CGIAR

INITIATIVE ON
Resilient Cities

Urban farmers and partners visit one of the community gardens, Joy of Q Urban Farm, in the Philippines, during the Roving Workshop of Resilient Cities.

Credit: International Institute of Rural Reconstruction (IIRR)

CGIAR Research Initiative on **Resilient Cities**

Annual Technical Report 2024

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The Artificial Intelligence (AI) software ChatGPT was used to support the editing of parts of this report, specifically to improve clarity, grammar, and style. ChatGPT was not used to generate the content of the report. All edits made with AI assistance were reviewed and validated by the authors to ensure accuracy, coherence, and alignment with the original intent.

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CGIAR Technical Reporting 2024

CGIAR Technical Reporting has been developed in alignment with CGIAR's Technical Reporting Arrangement. This annual report ("Type 1" Report) constitutes part of the broader CGIAR Technical Report. Each CGIAR Research Initiative/Impact Platform/Science Group Project (SGP) submits an annual "Type 1" Report, which provides assurance on progress towards end of Initiative/Impact Platform/SGP outcomes.

As 2024 marks the final year of this CGIAR Portfolio and the 2022-24 business cycle, this Type 1 Report takes a dual approach to its analysis and reporting. Alongside highlighting key achievements for 2024, the report also provides a cumulative overview of the 2022-24 business cycle, where relevant. This perspective captures the evolution of efforts over the three-year period. By presenting both annual and multi-year insights, the report underscores the cumulative impact of CGIAR's work and sets the stage for the transition to the 2025-30 Portfolio.

The 2024 CGIAR Technical Report comprises:

- **Type 1 Initiative, Impact Platform, and SGP Reports:** These annual reports present progress towards end of Initiative/Impact Platform/SGP outcomes and provide quality-assured results accessible via the CGIAR Results Dashboard.
- **Type 3 CGIAR Portfolio Practice Change Report:** This report provides insights into CGIAR's progress in Performance Management and Project Coordination.
- **Portfolio Narrative:** Drawing on the Type 1 and Type 3 reports, as well as data from the CGIAR Results Dashboard, the Portfolio Narrative synthesizes insights to provide an overall view of Portfolio coherence. It highlights synergies, partnerships, country and regional engagement, and collective progress.
- **Type 2 CGIAR Contributions to Impact in Agrifood Systems: evidence and learnings from 2022 to 2024:** This report offers a high-level summary of CGIAR's contributions to its impact targets and Science Group outcomes, aligned with the Sustainable Development Goals (SDGs), for the three-year business cycle.

The Portfolio Narrative informs the 2024 CGIAR Annual Report – a comprehensive summary of the organization's collective achievements, impacts, and strategic outlook.

Elements of the Type 2 report are integrated into the CGIAR Flagship Report, released in April 2025 at CGIAR Science Week. The Flagship Report synthesizes CGIAR research in an accessible format designed specifically to provide policy- and decision-makers at national, regional, and global levels with the evidence they require to formulate, develop, and negotiate evidence-based policies and investments.

The diagram below illustrates these relationships.

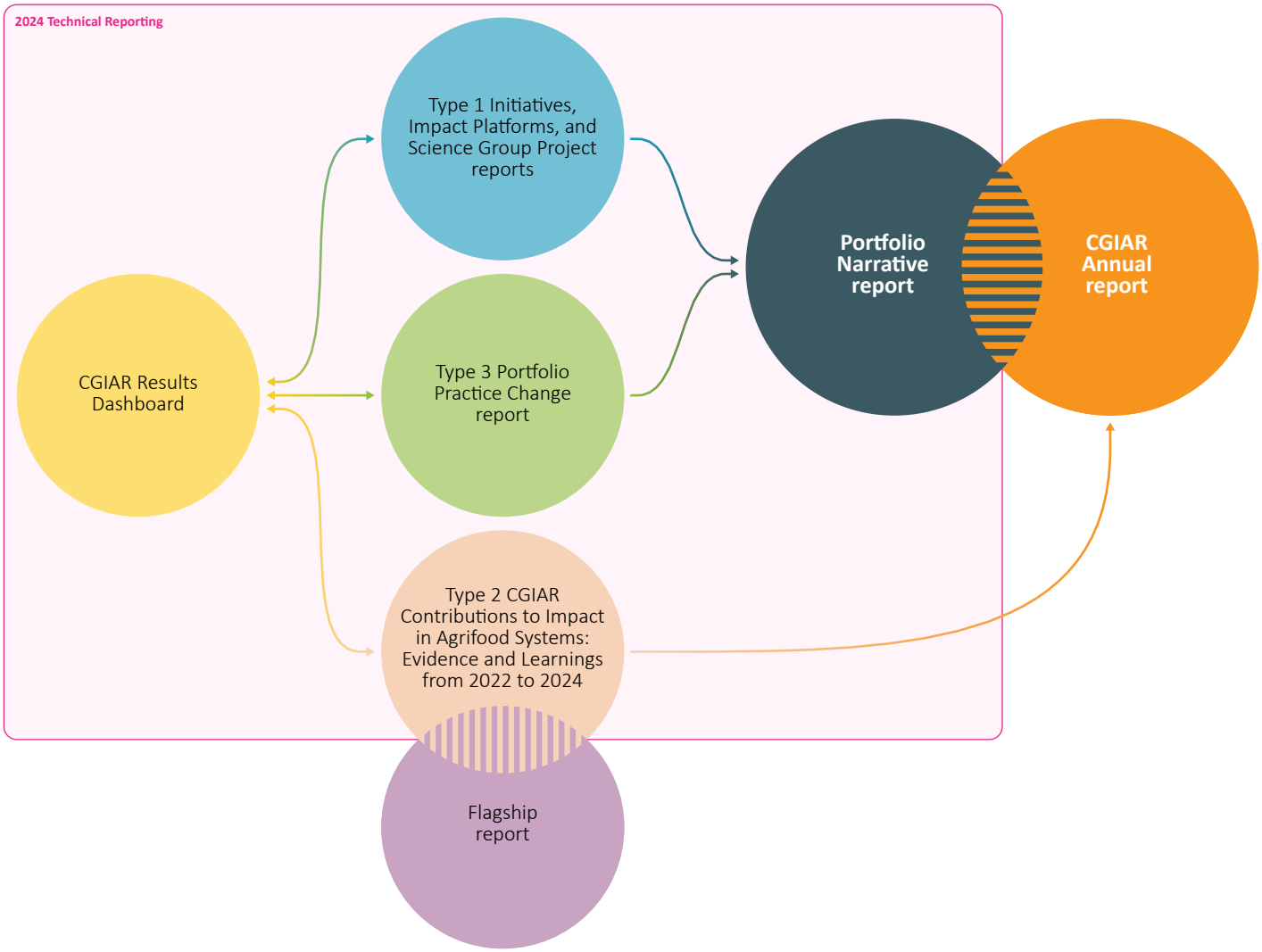

Figure 1. CGIAR's 2024 Technical Reporting components and their integration with other CGIAR reporting products.

Section 1: **Fact sheet, executive summary and budget**

Initiative name	Resilient Cities through Sustainable Urban and Peri-Urban Agrifood Systems
Initiative short name	Resilient Cities
Initiative Lead	Simon Heck (s.heck@cgiar.org)
Initiative Co-lead	Silvia Alonso (s.alonso@cgiar.org)
Science Group	Resilient Agrifood Systems
Start – end date	01 April 2022 – 31 December 2024
Geographic scope	**Regions** Central and West Asia and North Africa · East and Southern Africa · Latin America and the Caribbean · South Asia · Southeast Asia and the Pacific · West and Central Africa **Countries** Bangladesh · Burkina Faso · Ethiopia; Ghana · Kenya · Peru · Philippines · Rwanda · Sri Lanka
OECD DAC Climate marker adaptation score[1]	**Score 1: Significant** The activity contributes in a significant way to any of the three CGIAR climate-related strategy objectives—namely, climate mitigation, climate adaptation and climate policy—even though it is not the principal focus of the activity.
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OECD DAC Gender equity marker score[2]	**Score 1A: Gender accommodative/aware** Gender equality is an objective, but not the main one. The Initiative/project includes at least two explicit gender specific outputs and (adequate) funding and resources are available. Data and indicators are disaggregated by gender and analyzed to explain potential gender variations and inequalities.
Website link	https://www.cgiar.org/initiative/16-resilient-cities-through-sustainable-urban-and-peri-urban-agrifood-systems/

[1] The Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) markers refer to the OECD DAC Rio Markers for Climate and the gender equality policy marker. For climate adaptation and mitigation, scores are: 0 = Not targeted; 1 = Significant; and 2 = Principal.
[2] The CGIAR Gender Impact Platform has adapted the OECD gender marker, splitting the 1 score into 1A and 1B. For gender equality, scores are: 0 = Not targeted; 1A = Gender accommodative/aware; 1B = Gender responsive; and 2 = Principal.
These scores are derived from Initiative proposals, and refer to the score given to the Initiative overall based on their proposal.

EXECUTIVE SUMMARY

From 2022 to 2024, the CGIAR Research Initiative on Resilient Cities through Sustainable Urban and Peri-Urban Agrifood Systems (Resilient Cities) advanced inclusive, sustainable, and resilient food systems in rapidly growing cities across Africa, Asia, and Latin America. Focusing on nutrition, food safety, circular economies, informal markets, and governance, it collaborated with local governments, researchers, civil society, and communities to co-create solutions that improve access to safer, more nutritious food and that strengthen livelihoods, especially for marginalized urban populations.

In Nairobi, Dhaka, and Quezon Cities, the Initiative promoted urban and peri-urban vegetable production by improving access to high-quality seeds and seedlings, introducing a mobile application (in Nairobi) that links growers to propagators. Children engaged in school garden projects that fostered an appreciation for healthier diets, while participatory demonstration plots in Nairobi and Kisumu illustrated how improved seedlings boost yields. Training sessions in Quezon City reached more than 280 growers, most of them women, and an evaluation in Dhaka, undertaken with the Food and Agriculture Organization of the United Nations (FAO), showed that urban gardening raised women's dietary diversity and vegetable consumption. Yet these efforts also revealed food safety threats, such as antimicrobial-resistant bacteria and microplastics detected in crops, highlighting the need for reliable production practices in dense urban environments.

Recognizing that informal food markets play a central role in urban food access, the Initiative worked to professionalize small-scale vendors through the Vendor Business School (VBS). Pilots in Kenya's dairy sector and with vegetable vendors in Quezon City advanced local policy changes by 2024. The Kenya Dairy Board formally adopted VBS to improve food safety while a city ordinance in Quezon City readied the program for wider expansion. The Initiative also facilitated stronger market links by championing farmers' markets in Dhaka and food rescue kitchens in Lima, channeling surplus produce to underserved communities and drawing interest from global stakeholders such as FAO and the World Food Programme (WFP).

A key area of engagement centered on advancing circular economy models to manage urban food and organic waste. In Sri Lanka, the Initiative supported the Waste Management Authority in deploying digital performance indicators across 22 composting sites, training more than 140 local officials and improving overall waste management. It also conducted research on financing strategies for circular bioeconomy ventures in 15 countries,

emphasizing mechanisms like green bonds to attract private-sector investment. At the policy level, findings contributed to the 2023 update of FAO Water Quality Guidelines and underscored how stakeholder motivations — particularly among women — are pivotal for sustaining safe, resource-efficient practices.

Digital innovations supported better diets and food environments. The Food Recognition Assistance and Nudging Insights (FRANI) app used artificial intelligence (AI) to guide adolescents toward healthier choices, while the Urban Food Environments and Diets (UFED) toolkit offered policymakers and NGOs step-by-step assessments tailored to different resource contexts. The Initiative compiled urban nutrition profiles in Ethiopia, Bangladesh, and beyond, shaping WFP's urban policies in multiple countries. In Bangladesh, it helped update the Multisectoral Urban Nutrition Strategy and joined the national technical working group, while a phone-based diet recall study in Sri Lanka provided a cost-effective alternative for monitoring nutrition.

