OTA Backs Grassroots Strategy for Africa

A report on enhancing agriculture says development should build on the strengths of traditional farming

ALTHOUGH NOT QUITE the forgotten man—or woman—in devlopment, the African farmer has been conspicuously ignored when not being blamed for increasing environmental degradation on the continent. A new report* from the congressional Office of Technology Assessment urges that U.S. aid organizations focus on the farmer and the low-resource agriculture that predominates in most of sub-Saharan Africa.

The report reflects a belated acknowledgement that traditional agriculture in Africa has much to commend it. The catch is that, under the pressure of the highest rate of population growth in the world, traditional agriculture can no longer provide enough food for the continent. Taking this into account, the report says that "Nevertheless, low-resource agriculture has the potential to be improved substantially, and technology and U.S. development assistance can contribute to these changes."

By low-resource agriculture the authors mean the farmers who use only small quantities of modern fertilizers, pesticides, and seeds, earn comparatively little cash income, and produce primarily for their own family consumption. This includes the vast majority of farmers in the region. The report estimates that large-scale commercial ranches and farms contribute no more than 5% of food production in Africa.

Development organizations have come round to a clearer recognition that traditional agriculture—farming, herding, and fishing—represents a shrewd adaptation to African conditions. As the OTA report puts it, "In general, then, low-resource agriculture meets multiple needs for families and requires balancing scarce endowments of land, labor, capital, and other resources. This calls for complex decision-making and facing difficult trade-offs. A greater appreciation exists now of the efficiency and skill of resource-poor farmers and herders, although their agricultural systems were once perceived to be inefficient and haphazard."

These systems vary widely across Africa, but variations on the so-called bush-fallow system of shifting cultivation dominate. Now, competition for land generated by population growth averaging 2.9% a year has forced reductions in fallow periods so that in many places they are too short to maintain fertility. Farming has been extended into marginal lands were rainfall is lower and soils even more fragile. The result has been severe ecological damage compounding the effects of drought.

The report's recommendations stand or fall on the issue of whether technology is available to improve low-resource agriculture significantly. Much of the report is devoted to identifying technologies that qualify, including small-scale irrigation, intercropping, integrated pest management, and improved cultivation techniques. The report carries a strong caveat that new technologies should be environmentally sound, economically affordable, and socially desirable. It also urges that women, who account for almost half the agricultural labor force in Africa, get a reasonable share of development assistance.

The idea is to build on the strengths of traditional agriculture. The trouble is that technology transfer of this sort requires research to adapt it to local conditions and extension services to demonstrate the new technologies and convince farmers of their potential.

The U.S. Agency for International Development (USAID) and other development organizations have not been very good at this sort of thing. In part it was because African governments after independence saw industrialization as the way to modernization and stinted on investment in agriculture. Also, admittedly, poor African farmers are not easy to work with. They have evolved farming methods that afford them the best strategy for survival. Adopting innovations to achieve high yields involves high risks that in the African context may seem unacceptable.

And USAID has acquired organizational traits that made it less than agile at dealing with the farmer in his field. According to the report, however, there are some encouraging signs: "Over the past few years AID has made changes that could help the agency enhance low-resource agriculture, including more decentralized decision-making, increased attention to research, longer term support for projects, and an increased emphasis on projects' sustainability. At the same time, the impact of these shifts may be offset by deep personnel cuts, a lack of appropriate technical personnel, inadequate language and cultural skills, a flawed reward system, and a project design system that is cumbersome, inflexible, and oriented to achieving short-term results. These latter constraints were identified long ago and have remained unresolved. Therefore, their remedy would require concerted effort on the part of the Administrator and all AID staff."

One strong recommendation of the new report is that in behalf of low-resource agriculture USAID support more research and training, activities it has sponsored more effectively elsewhere than in Africa.

The report is addressed to Congress and casts its recommendations in the form of a number of options for giving greater scope to low-resource agriculture. This shift of emphasis would have to be harmonized with providing food relief in emergencies and the agency's recent priority on pressing African governments to adopt policy reforms favoring a free market. The OTA report offers no miracle cure to a daunting set of problems. Rather, it amounts to modest suggestions on how the United States could make better use of the foreign aid resources available and how African governments might literally cut their losses. ■ JOHN WALSH

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African farmers *prepare a field for millet in Niger.*

*"Enhancing Agriculture in Africa: A Role for U.S. Development Assistance" (Office of Technology Assessment, Washington, DC, 1988).