

NOTE 0: Overview of Extension Philosophies and Methods

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The Global Good Practices Initiative aims to facilitate access to information and know-how on agricultural extension for a wide audience of practitioners. It does so by providing Good Practice Notes, which are descriptions of key concepts, approaches, and methods in an easy-to-understand format. They give an overview of the main aspects, best-fit considerations, and sources for further reading. The notes are openly available at www.betterextension.org. To download, use, disseminate, or discuss this note, access it online by scanning the QR code in the bottom right corner. Feedback is highly appreciated.

Introduction

Extension (also known as rural advisory services) has risen and fallen on the global development agenda. The focus on extension increased during the green revolution era. Today, due to factors such as food price crises and climate change, extension is increasingly recognised as critical for rural development. This note aims to introduce programme managers to extension philosophies and methods over the past decades. It demonstrates that each approach originated in specific circumstances, and has both merits and demerits.

There are many philosophies and methods for extension, and views on what it is all about have changed over time. Extension originally was conceived as a service to 'extend' research-based knowledge to the rural sector to improve farmers' lives. It includes components of technology transfer, rural development goals, and non-formal education. The traditional view of extension in developing countries was focused on increasing production, improving

yields, training, and transferring technology. Today's understanding of extension goes beyond technology transfer to facilitation; beyond training to education; and includes assisting farmer groups to form, dealing with marketing issues, and partnering with a broad range of service providers¹.

Philosophy and principles

Depending on the underlying political, economic, and social philosophies and programme goals, there are varying philosophies and methods of advisory services.

The dominant paradigm in the 1970s and 1980s (which still exists today) was **transfer of technology**, a linear approach (Figure 1) that aims to persuade farmers to adopt new technologies, such as high-yielding varieties of rice and maize.

As practitioners saw that this approach was not necessarily meeting farmers' needs, more participatory approaches came about, where farmers articulate demand and are involved in research and extension activities.

BOX 1: WHAT IS EXTENSION?

GFRAS defines extension as all the institutions from different sectors that facilitate farmers' access to knowledge, information, and technologies; their interaction with markets, research, and education; and the development of technical, organisational, and management skills and practices. Thus extension includes not only technical knowledge, but also functional elements such as communication, facilitation, and empowerment.

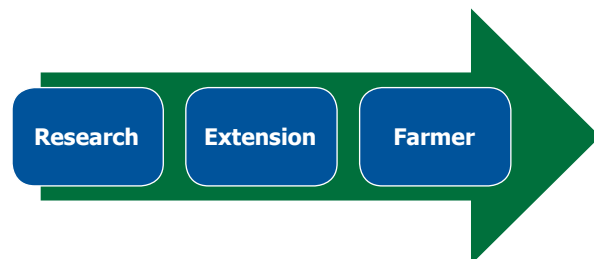


Figure 1. Linear approach

¹ Davis, K. 2008. Extension in sub-Saharan Africa: Overview and assessment of past and current models and future prospects. *Journal of International Agricultural and Extension Education* 15 (3): 15–28.



The linear philosophy was replaced by systems approaches such as **farming systems research and extension**, which merges research and extension in multi-disciplinary teams. A spin-off of this was the **agricultural knowledge and information systems** approach (Figure 2), emphasising links between research, education, extension, and farmers.

During the 2000s, these systems approaches evolved into the agricultural innovation systems approach. An innovation system includes all the actors that bring new products, processes, and forms of organisation into economic use². The framework includes the institutions and policies that affect how the actors interact. For more information see Global Good Practice Note 13³.

Other extension philosophies are based on adult education. These include the United States cooperative extension system, farmer field schools (FFS) (Note 2), and farmer study circles (Note 20). Many of these approaches are based on work of the Brazilian educator Paulo Freire, who called for empowerment through education rather than a 'banking' approach to learning where the empty learner receives 'deposits' from the teacher.

There are many more philosophies that are based on empowerment principles. These include farmer first, farmer-to-farmer extension (Note 7), and other participatory approaches.

Implementation

Here we define methods as specific tools or mechanisms to achieve a programme goal. This section describes a number of extension methods, their strengths and weaknesses, implications for gender and marginalised groups, cost implications where known, best-fit considerations, and sustainability.

Extension methods can be divided into individual approaches (one-on-one advisory services either face-to-face, by telephone, or via the internet) and group approaches. Group approaches, which include demonstrations and mass media, are used by methods such as FFS. They are more cost-effective than individual approaches. However, many farmers do need individual advice.

Mass media

Mass media approaches include leaflets, pamphlets, posters, radio (Note 18), television (Note 22), websites (Note 16), and text or audio messages via mobile phones (Notes 3 and 17). Mass media can reach many people at little cost. However, it is difficult to communicate complex information via mass media; they work better with simple messages. Also, some people (especially women) do not have access to mass media, or cannot read or speak the language used.

