | | ● | | ● | | | | | |
| E2 | Farm business school (FBS) | 15 | | | ● | | ● | | | ● | | | ● | | ● | | | | | |
| F | Household Methodologies | 16 | | ● | | | ● | | | ● | | | ● | | ● | | | | | |
| G | Innovation platforms | 17 | | | ● | | ● | | | ● | | | ● | | ● | | | | | |
| H | Learning events | 19 | | ● | | ● | | | | ● | | | ● | | ● | | | | | |
| H1 | Courses | 19 | | | ● | ● | | | | ● | | | ● | | ● | | | | | |
| H2 | Workshops | 20 | | ● | | ● | | | | ● | | | ● | | ● | | | | | |
| I | Management Advice for Family Farms (MAFF) | 21 | | | ● | | ● | | | ● | | | ● | | ● | | | | | |
| J | Mobile phones (mExtension) | 22 | ● | | | ● | | | | ● | | IVR | SMS | | ● | | | | | |
| J1 | Village-based information providers | 23 | | | ● | ● | | | | ● | | | ● | | ● | | | | | |
| K | Plant clinics | 24 | | ● | | | ● | | | ● | | | ● | | ● | | | | | |
| L | Radio | 25 | ● | | | | ● | | | ● | | | ● | | ● | | | | | |
| L1 | Radio campaigns | 27 | ● | | | | ● | | | ● | | | ● | | ● | | | | | |
| L2 | Radio listeners' group | 28 | | ● | | | ● | | | ● | | | ● | | ● | | | | | |
| L3 | Radio drama | 28 | ● | | | | ● | | | ● | | | ● | | ● | | | | | |
| M | Rural Resource Centre | 29 | | ● | | | ● | | | ● | | | ● | | ● | | | | | |
| N | Study circles | 30 | | | ● | | ● | | ● | | | | ● | | ● | | | | | |
| O | Study tours | 31 | | | ● | | ● | | | ● | | | ● | | ● | | | | | |
| P | Television | 32 | ● | | | | ● | | | ● | | | ● | | ● | | | | | |
| Q | Video | 34 | * | | ** | * | ** | | | ● | | | ● | | ● | | | | | |
| Q1 | Facilitated video viewing in groups | 35 | | | ● | | ● | | | ● | | | ● | | ● | | | | | |

* unstructured approaches ** structured approaches

References and resources

A. Benchmarking for farm business analysis

Kahan, D. 2013. Farm business analysis using benchmarking. FAO, Rome.

B. Demonstrations

Apina, H.T. 2009. Conservation agriculture demonstration guide. Sudan Productive Capacity Recovery Programme (SPCRP). FAO, EU and Government of Southern Sudan. Available at: http://www.fao.org/ag/ca/Training_Materials/CA_demonstration_guide_Sudan.pdf

Bell, M. & Rickman, J. 2012. The Farm Walk – Farm-Led Demonstrations. Factsheet. UC Regents Davis campus. Available at: http://afghanag.ucdavis.edu/other-topic/culture-and-extension/fact-sheets/FS_Ext_Farm_Walk.pdf/view

Cai, T., Rodriguez, L. & Abbott, E. 2014. The ability of training approaches to reduce agricultural knowledge gaps between men and women in rural Uganda. *Journal of International Agricultural and Extension Education*, 21(2): 17–31. Available at: https://www.aiaee.org/attachments/article/1596/2014-212_final.pdf

Daudu, S. 2009. Problems and prospect of folk media usage for agricultural extension service delivery in Benue State, Nigeria. *Journal of Human Ecology*, 25(1): 19–24. Available at: <http://www.krepublishers.com/02-Journals/JHE/JHE-25-0-000-09-Web/JHE-25-1-000-2009-Abst-PDF/JHE-25-1-019-09-1664-Daudu-S/JHE-25-1-019-09-1664-Daudu-S-Tt.pdf>

Gerber, C. K., Hillger, D. & Maddy, B. 2015. Planning and Conducting Field Demonstration Tours. *Journal of Extension*, 53(5): Online article 5TOT10. Available at: <https://joe.org/joe/2015october/tt10.php>

Hancock, J. 1997. Extension Education: Conducting Effective Agricultural Demonstrations. University of Kentucky Cooperative Extension Service. Available at: <http://www2.ca.uky.edu/agcomm/pubs/id/id111/id111.htm>

HELVETAS Swiss Intercooperation. 2015. SLMP Training for Resource Persons on Participatory Extension. Collection of published Concept Notes 2015. Helvetas Afghanistan and SDC. Available at: https://assets.helvetas.ch/downloads/e6a_extension_methods.pdf

ICAR. No date. Front-line demonstration. Umiam (Barapani), INDIA. Available at: www.icarzc3.gov.in/kvk/technical/9.pdf

Nafziger, E.D. 1984. Use of demonstration plots as extension tools. *Journal of Agronomic Education*, Available at: <https://www.agronomy.org/files/publications/nse/pdfs/jnr013/013-01-0047.pdf>

Richardson, J.G. 2003. On-farm demonstrations: consideration factors for their success and viability as an extension teaching tool. *South African Journal of Agricultural Extension*, 32: 114–124. Available at: <http://www.ajol.info/index>.

