



PARTNERS MOVE TO BRING URBAN AGRICULTURE ABOVE GROUND IN SUB-SAHARAN AFRICA

AFTER NEARLY TWO YEARS OF DEBATE AND CONSULTATION—AIDED BY THE URBAN HARVEST PROGRAM—THE KAMPALA CITY COUNCIL RECENTLY PASSED A NEW SET OF ORDINANCES THAT UPDATE THE RULES GOVERNING URBAN AGRICULTURE, MANY OF WHICH DATED BACK TO COLONIAL TIMES

Kampala, one of the few African capitals established prior to the colonial era, derives its name from *kasozzi k'empala*, which in the Baganda language means “hill of the antelopes.” Located on the shores of Lake Victoria at 1,300 meters above sea level, Kampala thrived through the first half of the 20th century as a commercial hub for cash crop agriculture.

Today, about 60 percent of the city’s land area is used for agriculture, with about 40 percent of the food eaten in the Ugandan capital being produced within the city limits. Urban Harvest, the Consultative Group for International Agricultural Research (CGIAR) system-wide initiative on urban and peri-urban agriculture, estimates that about a third of the city’s households derive some income from urban or peri-urban agriculture. New regulations were sorely needed to bring this important activity into synchronization with 21st century challenges and opportunities.

“The old rules governing agriculture were focused on protecting public health and limiting access to food production for ordinary people living in the cities,” says Diana Lee-Smith, Urban Harvest’s Regional Coordinator for Sub-Saharan Africa. “Many of the old regulations were restrictive and even illogical in a contemporary context. They were developed under very different circumstances, and emphasized such things as

GROWING CROPS IN CONTAMINATED CITY LAND POSES HEALTH RISKS TO AFRICAN FARMERS AND CONSUMERS. COMMITTED KAMPALA CITY OFFICIALS WINNIE MAKUMBI AND MARGARET AZUBA (CENTER LEFT) PLAYED A KEY ROLE IN COUNTERING THIS THREAT BY HELPING TO BRING ABOUT REFORMS IN LAWS ON CITY FARMING.



the height of crops—a theft-prevention measure—and even barking dogs. Most of the regulations were not even understood by the people charged with enforcing them,” Lee-Smith adds.

21ST CENTURY PROBLEMS

The outdated rules also did little to tackle 21st century problems. In Kampala today, as in many African cities, food crops are often grown on abandoned industrial sites and in garages, many of which are contaminated by heavy metals.

“The old regulations, moreover, didn’t emphasize what is right about urban agriculture,” Lee-Smith says. “Urban agriculture is a major income generator for the poor and provides affordable vegetables, meat, and dairy products for millions of people in Africa’s cities.”

Lee-Smith notes that while Africa is still predominantly rural, with only a third of its people living in cities, the continent has the world’s highest annual rate of urbanization: 3.5 percent.

In 2003, the United Nations estimated that roughly 300 million Africans lived in urban areas, a figure that is projected to grow five-fold over the next 25 years. They also found that 40 African cities had populations of a million or more. By 2015, 70 African cities are expected to reach that threshold.

“It’s obvious that a large percentage of those African city dwellers are going to be involved in some form of agriculture,” comments Gordon Prain, the CIP anthropologist who coordinates

Urban Harvest. "If we are to face this situation realistically, urban agriculture needs to be brought above ground," he adds.

Right now, because of antiquated regulations such as those that were in place in Kampala, farming is technically illegal in many African cities. This means that its practitioners work in conditions of vulnerability, uncertainty, and without the benefits of new technologies. Urban Harvest is well placed to help resolve this dilemma. Established in 2000, it brings together a cross-cutting group of partners who work to improve food security for the urban poor, increase the value of agricultural production in urban and peri-urban areas, and promote agriculture as part of the sustainable management of urban environments. Financing is provided by the Governments of Canada (CIDA), Spain, the United Kingdom (DFID), Canada's International Development Research Centre (IDRC), and the World Bank.

THE KAMPALA MODEL

"Kampala is an ideal place to institute reforms," says Lee-Smith. "It has a rich history in urban agriculture, serious and committed researchers, a responsive city government, and committed officials. Winnie Makumbi and Margaret Azuba are prime examples. These two women were

responsible for many of the reforms recently passed by the City Council. Makumbi, a member of the Council, is the City Minister for Social Improvement, Community Development and Antiquities. Azuba is the Council's Chief Agriculture Officer and one of Kampala's leading experts on agricultural systems.

"Winnie represented the city at the Urban Harvest research and planning meetings, while Margaret was deputy leader of the research team. Both were instrumental in educating the Council about the need for reform. Together they organized the participatory review of existing legislation in accordance with Council procedures," Lee-Smith says. "From the beginning, they worked hard to include council members and the local citizenry so that all views would be brought to the table."