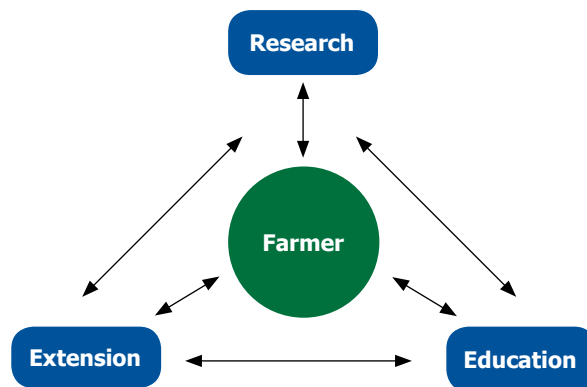


Figure 2. Agricultural knowledge and information systems approach

Demonstrations

Crops and practices can be demonstrated in a farmer's field, on a research station, or at an agricultural show or fair. While demonstrations can be convincing, there are drawbacks. One is that people must be present to see them; another is that people may feel unable to follow suit because they don't have the resources. One way to deal with this is to hold demonstrations by farmers on their own fields. This is especially useful when trying to reach women and other marginalised groups. Demonstrations can be quite expensive in terms of setting up the practice and bringing people to the site; and they have little sustainability unless they are permanent fixtures on farmers' fields.

Training-and-visit system (T&V)

Under the transfer-of-technology approach, the T&V system was introduced to transfer the latest technologies and practices from research to farmers. The T&V system was used to address a lack of professionalism and improve the accountability of extension agents. Advantages include regular farm visits, continuous training for agents, and a more professional approach to extension. Disadvantages are that it is top-down, rigid, and financially unsustainable. The costs include large numbers of personnel, and their continuous training and management.

Farmer field schools (FFS)

Farmer field schools take an adult education, participatory, group-based approach. They are used in over 90 countries on many different topics, from integrated pest management to business management. Farmer field schools are especially good for teaching complex practices that must be experienced to be understood, and experiential learning and discovery learning are critical elements of this method. The approach can also be used for empowerment, and for building social capital. Farmer field schools do require a different mindset than most extension agents have – facilitation rather than lecturing. They have been shown

² Hall, A., Janssen, W., Pehu, E. and Rajalahti, R. 2006. *Enhancing agricultural innovation: How to go beyond the strengthening of research systems*. Washington, DC: World Bank.

³ All Global Good Practice Notes can be downloaded from www.betterextension.org

⁴ Davis, K., Nkonya, E., Kato, E., Mekonnen, D.A., Odendo, M., Miiro, R. and Nkuba, J. 2012. Impact of farmer field schools on agricultural productivity and poverty in East Africa. *World Development* 40 (2): 402–413.

to be effective at reaching women and those with less education⁴. The intensive training offered over a long period is costly in terms of human and financial resources, and FFS have been criticised for being financially expensive. However, self-financed and semi-self-financed models can help to deal with sustainability issues and the costs of an external facilitator, transport, and setting up and maintaining demonstration plots – for example, farmers may pay back the costs of the facilitator using proceeds from sales from their plots.

Theatre

Theatre is a useful tool to put across key messages in a powerful, memorable way. While it has been used for some time for HIV/AIDS messages, it is now being used for climate change and other complex topics. Theatre is effective because it is entertaining and has an impact, but it is time- and resource-intensive. Special skills are needed to put together good scripts, and unless local capacity is developed and used, sustainability is non-existent.

Videos and ICTs

Videos, especially digital ones, are a relatively new technology. Videos may help to meet the challenges of disseminating information to farmers and reaching the poor, marginalised, women, and youth. Different types of video include documentary (describing events), institutional (promoting a project or organisation), instructional (developed by researchers with limited input from farmers), farmer-learning (made with farmers), and participatory (made by farmers). Videos have many benefits: entertainment value, the power of 'seeing is believing', clips can be readily available, and they are easily made in many local languages. However, drawbacks include the fact that equipment and power are required to view them. Also, they must be in a language that is easy to understand, and they are more costly to produce than a flyer or poster. Special technical capacities are needed. In terms of sustainability, video can be made locally, and one DVD can be shown multiple times to thousands of people. And Digital Green has shown, using a controlled evaluation, that video-enabled behaviour-change methods can bring a 10-fold increase in cost-effectiveness relative to a conventional extension system⁵. For more information see Note 6 (videos).

On other ICTs see Note 11 (navigating ICTs), Note 15 (social media), Note 17 (mobile phones), and Note 18 (radio).

Innovation platforms

Finally, innovation platforms can be a useful tool, especially for problem solving with relevant actors in value chains or innovation systems. This tool can be very empowering for farmers. However, it takes a lot of time and effort to coordinate, and the high number of stakeholders makes management a bottleneck, and sustainability an issue. Capacities needed by extension

include facilitation and coordination. For more information see Note 1.