Despite budget limitations, the Initiative maintained robust support for innovation and governance. In Peru, CIP and Incubagraria coached more than 230 aspiring entrepreneurs on science-based solutions, sparking 54 innovation projects, including hydroponics for community kitchens. Ghana's Circular Bioeconomy Innovation Hub united 17 public, private, and academic partners and reached over 12,500 students through awareness campaigns. Meanwhile, in Kenya, the Initiative collaborated with Nairobi and Kisumu counties to publish a food system profile, pilot new resilience indicators, and foster peer learning. It also joined forces with the World Bank to co-author a white paper on Resilient Urban Food Systems, reflecting global recognition of this work.

Common themes cut across these activities, including active engagement of women and youth, improved food safety, stronger local governance, and the use of data-driven evidence to inform urban policy. Digital technologies, collaborative approaches, and practical innovations were pivotal to scaling up impact. By 2024, the Initiative had shown that targeted interventions — when rooted in local ownership — can transform how cities produce, distribute, and consume food. Its integrated focus on nutrition, entrepreneurship, circular resource use, and governance provides a viable blueprint for future urban food system transformation. Looking ahead, the Initiative plans to deepen its efforts, leveraging the evidence and networks built so far to support cities in becoming healthier, more equitable, and more climate-resilient places for all.

Through each phase of its work, the Initiative emphasized the importance of broad partnerships and inclusive strategies that benefit the largest number of people. By combining research-driven interventions with practical training and policy engagement, it has equipped municipal authorities, market actors, and community groups with new skills and perspectives. This collaborative model, which brings together diverse stakeholders in a shared commitment to safer and more resilient food systems, remains a promising route for catalyzing lasting change in fast-urbanizing regions worldwide.

	2022	2023	**2024**
PROPOSAL BUDGET	$5.00M	$10.00M	**$10.00M**
APPROVED BUDGET [1]	$4.06M	$3.97M [2]	**$4.06M** [2]

[1] The approved budget amounts correspond to the figures available for public access through the Financing Plan dashboard.
[2] These amounts include carry-over and commitments.

One food rescue program of the Community Kitchen brigade in Lima's Pachacamac district feeds vulnerable people in poor areas of the district .

Section 2: **Progress towards End of Initiative outcomes**

Initiative-level theory of change diagram

This is a simple, linear, and static representation of a complex, non-linear, and dynamic reality. Feedback loops and connections between this Initiative and other Initiatives' theories of change are excluded for clarity.

CHALLENGE STATEMENT

- By 2050, more than two-thirds of humanity will live in urban areas, including 5.5 billion people in low- and middle-income countries (LMICs). The agrifood sector must adapt to feed growing urban populations, reduce health and environmental risks, and support economic opportunities for the urban poor. Health and climate crises require research to strengthen urban food system resilience, with a focus on more circular, scalable, equitable solutions for productive, green, and livable cities.
- Key challenges for urban and peri-urban (UPU) environments include pollution, land degradation, resource competition, growing social inequalities, and weak governance. Urban innovation capacity, supported by scientific research, can help UPU agrifood systems drive technological, institutional, and social change to secure food and livelihoods for future urban populations.
- CGIAR is well-positioned to provide global leadership, building on past and ongoing collaborative research. In urban areas, the agrifood sector often lacks visibility and support, leading to missed economic opportunities and heightened health and environmental risks. Five key entry points for UPU resilience stand out for immediate action: (1) enhancing UPU food productivity through improved access to better technologies, services, and clean environments; (2) strengthening informal urban food markets and rural-urban supply chains with improved technologies and business services, creating economic opportunities for women and youth; (3) improving urban food environments and promoting healthier diets for the urban poor to address malnutrition and diet-related noncommunicable diseases (NCDs); (4) supporting innovations for a circular bioeconomy by turning urban waste into safe and efficient resources for food production, driven by public-private partnerships; and (5) developing research capacities and tools to support UPU agrifood governance, innovation, and sustainable investment planning.
- In addressing these challenges, the Resilient Cities Initiative approaches UPU agrifood systems as dynamic urban systems, distinct from rural agriculture, and promotes cross-sector collaboration in urban contexts. It also works to better engage urban stakeholders and policymakers in agrifood dialogues for long-lasting impact.

RESEARCH QUESTIONS

- What approaches allow converging technological, institutional, and policy actions to reduce postharvest losses, and integrated mycotoxin management (IMM) to better recognize and reduce mycotoxin contamination at scale?

SPHERE OF **CONTROL**

Work Packages

Work Package 1

Enabling sustainable production of nutritious foods in (peri-) urban zones.

Work Package 2

Building inclusive and sustainable food markets and safeguarding supply chains.

Work Package 3

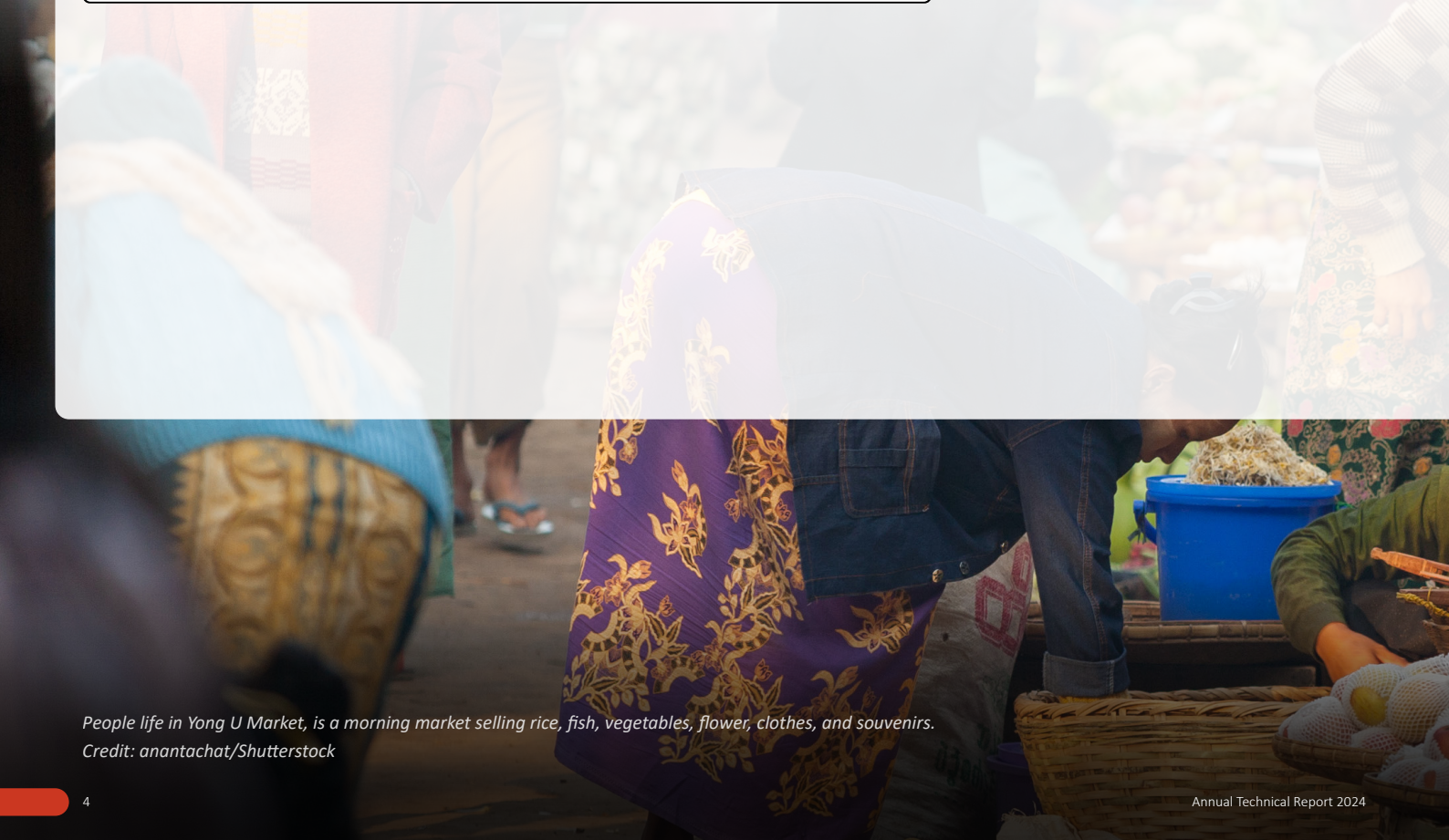
Strengthening circular bioeconomy, food safety and the urban environment.

Work Package 4

Improving food environments and consumer behavior for nutrition.

Work Package 5

Strengthening the evidence base and research & innovation capacities for UPU agrifood system governance and growth.



People life in Yong U Market, is a morning market selling rice, fish, vegetables, flower, clothes, and souvenirs.
Credit: anantachat/Shutterstock

SPHERE OF **INFLUENCE**

End-of-Initiative Outcomes

End-of-Initiative Outcome 1

1 ▶ At least 5,000 local MSMEs in food processing, marketing and agri-food service sectors can access and utilize business development toolkits, improved technologies, knowledge and skills, with strong participation by women and youth.

End-of-Initiative Outcome 2

2 ▶ At least 5,000 small-scale producers in Urban and Peri-urban (UPU) zones can access and utilize improved technologies, skills, know-how and management tools for safer, more sustainable and more efficient vegetable, livestock and fish production.

End-of-Initiative Outcome 3

3 ▶ Municipal authorities and their public and private sector partners in at least 6 cities and towns are made aware of evidence-based approaches, tools, and business models for planning, implementing and monitoring investments in a circular bio-economy and/or strategies to mitigate environmental and human health risks.

End-of-Initiative Outcome 4

4 ▶ At least 100,000 urban consumers benefit from nutrition programs that use evidence based UPU food environment and consumption toolkits, social assistance program guidance and profiles to improve diet quality and nutritional status.

End-of-Initiative Outcome 5

4 ▶ 5 ▶ 3 ▶ Urban planners and stakeholders participating in global networks of more than 200 cities representing over 400 million consumers use, promote and improve Research and Innovation tools and approaches developed by research, training institutions and civil society to accelerate UPU agri-food system development and strengthen urban resilience.

Action Area Outcomes

Resilient Agrifood Systems

1 ▶ **1** · Implementation partners (e.g. NARES, NGOs, private companies) actively support dissemination, uptake, and implementation of CGIAR innovations.

4 ▶ **2** · Due to CGIAR involvement, private sector actors invest in business practices or models that have the potential to improve livelihoods, climate resilience, promote sustainable and inclusive food systems, and boost consumption of healthy diets, especially among nutritionally vulnerable population groups.

2 ▶ 1 ▶ **3** · CGIAR-NARS-SME networks use market segments, target product profiles to orient variety development and deployment towards those that provide larger scale benefits across the 5 Impact Areas.

3 ▶ 5 ▶ 3 ▶ **4** · National and local multi-stakeholder platforms are strengthened to become more effective and sustainable, addressing development trade-offs and generating strategies for effective food, land, and water systems transformation.

SPHERE OF **INTEREST**

Impact Areas

Nutrition, Health & Food Security

1 ▶ · End hunger for all and enable affordable health diets for the 3 billion people who do not currently have access to safe and nutritious food.

Poverty Reduction, Livelihoods & Jobs

4 ▶ · Reduce by at least half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.

Gender equality, Youth & Social Inclusion

3 ▶ · Offer rewardable opportunities to 267 million young people who are not in employment, education, or training.

· Close the gender gap in rights to economic resources on, access to ownership of, and control over land and natural resources, for more than 500 million women who work in food, land, and water systems.

Climate Adaptation & Mitigation

2 ▶ · Equip 500 million small-scale producers to be more resilient to climate shocks, with climate adaptation solutions available through national innovation systems.

Environmental Health & Biodiversity

2 ▶ 4 ▶ · Stay within planetary and regional environmental boundaries: consumptive water use in food production of less than 2500 km3 per year (with a focus on the most stressed basins), zero net deforestation, nitrogen application of 90 Tg per year (with redistribution towards low-input farming systems) and increased use efficiency, and phosphorus application of 10 Tg per year.

Progress against End of Initiative Outcomes

This infographic provides a concise summary of the Initiative's progress toward achieving its Theory of Change End-of-Initiative outcomes for the 2022-2024 period. By drawing on reported results, it offers a comprehensive synthesis of progress made against the established outcome targets, highlighting the Initiative's overall impact and key achievements at the conclusion of this three-year cycle.

