

ESSENTIAL CAPACITIES FOR THE FUTURE AGRICULTURAL EXTENSION  
ADVISOR AND RESULTING CHALLENGES FOR EDUCATION

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ABSTRACT

This paper describes the roles that agricultural advisors play in the agricultural system. In addition to a solid agricultural background, the essential capacities needed to perform these roles include: agri-business, networking, facilitation and communication skills. It could be helpful to distinguish two broad orientations for agricultural advisors: agri-business development and facilitation of joint multi-stakeholder action for innovation. Challenges for education of new agricultural advisors include the negative perception of the vocation, and national, donor and development organisation policies towards long-term investments in capacity-building and educational reform. Some examples of

innovative programmes that aim to cope with and overcome these challenges are presented.

**KEY WORDS:** CAPACITIES, EXTENSION AGENTS, FACILITATION, NETWORKING, EDUCATION, SKILLS

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## INTRODUCTION AND OBJECTIVES

Agriculture is back on the international agenda because of rising food prices and the growing realisation that climate change is a major threat. Agriculture is once more recognised as an important sector for social stability and food security, but more importantly, as an important driver of local economic growth in rural areas. With this recognition of the role of agriculture in development, agricultural advisory services are increasingly recognised as a contributing factor to agricultural innovation and agri-business development.

The key to sustainable agricultural innovation lies in the concurrent change of marketing and production practices. In most cases, developing market opportunities is more challenging, as it often requires organisational change among economic actors. This often proves more complex than an increase in production, for which technological options can be found. The promise of a market provides the incentive to review the technological and organisational options available for improving agricultural practices. Once a genuine interest in intensification (based on the promise of increased income) is established, much of what is technically possible can be realised.

We consider the role of agricultural advisory services as the initiator and facilitator of change. This change can be related to production practices, product marketing or the organisation

and interaction of stakeholders. In this paper, we look at the capacities that agricultural advisors need in order to be able to facilitate agricultural innovation processes. The consequences for the education of agricultural advisors are discussed and we outline initiatives aimed at tackling the need for a different type of capacity-building.

## MATERIALS, METHODS AND DATA SOURCES

This paper is based on the experiences of the authors, during empirical research and field work in

agricultural advisory services, participatory research, development projects and capacity-building of agricultural professionals, mainly in sub-Saharan Africa.

## RESULTS AND DISCUSSION

### Agricultural advisory services: what are they?

Figure 1 illustrates the role of agricultural advisory services within an agricultural system. The core of the agricultural system consists of the interactions among economic actors represented by the