Governance, funding, and delivery

In this section we cover more recent developments in extension over the past few decades. The governance of extension methods depends on each country's governmental structure and administration of its extension programme.

In economic theory in general, and international development in particular, the 1980s and 1990s was a period of focus on the market to solve economic and development problems. There was criticism of 'bloated' civil service functions such as government extension, where the outcomes and impact did not necessarily justify the costs of salaries and operations. Around that time, institutions loaning money to countries for development, including the International Monetary Fund and the World Bank, began to introduce structural adjustment programmes – policies attached to new loans that encouraged economic reforms such as privatisation and deregulation. Criticisms of the existing models of extension led to various types of reform, described below.

Privatisation and pluralism

Privatisation involves the transfer of some or all ownership and operational control of extension from government to the private sector. Privatisation results from the desire to reduce the role of government due to central government failings or the complexity of local issues; inability of governments to finance services; or the view that democracy is best served through devolved functions with more participation at local level⁶. However, experience has been mixed. While the process has led to the emergence of private consulting companies, small farms – especially those with limited resources to buy extension services – are left out by the private sector unless special public funding is provided to support them.

In this context, recognising the potential contributions of other extension players has led to the concept of pluralism in extension. Pluralism is essentially the coexistence of a number of extension providers and approaches from different sectors. Pluralistic systems recognise the comparative advantages of different types of provider. Coordination is essential in pluralism to prevent duplication of effort and to ensure synergy.

Decentralisation

Decentralisation means transferring control of programme planning and management to the level of implementation. This is thought to improve accountability to local users and provide more appropriate programming. However, in many countries decentralisation has resulted in weakening of financial and technical support, and many local governments lack the necessary capacity.

⁵ Gandhi, R., Veeraraghavan, R. and Toyama, K. 2009. Digital Green: Participatory video and mediated instruction for agricultural extension. *Information Technologies & International Development* 5 (1): 1–15. Available at: <http://itidjournal.org/index.php/itid/article/view/322>

⁶ Rivera, W.M. 2011. Public sector agricultural extension system reform and the challenges ahead. *Journal of Agricultural Education and Extension* 17 (2): 165–180. Available at: www.tandfonline.com/doi/full/10.1080/1389224X.2011.544457



Demand-driven approaches

In this type of approach, farmers are given space to identify their needs and their requirements of extension programmes. Thus they need sufficient capacity and organisation to aggregate their demands, which means strengthening the capacities of farmer groups to articulate their needs and monitor service provision. Participatory extension approaches ensure that services are relevant and responsive to local conditions, and meet actual user needs⁷. Service providers are accountable to users, and ideally users should have a choice of service providers.

Market-oriented services

Market-oriented extension provides services focused on linking farmers to markets, often to improve their income. This type of extension may also involve providing services to other actors in the value chain. Currently there is an increasing demand for such market-oriented services.

In conclusion, all philosophies – and methods – have advantages and disadvantages. It is up to each extension manager to decide what works best in their own context, keeping in mind the nature of the challenge, the clients' demands, and the resources available for intervention.

Further reading

Davis, K. and Heemskerk, W. 2012. Investment in extension and advisory services as part of agricultural innovation systems. In World Bank (ed.) *Agricultural innovation systems: An investment sourcebook*. Washington, DC: World Bank. Available at: <http://siteresources.worldbank.org/INTARD/Resources/335807-1330620492317/9780821386842.pdf>

Davis, K., Nkonya, E., Kato, E., Mekonnen, D.A., Odendo, M., Miiro, R. and Nkuba, J. 2010. *Impact of farmer field schools on agricultural productivity and poverty in East Africa*. IFPRI Discussion Paper 992. Washington, DC: International Food Policy Research Institute. Available at: www.ifpri.org/publication/impact-farmer-field-schools-agricultural-productivity-and-poverty-east-africa

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Rivera, W.M. and Sulaiman V, R. 2009. Extension: object of reform, engine for innovation. *Outlook on Agriculture* 38 (3): 267–273.

⁷ Rivera, 2011. Op. cit.

Sulaiman V, R. and Hall, A.J. 2002. *Beyond technology dissemination – Can Indian agricultural extension re-invent itself?* Policy Brief 16. New Delhi: National Centre for Agricultural Economics and Policy Research. Available at: www.ncap.res.in/upload_files/policy_brief/pb16.pdf

Training materials

New Extensionist Learning Kit, Module 2 – Adult learning and behavioural change: www.g-fras.org/en/activities/the-new-extensionist.html#learning-kit

Ochola, W., Heemskerk, W. and Wongtschowski, M., eds. 2013. *Changing agricultural education from within: Lessons and challenges from the GO4IT programme*. Amsterdam: RUFORUM and KIT Publishers. Available at: http://213ou636sh0ptphd141fgei1.wpengine.netdna-cdn.com/sed/wp-content/uploads/publications/5373318064d97_KIT_GO4IT_final.pdf

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