C. Fairs, shows and rallies

- Government of Bangladesh.** Agricultural Extension Manual Chapter. Available at: http://dae.portal.gov.bd/sites/default/files/files/dae.portal.gov.bd/publications/295f75c5_f491_4f9c_bd63_86f3268e231d/Extension_Manual_Chapt10.pdf
- Ifenkwe, G.E.** 2012. Organizing agricultural shows and fairs in Nigeria. *International Journal of Academic Research in Progressive Education and Development*, 1(4): 74–87. Available at: <http://www.hrmars.com/admin/pics/1185.pdf>
- INTA** [Instituto Nacional de Tecnología Agropecuaria, Argentina] No date. [website] http://www.intaexpone.gov.ar/?page_id=82
- ITU [International Trade Centre]** 2012. Basics for organizing trade fairs a guide for developing countries. Technical paper. Geneva, ITU. Available at: <http://www.intracen.org/Basics-for-organizing-trade-fairs/>
- Odhiambo, D. and Muthuri, M.** 2013. [article on line] Evergreen and Strengthening Rural Institutions represented at the East African Farmer Innovation Fair. World agroforestry news on-line. Available at: <http://www.worldagroforestry.org/sites/default/files/Evergreen%20and%20Strengthening%20Rural%20Institutions%20represented%20at%20the%20East%20African%20Farmer%20Innovation%20Fair.pdf>

D. Farmer to Farmer Extension

- FAO [Food and Agriculture Organization of the United Nations].** 2016. Asistencia Técnica y Extension Rural Participativa en América Latina. FAO, Lima.
- Franzel, S., Degrande, A., Kiptot, E., Kirui, J., Kugonza, J., Preissing, J. & Simpson, B.** 2015. Farmer-to-farmer extension. Note 7. GFRAS Good Practice Notes for Extension and Advisory Services. Global Forum for Rural Advisory Services: Lindau, Switzerland. Available at: <http://www.g-fras.org/en/download.html>
- Franzel, S., Wambugu, C., Nanok, T. & Coe, R.** 2011. The 'model farmer' extension approach revisited: Are expert farmers effective innovators and disseminators? *In*: CTA, Proceedings of the International Conference on Innovations in Extension and Advisory Services: Linking Knowledge to Policy and Action, 15–18 November 2011, Nairobi, Kenya. Wageningen, the Netherlands, CTA. Available at: http://extension.cta.int/pages/Documents/Tools%20and%20Approaches/2.Changing%20Concepts%20and%20Functions%20to%20Empower%20Farmers/CTA129%20Changing%20Concepts%20and%20Functions%20to%20Empower%20Farmers_Franzel_04.pdf
- JICA, NACA and DoF.** 2013. Proceedings of the International Symposium on Small-scale Freshwater Aquaculture Extension, 2–5 December 2013, Bangkok, Thailand. Available at: <https://www.jica.go.jp/thailand/english/office/topics/c8h0vm00008umorn-att/131205.pdf>
- Kiptot, E., Franzel, S. and Kirui J.** 2012. Volunteer farmer-trainers: improving smallholder farmers' access to information for a stronger dairy sector. *World Agroforestry Centre Policy Brief*, No. 13. Nairobi. Available at: <http://www.worldagroforestry.org/downloads/publications/PDFS/PB12236.PDF>
- Simpson, B., Franzel, S., Degrande, A., Kundhlande, G. & Tsafack, S.** 2015. Farmer to farmer extension: issues in planning and implementation. *MEAS Technical Note*. Urbana, IL. USA. Modernizing Extension and Advisory Services, USAID.
- Tsafack, S., Degrande, A., Franzel, S. & Simpson, B.** 2014. Farmer-to-farmer extension in Cameroon: a survey of extension organisations. *ICRAF Working Paper*, No. 182. Nairobi, World Agroforestry Centre.
- Van Campenhout, B.** 2013. Is There an App for That? The Impact of Community Knowledge Workers in Uganda. *IFPRI Discussion Paper*, 01316. Development Strategy and Governance Division. IFPRI.
- Wellard K., Rafanomezana, J., Mnyirenda, M., Okotel, M. & Subbey, V.** 2013. A review of community extension approaches to innovation for improved livelihoods in Ghana, Uganda and Malawi. *The Journal of Agricultural Education and Extension*, 19 (1): 21–35. Available at: <http://www.selfhelpafrica.org/downloads/CEA-approaches-review-ghana-uganda-malawi.pdf?eca494>

