



# Agricultural extension A TIME FOR CHANGE

LINKING KNOWLEDGE TO POLICY AND ACTION FOR FOOD AND LIVELIHOODS



“

*It's about reforming the way they work, and making sure that reforms that are underway are cost effective and sustainable.”*

**Michael Hailu,  
CTA Director**

The conference on «*Innovations in Extension and Advisory Services, Linking Knowledge to Policy and Action for Food and Livelihoods*» was organized by the Technical Centre for Agricultural and Rural Cooperation ACP-EU (CTA), the Forum for Agricultural Research in Africa (FARA), the Global Forum for Rural Advisory Services (GFRAS), the International Fund for Agricultural Development (IFAD), the African Forum for Agricultural Advisory Services (AFAAS), the Alliance for a Green Revolution in Africa (AGRA), the United Nations Food and Agriculture Organization (FAO), the New Partnership for Africa's Development (NEPAD), the International Centre for development oriented Research in Agriculture (ICRA) and the World Agroforestry Centre (ICRAF), in collaboration with several national, regional and international partners, including the African Network for Agriculture, Agroforestry and Natural Resources Education (ANAFE), the Forum for the Americas on Agricultural Research and Technology Development (FORAGRO), the Kenya Agricultural Research Institute (KARI), the Ministry of Agriculture – Kenya, the European Initiative on Agricultural Research for Development (EIARD), the Global Forum on Agricultural Research (GFAR), the University of the West Indies (UWI) and the Universities of the South Pacific (USP), Hohenheim and Wageningen (WUR).



**WRITTEN BY**

Charlie Pye-Smith

**PEER-REVIEWED BY**

Prof Niels Rölings  
(WUR, The Netherlands)  
Prof Volker Hoffmann,  
(Hohenheim University, Germany)

**EDITED BY**

Kristin Davis, GFRAS  
Judith Francis, CTA  
Arno Maatman, ICRA  
Myra Wopereis-Pura

**CTA EDITORIAL TEAM**

Thierry Doudet  
Stéphane Gambier  
Armelle Degrave

**GRAPHIC DESIGN**

Stéphanie Leroy

**PROOFREADING**

Jacques Bodichon  
David Dunn

**PRINTED BY**

DIGIGRAFI BV

**PHOTOGRAPH CREDITS**

Cover page:  
Top: © Neil Palmer, CIAT  
Bottom: © All Rights Reserved  
Back page: © VisionFund

**ISSN**

2212-6333

# TABLE OF CONTENT

4 INTRODUCTION  
**In search of a brighter future**

8 CHAPTER 1  
**The big picture**

16 CHAPTER 2  
**Reshaping the reform agenda**

24 CHAPTER 3  
**A declaration of intent**

28 APPENDIX  
**Nairobi Declaration on Agricultural  
Extension and Advisory Services**

# In search of a brighter future

**T**hree-quarters of the world's poorest billion people live in rural areas, and the vast majority depend on agriculture for their livelihoods and survival. Encouraging the growth of the agricultural sector is therefore one of the most effective ways of tackling poverty and reducing hunger and malnutrition. Smallholder farmers, fisherfolk and livestock keepers produce 50–80 per cent of the staple foods consumed in developing countries, but many are inadequately served by research, extension and advisory services. These rural producers need support so that they can improve their knowledge and skills and take advantage of new technologies, policies and market opportunities.

Revitalising extension and advisory services was the focus of a landmark conference held in Nairobi in November 2011. The International Conference on Innovations in Extension and Advisory Services attracted over 450 delegates from 85 countries. It brought together farmers, extension agents, scientists, politicians, policymakers and representatives of development



© J. Lyell/Alamy

Efficient extension and advisory services can help small-scale farmers, such as this woman in Iganga, Uganda, to increase their crop yields.

organizations. Their aim was to share knowledge and experiences, and identify ways of transforming extension and advisory services for the benefit of smallholder farmers.

### A TIME FOR CHANGE

“This conference couldn’t have come at a better time,” Kareke Mbiuki, Kenya’s Assistant Minister of Agriculture, told delegates in his feature address. “One of the root causes of low productivity in Africa is the poor performance of the extension and advisory services, and the lack of financial support they receive.”

These, he explained, were critical times for Kenya and its neighbours. Most obviously, there was the

continuing crisis in the Horn of Africa. A combination of drought and conflict meant that during the closing months of 2011, 13 million people required emergency food aid. Pastoralists had lost over 60 per cent of their livestock, and hundreds of thousands of refugees were crammed into overcrowded camps near the Somali border.

**“Agricultural extension is about sharing scientific findings and know-how with farmers and helping them capture a greater share of the value chain.”**

*Michael Hailu, Director, Technical Centre for Agricultural and Rural Cooperation ACP-EU (CTA), The Netherlands*



A plant pathologist examines a diseased leaf at a plant health clinic in the Kenyan village of Wangigi. Clinics like these are organised by the Centre for Agricultural Bioscience International.

