2020 VISION

A 2020 VISION FOR FOOD, AGRICULTURE, AND THE ENVIRONMENT IN SUB-SAHARAN AFRICA: A SYNTHESIS

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A synthesis of a 2020 discussion paper, "A 2020 Vision for Food, Agriculture, and the Environment in Sub-Saharan Africa," edited by Ousmane Badiane and Christopher L. Delgado.

As part of its 2020 Vision for Food, Agriculture, and the Environment initiative, IFPRI held workshops in three developing regions of the world. The workshop on Sub-Saharan Africa (hereinafter "Africa," for convenience), jointly sponsored by the Office of the Coordinator-General of the Conference of Ministers of Agriculture of West and Central Africa and IFPRI, was held in Saly Portudal, Senegal, December 14–17, 1994. This synthesis is based on intensive discussion among two dozen African researchers, technical experts, and policymakers who participated in the workshop. A deliberate attempt was made to break the mold of outsiders conceptualizing Africa's issues. A drafting committee of eight Africans from all parts of the region brought together Anglophones and Francophones from both policymaking and research backgrounds. Where useful, statistics and elaborations to flesh out points made by the drafting committee were added later by IFPRI staff, but the tenor of the workshop statement has been maintained. This strategy will be helpful to the 2020 Vision initiative in defining forward-looking priorities for action in Africa.

FOOD, AGRICULTURE, AND THE ENVIRONMENT IN AFRICA: TRENDS, CHALLENGES, AND PERSPECTIVES

A dominant factor in Africa today—to a much greater extent than previously—is that a large share of the population is absolutely poor. The World Bank estimates that one out of two Africans, or roughly 250 million people, subsist on per capita total incomes of less than a dollar a day. About 30 million preschool-age children are significantly underweight for their age. Unless strategies that can change this outlook are adopted, the number of malnourished children will increase sharply by the year 2020. Furthermore, even if more active population policies were adopted, the average rate of population growth among African countries is expected to decline only slightly over the next 25 years, from 2.8 percent today. This will render advances in poverty reduction extremely difficult, and underlines the fact that the fundamental issue in Africa's food–population equation in the foreseeable future is that of resource productivity.

Sustained food security in Africa requires concerted and sustained action to raise agricultural resource productivity, at precisely the time that African governments and donor agencies seem to be losing sight of this fact. Agriculture is the primary source of employment for roughly 70 percent of the population, and transportation costs for food are so high that imports become prohibitively expensive on leaving the vicinity of coastal ports. The Food and Agriculture Organization of the United Nations (FAO) estimates that up to 80 percent of the land in Africa is threatened by degradation, as rural people put their own short-run survival ahead of long-run natural resource sustainability, and that 2 million hectares of forest are lost every year. Under these circumstances, how can African countries obtain the agricultural productivity increases that are necessary to assure food security, address the root causes of poverty, and slow environmental degradation for the next generation?

Despite pockets of good performance in certain commodities, markets, and countries, it is widely accepted that growth in agricultural productivity per capita in Africa has been disappointing in the last 15 years. On a region-wide basis, per capita food production declined

at an annual average of more than 2 percent from the late 1970s to the early 1990s. This masked considerable differences across agroecological regions and policy regimes.

Total production for all food crops increased over the past three decades in the mid-altitude to highland zones, but only southern Africa had significant per capita increases for a major food crop, maize. The latter was primarily due to area expansion in South Africa and increased use of hybrid varieties and fertilizer in the maize-dominated areas of the highlands, particularly in Zimbabwe. In coastal West and Central Africa, per capita production declined over the past 15 years for all major farm commodities, with the exception of rice, a secondary crop in West Africa, where substantial investment in irrigation led to output growth. The Sahelian zone is characterized by a decline in per capita production for all categories of commodities, except cotton.

The reasons for the generally poor showing of agriculture in Africa over the past 15 years involve both policy and structural factors, and both of these have internal and external components. Oversimplification by focusing on only one or two of the four sets thus defined can lead to serious misunderstanding of the nature of the problem.

Agriculture accounts for about 40 percent of Africa's merchandise exports (excluding South Africa), yet the external terms of trade for Africa's agricultural exports declined by 60 percent in the 1980s. External developments cannot be left out of the explanation for recent stagnation in Africa. Cuts in income of 60 percent in a 10-year period would be hard for any area of the world to adjust to, but for Africa, a very poor area with poor infrastructure, it was especially hard.

Participants also focused on internal explanations for poor performance, particularly why policies actually followed differed so greatly from ones that would help improve economic performance. Discussion here focused on the debilitating effects of chronic civil and social strife and the displacement of populations, the mismanagement of natural resources for political gain, and the failure to build capacity in such critical areas as policy analysis and entrepreneurship.