E. Farmer field schools

- Anandajasekeram, P., Davis, K. & Workneh, S.** 2007. Farmer field schools: an alternative to existing extension systems? Experience from Eastern and Southern Africa, *Journal of International Agricultural and Extension Education*, 14(1): 81–93. Available at: <https://www.aiaee.org/attachments/article/125/Anandajasekeram%2014.1-7.pdf>
- Bentley, J.W., Barea, O., Priou, S., Equise, H. & Thiele, G.** 2007. Comparing Farmer Field Schools, Community Workshops, and Radio: Teaching Bolivian Farmers about Bacterial Wilt of Potato. *Journal of International Agricultural and Extension Education*, 14(3): 45–61. Available at: https://www.aiaee.org/attachments/137_Bentley-Vol-14.3-4.pdf
- Braun, A., Jiggins, J., Röling, N., van den Berg, H. & Snijders, P.** 2006. A global survey and review of farmer field school experiences. ILRI. Available at: <http://www.share4dev.info/kb/documents/1880.pdf>
- Chuluunbaatar, D. & Yoo J.** 2015. A Shift in Global Perspective Institutionalizing Farmer Field School. Rome, FAO.
- Dhamankar, M. & Wongtschowski, M.** 2014. Farmer Field Schools (FFS). Note 2. GFRAS Good Practice Notes for Extension and Advisory Services. GFRAS. Lindau, Switzerland.
- FAO/WFP.** 2007. Getting started! Running a Junior Farmer and Life Field School. Rome, FAO. Available at: <ftp://ftp.fao.org/docrep/fao/010/a1111e/a1111e01.pdf>
- FAO.** 2011. Farm Business school Training of Farmers Programme South Asia Handbook. Bangkok, FAO. Available at: <http://www.fao.org/docrep/014/i2137e/i2137e00.pdf>
- GFRAS.** 2013. Summary of the e-discussion of Mobilizing Extension and Advisory Services to Improve Food Security and the Livelihoods of the Rural Poor. GFRAS-MEAS-USDA/NIFA. Available at: <http://www.g-fras.org/en/forum/mobilizing-extension/338-1st-question-what-approaches-methods-tools-are-available-for-delivery-of-advisory-services-and-scaling-up.html?start=6>
- Groeneweg, K., Buyu, G., Romney, D. & Minjauw, B.** 2006. Livestock farmer field schools – Guidelines for facilitation and technical manual. ILRI, Nairobi.
- May, L.** 2014. Farmer to farmer experience sharing, mutual learning and dissemination of good practices for an improved agricultural production. An experience from Food Security and Livelihoods Program (2011-2014). Kayah State, ACF Myanmar Mission. Available at: http://www.themimu.info/sites/themimu.info/files/assessment_file_attachments/140725_FFS_capitalization_Final_2.pdf
- Petricks, H., Blum, M., Kaaria, S., Tamma, P. & Barale, K.** 2015. Enhancing the potential of family farming for poverty reduction and food security through gender-sensitive rural advisory services. Rome, FAO.
- SUSTAINET EA.** 2010. Technical Manual for farmers and Field Extension Service Providers: Farmer Field School Approach. Nairobi, Sustainable Agriculture Information Initiative. Available at: http://www.fao.org/ag/ca/CA-Publications/Farmer_Field_School_Approach.pdf
- Waddington, H. & White, H.** 2014. Farmer field schools: from agricultural extension to adult education, 3ie Systematic Review Summary 1. London, International Initiative for Impact Evaluation (3ie).

F. Household methodologies

- IFAD** [International Fund for Agricultural Development][website]. Household Methodologies. Available at: https://www.ifad.org/topic/household_methodologies/overview

G. Innovation platform

- Tucker J, Schut M. & Klerkx L.** 2013. Linking action at different levels through innovation platforms. *ILRI Innovation Platforms Practice Brief* 9. <http://cgspace.cgiar.org/bitstream/handle/10568/34163/Brief9.pdf?sequence=1>

- Posthumus, H. & Wongschowski, M.** 2014. GFRAS Good Practice Notes for Extension and Advisory Services. Innovation Platforms. Note 1. GFRAS: Lindau, Switzerland. Available at: <http://www.g-fras.org/en/good-practice-notes/innovation-platforms.html?showall=&start=2#SNote1>
- Tucker, J., Cullen, B., Amsalu, A. & Ludi, E.,** 2014. Innovation Platforms to Enhance Participation in Rainwater Management: Lessons from The Nile Basin Development Challenge with a Particular Focus on Political Economy and Equity Issues. Colombo, Sri Lanka: CGIAR Challenge Program on Water and Food (CPWF). CPWF Research for Development (R4D) Series, no. 11. 40p.
- Mulema, A.A., Snyder, K.A., Ravichandran, T. & Becon, M.** 2015. Addressing gender dynamics in innovation platforms. *ILRI Innovation platforms practice brief*, No. 14.. Available at: https://www.researchgate.net/profile/Annet_Mulema2/publication/283507196_Addressing_gender_dynamics_in_innovation_platforms/links/563c4c9508aec6f17dd5105e/Addressing-gender-dynamics-in-innovation-platforms.pdf?origin=publication_detail
- van Rooyen, A., Swaans, K., Cullen, B., Lema, Z. and Mundy, P.** 2013. Facilitating innovation. *ILRI Innovation platforms practice brief*, No. 10. ILRI, Nairobi.

H. Learning events

- Barrack K.R.** (ed). 2012. Methods and techniques for effective teaching in extension and advisory services. *AMEAST Training*. USAID. Available at: http://www.usaid.gov/sites/default/files/docs/2012/01/20120114_AMEAST_Training_Methods_and_Techniques_for_Effective_Teaching_in_Extension_and_Advisory_Services.pdf
- Bationo, A., Waswa, B., Okeyo, J.M., Maina, F. & Kihara, J.M.** (eds). 2011. *Innovations as Key to the Green Revolution in Africa* Vol. 1: Exploring the Scientific facts. New York, USA. Springer.
- Bellwood-Howard, I.** 2012. Research and dissemination methods for non-literate contexts. University for Development Studies, Harmattan School conference: Literacy and the Millennium Development Goals. Ghana Institute of Linguistics, Literacy and Bible Translation Conference Centre, 6-8 February 2012, Tamale, Ghana. Available at: <http://www.uds.edu.gh/docs/2015/ICEIR/2012/Bellwood-Howard,%20Research%20and%20dissemination%20methods%20for%20non%20literate%20contexts.pdf>
- Bentley, J.W., Barea, O., Priou, S., Equise, H. & Thiele, G.** 2007. Comparing Farmer Field Schools, Community Workshops, and Radio: Teaching Bolivian Farmers about Bacterial Wilt of Potato. *Journal of International Agricultural and Extension Education*, 14(3): 45–61. Available at: https://www.aiaee.org/attachments/137_Bentley-Vol-14.3-4.pdf
- Dalsgaard, J.P.T., Minh, T.T., Giang, V.N. & Riise, J.C.** 2005. Introducing a farmers' livestock school training approach into the national extension system in Vietnam. *Agricultural Research & Extension Network, Network Paper*, No. 144. Available at: <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/5170.pdf>
- Fox, J., Hebert, L., Martin, K. & Bairnsfather, B.** 2009. An Examination of the Benefits, Preferred Training Delivery Modes, and Preferred Topics of 4-H Youth Development Volunteers. *Journal of Extension*, 47(1): Online article 1R1B2. Available at: <http://www.joe.org/joe/2009february/rb2.php>
- Hanson, J.C., Johnson, D.M., Miller, R.J. & Adams, D.C.** 2006. Training Extension Professionals from Developing Countries Through Educational Workshops Conducted in the United States. *Journal of Extension*, 44(5): Online article 5FEA6. Available at: <http://www.joe.org/joe/2006october/a6.php>
- HELVETAS Swiss Intercooperation.** 2015. SLMP Training for Resource Persons on Participatory Extension. Collection of published Concept Notes, 2015. Helvetas Afghanistan and SDC. Available at: https://assets.helvetas.ch/downloads/e6a_extension_methods.pdf
- Khin Mar Cho.** 2002. Training Needs of Agricultural Extension Agents in Myanmar. Proceedings of the 18th Annual AIAEE Conference. Durban, South Africa. Available at: <https://www.aiaee.org/attachments/article/1322/cho72-80.pdf>
- Unesco** (website). Learning Knowledge and Skills for Agriculture and Rural Livelihoods. Literature findings and research design. Power point presentation. Available at: <http://www.unesco.org/education/Globalseminar-literature-research-design.pdf>

