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Fostering Agricultural and Food System Transformation in Africa

By

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BACKGROUND: In September 1995, 40 African policy makers and researchers met in Abidjan, Côte d'Ivoire, to examine African experience with agricultural transformation and identify actions needed to promote it. USAID's Office of Sustainable Development in the Bureau for Africa (AFR/SD) sponsored the workshop, in collaboration with the African Development Bank (ADB), the Institut du Sahel (INSAH), and Michigan State University (MSU).

The workshop's objectives were to:

--Identify *strategic policies and investments* needed to transform agriculture and the food system to stimulate broad-based economic growth.

--Focus on *who should do what*--identify appropriate roles for, and relationships among, public and private sectors; other elements of civil society, such as farmer and trader associations; national and local governments; regional organizations; donors; and private voluntary and non-governmental organizations.

--Identify an *analytic agenda*--areas where research would have a high payoff in terms of providing key information needed to design successful transformation strategies.

--Lay the groundwork for *follow-up actions* to implement the workshop's recommendations.

Participants included senior researchers, policy makers, and NGO participants from West, East, and Southern Africa, with a few participants from North America and Europe. The Africans came from 19 different countries and represented 20 different organizations.

OVERVIEW OF RESULTS: The workshop participants identified several elements, discussed in more detail below, that need to be incorporated

into future strategies to foster agricultural transformation in Africa:

- Strategies need to focus on transforming the entire food system, not just farming.
- Technologies and policies should be specific to each agro-ecological zone.
- Good governance, decentralization, and farmer empowerment are essential for agricultural transformation.
- Agricultural transformation requires better domestic resource mobilization.
- Regional integration, rather than national food self-sufficiency, is the best way to assure broad-based growth and food security.
- Agricultural transformation requires greater coordination across development actions.

WHY FOCUS ON AGRICULTURAL TRANSFORMATION? Transforming agriculture and the broader food system is essential if African countries are to:

- Reduce widespread poverty and hunger in the face of rapid population growth.
- Promote broad-based economic growth and new job opportunities for the swelling labor force.
- Protect the environment.

Transforming the food system has been a linchpin in the development strategy of almost every country that has achieved broad-based economic growth. Such a transformation requires agriculture to become increasingly integrated into the world economy. Farmers expand their use of science-based inputs developed off the farm and exchange more of their outputs with others. Consumers (including farmers) increasingly rely on markets for secure, low-cost supplies of food. This process fosters greater specialization and productivity.

Increasing productivity growth at the farm-level, however, is not enough. For economic growth and employment to grow in the rest of the economy, the real price of food to consumers (a major determinant of wage rates, real incomes, and food security in poor countries) must fall. Generating the productivity increases needed to bring about lower food prices, while still maintaining incentives for farmers, traders, and processors, requires an ongoing stream of technological and institutional changes *throughout the food system*. In addition to improved farm-level technology, improvements are needed in input and output markets, factor markets, tax systems, and market-supporting infrastructure, such as roads, market facilities, and information systems.

Policy reforms are central to agricultural transformation. Increasing food-system productivity requires a combination of decentralized decision making by individual farmers, merchants, and consumers; and collective actions to benefit from new cost-reducing technologies and institutions. This mix of individual and collective actions is unlikely in economies where the state dominates agricultural production and marketing. Nor is it likely in pure laissez-faire systems that leave little room for collective action by various groups in civil society, such as farmer cooperatives or local units of government.

During the 1980s and 1990s, most African countries adopted structural adjustment programs in an effort to stabilize their economies and lay the foundations for long-term economic growth. Advocates of the reforms see clear, positive effects on African agriculture and the broader economy. Many African analysts remain skeptical, doubting the macro-economic numbers that underlie these evaluations. These analysts also often express concern that the reforms, although leading to short-term improvements in macro-economic aggregates, are not inducing the long-term investments needed to foster sustainable productivity growth and widespread food security. The workshop fostered a structured debate among Africans on these issues.