Humanitarian disasters attract worldwide attention; less newsworthy – but just as significant for our future welfare – are the perennial challenges faced by farmers and consumers. To give just one example, food prices rose dramatically during 2010. A variety of factors were to blame. Most obviously, poor harvests, caused by droughts, floods and unpredictable weather in grain-exporting countries, led to a reduction in supply. As a result, the food import bill for low-income, food-deficit countries rose by 20 per cent. The price increases added tens of millions to the billion or so people already suffering from hunger. A year later, global food prices were 19 per cent higher than at the same time the previous year. The result: a further increase in hunger and malnutrition in many developing countries.

The challenge of tackling hunger is made all the greater by population growth. Today's 7 billion is expected to become 9 billion by 2050. To keep pace with population growth, food production must increase by at least 70 per cent over the next four decades. There are other challenges too, such as climate change, which threatens to reduce crop yields, high post-harvest crop losses, environmental degradation and soaring levels of rural unemployment.

After decades of under-investment in agriculture, governments and donors now accept that accelerating agricultural growth requires the right sort of policies and institutions, as well as an increase in financial support, access to new knowledge, skills and markets, and improvements in communications. The reform of extension services should be part of a package of measures that help smallholders to increase productivity, earn more money and contribute to food security. "It's about reforming the way they work, and making sure that the reforms that are underway are cost effective and sustainable", said Michael Hailu, Director of CTA, in his introductory remarks.

In many countries, extension systems have undergone profound change during the last 20 years, from a centrally-controlled, top-down approach to one that encourages many different organizations to interact with farmers as equal partners. This conference provided an opportunity to reflect on the lessons learned from a wide range of experiences.



**Key speakers at the Nairobi extension conference. From left to right: Judith Francis, conference co-chair, CTA director Michael Hailu and thematic leaders Myra Wopereis-Pura, Kristin Davis and Arno Maatman.**

### TAKING STOCK

This was no ordinary conference, with experts talking to one another and everyone else politely listening. There were plenary sessions, attended by all delegates, but much of the time was devoted to more intimate and participatory thematic discussions on policy, capacity development, tools and approaches, and learning networks. Prior to the conference, the international steering committee's call for papers elicited some 400 abstracts. Of these, around 100

were chosen for presentation during the thematic discussions. During the months leading up to the conference, over 70 people actively participated in e-discussions on the four main themes. The conference also included panel discussions, small group discussions, field visits to sites in and around Nairobi, and a prize-giving ceremony for the winning journalists who had participated in a pre-conference competition.

During the course of the week, delegates were able to take stock of promising initiatives and opportunities, define and promote mechanisms to scale up successful models, and explore the sort of extension policies and practices that could increase agricultural productivity, reduce hunger and improve the livelihoods of millions of smallholder farmers. The conference findings are enshrined in the Nairobi Declaration, which

**“In Kenya, like most African countries, agriculture is the backbone of the economy and the main source of employment and foreign exchange. When agriculture grows, our economy grows. That is why good extension services are so important.”**

**Kareke Mbiuki, Assistant Minister of Agriculture, Kenya**

is printed in full at the end of the booklet. “The declaration can be seen as a rallying call to policymakers and practitioners”, says CTA’s Senior Programme Coordinator Science & Technology Policy, Judith Ann Francis, one of the conference co-chairs and chair of the policy thematic group. “Efficient, effective, demand-driven extension services are the key to improving the productivity and incomes of the world’s smallholder farmers.” ■



Students and peer trainers in an experimental plot at the farmer’s field school of Ngororero (Rwanda). Farmers learn the value of applying Integrated Pest Management (IPM) to test varieties of maize crops (Support Project for the Strategic Plan for the Transformation of Agriculture).



© NESTLÉ

Farmer Field Schools (FFS) have had considerable success in helping farmers to gain new skills. Here a Farmer field school supported by Nestlé is training farmers to improve their cocoa harvest.

# The big picture

During the 1960s and 1970s, state-run, state-funded agricultural extension and advisory services played a key role in increasing agricultural productivity. However, structural adjustment programmes during the 1980s and 1990s led to a significant decline in the funds available – and farmers suffered as a result. It is now widely accepted that a new model of service delivery is needed. This should be pluralistic – with the private sector playing an important role – and demand-led. Ideally, extension services should be provided free of charge to smallholder farmers.

**C**ompare the productivity of farmers in sub-Saharan Africa with those of East Asia. In 1961, average cereal yields were around 1 tonne per hectare in sub-Saharan Africa and 1.4 tonnes in East Asia. In sub-Saharan Africa, yields have barely risen since then. In East Asia, in contrast, farmers now average more than 5 tonnes per hectare. Low agricultural productivity is closely associated with high levels of poverty and hunger. Between 1981 and

2005, the number of people living on less than US\$1.25 a day in sub-Saharan Africa grew from 212 to 388 million; in East Asia, the number fell from 1,071 to 316 million.

“We who are working in extension and research have failed our people”, says Monty Jones, executive director of the Forum for Agricultural Research in Africa (FARA). He points out that the proportion of the population suffering from malnutrition in sub-Saharan Africa has fallen by just 1 per cent in the last two decades. “Africa is falling behind in innovation”, he says. Jones points out that extension has been integrated within the highest framework of the African Union, the Comprehensive Africa Agriculture Development Programme (CAADP). “We believe that with greater coordination of extension, it will be easier to build synergies with research and education to provide the relevant knowledge base for transforming agriculture”, he says.