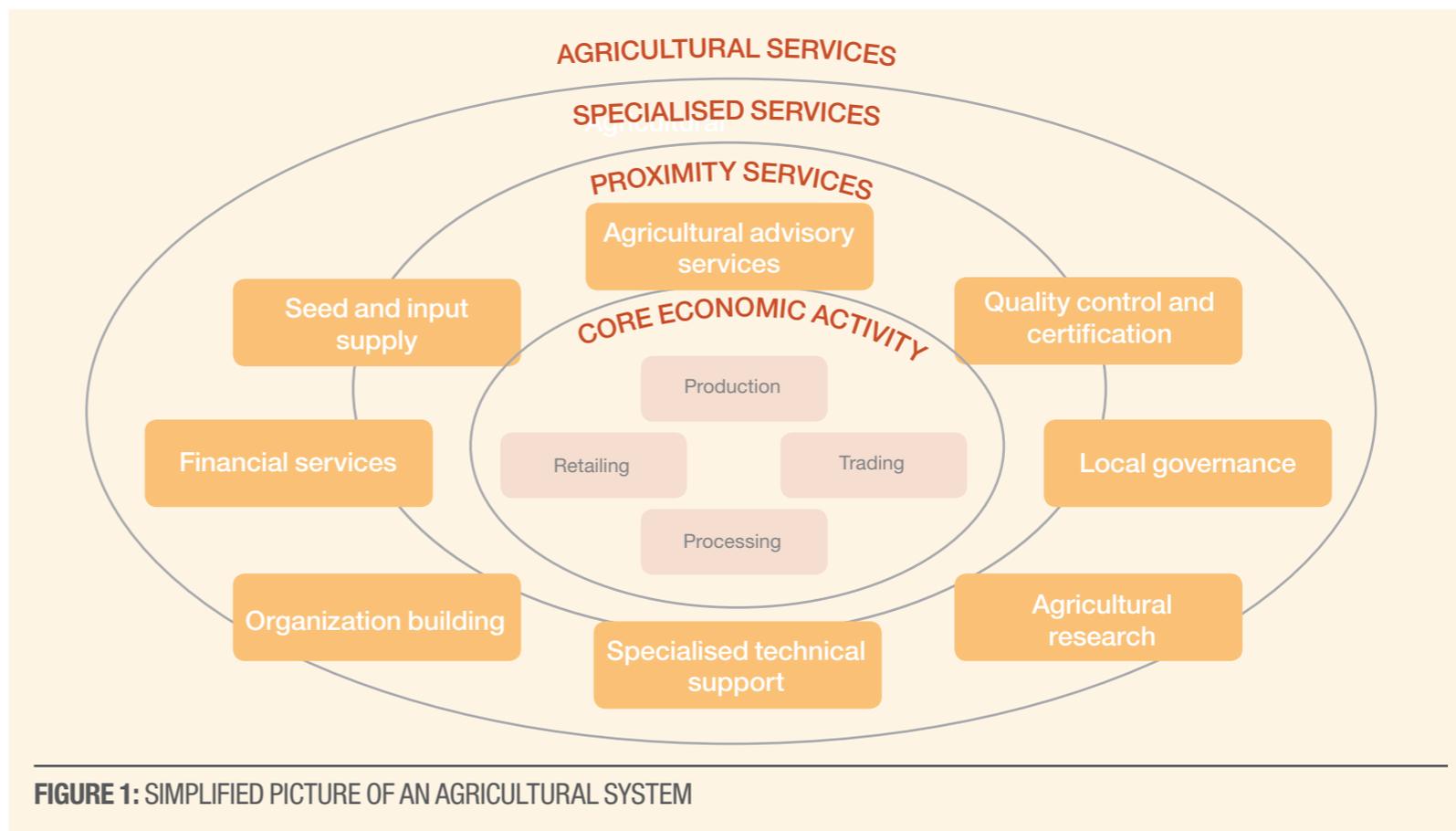


FIGURE 1: SIMPLIFIED PICTURE OF AN AGRICULTURAL SYSTEM



middle oval ('core economic activity'). These economic actors are supported by numerous specialised support services in carrying out their tasks. Agricultural advisory services are a key support service which support the functioning of the agricultural system.

Agricultural advisory services can be equated with a general practitioner in a health system. Agricultural advisors make a diagnosis and provide basic advice and service where these are within their capacity. They play a liaison role between clients and specialised services. They have a networking function to bring together the demand for services by the economic actors at the core of the agricultural system, and the supply available from the complex of specialised agricultural services. As is the case with a general practitioner in health, some of the roles and competencies of an agricultural advisor partly overlap with more specialised services.

Agricultural advisory services are no longer seen as a uniquely public responsibility, but rather a responsibility shared among a complex of public, private, producer and non-governmental organisations (NGOs). The new agricultural advisor may be located in any one of a number of different organisations. They could be working for an NGO, a producer organisation, or be a private consultant or for a ministry of agriculture, or an agri-business firm (the traditional affiliations of extension agents).

### **The different roles of agricultural advisory services**

#### ***Provide first-line economic, technical and organisational advice to economic actors***

In spite of the importance of market opportunities as the main incentive for agricultural innovation, there is, and will continue to be, a demand for direct advice from agricultural producers.

Agricultural advisors serve as the front line office for difficulties encountered by economic actors, with the main focus on producers.