I. Management advice for family farms (MAFF)

- Faure, G., Pautrizel, L., de Romémont, A., Toillier, A., Odru, M. & Havard, M.** 2015. Management Advice for Family Farms to Strengthen Entrepreneurial Skills. *GFRAS Good Practice Notes for Extension and Advisory Services*, Note 8. GFRAS, Lindau, Switzerland.
- Faure, G. & Kleene, P.** 2004. Lessons from new experiences in Extension in West Africa: MAFF and farmers governance. *The Journal of Agricultural Education and Extension* 10(1).
- Faure, G., Toillier, A. & Ismail, M.** 2013. How to address up-scaling and sustainability of innovative advisory services: the case of management advice for family farms in Africa. CIRAD, UMR Innovation, France & Burkina Faso. From: http://ifsa.boku.ac.at/cms/fileadmin/Proceeding2014/WS_1_2_Faure.pdf
- Faure, G., Dugué, P. & Beauval, V.** 2004. Conseil à l'exploitation familiale. Expériences en Afrique de l'Ouest et du Centre Coédition Gret-Cirad.

J. Mobile phone (mExtension)

- Barrantes, R. & Agüero, A.** 2014. Mobile phones for agricultural extension in Peru. In: *Mobile phones for agricultural extension. Worldwide mAgri Innovations and Promise for Future*. New India publishing Agency, New Delhi.
- E-krishok** website: <http://wp.ekrishok.com/>
- GSM**. 2016. The mobile economy. GSM Association. London, UK. Available at: <https://www.gsmaintelligence.com/research/?file=97928efe09cdba2864cdf1ad1a2f58c&download>
- Saravanan, R. & Suchiradipita, B.** 2015. mExtension – Mobile Phones for Agricultural Advisory Services. *GFRAS Good Practice Notes for Extension and Advisory Services*, Note 17. GFRAS, Lindau, Switzerland. Available at: <http://www.g-fras.org/en/good-practice-notes/mextension.html>
- Saravanan, R.** 2014. Mobile phones for agricultural extension. In: *Worldwide mAgri Innovations and Promise for Future*. New India publishing Agency, New Delhi.
- Van Campenhout, B.** 2013. Is there an app for that: the impact of community knowledge workers in Uganda. *IFPRI Discussion Paper*, 01316. Development Strategy and Governance Division. IFPRI

K. Plant clinics

- Boa, E., Franco, J., Chaudhury, M., Simbalaya, P. and Van Der Linde, E.** 2016. Plant Health Clinics. Note 23. *GFRAS Good Practice Notes for Extension and Advisory Services*. GFRAS: Lausanne, Switzerland.
- Danielsen, S. and Mutebi, E.** 2010. The introduction of mobile clinics to Uganda. Technical report. University of Copenhagen, Makerere University, Cabi.
- Negussie, E., Karanja, P., Day, R., Romney, D., Reeder, R., Boa, E., Muriithi, C., Kamau, R., Phiri N., Danielsen, S., Murage, N., Gitare, I., Wanjiku, R., Mutisya, J., Ngige, D., Kimani M., and Festus. W.**, 2011. Innovations in extension and advisory services international conference role of plant health clinics in meeting the needs of small-scale farmers for advisory services: experiences from eastern Africa in Proceedings of “*Innovations in Extension and Advisory Services: Linking Knowledge to Policy and Action for Food and Livelihoods*” conference organised by CTA, Nairobi, Kenya, from 15-18 November 2011. Available at: http://extension.cta.int/pages/Documents/Tools%20and%20Approaches/4.Innovative%20Communication/CTA129%20Innovative%20Communication_Negussie_04.pdf
- Remco Mur, R. Williams, F. Danielsen, S. Audet-Bélanger, G. Mulema, J.** eds. 2015. Listening to the silent patient. Uganda's journey towards institutionalizing inclusive plant health services. *CABI working paper 7*. CABI publishing. Available at: <http://www.cabi.org/Uploads/CABI/about-us/Scientists%20output/Listening%20to%20the%20silent%20patient.pdf>