The truly significant event in the Senegal workshop was that participants discussed both inward- and outward-looking policy issues in terms of intra-African divisions and interests, rather than in terms of a hypothesized communal African interest vis-à-vis a hypothesized unified external interest. The debate was among African policymakers and analysts, not between Africans and donors. It was notable that no one contested the need for macroeconomic and trade regime reforms of the type associated with structural adjustment programs, unlike similar gatherings only a few years previously. Even more important, the focus was on the future, not the past. The question was what can be done now to provide a basis for sustainable growth in the future.

The participants devoted a great deal of attention to internal policies of the agriculture sector, particularly those involving the institutional and infrastructure environment for agriculture. They emphasized the need to base a growth strategy on sound economic principles: to sell a product, countries must be competitive. To be competitive, countries must bring unit costs of production and distribution down. In countries such as those in Africa, bringing costs down must involve sustained and substantial public involvement in research, infrastructure creation, institution-building, and human capital creation. The issue is not whether the state has a role, but how to make state institutions better at mobilizing local institutions, resources, and capacities. The key policy debates affecting African agricultural production and food security in 2020 will not be between external donors and governments, but among producers, consumers, the organizations that represent their specific interests, and governments.

STRATEGIC ISSUES FACING AFRICAN COUNTRIES

The future prosperity of Africa depends on political stability, sustainable growth in agricultural production, reduction of the rate of population growth, and the protection of its natural resources. Success in these matters will require specific attention paid by policymakers to fostering the right institutional, infrastructural, and financial environment for growth. It will also require reducing the incidence of poverty and malnutrition as both a primary objective of policy and a necessary instrument for promoting the stability needed for sustained growth.

Specifically, the workshop participants called on African countries to work to achieve a series of interrelated but specific objectives. Paradoxically, these are both a matter of choice

and not a matter of choice. They are a matter of choice because achieving them primarily involves making them a priority over the other things that governments do. Priorities cost money, which has an opportunity cost. Yet these objectives are not really a matter of choice, because failure to achieve these objectives over the next 25 years will condemn Africa in the long run to stagnation and despair even worse than that of the past 15 years.

The participants debated the danger of creating a pious wish list. The critical point that decided the issue was a shared feeling that short-term pressures have combined in Africa to prevent governments from developing a consensus over key long-run objectives for food, agriculture, and the environment. The participants felt that it was important to be heard clearly on this point. They agreed on these priority objectives for 2020:

- *Reduce the number of absolute poor by at least half.* While it is perhaps true that the poor shall always be with us, in a relative sense, the participants were extremely concerned that if absolute poverty continues to swell in Africa the ability to develop peacefully and harmoniously will be compromised. The days are long gone in many areas when new entrants to the rural labor force could have automatic access to land, or when unsuccessful migrants to cities could return to till the land.

  Most governments want to reduce poverty, but many are doubtful that it can be done on a sustained basis. This illustrates the importance of understanding both the sources of poverty in Africa and the links between economic growth and poverty alleviation. Since 90 percent of Africa's poor live in rural areas, key poverty reduction strategies should aim at raising rural incomes. This necessarily involves measures to increase agricultural productivity, which will directly increase rural incomes. Incomes will also increase indirectly through creation of effective purchasing power in rural areas for services and local manufactured items, thus increasing off-farm employment.

- *Greatly reduce chronic food insecurity and eliminate chronic malnourishment of children.* Achieving this objective will require specific attention to delivery systems capable of reaching those who need help the most. Reaching 30 million malnourished children is well within Africa's capacities, but only if the will is there and if the underlying level of growth in rural areas is high enough to sustain the distribution policies involved. This growth will have to be significantly higher in the next 25 years than it was in the past 15 years. More generally, a necessary—but not sufficient—condition for progress in African food security is to boost the rate of growth of African rural incomes, including that from food production, by enough to meet food needs.

- *Achieve a rate of agricultural growth of at least 4 percent.* This is a controversial issue in African and donor policy debates. Yet there is a need to step back to consider that there is no other choice if Africa is to progress. It is simply not realistic to believe that African incomes will go up enough outside agriculture by 2020 to permit the import and distribution to all who need it of sufficient food to support a population growth rate of 2.8 percent per year. Since averages mask considerable variation in food entitlements across income groups, and since poor people tend to spend extra income primarily on increased food intake, meeting this need from African sources will require at least a 4 percent average growth rate in agricultural production. The participants were clear in their view that this growth rate is well within the technical and economic capacity of most African nations, *provided* that reaching this goal is made the top priority in public investment for research, producer support systems, and infrastructure, in a way that effectively mobilizes private production activity.