#### ***Facilitate farm–firm relations***

Difficulties in agricultural supply chains can often be reduced to simple supply and demand. In reality, there might be a demand and the potential to supply, but a lack of understanding between the supply and demand sides will block effective and profitable producer–agri-business partnership (KIT and CFC, 2011). Agricultural advisory services can identify potential farm–farm linkages, and build working relationships between producers and agri-businesses. The added value of agricultural advisors is in the understanding of the demands and opportunities – the ability to see both the production and agri-business sides. There is usually a need for producers to be helped in understanding and complying with agri-business needs for providing quality, volumes and constant supply over time.

#### ***Accompany participatory agricultural research***

Contemporary agricultural research emphasises the testing and adapting of practices and approaches under realistic farmer management. Researcher–producer interaction is an essential component of any applied agricultural research, to ensure an exchange of ideas and opinions. Researchers tend to be focused on their particular discipline, are not a constant presence in the field and have limited interaction with producers and market actors. Agricultural advisors can be of value by accompanying the process of applied and market-oriented research. First, by ensuring that researcher expectations are within the limits of what is possible under farmer conditions and the prevailing market reality. Agricultural advisors are well placed to improve the mutual understanding among researchers, producers and markets. Finally, agricultural advisors can provide a stronger field presence, being available to assist producers in the more routine handling of their applied research efforts, thus complementing agricultural researchers.

#### ***Link clients and specialised services***

Agricultural advisors liaise between producers and specialised support services. Where they cannot provide the required support directly, they should have an overview of the different services available to producers. One example is connecting agricultural producers to financial services. Often



financial services are badly adapted to opportunities in agriculture. Even when they are well-adapted, producers may not understand how to access these services. Agricultural advisory services can be of value in improving mutual understanding, and in helping producers to meet the requirements of financial institutes for access to credit. The networking function can go beyond facilitating producer–service provider interaction: agricultural advisors can also ensure that different support services work in a co-ordinated fashion and add value to the local agricultural system.

### ***Identify opportunities for local economic development***

This is the starting point for agricultural development initiatives. Identifying opportunities for local economic development is typically a multi-stakeholder process in which agricultural advisors can play a pivotal role. This role requires a good understanding of the perceptions of the different actors and being able to ‘translate’ between these actors.

### ***Accompany joint stakeholder action***

Changes in agriculture are promoted by joint stakeholder action (Nederlof et al., 2011). Once opportunities for local economic development are identified, a phase of pilot projects is often required to develop new practices and approaches to take advantage of the opportunity identified. An example

would be pilot initiatives involving producers, agro-industry and agricultural research to test and introduce the production and processing of a new variety, to better respond to international market demands. Such a process invariably has its moments of tension between partners, requiring the services of an agricultural advisor.

### **Capacities needed**

The contemporary agricultural advisory service has many functions and requires a multidisciplinary set of skills. In addition to a general technical and socio-economic background in agriculture, the person requires ‘soft skills’ in networking and facilitating interaction.

Agricultural advisory services require a solid *agricultural socio-economic and technical background*. This should include a general understanding of farming techniques, farm management, farming systems, basic agricultural economics and sociology. This is essential for the service to be able to provide first hand advice to agricultural producers. More importantly, advisors need this background to judge the value of information and opinions from different stakeholders in the light of identified opportunities for economic development. This agricultural background is needed to understand and mediate between different economic actors and support services.

A *basic understanding of agricultural business* will greatly aid agricultural advisors in developing

farm–firm relationships and supporting agricultural enterprises, be they private or co-operative, in sharpening their ideas, before calling upon more specialised service providers. Advisors must be able to comment on a business plan, assess the feasibility of business ideas and judge the merits of market studies.

Agricultural advisory services require *didactic and adult education skills*. The didactic skills of agricultural advisors affect not only the effectiveness of specific training efforts, but that of all communication. Just as ensuring mutual understanding of each other’s positions is an important component of the work of agricultural advisors, so is knowledge of didactics, communication and adult education.

Agricultural advisors need *networking and facilitation skills* to co-ordinate and facilitate interaction and to build networks and relationships between actors. This requires the ability to bridge different perceptions and ‘translate’ the languages and ideas of different actors. Agricultural advisors must understand the viewpoints of producers, agri-business entrepreneurs and service providers. Furthermore, they should be perceived as neutral and unbiased observers and mediators between different parties.