EOIO 1

Municipal authorities and their public- and private-sector partners in at least six cities adopt evidence-based approaches, tools, and business models for planning, implementing, and monitoring investments in a circular bioeconomy (CBE) and/or strategies to mitigate environmental and human health risks.

EOIO 2

At least 10,000 local micro, small, and medium enterprises (MSMEs) in food processing, marketing, and agrifood service sectors can access and utilize business development toolkits, improved technologies, knowledge, and skills, with strong participation by women and youth.

EOIO 3

At least 5,000 small-scale producers in UPU zones can access and utilize improved technologies, skills, know-how and management tools for safer, more sustainable, and more efficient vegetable, livestock, and fish production.

EOIO 4

At least 100,000 urban consumers benefit from nutrition programs that use evidence-based UPU food environment and consumption toolkits, social assistance program guidance and profiles to improve diet quality and nutritional status.

EOIO 5

Urban planners and stakeholders participating in global networks of more than 200 cities representing over 400 million consumers use, promote, and improve research and innovation tools and approaches developed by research, training institutions, and civil society to accelerate UPU agrifood system development and strengthen urban resilience

Over the past three years, the research evidence generated through the Resilient Cities' Work Package (WP) 2 influenced policy at various levels. The Initiative's work has resulted in the uptake by government in at least two cities (Nairobi and Quezon City) of incentive-based capacity development innovations designed and pilot-tested by the Initiative to strengthen informal markets serving urban centers. Such uptake means that these programs could reach thousands of individuals operating in what is the most widespread food sector in the country — the informal sector. A wider engagement with the African Union to develop guidelines for countries in the continent to embrace informal markets toward greater food safety and food security in African countries, expected to be approved by the end of 2025 by the Specialized Technical Committee on Agriculture, Rural Development, Water and Environment, is the stepping stone that could mean better job opportunities for millions of informal food sector workers, in particular for women who are overrepresented in the food market sector. Evidence has also been generated in Dhaka and Lima on methods to shorten value chains and connect farmers' produce with consumers in cities. In Lima, food rescue approaches not only benefitted farmers with greater returns but also guaranteed access to nutritious foods in many vulnerable communities.

The food rescue program in Lima benefited more than 1,000 low-income and highly vulnerable people with nutritious food. The Pachacamac Municipality in Lima also approved an ordinance to promote food rescue for improving food security programs. Demonstrations of improved vegetable production technologies and training on their use impacted at least 2,000 with intensive follow-up with many more through surveys. The promotion of improved planting material and better and safer production of vegetables reduced use and reliance on pesticides and improved productivity. Studies conducted on pathogen and pollution contamination of urban and peri-urban (UPU) vegetables enabled targeted activities to address them and drove policies to improve the safety and nutrition of UPU vegetables. By engaging with schools in improved production practices of nutritious vegetables in school gardens, school feeding systems improved better diets of school children.

Water quality guidelines were adopted by FAO for crops, livestock, and fish farming. These were already in use and being scaled for farmers around the globe beyond the targeted 10,000 farmers. A wide range of indigenous vegetables in Asia and African leafy vegetables in Africa were promoted. This was done through training, especially in learning institutions (schools, colleges), which ensured wide scaling of these technologies. Community gardens were also established to test and promote local vegetables suitable for specific conditions. From these community gardens, seedpacks were distributed to urban farmers. A mobile app was developed and in use in Nairobi to help link vegetable growers to seedling propagators. In implementing these activities, food safety issues were considered and analyzed; for example, the dangers of antimicrobial resistance were identified and communicated in these interventions.

The Initiative advanced innovation and policy engagement through two key digital tools and a suite of evidence products. FRANI, an AI-powered app, supported healthier food choices among urban adolescents and was integrated into school feeding programs in Ghana. UFED, a decision-support tool for assessing urban food environments and diets, underwent user testing and will launch in Q2 2025 in an IFPRI policy seminar. It will be shared in capacity building workshops, including in the Philippines, and made publicly available for implementers, researchers, policymakers, and other users. These tools supported evidence-based action in urban nutrition programming and policy planning.

Urban nutrition profiles for eight focal countries (Bangladesh, Ethiopia, Ghana, Kenya, Sri Lanka, Philippines, Peru, Rwanda) provided comparative analyses of urban – rural diets and food environments, highlighting key challenges and evidence gaps. The findings informed regional workshops and supported WFP country offices' strategic engagement in urban food systems. Other work included a Sri Lankan study, which found that phone-based dietary recalls can improve understanding of consumer eating habits, making it easier and less expensive to monitor and respond to dietary shifts in dynamic urban settings and supporting the development of nutrition interventions better targeted to urban consumers.

The Initiative strengthened its collaboration with the World Bank through the co-development of a white paper on resilient urban food systems, set for publication in 2025. Targeted at World Bank decision-makers and global city networks, the paper provides strategic recommendations and investment pathways to guide urban food system transformation.

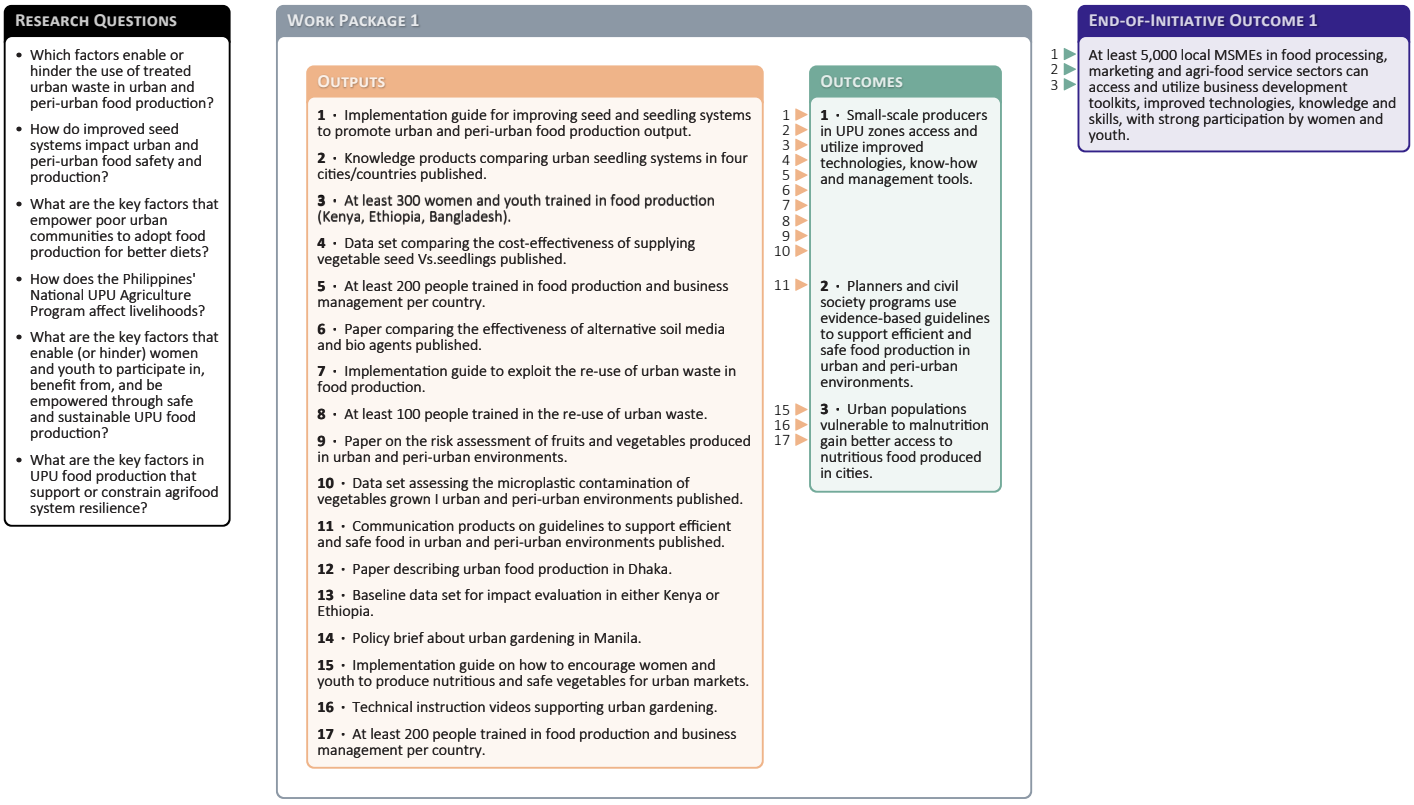
In partnership with the RUAF Global Partnership on Sustainable Urban Agriculture and Food Systems, the Initiative supported the profiling and analysis of urban food systems in cities such as Lima and Nairobi. The resulting insights were shared with local governments to inform policy and planning.

A collaborative effort with Nairobi City County led to the development of a monitoring plan for Nairobi's Food System Strategy. This included field testing of key indicators by County officers, a hands-on capacity-building activity that was showcased to representatives of other major African cities during a dedicated session at the 2024 World Urban Forum.

The Initiative's expanding network was further demonstrated by formal agreements, such as the memorandum of understanding with Quezon City, new partnerships with Welthungerhilfe in Lima, and the jointly authored white paper with the World Bank — collectively reinforcing the Initiative's pivotal role in accelerating action on urban food systems.

Section 3: **Work Package progress**

WP1: Enabling sustainable production of nutritious foods in (peri-) urban zones



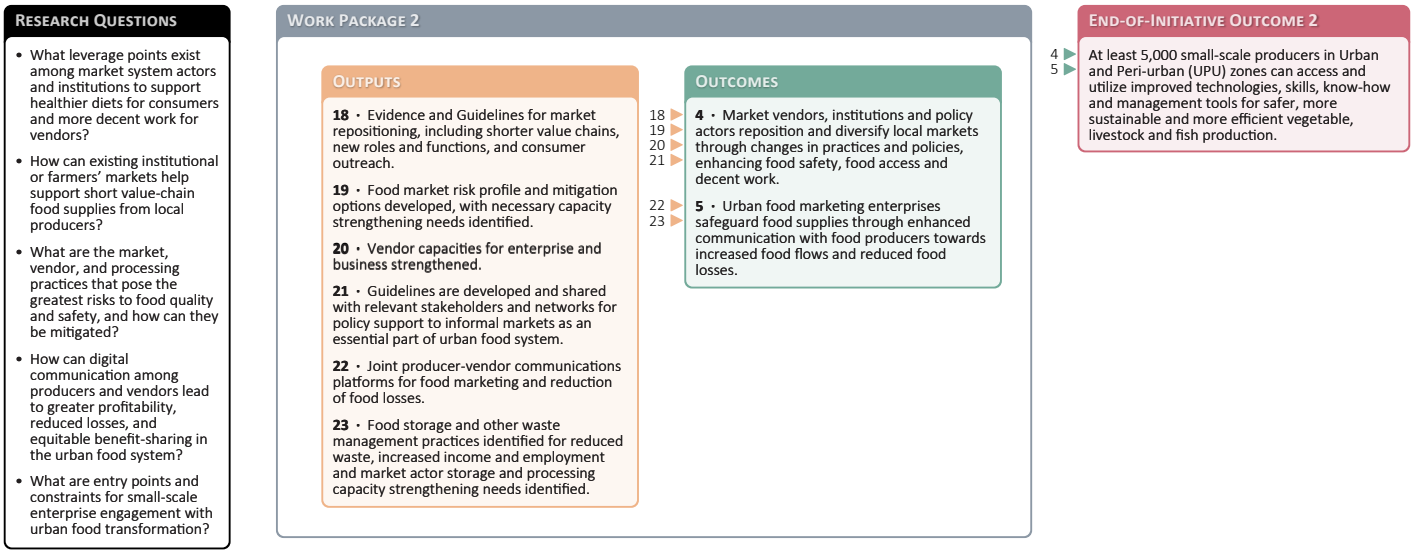
Work Package 1 progress against the theory of change

WP1 activities were undertaken primarily in Kenya (Nairobi, Kisumu), Bangladesh (Dhaka), and The Philippines (Quezon City), where the opportunities and challenges of UPU vegetable production were broadly analyzed. A large emphasis was placed on the promotion of quality seed and seedling systems serving UPU agriculture to improve production of safer, nutritious vegetables. This included conducting scoping studies of seed and seedling systems in four capital cities. Hundreds of farmer participatory comparison plots were established in Nairobi and Kisumu to demonstrate the multiple benefits of using healthy seedlings over conventional farmer bare-root seedlings. To improve access to healthy seedlings, a mobile app was developed and piloted in Nairobi, linking current and prospective growers to seedling propagators and providing information on seedling availability. In Kenya, focus was placed on promoting leafy African vegetables, while in Asia, a broader range of indigenous vegetables were included. Promoting school gardens in inner-city schools in Nairobi exposed hundreds of children to the benefits of healthy vegetables in their diets. Competitions on alternative growing techniques generated much enthusiasm from schools.

