

Resilient Cities

Through Sustainable Urban and Peri-urban Agrifood Systems

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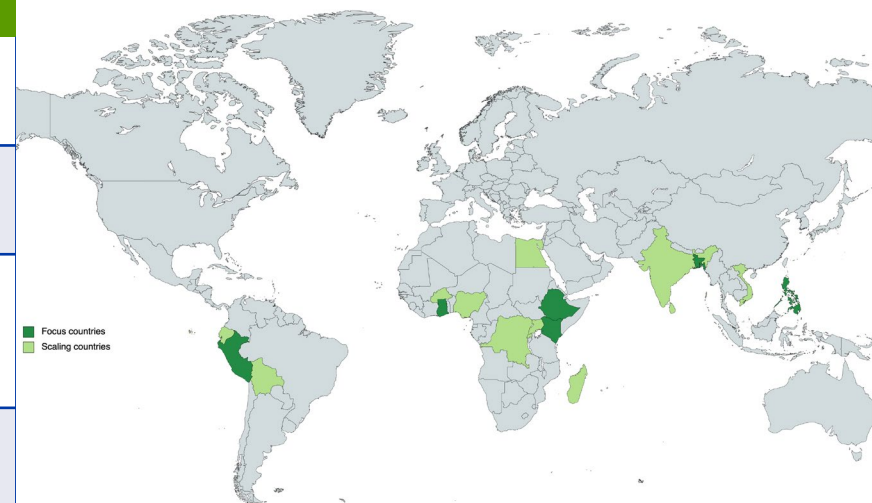
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Initiative goal and spread

Goal:

Science and innovation that enable urban food systems to provide **healthy diets and decent jobs** for the urban poor, whilst helping to **reduce the environmental footprint** of rapid planetary urbanization.

Work Packages	2022/23 Focus		
	Assessments, tools, metrics	Technology adaptation	Planning and management
WP1: Efficient and safe food production in urban and peri-urban zones	Kenya, Bangladesh	Peru	Philippines
WP2: Inclusive, profitable informal urban food markets & supply chains	B/desh, Peru, Philippines	Kenya	Bangladesh
WP3: Strengthening circular bio-economy and food safety	Bdesh, Kenya, Ghana, Sri Lanka	Ghana, Sri Lanka	Ghana
WP4: Improving urban food environment to enable healthy diets	Kenya, B/desh, Ghana, Ethiopia	Bangladesh	Kenya, Peru
WP5: Strengthening capacity for research & innovation	Global	Global	Peru, Ghana



Initiative expected results

CGIAR Impact Areas

Nutrition, Health,
and Food Security



Poverty Reduction,
Livelihoods, and Jobs



Environmental Health
and Biodiversity



Gender Equality, Youth,
and Social Inclusion



Climate Adaptation and
Greenhouse Gas Reduction



Initiative Outcomes by 2030

2M urban poor reduce risk of NCDs and CDs

1.5M urban poor increase micronutrient intake

4M jobs and enterprise opportunities in the food sector

6M ha under improved management for food production and ecosystem services

3.6M women and youth with greater opportunities

\$100M invested in better urban [food] waste management

Implementation to date



Knowledge products

>50 knowledge products contributing to 36 Outputs (2022)

Capacity sharing

In 2022, focus on adaptation of modules for training and institutional development targeted at producer and trader associations, city planners and local research providers

Policy and investment

Close collaboration with Municipalities and Local Government in Kenya, Peru, Philippines, Bangladesh, Ethiopia and Ghana

Innovations

25 CGIAR innovations at various stages of readiness, including 5 at advanced stage

Partners

12 main research partners; strong global scaling partners (city networks, business associations, UN programmes)

Initiatives connected

FRESH, One Health, NPS, TAFSA



Urban Production

OUTPUT

Quality vegetable seedlings for poor urban producers

- Increased **productivity** and access to vegetables in informal markets
- Reduced use of **pesticides** (health, environmental, income benefits)
- **Youth-led enterprises** networked for training and market access

Knowledge products 2022

- Guidelines for quality vegetable seedling production
- Assessment of Philippines National Urban Agriculture Program (on request by Gov)
- Analyses of small-scale urban production systems in Bangladesh



