

IFA Africa Forum

Statement on Agricultural Education and Extension in Africa

AGRICULTURAL EDUCATION

There is an urgent need to promote agricultural curricula in order to train the next generation of agronomists (including researchers, extension workers and leading farmers). Not only should these curricula focus on 'modern' sciences such as biotechnology, but they should give adequate attention to 'basic' agronomy, including soil sciences and crop nutrition.

Education and training programmes should address sustainable agricultural practices such as integrated farming. More specifically, the curricula need to focus on best management practices within cropping systems rather than on specific crops. Training is required on how to improve nutrient cycling within cropping systems, for instance through cereal-legume rotations/intercrops, integrated soil fertility and plant nutrient management, better nutrient use efficiency, and conservation agriculture.

AGRICULTURAL EXTENSION

Improving extension workers' educational opportunities and increasing their motivation is of critical importance. The number of extension workers needs to be increased and their linkages with farmers strengthened. Moreover, extension services should be accountable and their performance measured.

Research results developed over the past decades should be translated into material that can be used by extension workers. Platforms for knowledge exchange need to be developed. In the absence of such mechanisms, the weak linkages that exist between research and extension lead to disjointed extension programmes, resulting in the provision of inaccurate or contradictory fertilizer management information. These platforms can be used to facilitate information exchange and to better coordinate training programmes among international and national research centres, public and private extension services, agricultural development organizations and agri-input dealers.

As the number of farmers with mobile phones steadily increases, the use of information and communication technologies (ICT) should be developed. Ways of using mobile phone platforms to provide customized, real-time advice need to be investigated. Multi-stakeholder initiatives should be organized to develop comprehensive ICT services, including

the provision of crop and input prices, weather forecasts, and time- and site-specific crop management recommendations.

To increase outreach capacity, agro-input dealers should be involved in knowledge transfer. Market- and service-oriented systems, including private sector-led extension, can work in areas that are well-connected to input and output markets. However, in remote areas that are less well-connected to these markets, the activities of extension services provided by governmental agencies and NGOs remain of critical importance. Agri-business development should also be strengthened. Agro-input dealers and stockists need technical, operational and business training. In particular, national programmes should be put in place to certify the proficiency of agro-input dealers and NGOs with respect to the soundness of the crop management advice they give farmers.

It is important to expand the use of effective and innovative extension methods, and to increase the impact of farm demonstrations. This encompasses the use of procedures that encourage active participation by stakeholders, including farmers, in the organization, management and evaluation of demonstrations. Emphasis should be placed on economic analyses of fertilizer management practices. Training on innovative extension methods is required in order to replace the ineffective or outmoded methods used in some cases. To be successful, extension should be customized to meet farmers' expectations. In that regard, there is a need for two-way participatory approaches linking farmers, extension workers and researchers.

AGRICULTURAL RESEARCH

It is necessary to strengthen national agricultural research systems. Research institutions working on similar agro-ecosystems should be encouraged to cooperate across borders.

There is also an urgent need to update fertilizer recommendations. This is a priority in many countries that have promoted blanket fertilizer applications for several decades. Training is required in order to develop flexible crop- and site-specific fertilizer recommendations relevant to changing soil fertility conditions, yield potential, and fluctuating input/output market prices. To improve performance within highly variable systems, the focus should be on providing crops with the right nutrients at the right rate, right time and right place.

Particular attention should be given to water management and to reducing risks associated with drought. In view of the increasing frequency of long dry periods and periods of excessive rainfall, farmers need training on related fertilizer management decision support systems.

AGRICULTURAL POLICY

It is also important to empower leaders of national farmers' organizations with respect to lobbying, advocacy and communication, and negotiation skills in order to improve their ability to influence policymaking and their involvement in policy implementation.

Multi-stakeholder partnerships should be facilitated, within and across countries. Networking abilities need to be improved so that alliances can be formed with different stakeholders in the agricultural sector, including other regional and national extension services, research organizations, farmers' organizations, industry, agro-input dealers and NGOs.

About the IFA Africa Forum

The IFA Africa Forum was established in November 2007 by the Executive Committee of the International Fertilizer Industry Association (IFA).

This IFA regional body provides a platform for its members to exchange views and expertise on key issues. It facilitates effective communication of the interests and positions of the fertilizer industry to key interlocutors with regard to African issues. It is expected to contribute to greater awareness of the positive role fertilizers can play in Africa's development and, ultimately, to increased fertilizer use by African farmers, in line with agronomic recommendations.

The Forum is composed of IFA members with a long-term interest in developing fertilizer use to improve soil fertility, agricultural production and human nutrition and alleviate poverty in Africa.