L. Radio

- ACDI/VOCA** [website]. ICT Helps Development Efforts Go Farther and Faster for Real-Time Impact. Available at: <http://52.0.15.52/our-approach/cross-cutting-approaches/information-and-communication-technology-ict>
- Acunzo, M., Pafumi, M., Torres, C. & Stella Tirol, M.** 2012. Communication for rural development sourcebook. Rome, FAO. Available at: <http://www.fao.org/3/a-i3492e.pdf>
- Aditeshwar S.** 2009. Understanding and Meeting the ICT needs of Community Radio Stations. New Delhi, IIT Delhi.
- Bentley, J.W., Barea, O., Priou, S., Equise, H. & Thiele, G.** 2007. Comparing Farmer Field Schools, Community Workshops, and Radio: Teaching Bolivian Farmers about Bacterial Wilt of Potato. *Journal of International Agricultural and Extension Education*, 14(3): 45–61. Available at: https://www.aiaee.org/attachments/137_Bentley-Vol-14.3-4.pdf
- Chapman, R., Blench, R., Kranjac-Berisavljevic, G. & Zakariah, A.B.T.** 2003. Rural radio in agricultural extension: The example of vernacular radio programs on soil and water conservation in N. Ghana. Network Paper No. 127. Agricultural Research & Extension Network, ODI. Available at: www.odi.org/resources/docs/5200.pdf
- FAO.** 2015. Dimitra Clubs: a unique approach. Dimitra Listeners club. Factsheets. Rome, FAO. Available at: <http://www.fao.org/3/a-i4706e.pdf>
- Farm radio International.** 2014. Farmer Radio in Sub-Saharan Africa: A Snapshot. Final Report of the African Rural Radio Program Analysis (ARRPA) Project. Ottawa, Farm Radio Research Initiative. Available at: <http://www.farmradio.org/wp-content/uploads/Farm-Radio-International-ARRPA-Report-April-2014.pdf>
- Farm Radio International.** 2011. The new age of Radio. How ICTs are changing the rural radio in Africa. Ottawa, Farm Radio Research Initiative. Available at: <http://www.farmradio.org/wp-content/uploads/farmradioictreport20111.pdf>
- Farm Radio International.** 2011. The Participatory Radio Campaigns and food security. How radio can help farmers make informed decisions. Ottawa, Farm Radio Research Initiative. Available at: <http://www.farmradio.org/wp-content/uploads/farmradio-prereport20111.pdf>
- GFRAS.** 2012. Investments in agricultural extension and information systems. Switzerland, GFRAS. Available at: <http://www.g-fras.org/fileadmin/UserFiles/Documents/Framesand-guidelines/Financing-RAS/Investments-in-Agricultural-Extension-and-IS.pdf>
- Gilberds, H. & Myers, M.** 2012. Radio, ICT convergence and knowledge brokerage: lessons from sub-Saharan Africa. *IDS Bulletin*, 43(5): 76–83.
- FAO/FES.** 2003. The one to watch – Radio, New ICTs and Interactivity. Edited by B. Girard, Rome, FAO. Available at: <ftp://ftp.fao.org/sd/sdr/sdre/ruralradio/publications/The%20one%20to%20Watch/pdf/1-2watch.pdf>
- New agriculturist on line.** 2005. [online blog]. Agriculture comes clean with soap. Available at: <http://www.new-ag.info/05-2/develop/dev03.html>
- Rao, S.** 2015. Using Radio in Agricultural Extension. *GFRAS Good Practice Notes for Extension and Advisory Services, Note 18*. GFRAS, Lindau, Switzerland. Available at: <https://www.g-fras.org/en/savoifr/global-good-practices.html?download=357:gpp-note-18-using-radio-in-agricultural-extension>
- Sullivan, B.** 2011. How ICTs are changing rural radio in Africa. The new age of radio. African Farm Radio Research Initiative. Available at: <http://bit.ly/farmradioict>
- Ulbricht M.** 2010. [online blog]. Mobile Tech In Community Radio. Available at: <http://www.mobileactive.org/state-SMS-and-mobile-technology-community-radio-stations>

M. Rural resource centre

- Bicksler, A.J., Bates, R., Burnette, R. & Thansrithong, B.** 2014. The Current and Future Roles of Small Farm Resource Centers in Extension and Advisory Services. Synthesis report from seven case studies in Southeast Asia. MEAS. Available at: <http://dev.meas.illinois.edu/wp-content/uploads/2015/08/MEAS-CS-SFRC-0-Synthesis-and-Lessons-Learned-November-2014.pdf>
- CTA.** 2015. Rural resource centres: bringing agricultural services closer to farmers. Fact sheet, guidebook and poster. Wageningen, CTA.
- Degrande, A., Siohdjie Yeptiep, Y., Franzel, S., Asaah, E., Takoutsing, B., Tsobeng, A. & Tchoundjeu, Z.** 2014. Disseminating agroforestry innovations in Cameroon: are relay organisations effective? pp. 221–230, in: B. Van Lauwe, P. Van Asten and G. Blomme, (eds). *Agro-ecological Intensification of Agricultural Systems in the African Highlands*. Routledge, New York, USA.
- Degrande, A., Tchoundjeu, Z., Kwidja, A. & Fongang Fouepe, G.** 2015. Rural Resource Centres: A Community Approach to Extension. GFRAS Good Practice **Notes for Extension and Advisory Services, Note 10**. GFRAS, Lindau, Switzerland.
- Degrande, Z. Tchoundjeu & R. Kwidja.** 2015. Farmers Rural resource centres: Farmer centred approach to extension. In: *CTA Top 20 Innovations that Benefit Smallholder Farmers*. Available at: http://publications.cta.int/media/publications/downloads/1831_PDF.pdf

