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## AFRICAN PERSPECTIVES ON PROGRESS AND CHALLENGES IN AGRICULTURAL TRANSFORMATION

By

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### *Emerging Trends in African Agriculture:*

- Evidence of agricultural recovery and growth in selected countries as sectoral policy reforms begin to show payoffs;
- Evidence of rising crop input use and intensification in some countries; declines in others;
- Rapid globalization is redefining the conceptualization of agricultural growth strategies in Africa – growth will require more decentralized and flexible organizations capable of reacting quickly and responding to international market opportunities; and
- Major concerns about whether the economic and demographic processes of structural

These were some of the major messages that emerged from a Fourth Workshop on Agricultural Transformation in Africa, involving a group of prominent African researchers, policy makers, and private sector representatives from 16 countries. The workshop (held in Nairobi, Kenya, in June 1999), the fourth in a series sponsored by USAID's Africa Bureau, was organized by Tegemeo Institute of Egerton University, the Eastern and Central Africa Program on Agricultural Policy Analysis (ECAPAPA), and Michigan State University.

The discussions and consensus from the workshop were generally more optimistic than the conventional

perceptions about the state of African agriculture. Key messages from the workshop included:

- Most African countries that have carried out agricultural policy reforms are doing better than those that have not. However, there is still much to do across all countries to nurture a policy environment that attracts private investment capable of achieving rapid agricultural productivity growth.
- Rapid globalization is redefining the conceptualization of agricultural growth strategies in Africa. African economies will either make the policy decisions to become interconnected with the rest of the world in a trade-based and



specialized competitive system or be left behind.

- Linking agricultural development to industrial development is a necessary part of this process.
- Growth will increasingly require a pragmatic approach toward biotechnology. The green revolution largely bypassed much of Africa. The continent cannot afford to let this happen with biotechnology.
- The linkage of agriculture to markets makes the role of commitment, consistency, and communication more critical among the business sector, commodity associations and farmer groups.
- The role of the state remains critical – agricultural transformation cannot be achieved by sidestepping the state. The private sector has an important role to play in pressuring for good governance and efficiency.

These six areas are the elements of the vision developed at the meeting. Agricultural growth rates above the rate of population growth (about 4 percent) are well within the technical and economic capacity of Africa to achieve, provided this is made a top priority in public investment decisions. Prioritizing agriculture entails increased budgets and restructured incentives for technology development and dissemination, as well as greater coordination between national, regional, and international research centers. And the limited successes from decades of public and donor investment in African agricultural systems suggest that it is more than the quantity of money spent that matters. The participants concluded that governance issues need to be incorporated into the agricultural transformation debate.

Participants from both the public and private sector agreed that only through first transforming agriculture can the lives of most African people be improved. But government commitment is still lacking. Africa spends only one-third as much of GDP on agricultural research as do most high-income countries, yet agriculture is six times as important to its GDP. Investments in agricultural research and infrastructure need to be increased 18-fold to match the investments being made in the developed world and those made during the green

revolution in the newly industrialized countries of South and South East Asia.

#### **DETAILED FINDINGS:**

***Agricultural Productivity:*** Contrary to widespread perceptions, input use has actually increased in recent years in many African countries, and there is solid evidence of agricultural productivity growth in about a third of them. However, this is not cause for complacency. A key question raised repeatedly during the workshop was what is accounting for the limited use of productivity-enhancing farm technologies (e.g., improved seed and fertilizer) in Africa? Four country case studies presented on this topic revealed that the national agricultural research systems have had a mixed track record in generating productive new technologies. These African NARS tend to be top-heavy with large numbers of non-research staff, bloated payrolls, and poorly paid unmotivated scientists. Only small portions of their budget are from non-government contributions, creating weak stakeholder oversight. But even in cases where improved technologies have been developed, the ability of farmers to use them has been impeded by high costs of distribution, caused by poor infrastructure, high transaction costs, and policies that thwart private investment in the system. Some apparently profitable technologies sit underutilized on the shelf, perhaps convincing governments that further investment is not money well spent. This leaves the bulk of funding to donors whose incentives are often geared to show short-term payoffs. The meeting accentuated the importance of enhancing stakeholder roles in both research management and financial contributions, and making research more farmer- and market-driven. In South East Asia, agricultural research played a key role in broad-based poverty alleviation through generating technologies that could be adopted on small farms, thus improving the lives of tens of millions of farmers.

***Linking African Agriculture to Regional and Global Markets:*** Commercialization – raising the share of farm output produced for the market rather than for subsistence – as seen as critical in agricultural transformation. The productivity gains accruing from increased specialization and commercialization are made possible by the



development of more reliable and lower-cost markets and their institutional adjuncts – e.g., protection of commerce through strong legal systems, clearly defined property rights.