  Much has changed in Africa over the past 15 years, and the region has achieved many if not all of the preconditions for sustained growth in agricultural production. In particular, many of the policy and structural problems African producers have faced in the past are changing: confiscatory pricing and marketing policies, biased trading and exchange regimes, depressed international prices, low educational levels of rural people, and poor infrastructure.

  Ultimately, increasing the productivity of agricultural production resources is the key to achieving a sustained 4 percent growth rate. While boosting the productivity of agricultural labor is the key to making farming a viable activity and assuring food

security, the entry point for doing this over the next 25 years will mostly be in increasing yields. Land-surplus areas still exist in countries such as Angola, Mozambique, Tanzania, Zaire, and Zambia, and these represent considerable potential for expansion of production through area expansion. Yet most production growth in Africa to 2020 will have to come from intensification of production on currently cropped land.

The currently low average use of fertilizer (estimates range from 9 to 11 kilograms per hectare) and of irrigation in Africa (estimates range from 4 to 6 percent of cropped area) both suggest that the long-term technical capacity for expanding production through seed-fertilizer-irrigation strategies is potentially high. Nevertheless, a better understanding is required of why this has not occurred more widely to date, including increased attention to the constraints imposed by very poor infrastructure and high transport costs within Africa.

The currently low use of inorganic fertilizers and of irrigation also suggests that much of the required intensification will have to occur in rainfed agriculture, with maximum use of organic fertilizers. However, because of the widespread need for extensive improvements in soil fertility, the puzzle of why the use of inorganics is so low in Africa will have to be solved if the 2020 Vision production goals are to be reached. This will require specific attention to both the private and social costs and benefits of improvement of the fertility of African soils. A sustained rate of growth of yields of the magnitude needed requires in-depth scientific research, research on improved practices under farm conditions, improved incentives, adequate attention to fertilizer supply, and improved transport infrastructure.

- *Evolve institutions, technologies, and incentive systems to stop the process of rural environmental degradation.* As noted above, African production systems are far less intensive than those found elsewhere in the world, perhaps because land constraints were not a factor in much of the region up to 20 years ago. Reaching the needed increases in food production while avoiding rapid escalation of environmental degradation will require that ways be discovered to support sustainable farming practices, including replacement of nutrients in the soils.

  Ultimately, every economy experiencing land constraints must seek to provide an ever expanding supply of jobs outside the farming sector. Yet experience in Africa and elsewhere has shown that rapid growth in agriculture is required for this to occur, to create local demand for nonfarm production and to provide the physical counterpart to wages earned by workers outside agriculture (such as food). The participants were clear that sustainability of rural areas, which account for a high share of total population, cannot be attained without high agricultural growth rates. The case is quite different in societies where agriculture accounts for a much smaller share of economic activity and food can be easily imported.

- *Promote lower rates of population growth.* The participants recognized the difficulty of advancing in Africa with a 2.8 percent growth rate of population. Without a significant reduction in population growth rates, efforts to reduce poverty and to improve food security cannot be successful. Yet the response to this was divided. They also recognized that current population growth rates in Africa to some extent reflect responses to a set of incentives, to cultural norms, and to the unavailability of alternatives. While each of these three areas might provide scope for lowering growth rates, the participants felt that by themselves such programs would not be adequate to alleviate even medium-term food issues, and could involve a substantial opportunity cost in resources.

MAKING THE CRITICAL CHOICES FOR 2020

The workshop participants were clear that now is the time for choices, and that without the will to make those choices, the likelihood of success in boosting agricultural growth on a sustained basis would be small. Without such growth, it will not be possible to improve food security or halt natural resource degradation. It seems unlikely that all countries of Africa will choose to put in place the necessary conditions for growth, which makes it all the more

important to decide at the outset which conditions are most likely to beget further success. Participants highlighted four principal conditions that are interrelated: greater stability, probity, consistency, and analytical quality in the policymaking process for agriculture; increased public investment by national governments to facilitate growth in the agriculture sector; proactive adaptation to changing global trade conditions; and inclusion of the poor and malnourished in growth.

- *Improving the quality of agricultural policy.* Clearly, overall political stability is a requirement for agricultural and overall growth. Those countries that have opened their political systems to effective rural participation are far more likely to achieve good agricultural policies and to succeed in mobilizing from smallholder farmers the vast amount of private resources required for growth. Good governance is also a choice and a precondition for success in market-led (and probably other) systems. Inconsistency of agricultural policies has been a major problem in the past, both in policy flip-flops—often imposed by external actors—and inconsistency between sectoral growth objectives and the dissuasive effects of macroeconomic, fiscal, and trade policies that discriminated against the majority of rural producers. These inconsistencies have been largely remedied in recent years, mostly in response to external pressures. Political development that incorporates rural areas will increase internal pressures for more consistent policies. Yet remaining inconsistencies point to the final precondition for sustained agricultural growth: the need for a locally-based process of analytical input into policymaking capable of discerning inconsistencies and finding practical solutions.

