



Policy, Plates, and Planet: Actions to catalyze urban food system transformation

Cities are enablers of food system transformation.

Food is inextricably linked to cities and all major socio-environmental systems. The FAO finds that, “at least 55% of the world’s population already lives in urban areas and 80% of all food produced globally is destined for consumption in urban spaces.”¹ This role of cities as centers of consumption, endpoints of production and producers of waste, make the urban environment a strategic entry point for local governments and their partners to work towards climate, economic, and social justice in the global food system.

Food is a major contributor to city footprints.

In 2017, C40 found urban-food related climate gas emissions to be 582MtCO₂e per year, equal to 13% of all consumption-based emissions (CBE). With no action these emissions from agriculture, processing, transportation and food waste could increase 38% by 2050.² The most compelling areas to target for urban food system interventions are healthy and sustainable diets and food waste.

WWF has identified that increasing the accessibility of [Planet-Based Diets](#); healthy food made with sustainable ingredients, produced within planetary boundaries, adapted to local contexts, that includes a larger proportion of plant-based foods where appropriate, is essential. Creating opportunities for the accessibility of Planet-Based Diets could contribute to a 60% reduction of emissions, while avoiding household and supply chain waste could reduce emissions by 10% and 5%.³ By using a whole society approach and collaborating with governments, businesses, and civil society to target diets, waste, supply chain innovation and behavior change in the urban food system, there is significant potential to reduce intensive carbon emissions.

Cities are opportunity zones.

It is impossible to catalyze a comprehensive food system transformation without acknowledging the interdependencies between food and water, energy, biodiversity, transportation, waste, infrastructure, the economy, health, justice, culture, and how each of these systems metabolize within the fluid boundaries of the urban space. By integrating sustainability, and equity into these interdisciplinary practices through food, the co-benefits will enable a safer, healthier and more accessible city for all people.

By strengthening urban food systems, governments and their partners can simultaneously enhance resiliency. The COVID-19 Pandemic has disrupted urban food systems, increasing commodity prices, suspending school-food operations and closing informal markets.⁴ During the pandemic, food insecurity was exacerbated, lockdowns burdening low-income communities most significantly. This disruption exemplifies the necessity for local governments to create policy and resources that ensures food accessibility and sustainability, particularly with increasing climate impacts and future

¹ [FAO framework for the Urban Food Agenda](#)

² [Addressing Food-Related Consumption-Based Emissions in C40 Cities](#)

³ *ibid*

⁴ [Insights and opportunities for equitable food systems: Urban Lockdown Lessons](#)

pandemics. Investments that build back better from the pandemic have bi-partisan and cross-sectoral support, providing opportune timing for investments in resilient food systems. These gains for urban food system transformation can also provide opportunities to increase resiliency in rural communities, expanding on synergies with rural decision-makers, organizations, and companies. Urban food systems inherently rely on, and are connected to, the surrounding regions, and gains for urban food can equally benefit the extended system.

Local governments need to be empowered.

Cities are uniquely situated to innovate and adapt in ways that national governments cannot. While increasingly responsible for climate change, public health and the economy, cities also have increasingly strong political voices and participate in global platforms. However, to make equitable, low-carbon, and resilient urban food systems a reality, local governments must have increased maneuverability to be regulators and enablers. Policymakers and their partners should be empowered and funded to create multi-stakeholder governance mechanisms⁵ that create integrated mandates addressing food-related challenges through evidence-based planning and institutional mechanisms. This must happen vertically and horizontally.

Globally, frameworks should highlight the importance of cities as leaders and action labs to innovate and create solutions that can be scaled. Vertically, national governments should also look to city initiatives, providing support, funding and coordinating emission reduction targets throughout the system.

One of the largest challenges for the city-regional food system is working across silos to deliver comprehensive and intersectional solutions. Therefore, local governments should have the tools to work horizontally, coordinating cross-departmental efforts and collaborating with citizens, the informal and private sectors, and all other stakeholders throughout civil society.

Broader horizontal integration is also quickly advancing outside the city through trans-local networks⁶ ([C40 Good Food Cities](#), [Milan Urban Food Policy Pact](#), [OPCC](#), [ICLEI-RUAF CITYFOOD Network](#), [Sustainable Food Places](#) etc.) created by organizations to connect cities and share best practices. These areas of intervention span planning, procurement, citizen mobilization, engagement, education, and include strengthening urban-rural linkages, supporting local and urban agriculture, and creating waste management solutions.

Though many core priorities and challenges for food system change are shared internationally, it is critical to note that food policy cannot be applied prescriptively, each city has unique socio-cultural, political and geographical contexts, and thus must co-create an individualized pathway.

Behavior change tools can increase action competence and stimulate demand.