Credit: IITA

Informal Urban Markets

OUTPUT

Improved evidence and tools for food safety in informal markets

- Improved, adapted **technologies** for food safeguarding in
- Improved **surveillance tools** and incentive-based food safety systems supporting **women and youth entrepreneurs**

Knowledge products 2022

- Food safety assessment (tomato, chicken, fish value chains) in Dhaka, Bangladesh
- Nairobi market assessment for World Bank's *Safer Urban Food Systems* project design
- Assessment of institutional markets in Lima, Peru

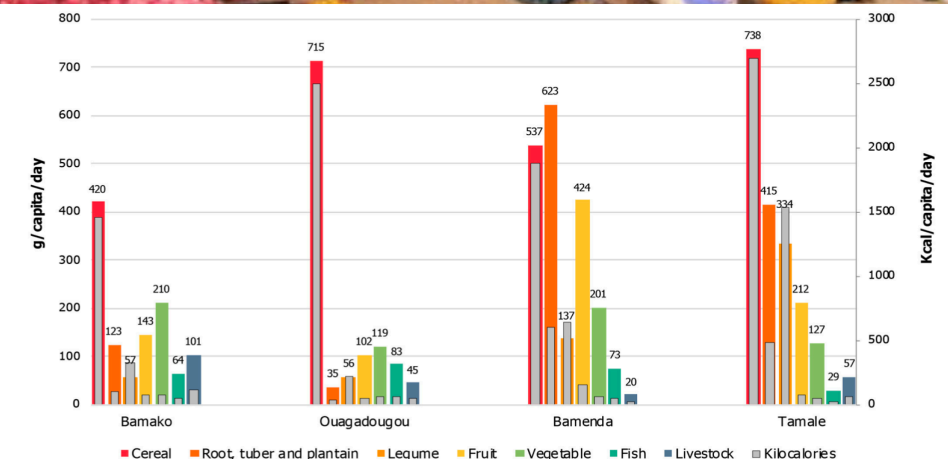


FIGURE 4 | Daily per capita quantity entering the West African cities of Bamako, Ouagadougou, Bamenda, and Tamale [incoming flows in g/capita/day (left axis) and kcal/capita/day (right axis)]—average over three (two) seasons (Bamenda, Cameroon).

Urban circular bioeconomy

OUTPUT

Reduced food losses and reuse of food waste

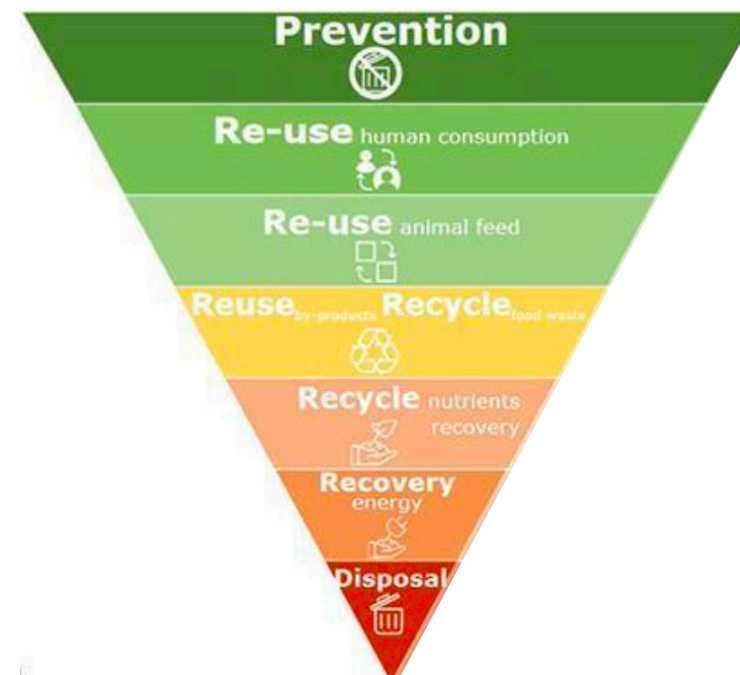
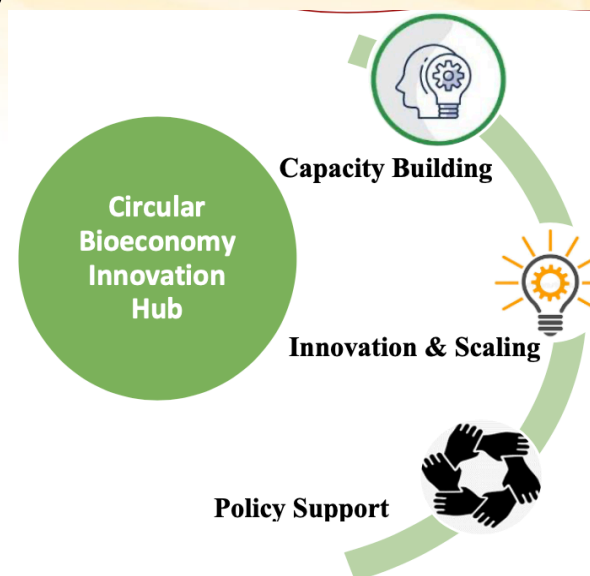
- Improved, adapted technologies for informal market operators
- Risk assessment tools and methodologies adapted
- Technical guidelines at production, market and municipal levels