Markets are increasingly being liberalized, albeit slowly and sometimes haltingly, throughout the continent. But most private markets are still based on spot market transactions with little coordination between credit, input and output marketing. While a specific goal of policy is to reduce marketing costs, the evolution of more productive economies over the past 200 years has featured the development of more complex marketing and contracting arrangements. These more complex marketing arrangements have successfully reduced risks and transaction costs of investment in more technically efficient production processes and have hence proven valuable because they have encouraged productivity growth at other stages of the system. In this regard, market reform policy should be regarded as a continuous process of searching for alternative institutional arrangements, adapted to local conditions, capable of promoting new investment and productivity growth throughout the food system.

National domestic markets and global export markets have long been the preoccupation of African agricultural policy. Several papers showed the potential of regional markets to bring positive benefits to producers without harming consumers. Achieving these gains, however, will require much lower transport and transaction costs. A range of policies and investments still need to be put in place to improve the functioning of markets and reduce the cost of participating in them. (e.g., investment in road, harbor and rail infrastructure, strengthening the legal foundations of a commercialized economy, and selected policy changes to enhance private investment incentives further).

***Linking Agricultural and Industrial Development:*** While accepting that industry can be important in pulling Africa out of poverty, participants emphasized that only industrialization based on strong agricultural growth can lead to broad-based poverty alleviation of the kind seen in parts of South East Asia. A comparative review of

South East Asia and Africa showed that increases in agricultural income – whether from productivity-enhancing changes in technology, or from improved infrastructure, or policy – were the single most important factor in explaining differences in enterprise start-up rates, enterprise expansion, and job creation in non-farm sectors across countries and regions. Sustained incentives for private investment in agriculture also sparked in many East Asian countries the dynamic demographic and labor shift culminating in structural transformation. Agricultural growth fueled the demand for small-scale industry, which expanded off-farm jobs. The rising share of people involved in off-farm activities in turn raised the demand for domestic agricultural production. This dynamic transformation process has been impeded in Africa by a lack of fundamental investment to get agriculture moving in the first place.

***Tapping the Potential of Biotechnology:*** Africa needs to be aware of both the risks and the very great potential of this new branch of science to transform agriculture. But the meeting concluded with a clear appreciation that African farmers' access to the productivity-enhancing benefits of biotechnology is crucial for future competitiveness and poverty alleviation. Biotech is already being widely used throughout the world. African governments will either forge agreements with multinationals and research centers that give African farmers' access to this technology, or face becoming uncompetitive in increasingly globalized markets. Major priority areas for future analysis are how African governments and NARS should liaise with international research centers and multinational firms to gain a voice in discussions of intellectual property rights, and how to nurture competition pro-actively among the foreign technology firms to supply the African farmer.

***Consistency and Communication:*** Even though the official policy environment across Africa is more conducive to private investment now than a decade ago, conflicting policy statements by government officials in the press raise the specter of policy reversals and adversely affect the private sector's response to liberalization. Statements by key politicians critical of a market-oriented system are



likely to be incorporated into the private sector's expectations of the payoffs and risks of future investment in the system. For their part, the private sector and researchers such as agricultural economists and research scientists are still searching for processes of effective dialogue with government and politicians who determine how public resources are allocated. The result is often an atmosphere of mutual suspicion and policy unpredictability. This is one of the biggest differences between much of Africa and other parts of the world. Examples of the Taiwanese Joint Committee on Rural Reconstruction and U.S. farmers making presentations on their positions regarding the millennium round of trade negotiations of the World Trade Organization showed how far Africa has to go in building social capital – the ability of a society to sit down, discuss, and work out mutually agreeable ways of achieving goals.

*The role of the state* remains critical – not in the historical role of a participant in production and marketing, but as a facilitator of socially beneficial activities undertaken by others. In many countries, the state has helped break down oligopolies, has invested in the generation and use of technology and market information, and has helped reduce the transaction and contract enforcement costs of doing business. Some of these functions only the state can provide, through organized civil society.

The workshop participants recognized that the processes of agricultural growth and structural transformation cannot occur without an explicit focus on changing the "culture" of the state – how people operate within it, transparency of decision making, etc. It was recognized that analysts and interest groups need to contribute to such a process, in part by trying to make their analyses more concrete, geared toward solutions to practical problems, and presented in a form that people outside the profession can easily follow.

**FOLLOW-UP ACTIONS:** Beyond defining an analytical agenda, the workshop participants set a number of target follow-up actions that could further the cause of agricultural transformation. Key among these were:

- To attempt to measure progress toward agricultural transformation through a process of defining and measuring benchmark indicators;
- To extend productivity measures beyond the farm to include commodity production, marketing and processing systems;
- To identify business opportunities, particularly in non-traditional crops and non-traditional markets; and
- To make professional research more in tune with the questions in policy makers' minds and to package results so they can be accessible to, and understood by, a wider audience.

This policy synthesis is part of that outreach process. More detailed information (including downloadable copies of all papers presented) and strategies for consideration by decision makers' can be found at the Transformation Website ([http://www.aec.msu.edu/agecon/fs2/ag\\_transformation/index.htm](http://www.aec.msu.edu/agecon/fs2/ag_transformation/index.htm)). Beyond identifying concrete actions for progress, a major aim of the workshop and follow-up activities is to get renewed commitment to agricultural transformation – one of the most important routes to improving the lives of millions of citizens of Africa.

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