**“Extension services should be seen as a public good in sub-Saharan Africa, in the sense that smallholder farmers can’t afford to pay for them.”**

**Romano Kiome, Permanent Secretary, Ministry of Agriculture, Kenya**



**70%**

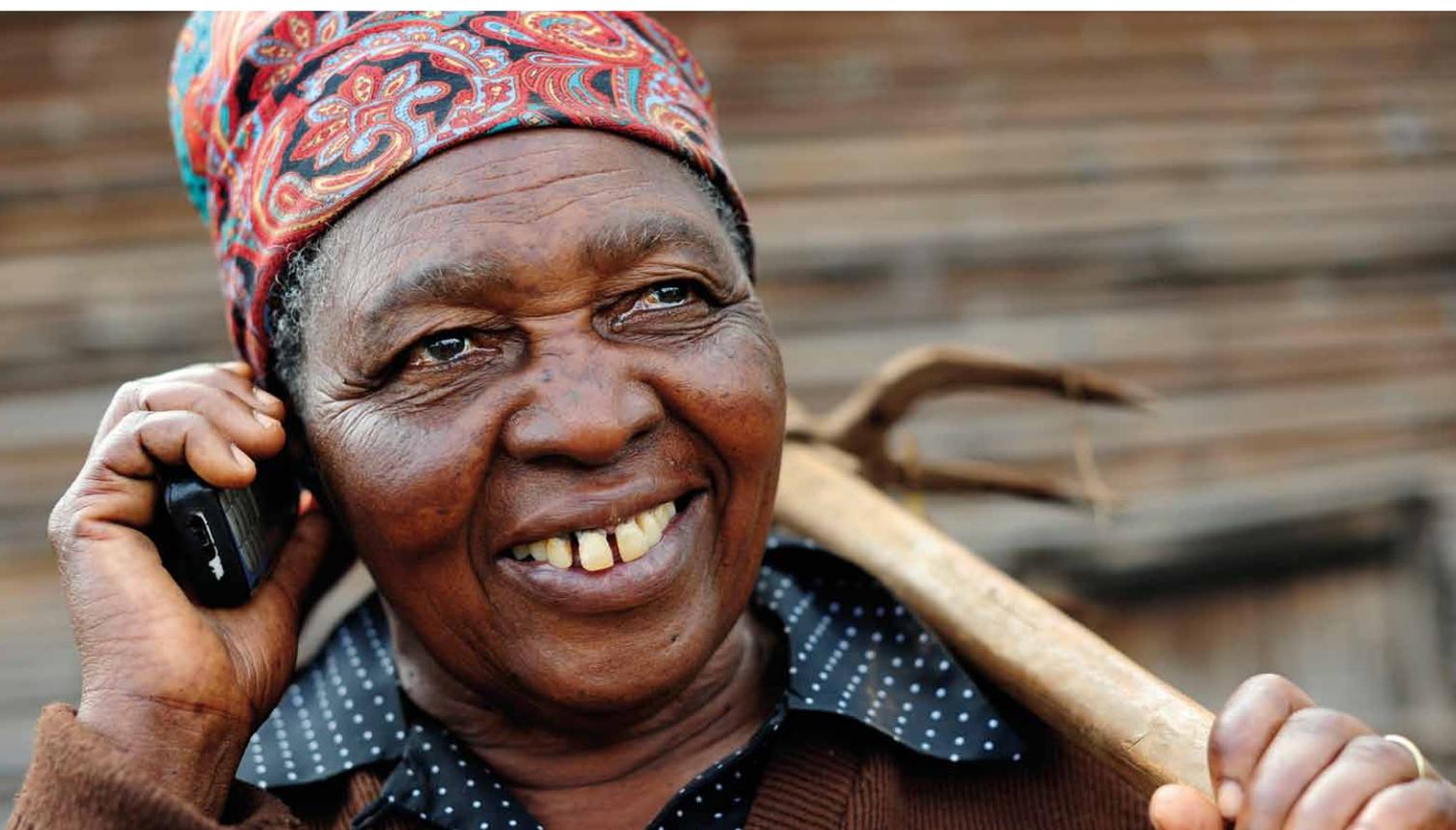
**Food production must increase by this amount by 2050 to keep pace with population growth.**

During the 1960s and 1970s, state-run, state-funded extension and advisory services played a key role in getting information and new technologies to farmers. Among other things, they provided the advice and support that helped to drive the Green Revolution in Asia. However, the structural adjustment programmes introduced by the World Bank and International Monetary Fund (IMF) led to a significant reduction in the funds available for agricultural service delivery. At the same time, the proportion of official development assistance devoted to agriculture declined from 17

per cent in 1980 to 3 per cent by 2006. This had a profound effect on national extension and advisory services. At one time, many developing countries had, on average, one government extension agent for 300 farmers; today there is now one for every 1500–3000 farmers. Of course, just having large numbers of extension workers is no guarantee for agricultural growth.

#### **A NEW WAY OF DOING THINGS?**

According to Volker Hoffmann, an agricultural economist and an expert on extension at



Mobile phones help farmers gain access to information which can help them to improve their livelihoods and farming practices. A farmer in Kibirichia, Kenya.