N. Study circles

- Agriterra.** 2014. [online blog] Training in integrated farming system. Available at: <https://agriterra.org/training-in-integrated-farming-system-58460/>
- Chipeta, S., Chonde, C., & Sekeleti, M.** 2016. Farmer Study Circles. GFRAS Good Practice Notes for Extension and Advisory Services. Note 20. GFRAS: Lausanne, Switzerland.
- Ljung, M., Richert, A., & Gibbon, D.** 1998. Extended Study Circles as a Means of Facilitating Change. In: Osewe, D.O., Ochola, W., Kharde, P.B. no date. Influence of Study Circle Extension Strategy on Technology Dissemination in Kenya. Available at: https://www.academia.edu/15253891/Influence_of_Study_Circle_Extension_Strategy_on_Technology_Dissemination_in_Kenya
- Pokrzywnicka, A.** 2015. [online blog] Study Circle. Swedish method of adult education. Available at: <https://ec.europa.eu/epale/en/blog/study-circle-swedish-method-adult-education>
- Study Circles Resource Centre (SCRC).** 1998. A Guide for Training Study Circle Facilitators. Topsfield Foundation, Inc. (TFI). Available at: http://www.awcnet.org/documents/tools_studycirclefacilitatorsguide.pdf
- We effect** study circle material: <http://www.weeffect.org/about-us/resources-2/africa/>

O. Study tours

- FAO.** No date. Guide to extension training. Available at: <http://www.fao.org/docrep/t0060e/T0060E07.htm>
- Myers, B. & Jones, L.** Effective Use of Field Trips in Educational Programming: A Three Stage Approach. University of Florida, IFAS Extension. Available at <http://edis.ifas.ufl.edu/wc054>
- NALEP [National agriculture and livestock extension programme].** 2011. A guide to effective extension methods for different situations. Kenya. Available at: <http://www.nafis.go.ke/wp-content/uploads/2012/05/extension-methods.pdf>

P. Television

- Adekunle, A.A., Onyibe, J.E. Ogunyinka, O.M., Omenesa, Z.E., Auta, S.J. & Kuyello, A.U.** 2002. Agricultural information dissemination: an audience survey in Kano State. Information and Communication Support for Agricultural Growth in Nigeria (ICS-NIGERIA). International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria.
- ACAR [Africa Centre for Applied Research]** 2013. Report for Mediae: Shamba Shape Up Series One Development Benefit and Systemic Impact. Nairobi, Kenya.
- Chachhar, A.R., Hassan, S.H.J., Omar, S.Z & Soomro, B.** 2012. The Role of Television in Dissemination of Agriculture Information among Farmers *Journal of Applied Environmental and Biological Sciences*, 2(11): 586–591. Available at: [http://www.textroad.com/pdf/JAEBS/J.%20Appl.%20Environ.%20Biol.%20Sci.,%202\(11\)586-591,%202012.pdf](http://www.textroad.com/pdf/JAEBS/J.%20Appl.%20Environ.%20Biol.%20Sci.,%202(11)586-591,%202012.pdf)
- Ducheneaut, N., Moore, R.J., Oehlberg, L., Thornton, J.D. & Nickell, E.** no date. Social TV: Designing for Distributed, Sociable Television Viewing. Available at: <https://www.parc.com/content/attachments/social-tv-ijhci.pdf>
- Nazari, M.R. & Hassan, M.S.B.H.** 2011. The role of television in the enhancement of farmers' agricultural knowledge. *African Journal of Agricultural Research*, 6(4): 931–936. Available at: http://www.academicjournals.org/article/article1380895095_Nazari%20and%20Hassan.pdf
- Khalid Alam, M. & Haque, A.** 2014. Contribution of Television Channels in Disseminating Agricultural Information for the Agricultural Development of Bangladesh: A Case Study. DigitalCommons@University of Nebraska – Lincoln. Available at: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2553&context=libphilprac>
- Nazari, M.R. & Hassan, S.H.J.** 2013. Role of Broadcast Media in the dissemination of agricultural knowledge. *Archive des Sciences*, 65: 3.
- Parvizian, F., Lashgarara, F. & Nejad, G.H.H.** 2011. Investigating the Role of Radio and Television Programs on the Improvement of Agricultural Extension, *American Journal of Scientific Research*, 16: 6–14. Available at: https://www.researchgate.net/publication/234114933_Investigating_the_Role_of_Radio_and_Television_Programs_on_the_Improvement_of_Agricultural_Extension
- TV technologies.** 2013. [website]. The State of Television, Worldwide. Available at: <http://www.tvtechnology.com/opinions/0087/the-state-of-television-worldwide/222681s>
- University of Reading**, 2014. Assessing the Impacts of Shamba Shape Up. Reading, UK.

