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# Sustainable Agriculture in Somalia

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*An investigation into the challenges posed to building lasting, sustainable agricultural development in the Horn of Africa*

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## Introduction

Somalia's agriculture sector is the main driver of the country's economy. More than two-thirds of the country's labor force is employed in agriculture, and the sector accounts for over 60 percent of the country's output. But decades of civil war, neglect, administrative mismanagement, and a series of environmental disasters have seriously damaged Somalia's agricultural productivity. Irrigation schemes that once fed commercial crops of bananas and sugar cane in the Juba and Shebelle growing regions have collapsed and fallen into disrepair. Grain production in the south has decreased from a combination of persistent drought and reductions in the amount of land under cultivation, as farming communities joined refugees as they escaped into neighboring countries to seek safety from the militia groups. Flooding in some regions has compounded the problem, and Somalia is ranked as one of the most food insecure nations in the world with epidemic proportions of famine and malnutrition.

In spite of these challenges Somalia's agricultural economy can recover if the civil conflict ends and peace and stability are restored. Refugees and internally displaced peoples can return home and begin restoring their livelihood and rebuilding communities. Consequently, Somalia will have a unique opportunity to rebuild its rural economy, and any development plans should be seen within the framework of creating a renaissance in Somalia's agriculture— an environmentally sustainable Somali Green Revolution – based on the lessons learned from several Green Revolutions and the movement towards sustainable agriculture, but defined by Somalis and tailored for the country's unique culture, geography, and climatic conditions.

## What is sustainable agriculture, and why Somalia?

Sustainable agriculture is a practice that combines commercial goals with an enhanced emphasis on long-term environmental sustainability and community health. The United States Agency for International Development (USAID) describes sustainable agriculture as an integration of, "...environmental health, economic viability and social equity to ensure long-term productivity of natural resources and improved livelihoods." Sustainable agriculture offers a flexible and integrated approach to agriculture and natural resource management, and may provide substantial benefits to Somalia given its current economic and environmental circumstances; limited natural resource base with an economy that is heavily dependent on agriculture for livelihoods, tax revenues, and export earnings. And an active livestock sector with immense grazing demands on arable lands that are prone to natural catastrophes that are occurring with greater frequency.

Sustainable agricultural practices are designed to improve ecosystems by strengthening soils, improving water and waste management systems, and minimizing the use of pesticides and herbicides, among other environmental and commercial goals. But in order to realize the full potential Somalia's leadership must overcome the challenges that would prevent sustainable agriculture from becoming a reality. And addressing these challenges means creating the missing, institutions, incentives, instruments, and information that are necessary to make sustainable agriculture a reality.

### Missing Institutions:

#### *Civil Unrest and the Black Hole in Governance*

The civil war in Somalia is responsible for the missing institutions and the 'black hole' in governance and public administration that is the main barrier to developing sustainable agricultural practices. The central government has been replaced with a Transitional Federal Government, but there are questions about its legitimacy and its ability to respond to emergencies or implement effective public policy. Somalia continues to suffer from food insecurity, and is not included in the World Bank's Doing Business Indicators; widespread corruption is endemic and criminal enterprise activity flows unimpeded in urban and rural areas. The lack of effective governance and institutional strength will constrain Somalia's ability to develop and implement a coherent economic development plan that includes sustainable agriculture.

Governance institutions are created to fulfill a need in society, and are developed within the cultural contexts of the organizations or countries in which they operate. Within the context of public administration, for example, institutions may help convert economic development goals into concrete steps, or help guide discussions on long-term public policy as part strategic planning. Without strong institutions working for the benefit of its citizens, Somalia will continue to suffer from weak governance, internal instability, depressed market activity, and physical insecurity. In this environment it is almost impossible for many Somalis to return home and resume traditional farming practices, or to participate in developing more sustainable methods of agricultural production. Good governance and institutional

capacity must be a part of Somalia's recovery. The country's leadership must develop and communicate a vision that links sustainable agriculture to the country's future, and support that vision with the appropriate policies that will lay the foundation and provide guidance for how the country will move forward.

### **Missing Incentives and Instruments:**

#### *Absent Market Signals, Risk Instruments, and a role for Government*

Another challenge to developing sustainable agriculture is to create the missing incentives that producers need to adopt such methods, and to discover the mix of consumer demand and government policy that will encourage more sustainable practices.