- *Boosting national public investment in agriculture.* In the past, up to 90 percent of public investment in agriculture—research and extension systems, infrastructure, and so forth—was funded by an array of foreign sources. This diversity of non-accountable (to those concerned) funding sources helped prevent the implementation of consistent national strategies; equally important, these sources of finance are drying up. Since the necessary rate of agricultural growth cannot be achieved without effective and increased domestic resource mobilization, African governments must take this in hand. Although this need comes at a time of public retrenchment, it is a question of priorities. In most countries, the rate of national public investment in agriculture must be raised significantly. Given the size of the agriculture sector, its present and potential contributions to the economy, and its share in export earnings and fiscal revenues, as much as 30–40 percent of national budget outlays should be invested in agriculture, a figure that far exceeds the historical average of 7 percent of budgetary expenditure going to this sector.

- *Pursuing proactive national and international competitiveness.* The painful process of structural adjustment over the past decade has in fact removed major barriers to competitiveness. Generally, policy reforms increase transparency, accountability, and participation. They contribute to maintenance of stable and consistent fiscal and monetary policies. Furthermore, growth will be enhanced by continued privatization with recognition of the proper role of the state, liberalization of trade and support for regional integration efforts, and properly targeted short-term support programs.

  Access to national, regional, and global markets is critical to the objective of sustained agricultural growth. Concrete measures will be required at all three levels, in descending order of importance. First, at the national level, it will be necessary to develop lower-cost local products and marketing systems for them, to improve product quality, and to create innovative products through agroprocessing. This involves improved technology and infrastructure. Second, at the regional level, it will be necessary to implement existing regional integration agreements, to harmonize national taxation and support policies for more efficient cross-border trade, and to cooperate in removing the infrastructural and institutional barriers to the movement of commodities across borders. Third, at the world level, it will be necessary to develop collective strategies for global trade negotiations to ensure access to fair markets.

  The recent world trade agreements and emerging changes in the agriculture sectors of Eastern Europe and the former Soviet Union are likely to further increase competition in Africa's traditional European export markets over the next 25 years.

While some thought in the 1980s that intra-African trade would provide an alternative to competing on world markets, it quickly became apparent that the same factors that make Africa's trade competitive in world terms are the ones that make it grow regionally. To face up to the challenge, African countries will have to increase the competitiveness of their exports.

The key point on competitiveness is that there is no solution to cutting unit costs of production and distribution at any level that can be achieved without adequate attention to technology generation and infrastructure creation. On technology, the challenges are to encourage a broad-based adoption of available technologies and to strengthen local capacities to generate and diffuse sustainable crop and livestock technologies. The participants felt that there is a need to reassess the relevance of existing research systems and to develop technologies that are less dependent on input and infrastructure except in high payoff areas. They also emphasized the need to concentrate research and development on disease-resistant and drought-tolerant varieties and breeds, and on technologies to stop and reverse the rapid degradation of soil fertility. Finally, they emphasized the need for resource and farming management systems that increase returns to farm labor, as an alternative to migration.

Reductions in Africa's very high transport costs, which in real terms are often twice as high as elsewhere in the developing world for comparable items and distances, cannot be achieved without significant improvement in the quality of physical and institutional rural infrastructure. And the growth objectives for Africa cannot be met unless transport costs are reduced. The participants felt that the following actions are required: increase investment in rural transport systems that are less capital intensive; provide needed social infrastructure such as schools and health facilities, especially in rural areas; and foster local participation in and control over rural institutions.

- *Including the poor and malnourished.* Even if a 4 percent aggregate rate of growth is achieved by 2020, the problems of reducing malnutrition and alleviating poverty will still present a challenge in Africa. Failure to deal with this is not only a serious moral failure, but it will jeopardize the stability necessary to achieve other objectives. Most governments will need to take direct measures in the immediate and medium terms to combat poverty and nutrition problems, including targeted subsidies for vulnerable groups, targeted public works and other employment programs, and child nutrition programs for at-risk groups. The economics of such interventions are largely known and depend for their viability on a robustly growing agriculture.

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"A 2020 Vision for Food, Agriculture, and the Environment" is an initiative of the International Food Policy Research Institute (IFPRI) to develop a shared vision and a consensus for action on how to meet future world food needs while reducing poverty and protecting the environment. Through the 2020 Vision initiative, IFPRI is bringing together divergent schools of thought on these issues, generating research, and identifying recommendations.