Hohenheim University, Germany, governments should not be directly engaged in the provision of extension services, which can be more efficiently managed by private legal entities. Government extension services continue to suffer from a number of shortcomings. They tend to be bureaucratic and inefficient. Instead of consulting farmers about their needs, government extension agents generally decide what is best for them. Furthermore, there is often a conflict of roles, with government extension agents acting as advisers, policemen, and arbiters about whether or not farmers should

receive subsidies or other assistance. This inevitably leads to a lack of trust between extension agents and farmers.

“There is a very strong argument in favour of creating a pluralistic system of delivery, which is participatory and demand-led”, says Hoffmann. Two rules should be followed: “avoid role conflict” and “no extension without content”. Hoffmann suggests that the state should continue to determine policy, regulate how extension services operate and ensure that farmers receive good advice. However, it should reduce its direct engagement



Science matters. Eton Codling, a soil scientist, evaluating maize growth in a field undergoing experimental treatment.

Brazilian president Lula Da Silva 2004: extension policy targeted farmers. Budget was increased from US\$ 100 to US\$ 250 million.



© S. Boness/Franos



© J. Lyell/Alamy

Microcredit schemes – this one is in Freetown, Sierra Leone – have provided much-needed support for small-scale farmers in the developing world.

in providing services or inputs to farmers. This could be left to other service providers, such as private companies and non-governmental organizations. “This should be a gradual process”, he says. “It cannot be achieved overnight.”

At the Nairobi conference it was broadly agreed that extension services should be provided free of charge for smallholder farmers. “Emerging” and fully commercial farmers, in contrast, should pay for services. Clearly, these two groups have different needs. Commercial farmers will require entrepreneurial training and advice that will help them to move up the value chain, for example by processing cocoa into chocolate or providing pre-packaged fresh vegetables for the hospitality industry. Smallholder farmers, in contrast, require technical as well as financial and marketing information, and assistance to help them make the shift from subsistence production to a more commercial type of enterprise.

Indeed, this was one of the constant refrains at the Nairobi conference: subsistence farming should only be a temporary phenomenon. However, for the transition to happen, the rural poor require more than just high-quality agricultural advice. They also need access to education, health services, transport, communications, credit and remunerative markets. In other words, agricultural extension needs to be part of a wider programme designed to stimulate the growth of both the agricultural sector and the non-farm rural economy.

### A MODEL FOR THE FUTURE

During the past decade, Brazil has made remarkable progress in achieving its development goals. Between 2003 and 2011, 33 million

**“In sub-Saharan Africa, yields have remained at one quarter the global average. This is unacceptable. AGRA’s strategy is to catalyze a uniquely African agricultural revolution through innovative approaches, linking smallholder producers to private-sector agricultural services, value chains and technological innovations.”**

**Namanga Ngongi, President, Alliance for a Green Revolution in Africa (AGRA), Kenya**

people out of a population of 180 million were able to lift themselves above the poverty line; another 22 million are currently heading in the same direction. During recent years, many of Brazil’s 4.5 million family farmers have improved their output and income. Brazil’s Zero Hunger Campaign, known locally as Fome Zero, together with an extension programme that focuses on family farmers, have been at the heart of this success story.

“During the 1970s, we had an extension system which was very effective in promoting the agro-industrial sector”, says Ben Corrêa da Silva, President of the Brazilian Rural Extension Academy. However, family farmers, who produce 87 per cent of Brazil’s cassava, 70 per cent of its beans and 58 per cent of its milk, the staple foods consumed by most Brazilians, received little or no assistance, despite their contribution to food and nutrition security and the economy.

All this changed when a government led by Inácio Lula da Silva introduced an extension policy that specifically targeted family farmers. The 2004 policy, which defines extension as a



**3%**

The proportion of official development assistance devoted to agriculture in 2006. This compares with 17% in 1980.

Extension empowers farmers



© Picture Contact BV/Alamy

Christine relies on farming for food and income. Through a local agricultural program, she was taught about soil irrigation and crop multiplication, and how to get her crops to the market. She is now a leader in her farming group and teaches others what she's learned.



**33 million**

The number of people lifted out of poverty in Brazil between 2003 and 2011 – thanks, in part, to reforms of the country's agricultural extension and advisory services.

non-formal and continuous education service, has encouraged a pluralistic approach, with NGOs, farmers' organizations, government departments and others being involved in the delivery of services, which are free of charge to farmers. The government has put its money where its mouth is: between 2004 and 2009, the extension budget increased from less than 50 million reais (US\$100 million) to over 250 million reais (US\$250 million).

The Brazilian approach to extension is the antithesis of the old top-down, under-resourced model: services are tailored to suit the needs and demands of the farmers themselves. Evi-

dence suggests that the more participatory and well-resourced the extension services are, the greater the benefits for their clients.

"In Papua New Guinea (PNG), government extension officers tell farmers what to do; they don't consult them first to find out what their needs are", says Maria Senar Linibi, President of the PNG Women in Agriculture Development Foundation. Much the same story can be told for many other countries. Ms Linibi's organization has pioneered a "farmer first" approach in which the farmers themselves, rather than outsiders, set the extension agenda by determining what their needs are. This has led to



The project extension workers explain tomato diseases and pest control to farmers of Antanetibe, Madagascar.

the adoption of new crops and improvements in livelihoods and incomes. The farmer-first approach has also given them the confidence to make their views known to government and policymakers.