DETAILS OF RESULTS: Participants reviewed 10 background studies commissioned for the workshop and debated issues of policy, technology development, and financing. The studies, based on original research by African scholars, analyzed the experience of various countries and regions of

Africa in fostering agricultural transformation and undertaking policy reform.¹ Out of the discussions came the following conclusions and recommendations:

Strategies to Promote Agricultural Transformation: The case studies demonstrated that macro policy reforms have had positive effects on agriculture in some parts of Africa. The impact of such reforms, however, has been slower and less dramatic than the authors of the reforms had hoped. The following actions could speed up the agricultural transformation process.

Strategies Should Focus on Transforming the Food System, Not Just Farming. The constraints to assuring sustainable growth and food security lie both on and off the farm. In many countries, well over half of consumers' cost of food comes from post-harvest operations and (to a lesser degree) purchased inputs. Improving productivity of input and output marketing, storage and processing are therefore critical to driving down the real cost of food to consumers. Competing internationally increasingly means serving niche markets that have tight quality specifications. Meeting both these challenges requires improved technologies and institutions (such as contracting procedures) not only at the farm level, but throughout the marketing and processing sectors as well.

Technologies and Policies Should be Specific to Each Agro-ecological Zone. African agriculture is tremendously diverse; Africa-wide strategies for agricultural transformation (e.g., based on an Asian-style Green Revolution) are unlikely to be successful. As a first step at disaggregation, the workshop participants identified 6 broad agro ecological zones within which similar constraints often hinder agricultural transformation: the arid/semi-arid zone, the subhumid areas, the humid tropics, the medium and high-altitude areas, the

¹ The debate built on results of earlier meetings of African scholars to discuss these challenges, including a 1993 symposium on agricultural transformation, also sponsored by AFR/SD, and a meeting in late 1994 in Senegal, organized by IFPRI as part of its "2020" study. The Abidjan workshop extended the work of these earlier consultations by:

- disaggregating from Africa-wide generalizations and identifying specific constraints and opportunities facing different parts of the continent.
- moving beyond just identifying long-run challenges to focus on specific short- and medium-run actions that African countries and donors can take that are consistent with long-run transformation.



Mediterranean zone, and the veldt. Within these zones, further disaggregation is necessary, based on local socio-political and agro-ecological conditions. Developing appropriate disaggregation and specific strategies for each zone is a key challenge for national agricultural research systems (NARS). A disaggregated, agro-ecological approach to agricultural transformation therefore implies the need to strengthen NARS (typically the weak link in the research system in Africa), as international and regional research systems are unlikely to carry out the disaggregated research needed to tailor innovations to local areas.

Good Governance, Decentralization, and Farmer Empowerment are Keys to Agricultural Transformation. Evidence is clear that farmers and traders *will* invest to increase production when they see a clear connection between such investments and future income. But arbitrary enforcement of rules, corruption, lack of information, and ponderous and inefficient state enterprises often rob food-system participants of the incentives to make the investments needed to foster agricultural transformation. Where transformation has proceeded, it has most often been in areas where farmers and traders have “voice” in the system, where rules of the market are transparent, and where many economic decisions are delegated down to the level of local governments, individuals, and professional organizations.

Agricultural Transformation Requires Better Domestic Resource Mobilization. The challenge of transforming African economies is so large that it cannot be financed primarily by donors. Particularly in an era of declining foreign development assistance, African countries need to develop more effective ways to mobilize domestic resources, as well as attract private resources from outside of Africa. Better governance, decentralization, and farmer empowerment will clearly help. Improving domestic capital and risk markets is essential, particularly linking these markets more effectively to international markets. The workshop participants discussed several innovative approaches that have been used by some African countries to attract foreign investors through joint ventures and contract farming. The greatest challenge lies in improving capital availability for domestic food crop production, as such production is often perceived as less “bankable” due to thin output markets and less secure credit recovery mechanisms.

Regional Integration, Rather than National Food Self-Sufficiency, is the Best Way to Assure Broad-based Growth and Food Security. The workshop participants endorsed regional integration, based on local comparative advantage and trade, as an important element of an agricultural transformation strategy. The participants felt there were many unexploited opportunities for greater regional specialization and trade within Africa. Exploiting these requires improved transportation and handling facilities, reduction of transaction costs, better information, and lowering of trade barriers among African countries. Many of these barriers were erected as part of costly attempts to assure food security through national food self-sufficiency.