Knowledge products 2022

- Policy Brief on *Food Waste Minimization and Circularity*
- Analysis of food waste reuse in Metro Manila
- Review of *WHO 2006 Wastewater Reuse Guidelines* finalized
- Review of food waste recovery for peri-urban livestock farms in Sri Lanka.

Capacity sharing

- *Circular Bioeconomy Innovation Hub* launched in Ghana (8 private & 8 public sector partners)
- Urban bioeconomy program introduced at *Incubagraria Center* at Universidad Nacional Agraria in Lima, Peru



Urban diets

OUTPUT

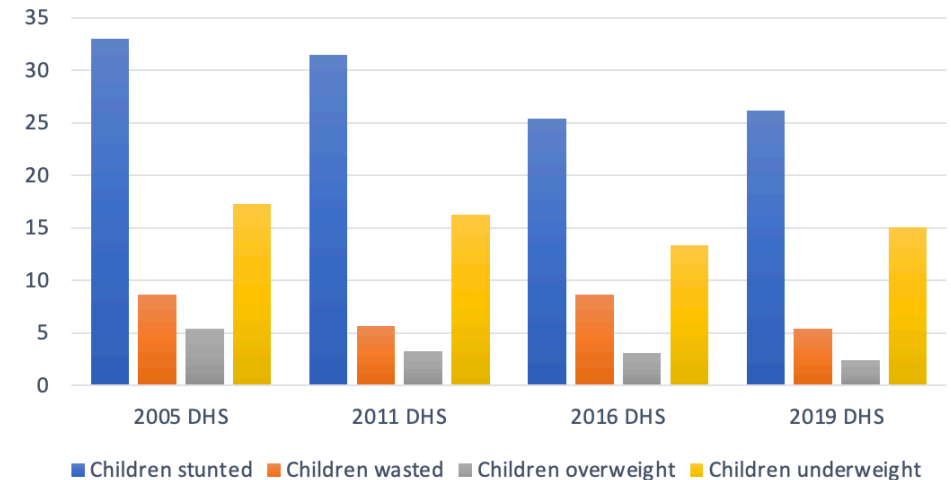
Urban nutrition and food environment profiles

- Provide framework and tools for targeting diet and food environment interventions at urban poor
- Specific focus on urban adolescents and unhealthy diets

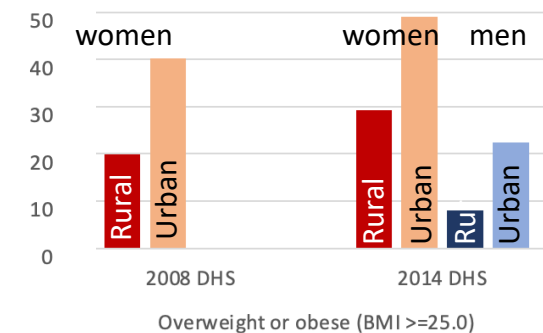
Knowledge products 2022

- Urban nutrition profiles for Kenya, Ghana, Ethiopia, Sri Lanka, Rwanda
- Development/testing of new programming tools: *Food Recognition Algorithm + Nudging Insights (FRANI)* in Ghana; food environment assessment tools underway in Sri Lanka

