

KISUMU

AGRO-ECOLOGICAL URBAN FARMING AND EDIBLE LANDSCAPING

AfriFOODlinks

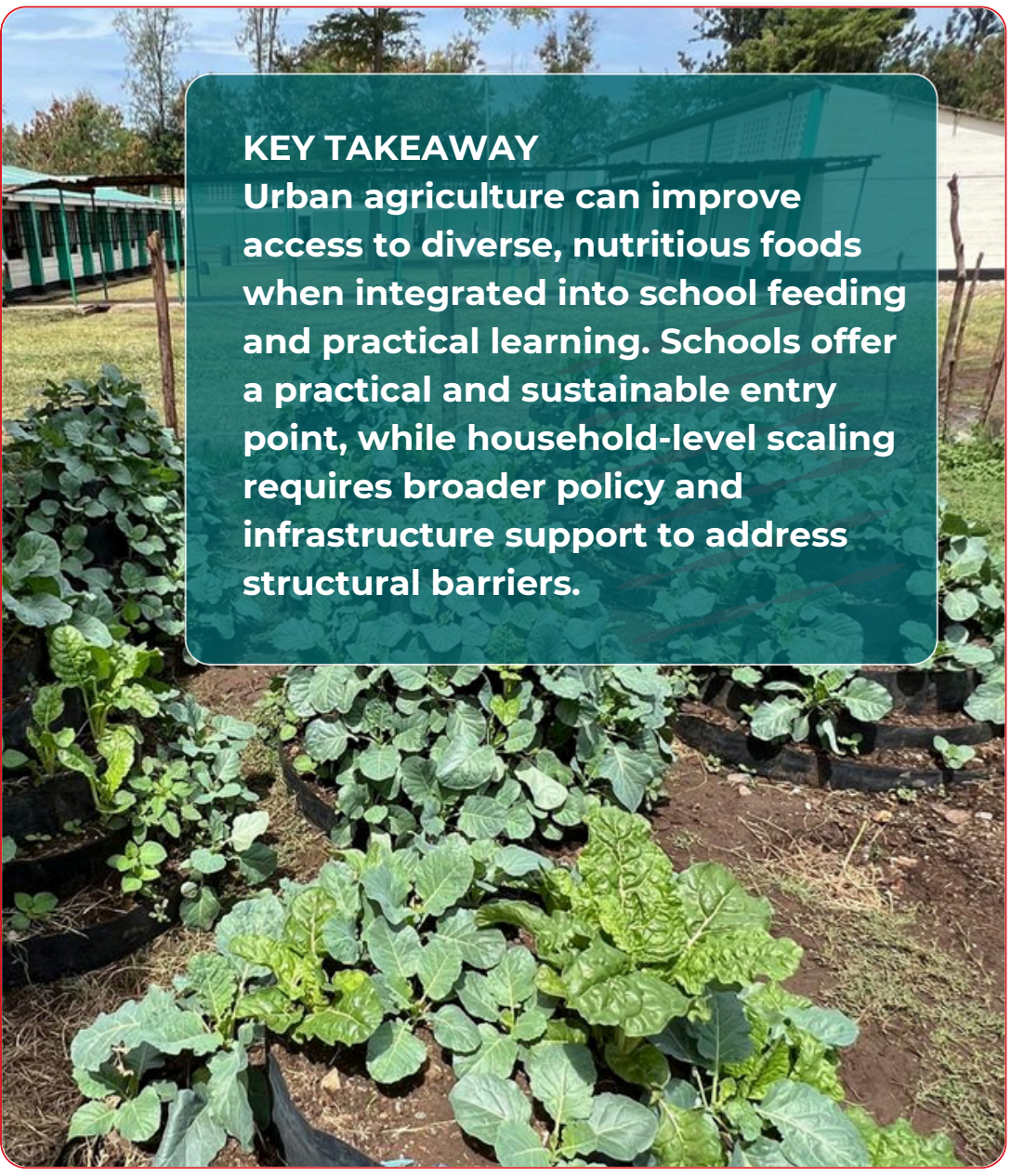
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REASON FOR THE PILOT AND ACTORS

Kisumu relies heavily on food supplied from surrounding areas, making the city vulnerable to food insecurity due to disruptions caused by climatic, economic and political shocks. With limited household food production, residents, especially school children have limited access to diverse foods. To address this challenge, APHRC, in collaboration with KIYA, City Shamba, ECD schools, caregivers, city officials, and officials from the Ministries of Education, Agriculture, Health, Urban Planning and Development, and Environment, implemented a pilot to improve access to diverse foods through urban farming.



KEY TAKEAWAY

Urban agriculture can improve access to diverse, nutritious foods when integrated into school feeding and practical learning. Schools offer a practical and sustainable entry point, while household-level scaling requires broader policy and infrastructure support to address structural barriers.

THE INTERVENTION

Cone and sack gardens were set up in ECD centers in six primary schools and selected households, with poultry keeping introduced in two schools. Teachers, learners, caregivers, and community groups received practical training in agroecological farming, along with farm inputs, regular monitoring, and ongoing technical support. School gardens were linked to 4K Clubs, providing opportunities for practical learning, while harvested produce was used to complement school meals for ECD learners.