In collaboration with FAO, the impact of training urban residents in gardening was evaluated in Dhaka. An analysis of panel data for 679 control and treatment households showed a significant increase in women's dietary diversity and vegetable consumption alongside multiple other benefits. Food safety challenges with UPU agriculture were also revealed by the research team in Dhaka, with several strains of bacteria (Citrobacter freundii, Shigella flexneri, Escherichia coli) with antimicrobial resistance identified, highlighting the significant risks this poses to human health. Separately, common vegetables, such as water spinach and lettuce, were found to absorb and accumulate nano-sized polymer (plastic) particles, demonstrating the potential food safety risk of plastic pollution.

In Manila, working with the Quezon City government, urban food production systems were characterized, and nine community gardens were established to test and promote locally adapted vegetables suitable for UPU environments. These gardens served as learning and demonstration sites, through which thousands of quality seedlings, seed packs, and stem cuttings of wide range vegetable varieties were distributed. There was capacity building through training 288 urban farmers, including 231 women and 51 men. The training was on urban vegetable production, seed saving, food preparation, and food safety. Urban food producers in Quezon City were characterized in an extensive survey of urban gardeners

WP2: Building inclusive and sustainable food markets and safeguarding supply chains

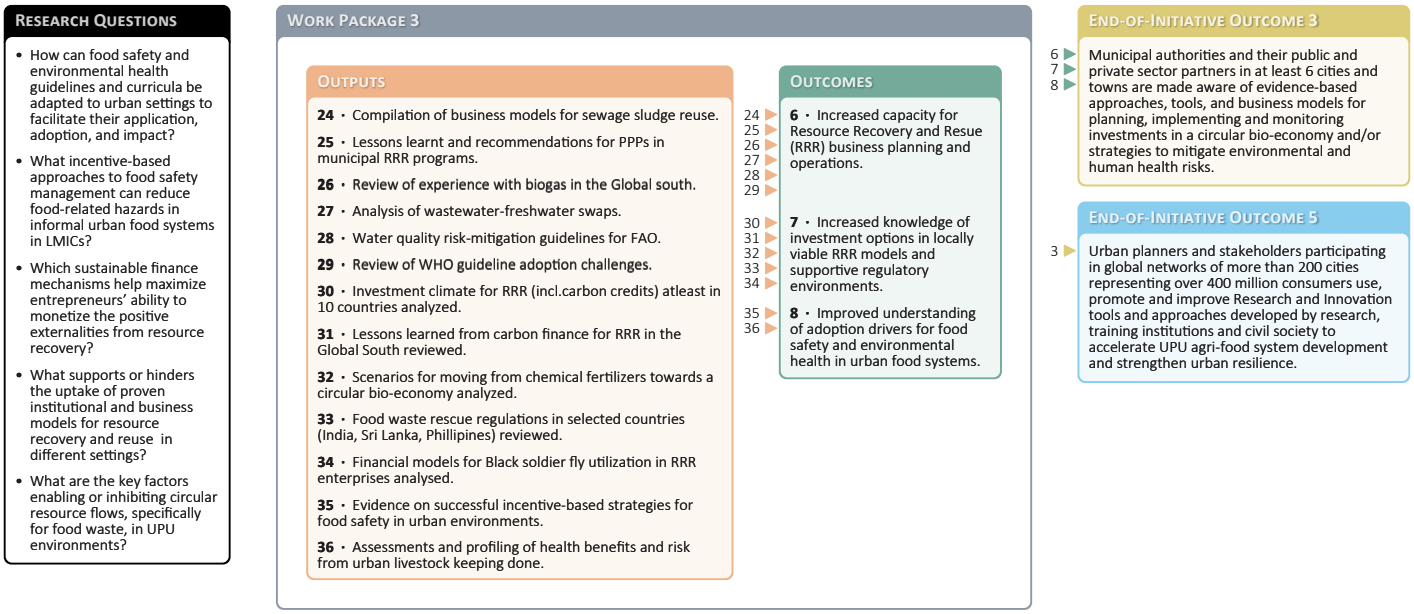


Work Package 2 progress against the theory of change

In 2024, WP2 consolidated the activities initiated two years before and the uptake of innovations generated from the WP by policy actors. An evaluation of the VBS, a professionalizing program for small-scale food vendors operating in informal markets within cities, was completed. The program was tested with dairy women vendors in Nairobi, Kenya, and vegetable vendors in Quezon City, the Philippines. Both programs were being institutionalized; the VBS is part of a new initiative launched by the Kenya Dairy Board to strengthen food safety in the informal dairy sector. In Quezon City, a city ordinance institutionalizing the VBS passed three hearings and is under signature by the city mayor. CGIAR will continue to collaborate with these government institutions, providing technical advice on the scaling of the programs and monitoring their scaling and impact reach. The VBS could be relevant to other value chains and locations. To support adaptation to other locations, WP2 continued to gather evidence on food safety priorities for market actors and consumers in cities like Dhaka and Addis Ababa to identify the most promising, acceptable, and efficient food safety practices for informal markets. This work contributes essential evidence to support the design of future food safety interventions in markets.

The WP2 has also worked on implementing innovations that shorten value chains and deliver farmers' produce closer and faster to consumers in cities. In Dhaka, the Initiative supported four farmers' markets managed by the local government and farmers' groups. In Lima, the Initiative supported community kitchens, with a food rescue initiative at farm level that was crucial in addressing chronic food insecurity in marginalized areas. This collaboration improved access to fresh produce, generated economic benefits to farmers, and strengthened stakeholder engagement and policy advocacy, attracting interest from international organizations such as FAO and WFP.

WP3: Strengthening circular bioeconomy, food safety and the urban environment



Work Package 3 progress against the theory of change

WP3 bridged gaps between research and practical implementation in the domain of resource recovery and reuse (RRR), also called circular bioeconomy (CBE) within urban food systems. The research questions that drove this work centered on adapting food safety and environmental health guidelines, exploring incentive-based approaches, identifying sustainable finance mechanisms, understanding the uptake of RRR/CBE models, and analyzing circular resource flows. The outcomes reflected a holistic approach, aiming not only to enhance technical capacities but also to foster enabling environments for sustainable and circular resource management practices.

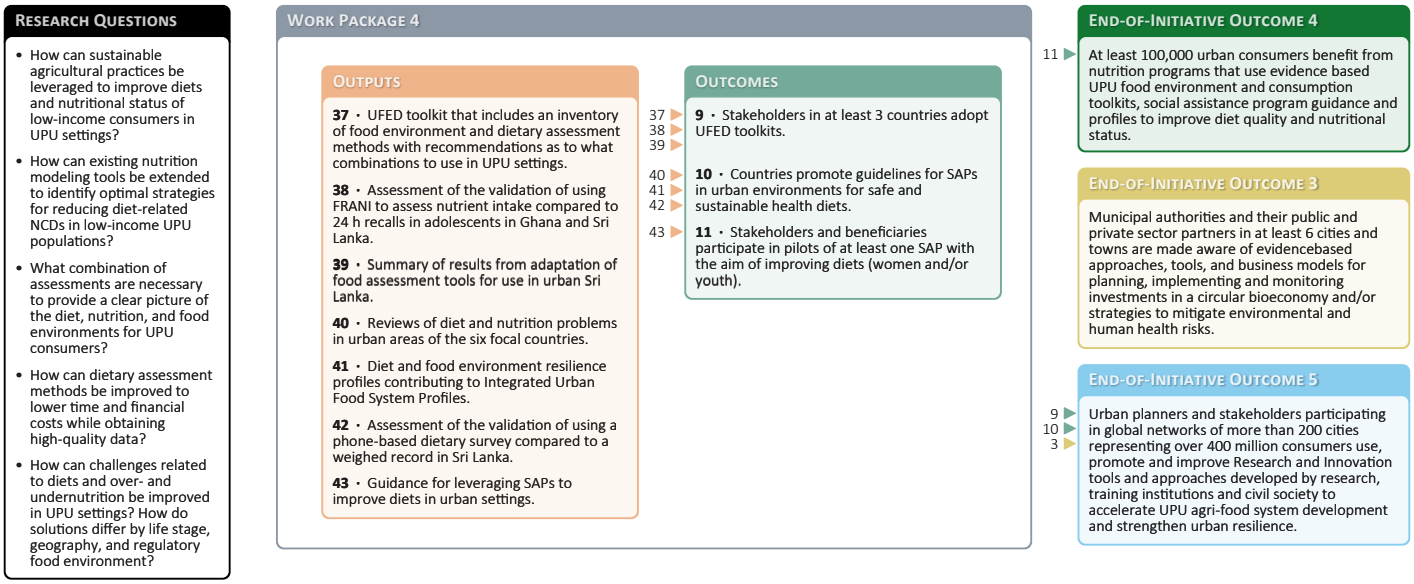
WP3 developed and disseminated evidence-based knowledge products. It conducted a comparative analysis of investment climates for the circular bioeconomy in 15 countries, directly addressing the need to understand investment options in locally viable RRR models and supportive regulatory environments (Output 30). This research identified key barriers and opportunities for private-sector engagement, highlighting the importance of robust regulatory frameworks and access to finance. Further expanding on this, WP3 provided concrete investment options for RRR, focusing on financial instruments that can attract capital for sustainable projects, specifically green bonds, within the circular bioeconomy context (Output 30). These findings directly contributed to EOIO 3 by making municipal authorities and their partners aware of evidence-based approaches for planning and implementing investments in a circular bioeconomy.

Moreover, WP3 enhanced the capacity for RRR/CBE planning and operations. A successful implementation was engagement with the Waste Management Authority (WMA) in Sri Lanka (Outcome 6). Building on a successful pilot project, WMA implemented key performance indicators developed by the Initiative to enhance operational efficiency and decision-making across 22 composting facilities in the country. Three workshops equipped over 140 officials from 49 Sri Lankan local governments with data management skills and digital tools, which will be transformed in a mobile app and enhance the currently used digital dashboard to improve solid waste management.

Understanding the adoption drivers for food safety and environmental health in urban food systems was also the focus of WP3. Research underscored the importance of addressing stakeholders' intrinsic motivations to achieve sustainable behavior change, focusing on reducing the risk of fecal contamination in urban irrigated vegetable value chains (Output 29). This work, along with guidelines for greywater use in refugee camps, provided practical strategies for risk management and emphasized the crucial role of stakeholder involvement, particularly women, in adopting safe practices (Output 29). A major outcome of the project team's contribution was the updated FAO Guideline on Water Quality in Agriculture published in 2023. All these insights are essential for urban planners and stakeholders participating in global networks, contributing to EOIO 5 by promoting and improving research and innovation tools for strengthening urban resilience.

Through these diverse research outputs and outcomes, WP3 effectively addressed its research questions and contributed to its overarching goals of promoting sustainable RRR practices in urban food systems and fostering a circular bioeconomy. The project's emphasis on evidence-based approaches, stakeholder engagement, and capacity building laid a strong foundation for future initiatives aimed at enhancing urban resilience. These efforts align with the Work Package's theory of change, which posits that by strengthening knowledge, capacity, and enabling environments, we can drive the adoption of sustainable CBE practices and contribute to more resilient and resource-efficient urban systems.