It is now widely accepted that the move towards more pluralistic, demand-driven, innovative, cost-effective systems of delivery, in which advisory services are combined with better access to credit, farm inputs and the market, has the potential to improve the welfare of smallholder farmers, reduce rural poverty and increase food production. The next chapter provides a more detailed reflection on the strengths and

weaknesses of the reforms, and the measures required to make them work more effectively for the benefit of smallholder farmers. ■

**“Gone are the days when there was one extension agent for every 300 farmers. Today we’re lucky if it is one for every 3 000. There is a job to be done, so let’s focus on how we can get the job done with the limited resources we have. One of the ways we can do that is by making intelligent use of radio, cell phones and other media.”**

**Doug Ward, Chair, Farm Radio International, Canada**

# Reshaping the reform agenda

The Nairobi conference explored the future of extension and advisory services by focusing on four main themes, with all participants having the opportunity to contribute to the deliberations.

**D**uring the months leading up to the Innovations in Extension and Advisory Services conference, CTA and its partners held a series of e-consultations on the four main themes: policy issues, capacity development, tools and approaches, and learning networks. The e-consultations provided an overview of current thinking and helped to shape discussions in Nairobi.

In the course of the conference, more than 60 papers were presented during the thematic sessions, covering every conceivable topic related to

assessing the current state of extension and advisory services, and the measures being piloted or considered to improve them. Some of the participants attended all six sessions on one particular theme; others moved among the different groups. All, in one way or another, were able to contribute to the elaboration of the key messages that were presented in the final plenary. These are described below.

## POLICY MATTERS

Two questions shaped the policy sessions. First, can improvements in extension and advisory services really help to reduce poverty and improve food and nutrition security? And second, what are the policy lessons learned from the last two decades of reform?

**“The conference identified success stories which showed that the right blend of policies can help to improve the livelihoods of farmers. This requires a policy framework that encourages pluralism, cooperation and competition.”**

The policy group responded “yes” to the first question, but noted that these services must conform to a set of guiding principles, and respect the role of small-scale farmers, fisherfolk and livestock keepers. The group concluded that the reforms

This was one of the largest gatherings ever held on agricultural extension, with delegates coming from 85 countries.





© F. Maitoli/IFAD

The role of the private sector in the delivery of integrated services, e.g. inputs, was widely discussed at the conference. Here farmers load a pick-up truck with bags of fertilizer at La Gina Censeri warehouse, Dominican Republic.

have largely failed, as there has not been any significant increase in accountability, efficiency, empowerment or impact. Furthermore, the privatization of extension services has been to the detriment of smallholder farmers and public extension agencies.

Nevertheless, a number of the papers presented at the conference identified success stories which showed that the right blend of policies can help to improve the livelihoods of smallholder farmers. This requires a policy framework that encourages pluralism, cooperation and competition.

Brazil provides a compelling example of the benefits that can flow from well-designed policies. Here, the government took the strategic decision to introduce measures that directly benefit

family farms. The pluralistic approach, backed by significant finance, helped to increase agricultural productivity and farm incomes. The Brazilian government also recognized the need to involve farmers in the formulation of agricultural policies. In short, it put the notion of “farmer first” into practice.

The policy group concluded that government extension agencies should not be involved in the provision of agricultural inputs, such as seeds and fertilizers. The state has a key role to play in the coordination and regulation of extension and advisory services. It also has an important role to play in designing policies that encourage a broad range of different groups – including the private sector, NGOs and farmers’ groups – to deliver integrated services. Cooperation is important, as is



**3**

The number of countries in sub-Saharan Africa – out of 27 investigated – that have introduced legally binding extension policies.



Farmers visiting the Nyaani Soil Conservation and Water Catchment Project in Kenya.

healthy competition, which should lead to greater efficiency.

Extension and advisory services should focus on improving the welfare of smallholder farmers. Larger, commercial enterprises can generally afford to pay the market rate for whatever advisory services they require. Government policies, and national extension and advisory services, should also recognize that farming is not simply a matter of producing food, fibre and fuel. Farmers are the guardians of natural resources, and national policies should encourage sustainable resource management as well as more efficient food production.

A study presented at the Nairobi conference found that just three out of 27 sub-Saharan African countries examined have introduced legally bin-

ding extension policies. This suggests that policy and institutional changes are urgently needed to create realistic and remunerative opportunities for smallholders. It is imperative that all countries formulate policies that guide the provision of extension and advisory services. The Brazilian experience, with its strong focus on designing policies to improve the welfare and performance of family farmers, provides important lessons for other countries.

The renewed interest and commitments for increasing investment in agriculture provides a timely opportunity to deliver extension and advisory services that are farmer-centred, participatory, well-funded, demand-driven and performance-oriented.

### **BUILDING CAPACITY**

A number of factors are responsible for low agricultural productivity, including a lack of technical knowledge, poor entrepreneurial skills, and meagre access to communication technologies that could help farmers, extension workers and others share information. Overcoming these problems, and improving access to markets, could help to increase farm productivity and incomes. This is why capacity building is so important.

“In the past, when people talked about capacity development, they were largely referring to providing technical knowledge and information to farmers,” says Kristin Davis, conference co-chair and thematic leader for the capacity development group. “Nowadays, the focus has begun to change, and at the conference we looked more broadly at capacity building using an ‘innovation systems perspective’.”