RESULTS AND LEARNINGS

The pilot reached 357 children aged 3–6 years and their caregivers, improving dietary diversity and school food environments. Minimum dietary diversity increased from 32.6% to 56.5%, while the mean dietary diversity score rose from 4.03 to 4.86 food groups. There was increased consumption of vegetables, pulses, and animal-source foods and learner engagement in farming increased. Household uptake remained limited by space and landlord restrictions, despite continued caregiver interest in urban farming.

Schools provided structured spaces for farming, with 4K Clubs, supportive leadership, learner participation and continuous technical mentorship helping embed gardens into school routines. Challenges faced in schools included water shortages, flooding, pests, roaming animals and high input costs.



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KISUMU

FOOD SAFETY AND MARKET UPGRADE INTERVENTION

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KEY TAKEAWAY
Improving food safety in informal markets requires combining infrastructure development with workplace-based training, continuous supportive supervision, and locally owned management systems.



REASON FOR THE PILOT AND ACTORS

Obunga informal fish-processing market supports vendors' livelihoods, but operates under poor sanitation and drainage, limited waste management and inadequate cold storage. These conditions compromise food safety, increase spoilage, and constrain vendor incomes. To address these challenges APHRC worked together with 200 fish vendors (primarily female), market leaders, Public Health Officers (PHOs), Fisheries Officers, and city/county departments from Trade, Urban planning, Administration and Environment.

THE INTERVENTION

Through a co-creation process, a priority 10-tonne solar-powered cold room was installed and managed by a market committee under a user-fee model for maintenance. Food safety was strengthened through development of a food safety training manual on fish, capacity strengthening of Public Health Officials (PHOs) followed by PHO-led one-week on-site vendor training and six months of monthly on-site supportive supervision.

RESULTS AND LEARNINGS

The intervention was associated with improved food-safety attitudes, selected safe-handling behaviours, reduced fish losses and strengthened vendor livelihoods. Food-safety attitudes improved significantly, with mean scores rising from 8.98 to 9.69, while six-month monitoring showed overall increase in compliance from 31.0% to 47.0%, safe sourcing from 58.2% to 89.9% and routine sanitation from 23.3% to 49.8%. Fish frame and head losses fell by about 49%, from 34.3 kg to 17.4 kg per trader, and 48% of traders reported profit increases above 50%. Vendors also reported greater customer confidence.

Co-creating with vendors strengthened ownership and cooperation, while practical workplace-based training, continuous supportive supervision, strong market leadership, effective cold-room management, and user-fee arrangements supported implementation and sustainability.

Poor drainage, inadequate sanitation and waste management, limited infrastructure, initial resistance to new food-safety practices, compliance costs, unreliable solar power, and limited access to specialised technical support for complex repairs constrained implementation.

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FOOD LOSS AND WASTE RESCUE AND REDISTRIBUTION INTERVENTION

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KEY TAKEAWAY
Food rescue can safely reduce food waste, improve access to nutritious food, and lower environmental impacts, but scaling requires reliable collection systems, strong partnerships, and clear national guidance.



REASON FOR THE PILOT AND ACTORS

In Kisumu, large quantities of food suitable for human consumption are lost in open-air markets due to damage, overripening, poor handling, limited storage, and delayed sales. At Kibuye market for example, 9.4 tonnes of fruit had quality defects, with 5.7 tonnes potentially suitable for donation. APHRC, with Food Banking Kenya, RETRAK, the University of Nairobi, government, market actors, and beneficiary institutions, established a food rescue and redistribution system to redirect this food to people facing food insecurity.

THE INTERVENTION

The initiative combined three linked actions: measuring food loss to identify quantities and causes; rescuing edible surplus through a structured system across three markets, with trained food rescue champions, scheduled collections, sorting, food-safety checks, and the Foodiverse digital platform for coordination and tracking; and redistributing recovered food to three beneficiary institutions serving vulnerable children and adolescents — Kisumu Urban Apostolate Programme (KUAP), Mama Ngina Children's Home, and Yatima Hope Centre. At national level, the National Food Redistribution Guideline was co-developed and validated, addressing food safety, traceability, liability, and other barriers to food donation.

RESULTS AND LEARNINGS

The initiative demonstrated that surplus food can be safely diverted from waste and redirected to people facing food insecurity. Across three Kisumu markets, 4,089 kg of surplus food was recovered and redistributed, providing approximately 17,778 meals and reaching an estimated 200 children and teenagers weekly.

Food diversion also avoided an estimated 13.0 tonnes of CO_2e emissions, with no reported food-safety incidents. Beneficiary institutions reported greater meal variety and reduced food-procurement costs. Beyond markets, over 36 tonnes of surplus bakery products were redistributed through the retail guideline pilot.

Key enablers included trained food rescue champions, simple collection systems, food-safety training, digital tracking, and strong partnerships. However, trader mistrust, delayed collection, volunteer turnover, and liability concerns constrained scale-up.

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