WP4: Improving food environments and consumer behavior for nutrition



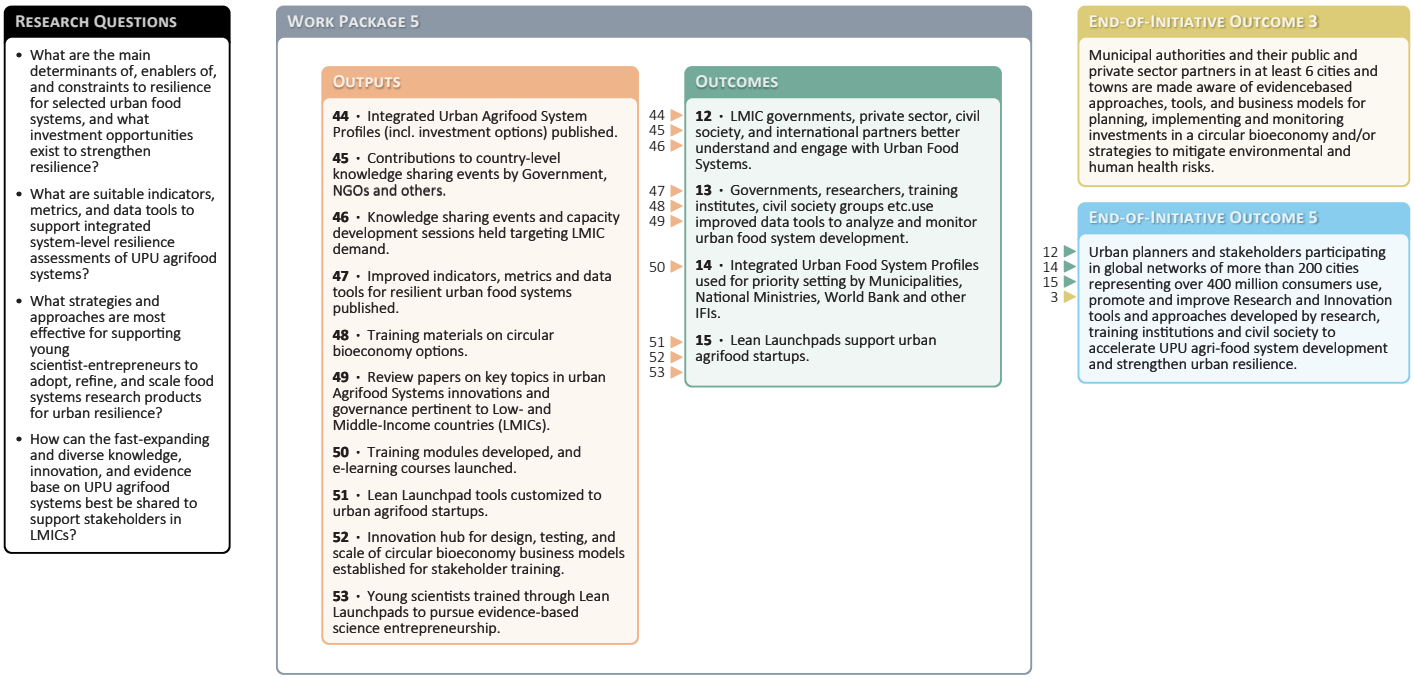
Work Package 4 progress against the theory of change

WP4 made significant strides by creating and sharing evidence-based knowledge products alongside two key digital innovations. The digital innovations include FRANI and UFED. FRANI is an AI-app that helps individuals make healthier food choices by estimating nutrient intake and providing real-time advice, particularly for vulnerable urban adolescents. FRANI's integration into systems like school feeding programs can support healthier urban food environments. The UFED tool supports users, including NGO staff, policymakers, and researchers, in understanding urban food environment and diet challenges by guiding them through a decision tree to select the most suitable assessment tools and methods, with recommendations tailored to resource constraints and urban contexts.

WP4 produced a range of knowledge products to help guide urban programs and policies. Urban nutrition country profiles synthesized data from national surveys and evaluations to highlight urban dietary challenges and food environments, with the Ethiopia profile featured on the Ethiopia country office website. These profiles were disseminated through workshops, contributing to discussions on WFP's involvement in urban nutrition, food systems, and social protection strategies in Sri Lanka, the Philippines, and Bangladesh. The scoping review on Bangladesh's food environment was under review at BMC Public Health, and a synthesis review across eight countries was being finalized for journal submission. The review includes a guidance note that offers recommendations for designing and evaluating urban social assistance interventions, which was developed with input from government, multilateral, NGO, and academic stakeholders. The team also conducted a study to compare phone-based and in-person 24-hour recalls in rural Sri Lanka to test the assumption that the phone-based method would be as accurate as, and less expensive than, the in-person 24-hour diet recalls. Lower cost methods would address one of the key constraints to understanding urban dietary shifts. This study found phone-based recalls to be a valid, cost-effective alternative, and the associated publication is forthcoming in 2025. These outputs provided actionable recommendations for improving urban food systems and nutrition. Lastly, a key policy influence opportunity in Bangladesh involved collaboration with in-country staff to engage government officials, review the Multisectoral Urban Nutrition Strategy (MUNS), and join the technical working group with the Bangladesh National Nutrition Council.

The WP's outputs, innovations, and advice strengthened partners' ability to understand, engage with, and monitor urban food systems, helping to set priorities within governments and influencing urban social assistance strategies, such as the Bangladesh MUNS. Through collaboration with partners such as the WFP, urban nutrition strategies were supported in Sri Lanka, Bangladesh, and the Philippines. One challenge was lengthy development of the UFED online tool, but it became ready for user testing. A full-scale dissemination plan will be implemented in 2025 to encourage partners to use it for planning, assessment, and monitoring purposes.

WP5: Strengthening the evidence base and research & innovation capacities for UPU agrifood system governance and growth



Work Package 5 progress against the theory of change

WP5 made steady progress in strengthening capacities, forging impactful partnerships, and integrating science into urban policy and planning processes. Over the course of the Initiative, WP5 supported entrepreneurship and innovation, built strong collaborations with international and municipal stakeholders, and provided decision-makers with improved tools and data systems. Collaborative training efforts with academic institutions equipped hundreds of young scientists and entrepreneurs with practical skills to develop evidence-based, sustainable solutions. WP5 also helped establish and grow innovation platforms focused on circular economy practices, particularly around organic waste management. Engagements with city governments supported the development of urban food system strategies, monitoring frameworks, and participatory learning processes. These efforts laid a strong foundation for more systemic transformation of urban food environments.

In 2024, WP5 achieved several notable milestones. In Lima, a partnership between CIP and the Business Incubator of the National Agrarian University La Molina, Incubagraria, led to five new initiatives, including a national innovation challenge on climate change and a hydroponics-focused entrepreneurship program for communal kitchen beneficiaries. These activities collectively resulted in the development of 54 innovation projects, demonstrating the effectiveness of the Lean Launchpad methodology in promoting science-based entrepreneurship.

In Ghana, the Circular Bioeconomy Innovation Hub, coordinated by IWMI, was formalized as a collaborative platform with 17 co-owning institutions across the public, private, and academic sectors. The partners signed a memorandum of understanding to jointly advance circular economy solutions, particularly in organic waste recovery. The Hub launched its online portal (cbeih.iwmi.org), trained over 8,600 students across 10 schools, and expanded its outreach to promote youth engagement in circular practices. A key milestone was the release of the first monitoring, evaluation, learning and impact assessment report for the Hub, which assessed progress using agreed indicators and outlined challenges and opportunities based on early implementation experiences.

In Kenya, RUAF worked closely with Nairobi and Kisumu counties to strengthen urban food systems resilience. Key achievements included publication of Nairobi's Urban Food System Profile, pilot testing of outcome-level indicators in collaboration with Mazingira Institute, and a governance assessment tool to evaluate institutional readiness for food systems transformation. RUAF also facilitated cross-county learning exchanges and co-led a training session at the World Urban Forum 12, showcasing Nairobi's progress in indicator development.

A major cross-cutting highlight in 2024 was finalization of a co-authored white paper on Resilient Urban Food Systems, developed in partnership with the World Bank and approved for publication in 2025.

Work Package progress rating summary

WORK PACKAGE	PROGRESS RATING & RATIONALE
1	On track Baseline scoping studies were conducted in the original four targeted cities and key partnerships developed in three of them. The potential for improving the production, safety, and nutritional quality of vegetables in targeted cities was demonstrated through WP1. Large numbers of UPU growers in addition to schools and tertiary training institutes collaborated or were influenced though demonstrations or introduction of new practices, crops, or varieties. The dangers of UPU crop production were also highlighted in relation to pollution and pathogen contamination.
2	On track Our key engagement with city governments in the design and testing of innovations meant that our research influenced policy, and the innovations were institutionalized in various locations. This ensured that the innovations will, in the coming years, reach higher numbers than anticipated.
3	On track WP3 enhanced planning and decision-making for RRR and CBE through capacity building and collaboration with stakeholders like the Waste Management Authority in Sri Lanka (Outcome 6). It developed viable, locally adapted CBE business models and analyzed investment climates to guide urban resilience efforts (Outcome 7). WP3 also advanced understanding of behavioral drivers for safe resource use by combining research on food safety with tools like greywater guidelines and updated standards (Outcome 8).
4	On track The two digital innovations (FRANI and UFED) are significant innovations in informing good food choices. This is in addition to the WPs several Knowledge products that have influenced Policy in countries where the WP was implemented.
5	Delayed Despite budget limitations in 2024, WP5 achieved significant progress across its core objectives — supporting innovation and entrepreneurship, strengthening international partnerships, and equipping municipal decision-makers with improved data and tools. However, the need to scale back activities and reduce the number of focus cities impacted our ability to stay fully aligned with the expected End-of-Initiative outcomes.

Definitions

On track

- Progress largely aligns with Plan of Results and Budget and Work Package theory of change.
- Can include small deviations/issues/delays/risks that do not jeopardize success of Work Package.

Delayed

- Progress slightly falls behind Plan of Results and Budget and Work Package theory of change in key areas.
- Deviations/issues/delays/risks could jeopardize success of Work Package if not managed appropriately.

Off track

- Progress clearly falls behind Plan of Results and Budget and Work Package theory of change in most/all areas.
- Deviations/issues/delays/risks do jeopardize success of Work Package.

Section 4: **Quantitative overview of key results**

This section provides an overview of results reported and contributed to, by the CGIAR Initiative on Resilient Cities from 2022 to 2024. These results align with the CGIAR Results Framework and Resilient Cities's theory of change. Further information on these results is available through the CGIAR Results Dashboard.

The data used to create the graphics in this section were sourced from the CGIAR Results Dashboard on 04 April 2025. These results are accurate as of this date and may differ from information in previous Technical Reports. Such differences may be due to data updates throughout the reporting year, revisions to previously reported results, or updates to the theory of change.

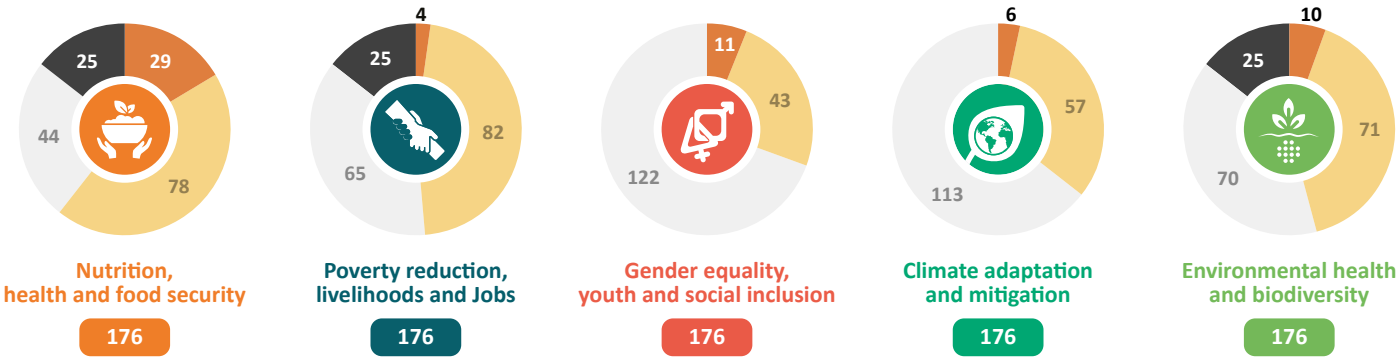
Overview of results by category

Outputs

Outcomes

Resilient Cities reported 176 results, most of which were knowledge products (88) followed by capacity sharing for development (38).