The marketing environment and policy institutions are weak or non-existent in Somalia and consumer demand for sustainably produced agricultural products is undetermined. Farmers lack risk management instruments, and there are legitimate questions about the commercial viability of these instruments given Somalia's present state of lawlessness. The war has also reduced economic output and incomes of both farm and non-farm households, and this weakens the ability of consumers to signal any desire for products that were produced using more sustainable methods. And with constant pressure from malnutrition and famine, all current efforts are focused on increasing domestic food production, fuel, importing food aid, and negotiating with militias for greater mobility to deliver humanitarian assistance.

Under these conditions it is impossible for farmers to determine the commercial viability of sustainably produced agricultural products, and effectively manage the risks associated with changing production methods; the Somali farmer would hold the entire risk burden— an intolerable situation even among farmers in industrialized nations. But government policy can play an active role in stimulating demand for sustainably-produced agricultural products and helping farmers manage the risks, particularly if there is general agreement that adopting more sustainable methods are in the public interest, but consumer demand is weak or undetermined. Agriculture is an intrinsically risky enterprise, and Somali leaders must take the initiative and design a strong package of incentives and risk management tools that are compatible with Somalia's agricultural development goals, including greater capacity for research and development, education, and outreach.

### **Missing Information:**

#### *Missing Research and Development, Education, and Outreach*

A final challenge for Somali leaders will be creating the missing information and feedback mechanisms that provide farmers with the missing information to develop sustainable processes, including greater support for research and development centers, and education and outreach services. Similar to experiences with industrialized agriculture, developing sustainable agricultural methods is an evolutionary process that is perfected overtime as producers learn new information

and improve their management techniques. In addition to the missing institutions and incentives, Somalia may lack enough trained personnel and research facilities to effectively manage a program in sustainable agricultural development. Non-governmental organizations (NGOs) can fill the void as a country rebuilds its institutions, but there should be adequate coordination to collect, analyze, and deliver information on sustainable agriculture practices to farmers. And a network of agricultural extension offices could play an important role in fulfilling the functions of education and outreach.

Agricultural extension offices can help educate producers on the best practices for sustainable agriculture, specific to their region and environmental constraints, and fulfill a critical service as an information conduit as agricultural producers and researchers discover new information and share results among rural communities and public policy institutions. Extension offices can also provide consulting services to improve marketing and farm management skills, provide training on integrated pest management techniques, livestock and natural resource management, and support overall rural economic development.

### A Way Forward

Somalia has the potential for further agricultural development, but the combination of civil conflict, erratic climatic conditions, and some traditional agricultural practices are causing desertification of arable land and putting greater pressure on the existing ecosystem. And with Somalia's economy heavily dependent on the performance of its agricultural sector, environmental disasters or large-scale negative changes in productivity can have severe implications; higher rates of unemployment and food-price inflation, lower growth rates of national income, savings, and capital accumulation, and possibly greater risks to country stability.

But Somalia's agricultural sector can recover if peace replaces civil conflict, and refugees can safely return home. And as stability returns, foreign direct investment in Somalia can replace capital flight out of the country and help employ local expertise to help rebuild the national infrastructure, restore markets, and grow the economy. The first priority, however, must be an end to the civil conflict and a stable central government that is legitimate in the eyes of the Somali people, and recognized by the international community. And a full restoration of the missing institutions, incentives, instruments, and information systems that are required to release the full potential of the Somali people, including a strong commitment to sustainable agriculture reflected in government policy.

The commitment to sustainable agriculture should be reflected in an aggressive reconstruction and development agenda that associates the success of rural development plans with adoption of sustainable agricultural practices. Working with the international community, private-public partnerships, and indigenous communities, a leadership council led by Somalis should create a definition of sustainable agriculture, assess the environment for sustainable agricultural practices, set goals, and determine measurements for success. And new legislation should be developed and adopted that would begin to institutionalize sustainable agriculture as part of Somalia's long-term development plan. This legislation

should authorize and fund programs that would provide farmers with the incentives and risk management tools to adopt sustainable agricultural practices. The legislation should also support programs to increase Somalia's capacity for research and development, education, and outreach. For example, funding for Somali-based research centers linked to universities, recruiting and training programs to strengthen human capital, and establishing a system of agricultural extension services to help disseminate information, provide consulting services, and participate in agricultural research.

There are significant challenges to developing sustainable agriculture in Somalia, and it will require domestic and international leadership. But the Somali people are resilient and determined to overcome the obstacles, and developing sustainable agricultural practices should be integral in Somalia's economic recovery and long-term stability.