A food system is influenced and created by social, political, cultural, technological, economic and natural environments. In order for cities to engage citizens in the shift towards more sustainable food systems, they must work within these human dimensions. Behavioral science can be used by local governments to create and support mechanisms that influence citizen choice, adjusted depending on community and country context.⁷ Policies can target and reduce barriers, using taxes, bans or subsidies as levers. They can provide effective communication and information, empowering and boosting citizens to make more informed decisions. Through prompts or nudges, programs can make healthy Planet-Based options the default, more attractive, larger, or at the forefront of menus and options. By highlighting behavior, drawing on community networks and promoting

⁵ [National and Subnational SFS MSM: an assessment of experiences](#)

⁶ [Re-assembling sustainable food cities: An exploration of translocal governance and its multiple agencies](#)

⁷ [Save Nature Please](#)

commitment devices, local governments can foster sustainable norms. Simultaneously, city governments should explore behavioral techniques that limit the marketing of high fat, salt and sugar (HFSS) foods to children.⁸ Municipalities should work to implement the WHO food marketing recommendations, and pressure national governments to do the same. Municipalities can also collaborate with, and support CSOs and companies that use these techniques to mobilize and influence citizens.

Action can be taken at all levels of government.

Globally, nationally, regionally and at the municipal level, food policy is characterized by a 'governance gap,' lacking a sectoral approach that can address the topic systemically. Differentiated responsibilities and priorities across departments and organizations prevent each from addressing food as a multi-dimensional issue and consequently, preventing substantial climate action and the interrelated issues of food insecurity, resource use, poverty and health.⁹ By taking a food systems approach to policy-making, environmental, agricultural, health, trade, and industry policy agendas can be connected.¹⁰

By using a dedicated urban food system perspective to work on climate change, large sectors of CBE can be targeted, with co-benefits spilling into multiple sectors and practices.

CHALLENGES

1. The urban food system is not seen as systemic or cross-cutting. Therefore, it is not a political priority, is insufficiently funded, and local governments lack food mandates.
2. National food policies are not vertically integrated nor align with global frameworks, such as the SDGs. They often limit municipal priorities to create localized, healthy and equitable food systems.
3. Effective engagement mechanisms that connect local governments and certain stakeholders (e.g. CSOs, private sector, research organizations) to those with less capacity to participate are often lacking, resulting in potential conflicts of interests or power imbalances.
4. Large, context-specific data gaps exist on socio-environmental aspects (e.g. GHG emissions, nutrition, biodiversity impacts, eutrophication, waste, foodscapes, water use connected to consumption) throughout the food system, especially at the local level, making it difficult to identify leverage points.
5. Nutritious and healthy food is not equally accessible. Inequitable distribution, lack of purchasing power and expensive prices, combined with market concentration in the retail sector and marketing of profitable but unhealthy food to vulnerable populations create a harmful urban food environment.
6. Urban infrastructure and planning largely do not prioritize access to sustainable food, nor facilitate bottom-up solutions (e.g. informal vendors, markets, peri-urban agriculture) to fill this gap.
7. Nutrient flows in the urban food system are linear and lack circular thinking. Agricultural inputs are wasted in urban sanitation systems and dispersed, causing environmental degradation, while chemical dependency in food production grows. Without a closed loop system, opportunities for resource efficiency and soil fertility are missed.

⁸ [Policies to limit marketing of unhealthy foods to children fall short of protecting their health and rights](#)

⁹ [Making Better Policies for Food Systems](#)

¹⁰ [National and Subnational SFS MSM: an assessment of experiences](#)

GLOBAL GOVERNANCE

There is a need for global action, and it must be taken urgently. While global awareness of urban food governance as a key tool for climate and social justice is increasing (Appendix 1) through impactful frameworks such as the [Glasgow Declaration](#), international forums must encourage and enable national governments to prioritize food action in cities.

WWF Invites

Global frameworks and international organizations to:

- Recognize that food systems account for 21-37% of global greenhouse gas emissions and that food plays a vital role in contributing to major global challenges relating to public health, nutrition, hunger, biodiversity.¹¹
- Encourage public authorities to establish a clear distribution of roles and responsibilities across different institutional levels for food systems transformation and ensure the engagement and contribution of food-related businesses in the process.
- Recognize the crucial role played by citizen initiatives and local levels of governance in reshaping food systems. Promote and support robust mechanisms for participation of citizens and producers engaged in food-related initiatives in policy development and international processes.
- Understand the opportunity to accelerate climate action through sustainable food systems and deliver co-benefits, including the promotion of biodiversity, ecosystem regeneration and resilience, circular thinking, equity, access to healthy and sustainable diets for all, and the creation of resilient livelihoods for farm and food workers through policy.¹²

NATIONAL AND REGIONAL GOVERNANCE

National governments are crucial to advancing urban food system transformation. They can create an enabling environment to advance their city's capabilities to manage and influence food systems. Ministries of agriculture, forestry, health, trade, social protection, education, and environment¹³ can together coordinate integrated approaches to support local and impactful initiatives, provide incentives or state funds, and set national guidelines. This requires national governments to also take an intersectional approach, recognizing the importance of the food system as it relates to major national challenges, and the criticality of the urban environment in innovating solutions that can produce tangible results and co-benefits.