This assumes that the extension agents of the future – or the “new extension agents” – will have a responsibility that goes beyond providing farmers with technical information, such as which varieties of seeds to use and how to control pests and diseases or make better compost. They will also require “soft skills” that enable them to generate and promote innovations, improve the management of farmer

organizations and agribusinesses, and build alliances and networks of different groups and individuals along the value chain.

Developing and strengthening capacity – or the ability of the human system to produce results, maintain itself and self-renew – is important at many levels. Farmers, public and private sector extension agents, researchers and journalists all need to improve their knowledge and skills. Besides providing advice and the skills and knowledge to increase productivity, capacity development can help farmers take advantage of market opportunities, adapt to climate change, forge new partnerships and learn how to make the best use of information and communication technologies (ICTs).

It is impossible to exaggerate the importance of innovation. Farmers and others involved in the food chain need to promote innovations in production, processing, marketing and distribution. These should lead to an increase in agricultural output, higher incomes and more sustainable management of natural resources. This will require new ways of thinking and doing business, and a willingness to embrace change.

### **TOOLS AND APPROACHES**

The third thematic group, chaired by Myra Wopereis-Pura, addressed two questions of fundamental importance. First, which approaches and tools are proving most effective when it comes to delivering extension and advisory services to smallholder farmers? And second, how can the “islands of success” become the rule rather than the exception? In other words, how can we capture and promote best practice?

**“We need to improve capacity at every level. We need to improve the level of training for farmers. We need to invest more in the training of extension workers. And we need to strengthen the capacity of agricultural colleges and universities.”**

**Kahijoro Kahuure, Permanent Secretary, Ministry of Health and Social Services, Namibia**



© M.Millinga/IFAD

**Building capacity is important at all levels of the value chain. Here a worker sorts and packages rice at the Magugu collection center, Arusha, Tanzania.**

“Tools” refers to the technologies used to transmit knowledge and information, such as radio, podcasts, mobile phones and video programmes. “Approaches” refers to the ways in which new knowledge and skills are shared with farmers. This could involve the use of champion or model farmers, farmer field schools, village information centres or question-and-answer services – to name but a few of the approaches that have been used.

The most successful approaches achieve the following: they help to empower farmers and communities; they take into account local

culture and tradition; and they frequently target specific groups such as women and young people. The best approaches tend to be participatory and demand-led; in other words, they respond to the individual needs of farmers and communities. They also involve a constant dialogue between clientele and service deliverers, and a process of continuous learning. Successful approaches help farmers to adopt practices that make the most of a changing world. This could involve, for example, introducing new varieties or techniques that enable farmers to adapt to a more variable climate or changes in consumer behaviour.

During the past two decades, there has been a revolution in ICTs, with mobile phones becoming a key tool for transmitting knowledge and market information to farmers. At the same time, we have seen a dramatic shift in the way radio and television are used. The proliferation of privately-owned and community radio stations is providing farmers with high-quality material in local languages and the opportunity to participate in the two-way flow of information in ways undreamt of a generation ago. Radio services are particularly important for farmers who live in remote areas where extension agents seldom or never venture and where there is little or no access to the Internet. They are also highly cost-effective.

However, there are too many examples of ICT-based projects that have worked well, only to collapse once the funding ceases. They should therefore be designed with sustainability in mind.

It is important to ensure that the benefits of ICTs do not flow exclusively to enlightened and better-off farmers. ICT-based extension services should target the poor and women, and there should be a strong emphasis on ensuring their sustainability when managed by local communities.

### LEARNING NETWORKS

Innovation results from collective action, learning by doing and the sharing of knowledge and experience. Indeed, a learning network can be loosely defined as a diverse group of people and organizations who willingly share their experiences and knowledge. These networks can take many forms, from communities of practice to arrangements that bring together farmers, extension workers and others involved in the production and sale of agricultural goods and services.

Most extension and advisory services – whether state agencies or private – tend to focus on providing knowledge and technical information to farmers. Most lack the skills needed to promote the sort of interactive learning processes that foster and encourage innovation. Furthermore, extension and advisory services often decide what sort of information and help farmers need. This top-down approach is a serious weakness and has been widely discredited.

Extension and advisory services should recognize that continuous innovation requires

Each tool has its own niche, advantages and disadvantages. Successful ICT initiatives tend to recognize and build on the existing capacities and knowledge of farmers and entrepreneurs. Frequently, different tools can be combined to good effect. For example, some extension projects have successfully blended the use of SMS services, the Internet and ra-



500 million

The number of mobile phones in Africa today. In 1998, there were fewer than 4 million.



SMS services enable farmers in Zambia to send feedback to a farming programme, indicating what topics they'd like to hear more about. The radio show, which is supported by IICD, is broadcast twice a week in eight different languages.

collective action and knowledge sharing. For example, a group of farmers might decide to grow a new variety of tomato or eggplant in response to a market opportunity. This may involve new production techniques. The success of the new venture will also depend on a range of other groups involved in the food business—transporters, processors, traders – acquiring new equipment, designing new labels, finding new markets and so forth. In short, success will hinge on organizations and individuals cooperating together and learning collectively as part of an “agribusiness cluster” or “innovation platform”.