Urban Child Nutrition Status trends: Ethiopia



Overweight and obesity in Ghana



Urban food system resilience

OUTPUT

Integrated analysis of urban food systems

- Evidence and tools to enable urban planning to engage with agrifood systems
- Partnering with urban science ('Planetary Urbanization' rather than 'rural-urban linkages')

Knowledge products 2022

- Urban food flows in West Africa
- Review of priorities in research & innovation
- Review of institutional food markets, Peru
- White Paper with World Bank on *Food Systems for an Urban Planet*

Capacity sharing

- Webinar series with World Bank Urban Food Group
- Training manual for resilience monitoring indicators

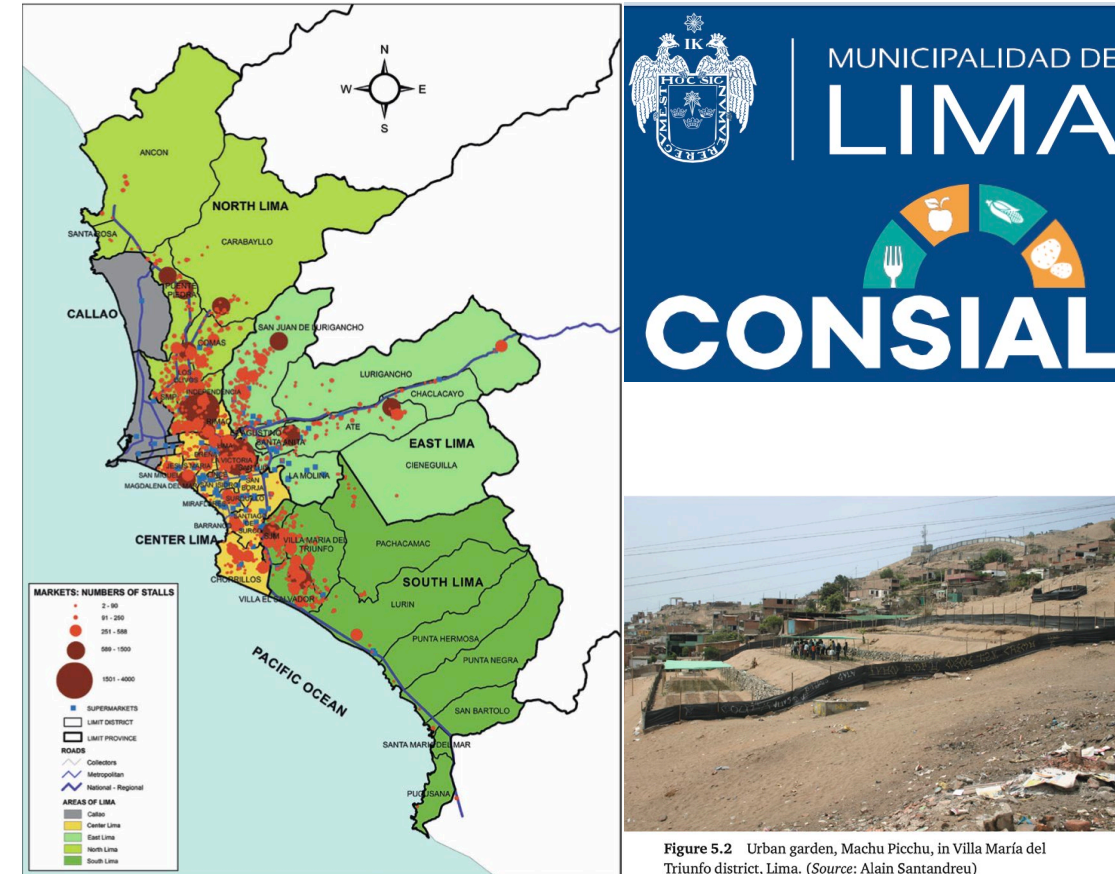


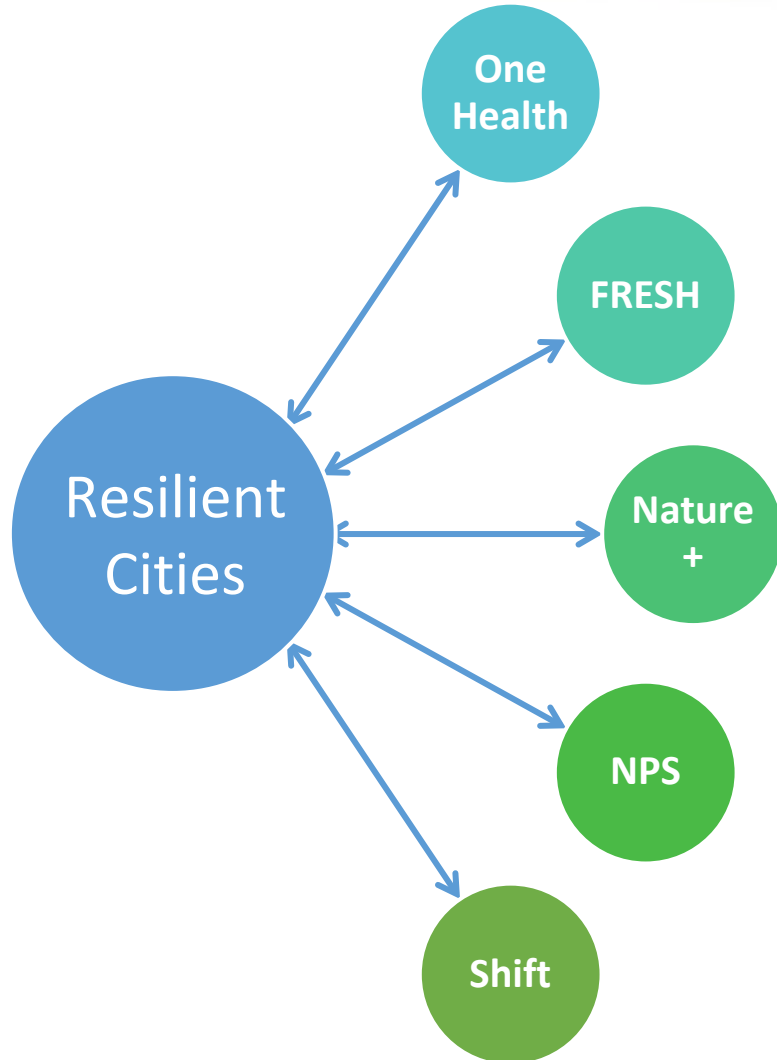
Figure 5.1 Location of popular markets and supermarkets according to the number of establishments. Many popular markets sell products from urban farms. (Source: FAO Proyecto NADHALI 2016–18)

Figure 5.2 Urban garden, Machu Picchu, in Villa María del Triunfo district, Lima. (Source: Alain Santandreu)

Reflect & learn: Positioning in CGIAR portfolio