Q. Video

- Bentley, J., Van Mele, P., Okry, F. & Zossou, E.** 2014. Videos that speak for themselves: when non-extensionists show agricultural videos to large audiences, *Development in Practice*, 24(7): 921–929.
- Bentley, J. & Van Mele, P.** 2011. Sharing ideas between cultures with videos. *International Journal of Agricultural Sustainability*, 9(1).
- Bentley, J. Van Mele, P. & Musimami, G.** 2013. The Mud on Their Legs – Farmer to Farmer Videos in Uganda. *MEAS Case Study # 3*. MEAS.
- Bentley, J., Chowdhury, A. & David, S.** 2015. Videos for Agricultural Extension. *GFRAS Good Practice Notes for Extension and Advisory Services* Note 6. GFRAS, Lindau, Switzerland.
- Bentley, J., Van Mele, P., Harun-ar-Rashid & Krupnik, T.** 2015. Distributing and showing farmer learning videos in Bangladesh. *The Journal of Agricultural Education and Extension*, 1(19):
- David, S. & Asamoah C.** 2011. Videos as a tool for agricultural extension in Africa: a case study from Ghana. *International Journal of Education and Development using Information and Communication Technology*, 7(1).
- Lie, R. & Mandler, A.** 2009. Video in development. Filming for rural change. CTA, FAO, GTZ, Wageningen UR. Available at: http://www.fao.org/uploads/media/Video%20in%20Development_1.pdf

- Tian Cai, T., Rodriguez, L. & Abbot, E.** 2014. The Ability of Training Approaches to Reduce Agricultural Knowledge Gaps between Men and Women in Rural Uganda. *Journal of International Agricultural and Extension Education*, (21)2: 17–31. Available at: https://www.aiaee.org/attachments/article/1596/2014-212_final.pdf
- USAID.** 2012. Integrating low cost video into agricultural development projects. Toolkit for practitioners; Radio toolkit component 1: how is low-cost video currently being used in agricultural development? Available at: <http://ictforag.org/toolkits/video/component1.html#.V5oKxvI95Mw>
- Van Mele, P.** 2006. Zooming-in zooming-out: a novel method to scale up local innovations and sustainable technologies. *International journal of agricultural sustainability*, 4(2): 131–142. Available at: <http://www.africarice.org/warda/IJAS%20zooming-in%20zooming-out.pdf>

References on tools

Participatory learning and action (PLA)

- Appel, K. Buckingham, E. Jodoin, K. & Roth, D.** 2012. Participatory Learning and Action Toolkit: for Application in BSR's Global Programs. BSR. Available at: <https://herproject.org/downloads/curriculum-resources/herproject-pla-toolkit.pdf>
- Kenton, N.** no date [online article]. Participatory Learning and Action (PLA). International institute for environment and development -IIED. Available at: <https://www.iied.org/participatory-learning-action>
- Participatory methods** website, produced by the Participation Research Cluster, Institute of Development Studies and supported by the Swiss Agency for Development and Cooperation. Available at: <http://www.participatorymethods.org/glossary/participatory-learning-and-action-pla>
- Thomas, S.** no date. What is Participatory Learning and Action (PLA): An Introduction. University of Wolverhampton, Centre for International Development and Training. Available at: <http://idp-key-resources.org/documents/0000/d04267/000.pdf>

Printed materials

- David, S & Cobbah, E. A.N.** 2008. From our perspective: developing printed extension materials with cocoa farmers in Ghana. *International Journal of Agricultural Sustainability*, (6)4: 267–276. Available at: <http://www.tandfonline.com/doi/abs/10.3763/ijas.2008.0354?journalCode=tags20>
- Oakley, P. & Garforth, C.** 1997. Guide to extension training. FAO, Rome. Available at: <http://www.fao.org/docrep/t0060e/T0060E05.htm>
- Government of Bangladesh.** Agricultural Extension Manual Chapter. Available at: http://dae.portal.gov.bd/sites/default/files/files/dae.portal.gov.bd/publications/295f75c5_f491_4f9c_bd63_86f3268e231d/Extension_Manual_Chapt10.pdf

Social media

- Chowdhury, A. & Hambly Odame, H.** 2013. Social Media for Enhancing Innovation in Agri-food and Rural Development: Current Dynamics in Ontario, Canada. In: W. Ashton & A. S. Carson [Eds]. *Journal of Rural and Community Development*, 8(2): 97–119. Available at: <http://journals.brandonus.ca/jrcd/article/view/1007/232>
- Saravanan, R., Suchiradipita, B., Chowdhury, A., Hambly Odame, H. & Hall, K.** 2015. Social Media for Rural Advisory Services. *GFRAS Good Practice Notes for Extension and Advisory Services*, Note 15. GFRAS, Lindau, Switzerland. Available at: <http://www.g-fras.org/en/good-practice-notes/social-media-new-generation-tools-for-agricultural-extension.html>

Suchiradipta Bhattacharjee, S. & Raj, S. 2016. Social media: Shaping the future of agricultural extension and advisory services. From: <http://elearning.tki.org.nz/Ministry-initiatives/Connected-Learning-Advisory-service/Social-media>

Typhina E., Bardon, R.E. & Gharis, L.W. 2015. Collaborating with Your Clients Using Social Media & Mobile Communications. *Journal of Extension*, 53(1): Article 1TOT2 Available at: <https://www.joe.org/joe/2015february/tt2.php>

Games

Chapman, G. 1989. Developing Real Imaginary Games. *Irrigation and Drainage Systems* 3: 309–313.