The discussions in Nairobi highlighted the fact that we need greater understanding of how to promote and facilitate interactive learning in a cost-effective way. This may involve the setting up of public–private partnerships; it certainly requires good documentation and the sharing of the lessons learned by existing networks.

**The leaning networks group came up with four main recommendations.**

1. Extension and advisory services should devise mechanisms that enable producers and other clients to reflect on the value of the services provided and articulate their needs.
2. Greater effort should be made to improve the advisory services’ capacity to support interactive learning along value chains and within agribusiness clusters.
3. Extension and advisory services should not attempt to replace existing innovation initiatives; instead, they should do all in their power to support them and respond to their needs.
4. Finally, much greater effort should be made to link local-level learning networks to networks at the district, national and regional levels. ■



© IICD

**Knowledge is power. Broadcasting a radio show about information and communication technologies for development (ICT4D) in Zambia. Extension needs the media.**

# A declaration of intent

Small-scale farming will continue to play a vital role in most developing countries. However, if farmers are to fulfil their potential, they require the best possible access to knowledge and information. The Nairobi Declaration – the key text for the conference – defines and describes the sort of extension services which are needed in these challenging times.



The conference delegates had the opportunity to shape the Nairobi Declaration

**T**he Nairobi conference was an event of considerable importance and the largest of its kind ever held. “This was certainly no ordinary conference,” said Ibrahim Mayaki, Chief Executive Officer of the NEPAD Planning and Coordinating Agency, in his closing speech. “One of the aims of the conference was to establish a coalition of different interests, and in this it was successful.”

During the course of the conference, the organizing committee oversaw the drafting of the Nai-

robi Declaration on Agricultural Extension and Advisory Services, which was presented in plenary during the closing ceremony. All those who attended the conference were given the opportunity to offer advice and opinions as the document was being finalized. The Nairobi Declaration provides a succinct summary of the current state of thinking about extension and advisory services, and the measures needed to improve their performance.

#### **THESE ARE THE MAIN POINTS IN BRIEF**

The conference recognized that smallholder agriculture and family farming are of paramount



Extension and advisory services will continue to play a vital role in helping small-scale farmers to improve their yields and incomes.

importance in most developing countries. Furthermore, extension and advisory services can and should play an important role in increasing access to knowledge, credit, inputs and markets for farmers and entrepreneurs along the value chain, and they have the potential to help farmers increase their productivity and incomes. There is an urgent need for a coalition of public, private and civil society groups to campaign for the revitalization of agricultural extension and advisory services.

During recent decades, farmers' groups, researchers, extension agencies and others have generated a wave of imaginative attempts to revive extension services, but with mixed results. Many of the policies, strategies and approaches to extension have failed to increase agricultural production and improve rural livelihoods. There is an urgent need for policy and institutional reform, an increase in investment, and the creation of participatory, demand-driven, performance-oriented extension services.

The Nairobi Declaration calls on all those involved in extension and advisory services, from national governments to extension agents, farmers' organizations to international donors, to work together to achieve a number of objectives.

First, they need to develop clear policies and strategies for extension in a participatory manner. Second, they should press for increases in the funding of extension and advisory services, and promote mechanisms that ensure sustainability and the efficient provision of high-quality inter-linked services. Third, the coalition partners should promote and facilitate a continuous process of capacity building and learning, as well as greater use of ICTs and the media. Fourth, the partners should develop and implement participatory processes for monitoring and evaluating extension and advisory services.

Will the Nairobi Declaration be worth any more than the paper it is written on? The conference organizers believe it will. "My organization, the Forum for Agricultural Research in Africa (FARA), and others such as the African Forum for Agricultural Advisory Services (AFAAS) will use the Declaration to promote reforms," says Myra Wopereis-Pura. "The Declaration provides clear guidance, and a common approach, about what needs to be done to improve extension services."

Kristin Davis, Executive Secretary of the Global Forum for Rural Advisory Services (GFRAS), also believes that the Nairobi Declaration will prove to be a valuable document. "We can send the Declaration to policymakers and say, 'Look, this is an important issue, and these are the sort of measures that need to be introduced if we're going to improve the welfare and productivity of smallholder farmers and their families.'"

In his closing speech, Michael Hailu, CTA Director, pointed out that there has been a tendency for those involved in extension and advisory services to operate within their own small circles of interest, with researchers talking among



# 3 000

The number of farmers per extension agent in many developing countries today. The figure used to be closer to 300.

**“Le client est roi – the client is king – in the business world, but when it comes to farmers, the client is a subject to be manipulated. There needs to be much greater respect for farmers and their families and we need to recognize their importance as food producers and private-sector wealth creators.”**

Mamadou Cissokho, Member of the Comité de la Sécurité Alimentaire Mondiale (CFS), Senegal



The fruits of success. Extension and advisory services can help link farmers, such as those producing oranges in Ethiopia, to profitable markets.

themselves, extension agents communicating with extension workers, and politicians and policymakers doing likewise. “What we have tried to create through this conference is an environment where everybody, no matter what their interest or profession, communicates openly with everybody else,” he said. “That is why it has been so important to establish this coalition.”