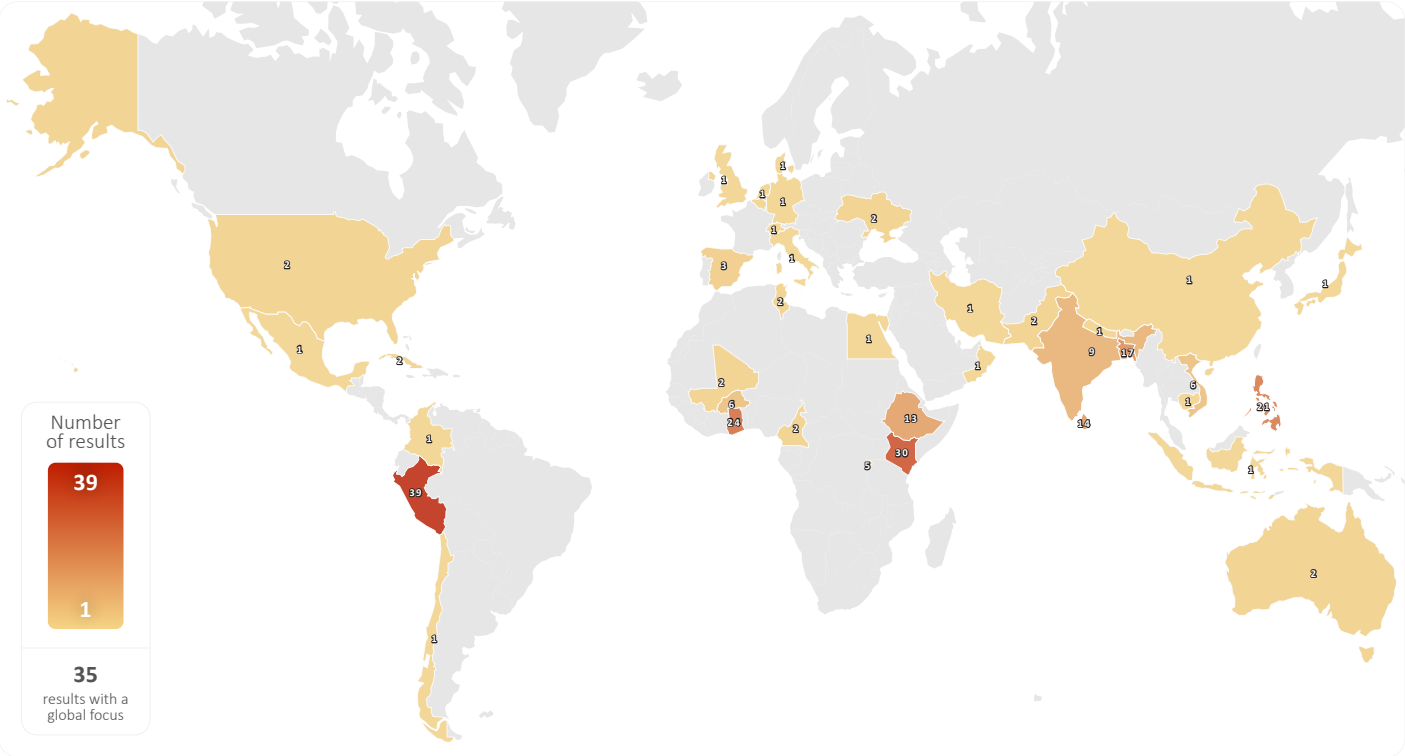
Number of results by Impact Area contribution



- **2 = Principal:** Contributing to one or more aspects of the Impact Area is the principal objective of the result. The Impact Area is fundamental to the design of the activity leading to the result; the activity would not have been undertaken without this objective.
- **1 = Significant:** The result directly contributes to one or more aspects of the Impact Area. However, contributing to the Impact Area is not the principal objective of the result.
- **0 = Not targeted:** The result has been screened against the Impact Area, but it has not been found to directly contribute to any aspect of the Impact Area as it is outlined in the CGIAR 2030 Research and Innovation strategy.
- **Not applicable:** Pertains to 2022 reported results when only information on Gender and Climate impact area tagging was available.

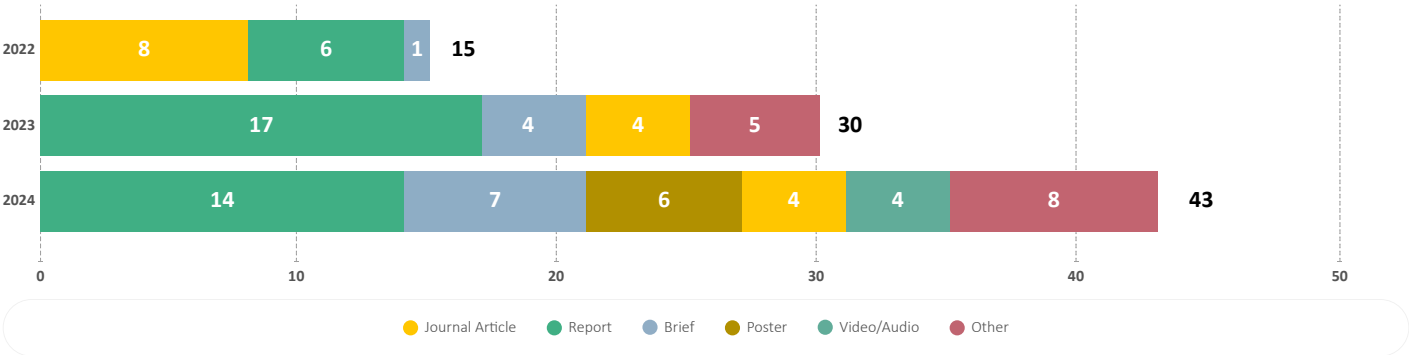
The results speak to CGIAR's five Impact Areas, but it is important to note that 26 results had a score of 2 for Nutrition, health and food security, implying that the Initiative was stronger on Nutrition, health and food security than on other Impact Areas.

Geographic focus of results



The Initiative's activities were spread across the globe, with most implemented in Peru, Kenya, Bangladesh, the Philippines, and Ghana.

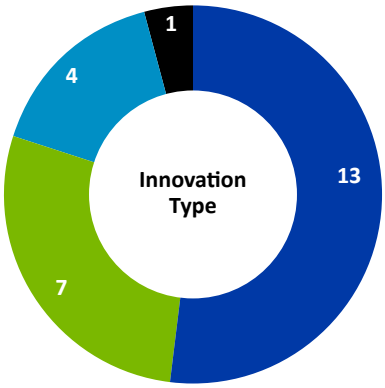
Knowledge products by type



Reports made up the bulk of the knowledge products, and, as expected, most knowledge products were reported in 2024. However, some knowledge products were still under development and will be reported through CGIAR's Science Programs for the 2025 reporting period.

Number of innovations and their readiness levels

Innovations by typology



TECHNOLOGICAL INNOVATION
Innovations of technical/material nature, including varieties/breeds, crop and livestock management practices, machines, processing technologies, big data, and information systems.

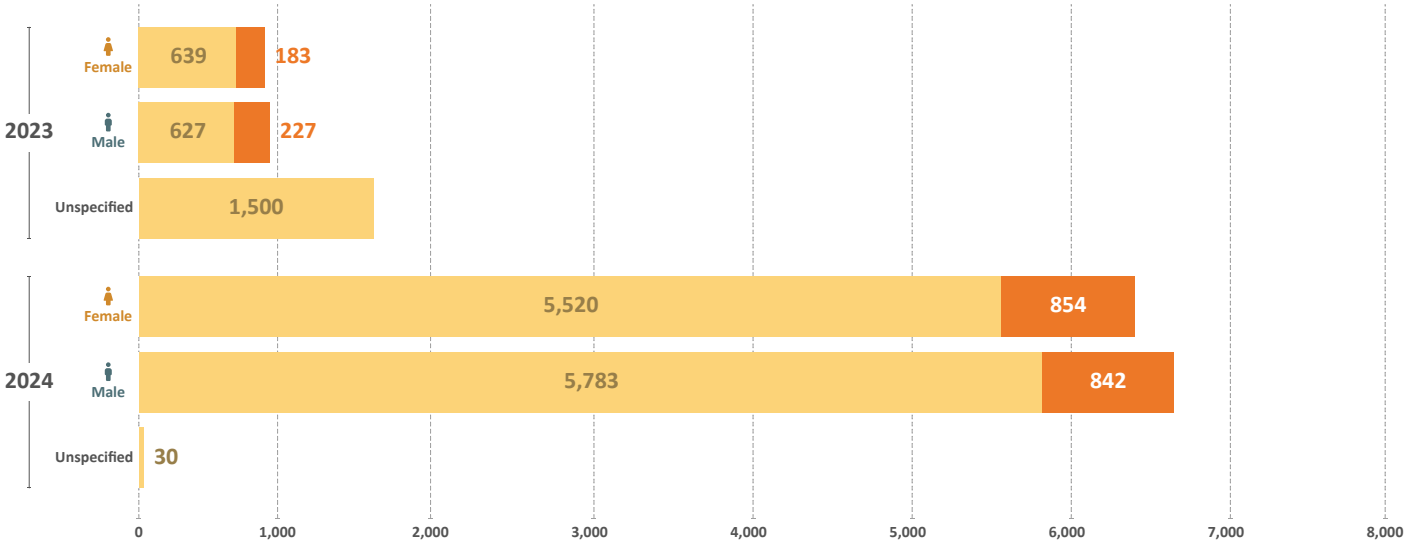
POLICY/ORGANIZATIONAL/INSTITUTIONAL INNOVATION
Innovations that create enabling conditions, including policy, legal and regulatory frameworks; business models; finance mechanisms; partnership models; public/private delivery strategies.

CAPACITY DEVELOPMENT INNOVATION
Innovations that strengthen capacity, including farmer, extension or investor decision-support services; accelerator/ incubator programs; manuals, training programs and curricula; online courses.

OTHER INNOVATION
Unknown or the type does not work for the innovation.

The innovations reported were at different levels, but most were at level 5 and below, highlighting the need for continuity in working on these innovations to reach the levels at which they can be scaled.