Hardwick, D. [online article]. Soil science and role plays: A new approach to extension. Available at: <http://ecoag.org.au/soil-science-and-role-plays-a-new-approach-to-extension/>

Speelman, E.N., Garcia-Barrios, L.E., Groot, J.C.J. & Tittone, P. 2013. Gaming for smallholder participation in the design of more sustainable agricultural landscapes. *Agriculture Systems*. 126(April 2014): 62–75. <http://dx.doi.org/10.1016/j.agsy.2013.09.002>

Villamor, G.B. & Badmos, B.K. 2015. Grazing game: a learning tool for adaptive management in response to climate variability in semi-arid areas of Ghana. *Ecology and Society* 21(1): Article 39. <http://dx.doi.org/10.5751/ES-08139-210139>

North-West University South Africa. 2014. [article on line]. Board game to GROW sustainable development in rural areas. Available at: <http://news.nwu.ac.za/board-game-grow-sustainable-development-rural-areas>

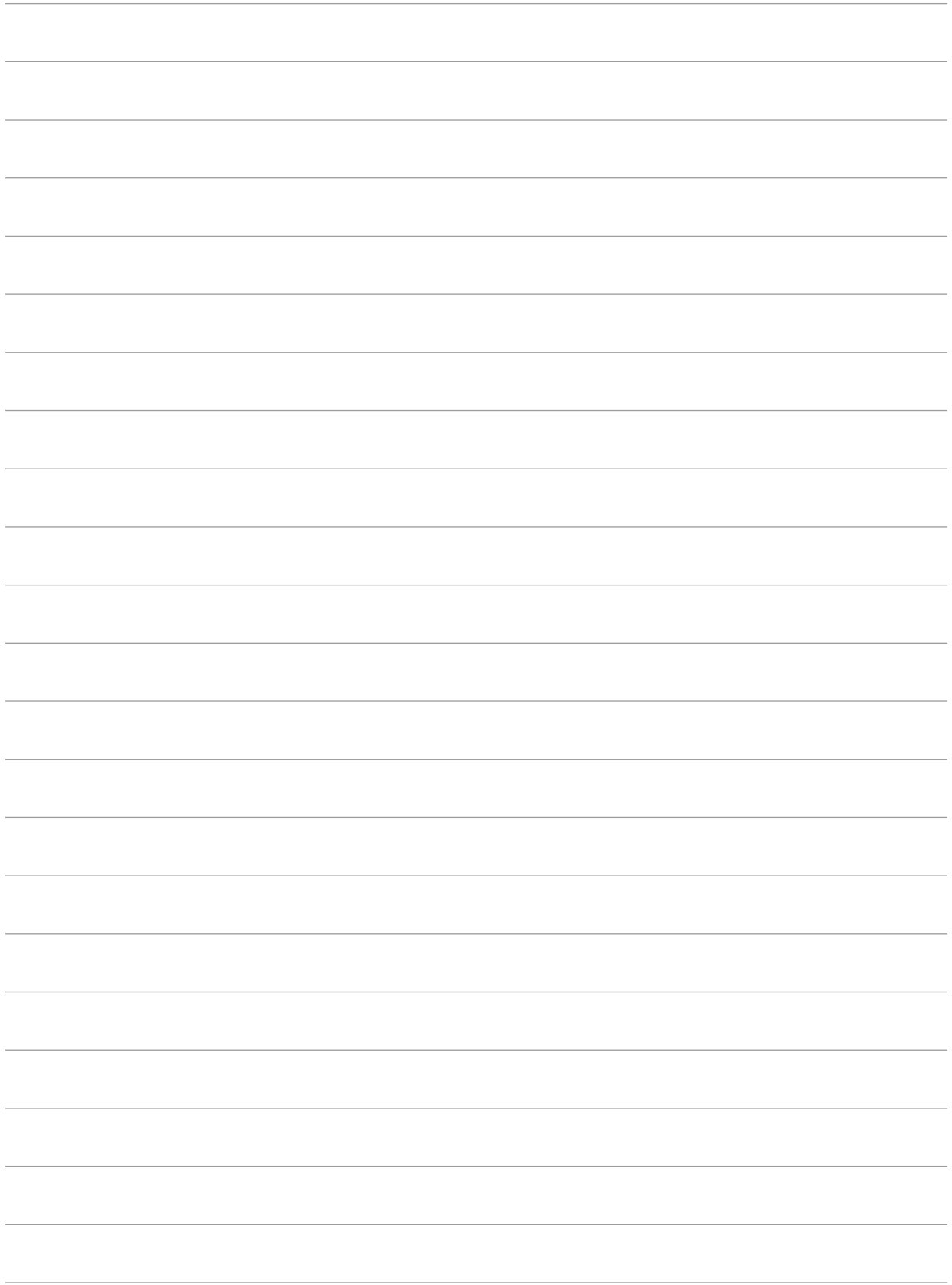
Folk media

Chauhan, J. 2007. Agriculture extension education communication in agriculture. (Unpublished document) R.B.S. College, Bichpuri, India. Available at: <http://nsdl.niscair.res.in/jspui/bitstream/123456789/517/1/PDF%20Communication%20in%20Agriculture.pdf>

Daudu, S. & Anyanwu, A.C. 2009. Folk media preferences and prospects for agricultural extension service delivery in Benue state, Nigeria. *Tropical Agricultural Research & Extension*, 12(1). Available at: http://www.agri.ruh.ac.lk/tare/pdf/V_12.1/AEC.07.04.pdf

Government of Bangladesh. Agricultural Extension Manual Chapter. Available at: http://dae.portal.gov.bd/sites/default/files/files/dae.portal.gov.bd/publications/295f75c5_f491_4f9c_bd63_86f3268e231d/Extension_Mannual_Chapt10.pdf

Sharma, A. & Singh N. 2015. Role of folk media in rural development. *International Journal of Education and Science Research*, 2(2): 59–63. Available at: www.ijesrr.org/publication/19/IJESRR%20V-2-2-12%20E.pdf



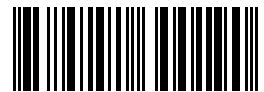




**A decision guide for
rural advisory methods**



ISBN 978-92-5-130019-0



9 789251 300190

I8141EN/1/11.17