Over the coming years, the conference partners will continue to provide a platform to discuss

the measures and reforms needed to improve and revitalize the world’s extension and advisory services. ■

**“Extension and advisory services now embrace rural issues that go beyond agriculture alone. This calls for well-equipped advisors, who are networked at national, regional and international levels and can facilitate learning and innovation.”**

**Silim Mohammed Nahdy, Executive Director, AFAAS and Chair GFRAS, Uganda**

## ▶ **Nairobi Declaration on Agricultural Extension and Advisory Services**

**WE, MORE THAN 400 PARTICIPANTS** comprising: extension practitioners from public, private and civil society organizations, farmers, policymakers and representatives of the research and development community, academia, the private sector, donor agencies, financial institutions and the media from 75 countries; congregated in Nairobi, Kenya from 15 to 18 November 2011 for an international conference on Innovations in Agricultural Extension and Advisory Services: Linking Knowledge to Policy and Action for Food and Livelihoods.

### **RECOGNIZING:**

- That smallholder agriculture and family farming is the core contributor to agricultural production in most developing countries, and therefore vital for achieving food and nutritional security goals, for reducing poverty and improving livelihoods and for responding to climate change;
- That within dynamic innovation systems, extension plays an indispensable role as facilitator, knowledge broker and matchmaker between service providers and support agencies on the one hand and smallholder farmers and other entrepreneurs especially women and youth on the other;
- That efficient agricultural extension and advisory services strengthen the capabilities of smallholder farmers to take advantage of realistic and remunerative opportunities through access to knowledge, credit, markets and related services;
- That a coalition of public, private and civil society actors at national, regional and international levels is needed to revitalize and modernize agricultural extension and advisory systems in support of agricultural innovation.

### **NOTING:**

- That the conference generated significant interest, mobilized multiple stakeholders and demonstrated a need for greater emphasis on extension and advisory services within the global agricultural development agenda;
- That in response to the disarray caused by underinvestment in extension and advisory services; extension practitioners, farmers' groups, researchers, policymakers and development partners are generating a wave of imaginative attempts to revive extension;
- That a plethora of demand-led, situation- and context-specific, gender sensitive and climate-smart policies, strategies and initiatives are being implemented;
- That this multitude of policies, strategies and approaches has yet to achieve the desired impact on the agricultural and rural sectors;
- That policy and institutional changes are urgently needed to create realistic and remunerative opportunities for smallholders;
- That national funding for agricultural extension and advisory services remains at a low and variable level;
- That the renewed national, continental and global interest and commitments for increasing investment in agriculture provides a momentous opportunity to deliver extension and advisory services that are farmer-centred, participatory, well funded, demand-driven and performance oriented.

### **EMPHASIZING:**

- The need for national agricultural and extension policies, strategies and approaches that are inclusive, context-specific and contribute to national, continental and international development goals;
- The need for capacity building, greater coordination and professionalism in the provision of extension and advisory services;
- The need for enhanced use of information and communication technologies (ICTs), both old and new, and engagement of the media in expanding the reach and impact of extension and advisory services.

### **BEING CONCERNED THAT:**

- Failure to clarify the roles and responsibilities of the various stakeholders and service providers and develop mechanisms for working together could result in further erosion of extension and advisory services, with negative consequences for agriculture, rural areas, family farming and smallholder farmers, especially women and youth.

**WE HEREBY CALL UPON** all key stakeholders including governments, extension professionals, farmers', organizations, regional and global bodies, the private sector, civil society, development partners and donors to work together to:

- Develop clear policies and strategies for extension and advisory services in a participatory manner and put coordination and quality assurance mechanisms in place;
- Advocate for increased funding within national budgets and develop and implement public, private and donor funding mechanisms that ensure sustainability, risk sharing and efficient use of funds to provide high-quality demand-led services;
- Promote and facilitate continuous capacity building, learning and foresighting as well as greater use of ICTs and the media which take into account culture and gender in the provision of advisory and extension services so that millions of smallholder farmers can move up the value chain;
- Develop and implement participatory processes for monitoring, evaluation and impact assessments and for conducting research on extension to facilitate learning, accountability, efficiency and empowerment.

The coalition of partners established through this conference remains committed to advocating and implementing effective extension and advisory services for agricultural and rural development.

Therefore, the participants call upon the conference organizers to continue to provide platforms at different levels for extension professionals and researchers and farmers to meet, exchange and improve their capacity to mobilize smallholders' knowledge, labour, land, water and genetic resources for global food security.

Dated this 18<sup>th</sup> of November 2011  
Nairobi, Kenya



**The Technical Centre for Agricultural and Rural Cooperation (CTA)** is a joint international institution of the African, Caribbean and Pacific (ACP) Group of States and the European Union (EU). Its mission is to advance food and nutritional security, increase prosperity and encourage sound natural resource management in ACP countries. It provides access to information and knowledge, facilitates policy dialogue and strengthens the capacity of agricultural and rural development institutions and communities. CTA operates under the framework of the Cotonou Agreement and is funded by the EU.



For more information on CTA, visit [www.cta.int](http://www.cta.int)





*Cost effective, efficient extension and advisory services that empower farmers for a brighter future*



**Technical Centre for Agricultural and Rural  
Cooperation ACP-EU (CTA)**

P.O. Box 380

6700 AJ Wageningen, The Netherlands

[www.cta.int](http://www.cta.int)