Number of individuals trained by the initiative

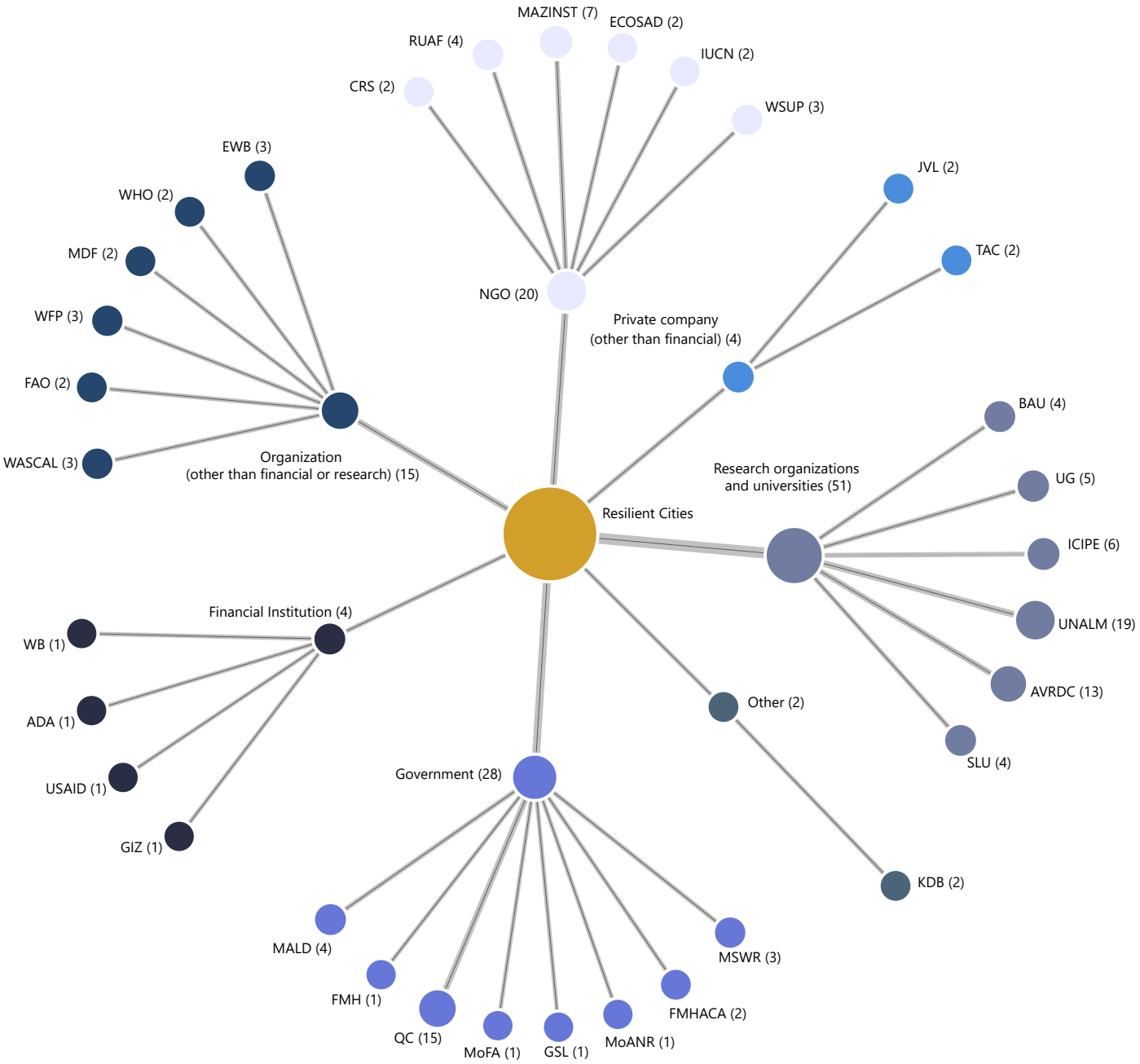


Long-term trainees: Long-term training refers to training that goes for three or more months.
Short-term trainees: Short-term training refers to training that goes for less than three months.

The beneficiaries of the Initiative's capacity sharing work were gender responsive since similar numbers of men and women (49 percent women, 51 percent men) were involved.

Section 5: **Partnerships**

Resilient Cities's external partners



The diagram maps the external partners of the Resilient Cities Initiative, organized by partner type. The numbers in brackets represent the number of results each partner has contributed to, reflecting the scale and diversity of collaborations. To allow for a clearer view, a maximum threshold of six partners was applied for each typology. The list of partner acronyms is available here

Partnerships and Resilient Cities's impact pathways

Since 2022, the Resilient Cities Initiative worked with 47 partners. These were Research Organizations and Universities (10), Organizations other than financial or research institutions (12), NGOs (9), Governments (8), Private companies other than financial (2), and financial institutions (2). The Research Organizations and Universities were instrumental in most of the innovations reported, while NGOs were important in scaling and capacity development.

WP1 partnered with the World Vegetable Center in promoting production of healthier and more nutritious vegetables in UPU settings. The engagement of the Nairobi City County in WP1 activities strongly facilitated access to growers, schools, and organizations involved in UPU vegetable production while jointly involving County agricultural staff in a mutually beneficial arrangement. Interactions with Fascination of Plants (https://plantday18may.org/) activities, especially in schools, helped reach a broad international audience. In Bangladesh, the Initiative partnered with the Bangladesh Agricultural University to conduct research on rooftop gardens — testing alternative technologies and analyzing food safety risks. The Initiative partnered with FAO to analyze the impact of the project that trained

5,000 urban households in gardening. In Metro Manila, close partnership with the Quezon City administration helped to diversify and improve urban community gardens with the International Institute of Rural Reconstruction and to conduct a study with Ateneo de Manila University, a local university in Quezon City. We also initiated collaboration with Quezon City University on urban farming.

In WP2, after piloting the VBS in 2023 and 2024, the Quezon City government institutionalized the VBS ordinance, which was passed in 2025. VBS will be a regular program of capacity building for vendors in the city. The local government of Pachacamac, one of Lima's districts conducting urban and peri-urban agriculture, approved an ordinance supporting food rescue programs at the farm level, supporting the logistics and processes of fresh food rescue to contribute to better nutrition in the community kitchens in Manchay. Partnerships and alliances were crucial to research on viable food source alternatives, to providing training and capital to beneficiaries based on needs, to promoting solidarity, to developing a territorial sustainable use of resources, and to fostering policy advocacy to create an enabling environment for inclusive food security.

In WP3, partnerships played a vital role in connecting research outputs to real-world change across multiple levels — from global policy to local implementation. Our collaboration with FAO was a key highlight, where our contributions directly informed the updated global guidelines on Water Use in Agriculture. This not only reflected the value of our scientific inputs but also reinforced how strategic partnerships can scale research impact at the global level.

At the country level, we conducted targeted assessments and actively disseminated research across partner countries, ensuring that national institutions were equipped with context-specific knowledge. Locally, we prioritized partnerships that allowed us to influence direct service delivery and practices. For example, in Sri Lanka, we engaged deeply with municipal stakeholders and the Waste Management Authority to enhance the operation of composting facilities — supporting a transition to more circular, sustainable waste management systems.

Our collaborations with humanitarian organizations represented another important dimension of our partnership strategy. These partnerships helped fill critical service gaps and address the needs of vulnerable populations. Refugee camps, often located in urban peripheries with limited infrastructure, face acute challenges in water supply and food security. We piloted water reuse interventions in these settings and co-developed guidelines that promoted safe water reuse for urban agriculture. These guidelines are now being adopted by humanitarian organizations to scale similar practices across other regions.

In WP5, we strengthened our collaborative efforts through the creation and support of Circular Bioeconomy Innovation Hubs in Ghana and similar initiatives in Vietnam and India. These hubs serve as inclusive, multistakeholder platforms and living labs, where public institutions, private enterprises, and researchers co-develop and test circular bioeconomy innovations. In Ghana, private-sector partners such as Jekora Ventures and Safisana brought valuable expertise in circular economy and waste-to-resource technologies. The Innovation Hubs demonstrated a scalable model for fostering innovation grounded in local priorities and sustainable business practices. For more information, visit: https://cbeih.iwmi.org/.

Resilient Cities Policy Forum on Urban Food Systems co-organized with the Quezon City government. Credit: Resilient Cities Initiative

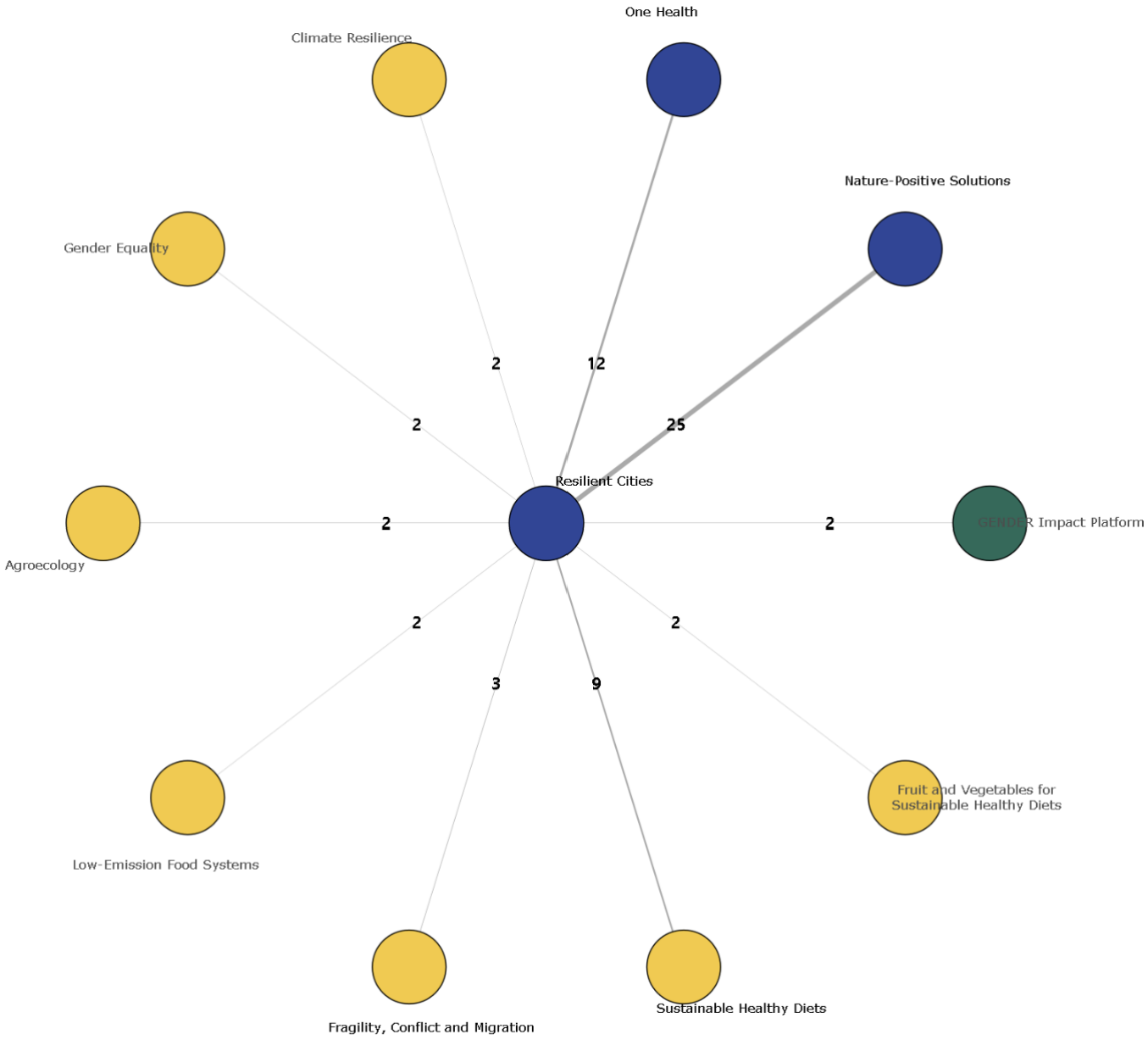
We further deepened our collaboration with Nairobi City County, presenting the institutional capacity-building initiatives undertaken in Nairobi at the World Urban Forum. A new partnership with Welthungerhilfe in Lima enabled us to launch joint activities aimed at strengthening Communal Kitchens, with a focus on developing targeted innovations starting in 2025 .

Finally, our partnership with the World Bank resulted in a co-authored CGIAR/World Bank white paper on Urban Food Systems, which has been reviewed and accepted for publication in 2025.

Partner selection was driven by the alignment of partners with our theory of change. At the output level, we prioritized organizations that facilitate direct research application, while at the outcome level, we engaged partners with influence over broader systems and policy environments. Partners from national agricultural research and extension systems were involved as much as possible to ensure contextual relevance and strengthened pathways for long-term adoption.

Section 6: **CGIAR Portfolio linkages**

Resilient Cities's internal network of collaborations



The diagram presents the internal collaborations of the Resilient Cities Initiative with other CGIAR Initiatives and Impact Area Platforms. Connections are sized according to the number of shared reported results, highlighting the depth of collaboration across the CGIAR Portfolio. A results threshold filter is applied (set to a minimum of two results) to focus the view on the most significant collaborations. Thicker lines represent stronger collaborative links based on a higher number of shared results.

Portfolio linkages and Resilient Cities's impact pathways

The diagram presents the internal collaborations of the Resilient Cities Initiative with other CGIAR Initiatives and Impact Area Platforms. Connections are sized according to the number of shared reported results, highlighting the depth of collaboration across the CGIAR Portfolio. A results threshold filter is applied (set to a minimum of two results) to focus the view on the most significant collaborations. Thicker lines represent stronger collaborative links based on a higher number of shared results.

Since 2022, the Resilient Cities Initiative collaborated the most with four other Initiatives: Nature-Positive Solutions for Shifting Agrifood Systems to More Resilient and Sustainable Pathways (Nature-Positive Solutions, 25 results), Protecting Human Health through a One Health Approach (One health, 12), Sustainable Healthy Diets through Food Systems Transformation (Sustainable Healthy Diets, 9), and Fragility, Conflict and Migration (3).