Good *system overview and analysis* is the value that agricultural advisors can add to the processes of identifying opportunities for local economic development, developing farm–firm



relationships and accompanying joint stakeholder action. The other actors – economic actors, researchers and financial service providers alike – will be inclined to think through opportunities for local economic development from their own point of view. It is the task of agricultural advisors to analyse further than the interests of individual actors, and provide the overview of constraints and opportunities in the whole knowledge/information–economics–farming system.

### **Education of agricultural advisors**

Professional capacity-building of agricultural advisors is required at *different levels*: at university level (BSc and MSc), and at professional and vocational training institutes (certificate and diploma levels). There are agricultural advisory functions (e.g., public advisory services at district level) with a co-ordinating role on behalf of the local government. Such a function requires bachelor's or master's level knowledge. Agricultural advisors directly intervening at household level, for an NGO, farmer organisation or private company, are in most countries required to have at least a diploma.

Current agricultural training programmes are largely discipline focused, with a technological bias. Furthermore, teaching methods are largely theory based, with little attention to practical learning. This does little to prepare graduates for the challenges of facilitating agricultural innovation.

Looking at the skill set proposed for effective

agricultural advisory services, it becomes clear that it may be hard to produce graduates who are skilled in all of the elements mentioned. A distinction could be made between two specialisations within the field of agricultural advisory services:

- facilitation of joint multi-stakeholder action for agricultural innovation;
- facilitation of agricultural business development.

Advisors specialising in one of these topics require the same basic capacities discussed above. Their further specialisation could ensure that the agricultural advisors develop an expertise focused on one role or the other.

Considering the time it takes to reform education, a dual strategy could be adopted of parallel development of short mid-career courses to improve the capacities of practising agricultural advisors, while at the same time improving the diploma and degree training courses on offer in sub-Saharan African countries.

### **Challenges facing the emergence of competent agricultural advisors**

There are a number of systemic challenges that hinder efforts to improve the capacity of agricultural advisors.

#### **Perception**

Despite being complex and dynamic sectors of activities, offering very good career prospects,

agriculture and rural industries are often perceived as 'old', even 'backward', industries requiring no skills and offering little to ambitious young graduates. Such negative perceptions have been predominant since independence in most developing countries, especially in Africa, both north and south of the Sahara. This perception cannot be easily reversed without significant changes in the structure of incentives offered to, and a social recognition of the value of, would-be agricultural advisors.

### **National and donor policies**

Much of the resources made available for capacity-building of agricultural advisors comes through short-term development project funding. For structural improvement of the capacity-building of agricultural advisors, structural changes are required at the different levels of training, which require stable programme funding over a longer term. Greater emphasis on stability of funding for the training and employment of agricultural advisors is, therefore, essential.

Even when education responds better to the needs for multidisciplinary agricultural advisors, investments in diploma level and higher education will take time to have an effect. Training of agricultural advisors will take a minimum of 1 year for a diploma, to 4–5 years for a full MSc. The results of the investment in this training will only show once this person gets to use what they have learned; the



results are hard to measure, and will not necessarily be reaped by the donor organisation that invested in the training in the first place.

### **Organisational strategies**

Development organisations invest little of their budget in building the capacity of their own staff. There are several perfectly understandable reasons for this. They may lack information on the returns of such an investment. They may also lack access to adequate resources or have more pressing short-term needs. Finally, they may fear losing the staff they train to other, more financially attractive organisations. This latter fear is often fuelled by donor-funded projects, which attract the best and brightest. It is, therefore, a matter of urgency that investments to build strong advisory services are not curtailed by strategies to save on training.

### **Examples of innovative initiatives to address the capacity needs of new agricultural advisors**

#### ***Multi-stakeholder processes for knowledge-based rural innovation (Integrated Agricultural Research for Development, IAR4D)***

This is a 3.5-month capacity-building programme offered by the International Centre for development oriented Research in Agriculture (ICRA) for mid-career professionals. It gives participants hands-on experience of integrated and interactive learning in rural innovation in the context in which they work. It aims to enhance the

capacity of participants to support constructive change within their own organisations and environments upon return.

