

Taking Action for the World's Poor and Hungry People

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SPEAKER SUMMARY NOTE

Session:	AFRICA: New Strategies, Actions, and Ways Forward to End Extreme Poverty and Hunger in Main Developing Regions
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Title:	Building Capacity to Increase Agricultural Productivity and Incomes of Poor Small-Scale Farmers

Low Productivity of the African Farmer

The pervasive poverty in rural Africa is often blamed on low productivity of the African farmer. Therefore if poverty has to be tackled in African countries then the productivity of the agricultural sector which gives employment to majority of the citizenry has to be tackled. Agricultural productivity cannot be tackled if capacity of the actors engaged in the sector is low. Capacity in terms of knowledge and information has to be built in the farmers and other operators in the agriculture value chain to enable them operate efficiently in the knowledge economy.

The UNCTAD Least Developed Countries Report 2007 subtitled, "Knowledge, Technological Learning and Innovation for Development", focuses on knowledge accumulation, technological learning and the ability to innovate as vital process toward genuine productive capacity development in these countries.

Innovation Systems Approach

It has been found that a lot of knowledge already exists which can be used to improve the livelihood of the small holder. Innovation systems approach offers an opportunity for effective way to use, adopt, uptake or commercialize existing knowledge. The innovation systems approach moves away from a traditional linear research and development model in which research is completed and results are passed on to users through extension. Instead it emphasizes the need to nurture the demand for knowledge and technologies among a range of actors including farmers, researchers, extension officers, policy makers, private sector companies, entrepreneurs, nongovernmental agencies and other intermediary organizations and encourage them to demand relevant knowledge. The flow of knowledge between these actors is important to get innovations to work to advance food and agriculture.

Contributions of Higher Education

The first stage of capacity development should be at the universities or institutions of higher learning. It is important to build capacity in the teachers at higher educational institutions about effective ways of teaching so that they can impact knowledge to their students. This process of building capacity to build capacity ensures effective pedagogy for agriculture. Content, pedagogy, and technology must be integrated. We should move away from just lecturing and use participatory methods of teaching which tend to increase retention of knowledge by students. A student-written wiki-text with student generated text questions combined with instructor lectures and instructor generated test questions have been found to be useful. Curriculum should be developed in a participatory way. Revision of curriculum using feedbacks from students and actors in the agriculture value chain including farmers tend to enrich the curriculum and make it more relevant to the needs of society. But reform in curricula will not be sufficient unless accompanied by adjustments in pedagogy to emphasize experiential learning.

The need to provide students with access to practical experience and learning from direct engagement is particularly critical in rapidly changing technological fields. Experiential learning can be promoted more readily in universities that have direct linkages with the production sector. This makes community linkages even more critical to the effective functioning of universities. For students to be able to participate in curriculum development they should interact with farmers and other actors in the food and agricultural value chain to be able to appreciate their problems and offer solutions.

Agricultural graduates take up jobs in research, policy analysis, extension and various positions in the public and private sectors. Continuous education makes them keep up with developments in knowledge in the sector. Without good analytical support it may be difficult to bring out good policies that will help move the agricultural sector. The universities can mount short and specialized courses to build capacity in middle level officers.

Building Capacity in Farmers

The most important part of capacity building is with the large number of small-scale farmers who have to innovate and adopt new technologies to increase their productivity. Extension services have gone through a number of reforms in various countries in Africa but yet still productivity has not responded much to the initiatives. The training and visit (T&V) program is to make farmers visit a demonstration farm or the farm of a nucleus farmer, get training on how technology has been applied and go back and apply the same on his or her farm. The farmer field school concept is used to train farmers in clusters so that they learn from each other as well as from a resource person. With multiple objectives for the method, an evaluation concluded that productivity and knowledge acquisition increased among a large number of farmers. Farmers must be aware of their vulnerability and know how to cope with the situations that confront them. Emerging issues like climate change require different type of capacity to be built in farmers so that they can successfully adapt to its consequences.

It is when farmers are able to demand the type of technologies they need is adoption and use of knowledge effective. Before farmers can make meaningful demands for their operations they must be empowered.

Actors in the food and agriculture value chain have been found to belong to all kinds of social networks. Networks offer avenues for passing on information from one person to another and can be used to build capacity in the members. Social networks can therefore be used as avenues to promote knowledge creation and learning among its members. Where there are no formal networks, church and mosque services can be used to send information to members from time to time.

The production of knowledge and innovations through agricultural research and development (R&D) investments as well as their spatial spillovers provide driving engine of sustainable agricultural growth. Agriculture knowledge spillovers among geographical locations arise when research conducted in one location benefits other locations and are able to adopt the research results, and ultimately increase their productivity. The impact of agricultural knowledge spillovers will depend significantly on the amount and quality of existing stock of knowledge accumulated over the years. Empirical evidence suggests that new incoming knowledge can only be utilized if necessary complementary knowledge is already in use.

Input distributors come in contact with farmers. This makes it easier for them to undertake advisory services for farmers. Training input distributors about new ways of doing things is an effective way to promote adoption of innovation by farmers.

Non-formal education has been used successfully in some countries to provide literacy and numeracy skills to adults who missed formal education. The so-called "night school" was an avenue for educating many adults in Ghana. With the education they receive they become early adopters of new technology and are able to read extension messages and do simple book keeping on their ventures.

Radio and television have become affective media for educating rural people. Cinema vans which tour the villages and show documentaries and movies are able to pass on information to community people. The shows are well attended and the messages generate further discussions among the people and the content tends to stick and get applied.

Play acting is also a good medium for putting important messages across to people. In addition to providing entertainment the drama simulates real life situations which make it easier for adoption and use.

The internet has become a universal medium for disseminating information. Some rural communities have been able to obtain information about their ventures through the internet. The cost of internet connectivity in Africa has to come down so that many rural people can use the facility to expand their knowledge.

With the spread of mobile phones in many parts of the world, and its increasing availability in Africa, it is being used by many farmers to access information, especially market information so they no longer become price takers but are able to sell their produce at negotiated price. Mobile phones can also be used to advance agricultural advisory services by extension officers with farmers. It is thus becoming a tool for building capacity in small scale farmers in many African countries.