The Resilient Cities Initiative collaborated with the One Health Initiative in the design and pilot testing of an innovation to improve food safety in meat markets in Addis Ababa. This work generated many lessons around what works and what doesn't to improve food safety in butcher shops and could be the basis of upcoming

innovations in this space. We also collaborated with the Sustainable Healthy Diets Initiative in gathering evidence on food safety and informal businesses practices in Addis Ababa. Additionally, we conducted formative research to support the development of a novel food safety scale that would help monitor how food safety considerations affect consumer food choices and, ultimately, the adoption of healthy diets.

The impact evaluation study in Bangladesh and the work on urban gardens in the Philippines was conducted in collaboration with the Fruit and Vegetables for Sustainable Healthy Diets Initiative. Home gardens are an interesting case of an end-to-end intervention approach, and this Initiative aimed to strengthen the evidence base for such approaches. The Philippines is a target country of both the Resilient Cities and the Fruit and Vegetables for Sustainable Healthy Diets Initiatives. While Bangladesh is not a target country for the Fruit and Vegetables for Sustainable Healthy Diets Initiative, the linkage allowed research on end-to-end approaches in the country.

The Resilient Cities Initiative collaborated with the Nature-Positive Solutions Initiative through a shared focus on circular bioeconomy approaches, though from different entry points — agriculture waste streams in rural settings for the latter, and organic waste streams in urban environments for the former. These rural-urban linkages are critical to understanding how nature-positive strategies can be adapted across contexts. A 2024 cross-country study on the investment climate for circular bioeconomy enterprises demonstrated key enablers and barriers for private-sector engagement, offering important insights for both Initiatives. Additionally, the Circular Bioeconomy Innovation Hubs in Ghana and other countries represented joint efforts to pilot scalable, nature-based solutions that contribute to environmental health and sustainable livelihoods. Working together strengthens the development of integrated models that apply across the rural–urban spectrum.

One Health principles are particularly relevant in urban settings of the global South, where livestock are often integrated into city food systems and mismanaged waste can pose serious risks to both human and environmental health. The Resilient Cities Initiative aligned with One Health through its focus on safe waste reuse and circular economy practices. A key example was the report on “Resource Recovery from Livestock Waste: A Compilation of Business Cases from the Global South, 2024”, which highlighted innovative models for transforming livestock waste into energy, compost, and aquaculture feed. These solutions not only reduce pollution and improve public health but also support livelihoods and promote safer urban environments.

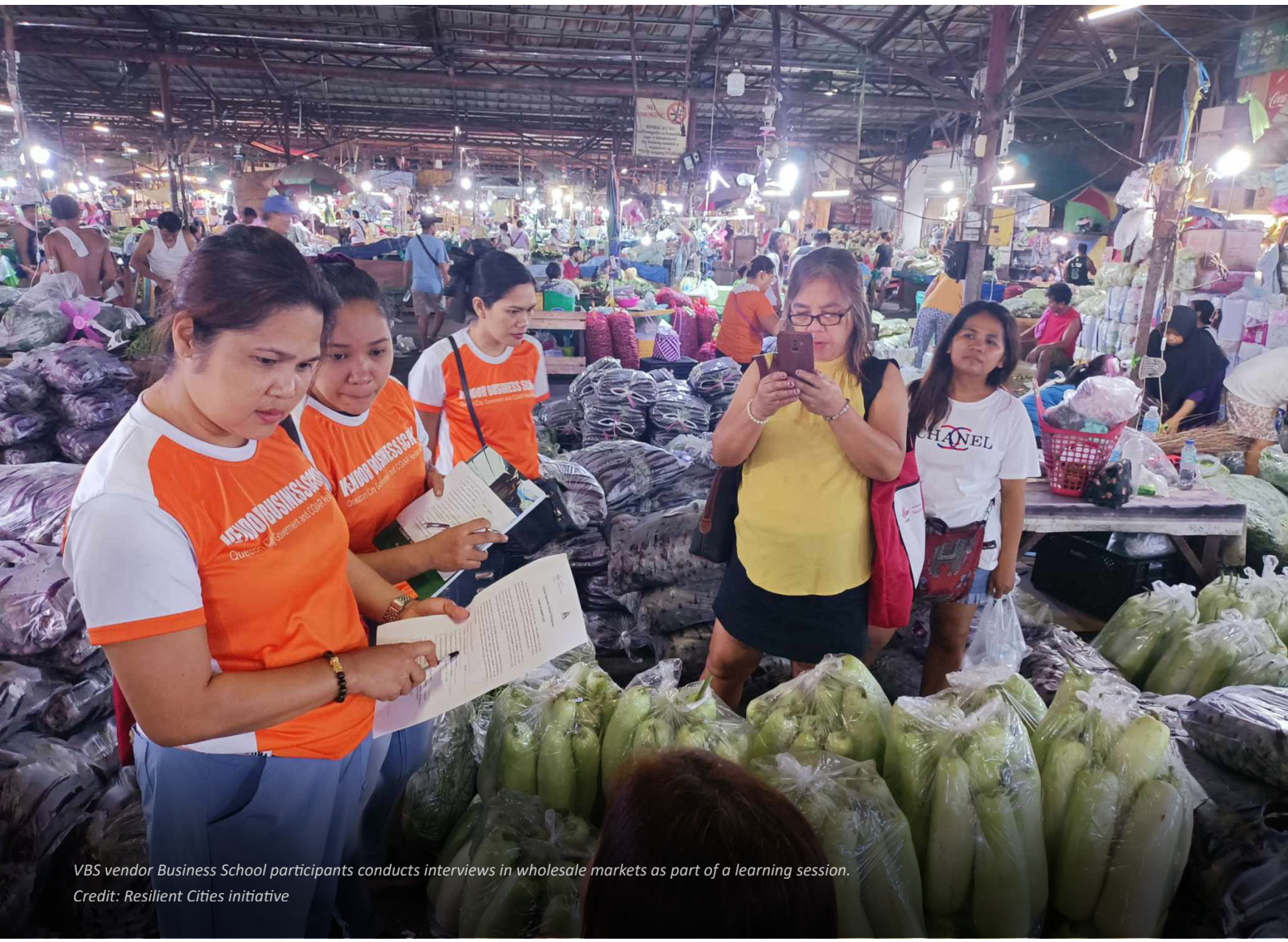
The Resilient Cities Initiative established a strategic linkage with the Fragility, Conflict and Migration Initiative through joint efforts to address water reuse in refugee contexts — of particular importance given that refugee camps are often situated in or near urban areas, where they interact closely with host communities. A 2024 report on “Greywater Use for Food Security in Refugee Camps” included a guidance note that offered a practical decision-making framework for using greywater in refugee camps to promote local food production. This approach supports food security, reduces water stress, and fosters resilience in both displaced and host populations. By enabling safe greywater re-use, the Initiative contributed to healthier environments and more cohesive local food systems. The work also emphasized the key role of women in managing water reuse, from crop selection to risk reduction, and was taken up by humanitarian organizations to inform broader practice. These efforts exemplify how urban resilience strategies can be adapted to support communities living under pressure while promoting environmental sustainability and inclusive social outcomes.

Together, these Portfolio linkages strengthened the Resilient Cities Initiative’s alignment with CGIAR’s wider mission and demonstrated how integrated, cross-cutting research can deliver context-specific, scalable solutions for sustainable urban futures.

Vendor Business School graduate showing her certificate during graduation. Credit: Resilient Cities initiative

Section 7: **Key result story**

Vendor Business Schools: An Innovative Approach to Strengthening Entrepreneurial Skills of Informal Market Vendors in Quezon City, Philippines (by Arma Bertuso and Silvia Alonso)



VBS vendor Business School participants conducts interviews in wholesale markets as part of a learning session.
Credit: Resilient Cities initiative

Primary Impact Area

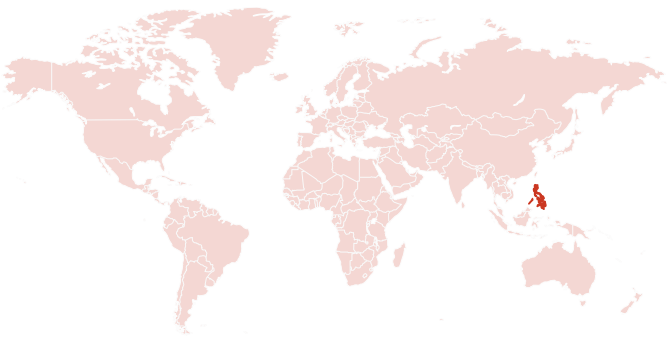
Contributing Initiative

Resilient Cities

Contributing external partners

Quezon City Government

Geographic scope



Countries: The Philippines

The Philippines is rapidly urbanizing, with over half of its 109 million citizens living in urban areas as of 2020 (UN-Habitat 2023; PSA 2022). This shift is driven by people migrating to cities in search of better economic opportunities and services. However, this urban growth poses challenges, particularly in ensuring access to nutritious, locally sourced food. The informal food sector, which supplies around 60 percent of the country's domestic food needs (USDA 2015)[1], plays a crucial role in meeting this demand. While informal vendors — many of whom are women — provide essential goods and services and selling food is a vital source of employment, these vendors face significant hurdles, including limited access to finance, inadequate business skills, and difficulty navigating regulations.

To address these challenges, the Resilient Cities Initiative introduced the Vendor Business School (VBS) in 2023. This innovative program, developed in collaboration with Quezon City's government, aims to empower informal food vendors by enhancing their entrepreneurial skills and helping them transition toward the formal economy of the country. The VBS combines group training sessions with individual coaching to provide both theoretical knowledge and practical support tailored to each vendor's specific needs.

The program's group training consists of ten weekly two-hour sessions covering topics such as entrepreneurship, negotiation skills, food handling, and safety. These sessions emphasize active participation through exercises, group discussions, and market visits. Social learning — a key feature of the program — encourages vendors to share experiences and build support networks. Following the group sessions, individual coaching at the vendors' workplaces helps them apply their learning to real-world situations. Facilitators work closely with participants to set and achieve specific business goals.

By 2024, the VBS had trained 120 vegetable vendors in Quezon City's public markets and street kiosks, with 72 percent of the participants being women. Of these, 108 completed the program. Vendors reported significant improvements in business practices such as record-keeping, budgeting, customer relations, and food safety. For example, record-keeping compliance rose from 58 to 80 percent, while budgeting improved from 38 to 55 percent[2]. Participants also noted better communication skills and stronger relationships with customers and fellow vendors. Coaching sessions proved instrumental in connecting vendors to city support services like livelihood grants. The testimonies below from some of the vendors highlight the impact of this program.

The program's success has led to its institutionalization in Quezon City. The Quezon City Council, under the leadership of Mayor Joy Belmonte, approved an ordinance establishing the VBS as a permanent initiative starting in 2026. This move underscores the importance of informal food vendors in creating equitable and resilient urban food systems.

The VBS model has also been piloted in Nairobi, Kenya, where it showed similar positive outcomes. In Kenya, the program inspired initiatives like the Kenya Dairy Board's effort to improve milk safety and business skills within the informal dairy sector.

The Vendor Business School demonstrates how targeted education can transform informal markets into more professionalized sectors. By empowering vendors with knowledge and skills, programs like the VBS not only strengthen individual businesses but also stimulate local economies and contribute to more sustainable urban food systems

When I joined VBS, it was only then that I realized and started to dream because I really lacked confidence. I used to think I couldn't do it. But as we attended VBS, I gradually began to dream, and it gave me the courage to try and fulfill a dream." "Thank you for the opportunity to be one of those selected to study at VBS. This is a great experience for us because we only focus on selling. I realized there was also opportunity to increase my knowledge on how to take care of customers, take care of my products, and provide the right quality to customers — not just to make a sale but also to offer quality food that they will serve at their dining tables."

VBS has helped me a lot and I have learned so much. I can teach this to my children who also want to start a vegetable business in the future. It was a really enjoyable experience studying at VBS, truly a very happy experience."

"For me, the VBS program has been a huge help because our sales and profits have significantly increased. This is due to the proper systems and methods we learned for running our store."

[1] https://unhabitat.org/sites/default/files/2023/06/5._un-habitat_philippines_country_report_2023_final_compressed.pdf
[2] https://hdl.handle.net/10568/168210

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Circular BioEconomy Hub Ghana - Preparing Food Waste for Composting