Pivotal role connecting CGIAR research to urban science and innovation



2-way Street

← Selecting and adapting technologies and tools **from CGIAR to urban systems**

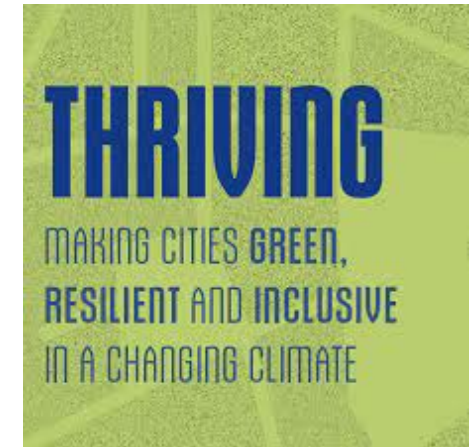
→ Providing evidence and tools **from urban research for CGIAR** Initiatives to engage with urbanization as an agrifood system driver

In the process, we identify

- Critical gaps (e.g. post-harvest)
- New science and innovation partners (e.g. commercial CEA)

Reflect & learn: External positioning

- **World Bank** Urban Food Group and *THRIVING* Flagship Report
- **UNFSS Alliance** – Leading the Research and Innovation Task Force
- **HLPE-FSN** Report #19 on Urban and Peri-urban Food Systems
- **FAO Green Cities** Initiative – Advisory Committee
- **ETH – Singapore** Future Cities Laboratory
- Funder interest increasing



RESILIENT LOCAL FOOD SUPPLY CHAINS ALLIANCE



AUDA - NEPAD
AFRICAN UNION DEVELOPMENT AGENCY



Food and Agriculture
Organization of the
United Nations



Investing in rural people

Impact Capital
for Development



Science for a food-secure future



Thank you!