"The municipality and the business community," Lee-Smith notes, "were worried about health and nuisance issues, while nongovernmental organizations and community-based organizations were concerned about food security and livelihoods."

"The process that Urban Harvest established," continues Lee-Smith, "and which we hope to replicate elsewhere in Africa, helped us to find ways around the impasses that arose among the stakeholders." The partners started with

neighborhood consultations. Five formal Divisional Workshops allowed local people to provide their input by commenting on existing rules and making suggestions for reform.

"Gradually," says Lee-Smith, "we worked up from the grassroots to the district level and eventually went city-wide." The result is a new set of regulations that passed the City Council in January 2004. They are expected to be made into law following a review by national authorities.

"The new regulations, which will be translated into local languages, will simplify or nullify dozens of superfluous laws, set the stage for real reforms that will reduce health risks to farmers and consumers, and improve the quality of life in the city," Lee-Smith adds.

As a first step, the government is issuing temporary permits to farmers working within the city limits. The permits will legitimize their activities, helping to prevent harassment by unethical officials and land developers. They also will allow for a period of public education whereby farmers, as well as milk, fish, and meat traders and handlers, can upgrade their operations to meet better health standards. The city will also develop a database of farmers and traders, which to date is lacking.

"Basically the permits place urban agriculture in an arena where the city can begin to make

better decisions that will benefit the population as a whole," concludes Lee-Smith.

NAIROBI TAKES NOTE

The Urban Harvest activities in Uganda and the reforms passed by the Kampala City Council are part of a much broader plan that includes diverse related initiatives in neighboring countries. For example, Nairobi's Deputy Mayor Lawrence G. Ngacha recently reported that the Nairobi City Council is working with the Kenyan Government to strengthen urban food security in Nairobi through improved food supply and distribution systems. He notes that the City Council is also developing projects to address urban waste management and its links to urban agriculture.

The problem of waste management in Nairobi is a significant issue. Since the 1970s, the city has tripled in size and has seen major increases in the illegal use of human waste for agriculture. Nowhere is the issue more evident than in Kibera, Nairobi's notorious slum that is home to more than three-quarters of a million people. The residents of Kibera, like many other urban poor, grow a variety of crops and vegetables using wastewater tapped from the sewage pipes.

Scientists fear that the fields, and potentially the crops themselves, are contaminated with pathogens, such as *Escherichia coli* bacteria, and



KAMPALA WETLAND AGRICULTURE IS CONTAMINATED WITH WASTES FLOWING IN FROM NEARBY HUMAN SETTLEMENTS AND FACTORIES.

AGRICULTURE AND HEAVY METALS

The Nation, one of Kenya's leading newspapers, reported on December 12, 2003 that crops grown along the Nairobi River may contain high levels of lead, posing a threat to the health of local consumers.

According to *The Nation*, kale, a green leafy vegetable eaten by rich and poor alike, may contain more than 15 times World Health Organization's standard of 300 micrograms of lead per kilogram.

Urban Harvest Coordinator Gordon Prain feels that the situation may be even more serious than reported. According to Prain, agriculture in African cities is often located on abandoned industrial sites that may be contaminated by a variety of heavy metals. "This poses a threat not only to consumers, but also to farmers and their families," he says.

"People understand that they are at risk, but have little choice but to continue," Prain notes. He cites the case of a Kampala woman growing coco yams in contaminated wetlands. When interviewed by Urban Harvest researchers, she told them that for her it is a question of dying 15 years from now of cancer, or perishing today of hunger.

intestinal parasites. Even so, no one really knows with any certainty the extent of the actual health risks associated with so-called sewage farming, and this creates a vicious circle of indecision: on the one hand, public health concerns would dictate that the practice be stopped; on the other, there is little scientific data available to support decision-making on instituting reforms.

In an Urban Harvest study carried out in Cameroon's capital city, Yaounde, researchers from two local universities and three international centers came up with evidence that may help Nairobi officials to move forward. They measured contamination in inland farming valleys, and although the results show that water contamination levels at different points in the local drainage system are high, they also indicate that these may pose little risk to consumers who cook their food. Little, if any, food is eaten raw in traditional African cooking.

Recommendations to ban sewage farming in inland valley areas, the researchers contend, may therefore be premature. The health risks to farmers themselves, nonetheless, and the risks of eating uncooked foods require awareness-raising programs. Continued research is also needed to understand the complexity of disease pathways as well as other health risks associated with urban agriculture.

The study was carried out by the University of Yaounde, the Ecole Nationale Polytechnique Supérieure (ENPS), the International Institute of Tropical Agriculture, the World Fish Center, and the World Agroforestry Centre, in cooperation with the City of Yaounde and Cameroon's *Institut de Recherche Agricole pour le Développement*, *Centre de Coopération Internationale en Recherche Agronomique pour le Développement*, *Institut Supérieur des Sciences Economiques Appliquées*, and *Institut National de Cartographie*.