The programme prepares participants to:

- work in interdisciplinary and interinstitutional teams;
- apply systems thinking to put a problem or opportunity in its broader context;
- analyse problems from ecological, social and economic perspectives;
- describe the main elements of a livelihood system and the factors that influence it;
- apply a business approach to development, analysing value chains and market opportunities;
- apply an interdisciplinary research process and use reflection to improve planning and implementation.

#### ***Business Minds Africa***

***(<http://www.businessmindsafrica.org>) Closing the capacity gap on agricultural entrepreneurship***

Knowledge and education institutes from Kenya, Mozambique, Rwanda, Tanzania, Uganda and The Netherlands<sup>5</sup> collaborate to enhance capacities of future professionals in agricultural entrepreneurship through *Business Minds Africa*. The collaborating institutes will:

- make existing local knowledge and experiences on agri-business available for practice-based education;
- develop high quality education and training

materials, modules and programmes adapted to the needs of local labour markets;

- deliver graduates who competently contribute to business performance of the agricultural sector in Eastern and Southern Africa;
- build capacity among teaching staff in development and facilitation of competency-based learning and development of locally relevant resources and training materials;
- strengthen co-operation and partnership among institutes;
- actively involve relevant stakeholders from private, public and NGO sectors in programme development, knowledge documentation and collective learning activities.

#### ***PIREP Mozambique (Programa Integrado da Reforma da Educação Profissional, Ministry of Education)***

The Government of Mozambique is reforming its vocational training system for agricultural extension to ensure multidisciplinary agricultural advisors are trained. It has set a national standard for the competencies required of trainees to obtain their diploma, as follows.

- Mandatory competencies are skills to:
  - communicate and interact with farmers and communities;
  - organise, supervise and manage public and private extension networks;
  - accompany on-farm trials, demonstrations and



- assessments;
- implement adaptive research;
- business plan elaboration, based on multistakeholder analysis;
- carry out marketing and product quality management;
- manage animal and tractor-based mechanisation programmes.
- Optional, specialised competencies are:
  - livestock, crops, drainage and all other technical specialisations.
- General competencies required are:
  - basic English skills;
  - information and communication skills;
  - reading and writing skills;
  - group facilitation skills;
  - information and knowledge analysis skills.

### **GO4IT (Graduate Opportunities for Innovation and Transformation)**

GO4IT is a European Union-funded regional project aimed at building the capacity of African university graduates in Kenya (Egerton University), Malawi (Bunda College), and Uganda (Makerere University) with support by Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) and the Dutch Royal Tropical Institute (KIT).

One of the planned outputs of the GO4IT programme is an in-service mid-career training course on the facilitation of innovation processes. It will address the path to identify and pursue local

economic development opportunities through joint stakeholder action.

At the same time, the project will, using the mid-career course materials, improve existing degree training courses to make them better focused on the need for multidisciplinary, practically trained agricultural professionals.

### **CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS**

This paper details the essential capacities that are needed for the new agricultural advisor in light of the challenges seen in agriculture and in rural areas. We describe how the capacities needed are much broader than those of the 'old' extension agent, whose main mandate was to provide technical advice to farmers. The new agricultural advisor needs a solid technical background in agriculture and agricultural socio-economics. In addition 'soft' skills such as agri-business management, networking, facilitation and communication are required.

Challenges for education for the new agricultural advisor include the negative perception of the vocation, national and donor policies aimed at short-term impact, and organisational strategies not investing in building a class of well-equipped agricultural advisors.

One way to address the issue of the new skills and capacities required of agricultural advisors would be parallel short- and long-term

strategies such as promoting in-service training of existing agricultural advisors, interweaving practical and class work into their own daily work to improve their immediate performance. At the same time, diploma and degree training programmes could be reorganised to ensure they produce multidisciplinary, practice-orientated agricultural graduates.

Advisory service providers must focus on providing the right incentives for their agents, and ensuring that it is a profession with a positive reputation. Capacities must be built throughout the system, not just among individuals. National policies and organisational strategies must include provision for the development of the right capacities to enable agricultural advisors to have real impact in their work.

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