Agricultural Transformation Requires Greater Coordination Across Development Actions. Agricultural transformation involves greater integration of the food system into the broader economy. To facilitate that integration, greater coordination among various public and private actions is needed. Strengthening input and output markets will help achieve this coordination. The workshop participants also identified two areas where public decision-making by Africans needs greater coordination:

- *Policy reforms across countries.* In the presence of regional trade and capital flows, policy reforms in one country spill over onto its neighbors. This has posed problems when one country (e.g., Zambia) is reforming its economy faster than its neighbors (e.g., Zimbabwe and South Africa). The slower-reforming countries may flood the faster reformer with subsidized agricultural exports, thereby undercutting incentives for local producers.
- *Across various ministries.* Agricultural transformation depends not only on decisions by the Ministry of Agriculture. Transportation, trade, and macro-economic policies often have more effect on farmer and trader incentives than do agricultural sectoral policy. Yet often there is little coordination of policies made among various ministries. Mechanisms, such as the authority recently granted the Ghanaian Ministry of Agriculture to coordinate the budget requests of five other ministries having a strong impact on agriculture, need to be explored by other countries in Africa.

Analytic Agenda: What Do We Still Need to Know? The workshop attempted to identify



critical areas where more information is needed to design effective agricultural transformation strategies. Six priority questions emerged:

1. What are the best ways to foster and support producer and village organizations as tools for mobilizing local participation and resources in making policies, carrying out investments, and increasing accountability of governments, firms, and other development organizations? Most agree that greater local participation and empowerment are needed. The challenge is to find the best ways to support them.
2. What strategy should be used to allocate public investment between “high-potential” areas and more marginal zones, if the goal is to foster *broad-based* development? Many of the poor live in areas where very heavy investments are needed to increase agricultural productivity. How much public investment should be made in these areas versus more environmentally favored zones?
3. What institutional innovations will allow appropriate public and collective action to strengthen agricultural production and marketing, given the very tight budget constraints facing most African states? For private markets to work well, some collective action is needed. The challenge is to identify what needs to be done collectively, who should provide different types of services (national government? local government? business associations?) and how to finance such actions.
4. How can investments more effectively promote agricultural transformation? Specifically, what tools can attract non-traditional sources of investment (particularly foreign investment) to African food systems? How can investments across sectors be coordinated more effectively to avoid duplication and capture synergies? What are the impacts of different ways of coordinating production and distribution of agricultural products (for example, contract farming vs. reliance on spot markets) on domestic resource mobilization and re-investment in the food system?
5. What would be effective guidelines for the ADB and other regional and international organizations to increase the level and productivity of their investments in fostering agricultural transformation?
6. What are effective models to assure sustainable financing for restructured and “reinvigorated” NARS? How can the articulation between the NARS and other levels of the international agricultural research system be improved?

Follow-up Actions: To stimulate follow-up actions from the workshop, MSU and INSAH are:

- Developing a series of workshop reports in French and English that will be widely diffused throughout Africa (synthesis report, policy bulletins, and workshop proceedings);
- Helping the ADB develop follow-up programs. These include diffusing the workshop results to finance and planning ministries (where the ADB has special *entre*), developing guidelines to improve the impact of ADB lending on agricultural transformation, and helping coordinate actions and outreach across various regions of Africa.

In addition, the African workshop participants have launched several follow-up initiatives of their own. In December 1995, CILSS (a regional organization of Sahelian countries) initiated a regional strategic planning activity to develop policies and strategic investments to promote agricultural transformation in the Sahel. Several of the Abidjan workshop participants lead this effort. Several participants from Southern Africa have prepared proposals to the ADB for follow-up actions within their region. The United Nations Industrial Development Organization (UNIDO) also has based its new 10-year “Alliance for Africa’s Industrialization” (part of the new U.N. Special Initiative on Africa) on ideas from the workshop, and named a key workshop participant, Dr. Kandeh Yumkella, to lead its program.

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