WWF Invites

National governments to:

Planning

- Enable integrated and overarching food system policy frameworks and multi-level governance mechanisms that allow coordinated decision-making, equalizing all voices, as well as recognizing trade-offs, and abilities to participate.
- Seek policy coherence to prevent national policies that advance sustainable food systems from being undermined or contradicted by other national policies.
- Develop inclusive national food policies that prioritize a rights-based approach to food within the revision of the Nationally Determined Contributions (NDCs) for climate change and include food policies into climate action planning frameworks.¹⁴
- Establish or update national dietary guidelines (NDGs) that align with or contribute to the Planet-Based Diets perspective.

¹¹ [Understanding City Region Food Systems](#)

¹² [Glasgow Declaration](#)

¹³ [Green Cities Action Programme: building back better](#)

¹⁴ [Glasgow Declaration](#)

- Utilize social protection systems to increase access to healthy food for vulnerable populations while prioritizing specific beliefs, cultures, traditions, dietary habits and preferences of diverse communities.¹⁵
- Integrate food policies into social safety nets and cash transfer redistributive policies.
- Ensure that sustainable food systems law and policies establish an inclusive just transition policy process which engages a variety of actors, prioritizing farmers and fisherfolk.¹⁶

Procurement

- Release national procurement principles in line with [Planet-Based Diets](#) guidance that prioritize affordable, safe, seasonal and nutritious food that is sustainably produced using agro-ecological principles within planetary boundaries and adapted to local contexts. Based on local contexts and human health considerations, integrate recommendations relating to increased consumption of plant-based foods where relevant and support local governments to do the same.
- Increase procurement of environmentally labelled, certified foods, and phase out products with low-environmental performance. Encourage and support local governments to do the same.

Education and Knowledge Creation

- Evaluate existing policies, investments and resources directed at food systems in urban and peri-urban areas to plan impactful actions, and propose recommendations for the integration of urban food system solutions into existing national priorities.¹⁷
- Acknowledge that cities and city-regions are where transformative food system development must happen, and that cities are uniquely positioned to connect and mobilize citizens and partnerships that can collectively deliver reforms.¹⁸
- Work with research institutions, thinktanks, academic institutions, and farming stakeholders to invest, scale, and accelerate research and development on approaches that establish an agroecological food production system. Pursue solutions for integrated pest management, strip cultivation, hoeing and weeding, and traceability mechanisms that track commodity production from farm to market and create participatory mechanisms for implementation.¹⁹
- Encourage and support schools nationally to plant gardens and practice composting for interactive learning to teach children about natural growing cycles and healthy eating habits.
- Support schools to make action plans that implement a [Whole School Food Approach](#), working interdisciplinary with food quality, food leadership, food culture, food education and engaging community and partnerships.
- Establish practices for city-to-city knowledge sharing, and bridge twinning agreements through existing partnerships (MUFPP, ICLEI, C40, UCLG, OPCC, etc.)²⁰

Urban-Rural Linkages

- While supporting and incentivizing initiatives that enhance urban-rural and consumer-producer linkages through shortened supply chains, increase local procurement and farmers markets, support producer organizations and producer-to-consumer networks/platforms, include farmers and rural stakeholders in policy discussions, invest in rural interests, and stimulate rural jobs and education to halt rural-urban mass migration.
- Eliminate restrictions, and provide guidance, technical training, and financial assistance to cities and regions for food producers to increase economically viable circularity, (animal feed from food waste, compost from food waste, grey water from post-consumer use, sanitized source separated excreta, and energy from waste etc).²¹

CITY GOVERNANCE

Cities are uniquely positioned to support a community of political actors and mobilize people and institutions around shared values and issues. By creating multi-disciplinary place-based solutions,

¹⁵ [Milan Urban Food Policy Pact](#)

¹⁶ [WWF Discussion paper: Opportunities for an EU Food Systems Law](#)

¹⁷ [Green Cities Action Programme: building back better](#)

¹⁸ [Glasgow Declaration](#)

¹⁹ [WWF Food Practice Narrative](#)

²⁰ [Green Cities Action Programme: building back better](#)

²¹ [Milan Urban Food Policy Pact](#)

cities may be leaders in shifting disrupted food metabolisms throughout the supply chain. With key emphasis on collective action and developing solutions amongst diverse stakeholders, urban development can be advanced with equity at the center.

WWF imagines a city-region with participatory urban governance that acknowledges all stakeholders within the food system, prioritizing informal and historically marginalized actors. The ideal food city would use these processes to ensure every person has access to nutritious, healthy, and low-emissions food, in line with a Planet-Based Diets perspective, reducing waste, and improving overall public health outcomes.

WWF Invites

City governments to:

Planning

- Map food system actors and identify entry points for policy development using system-based problem framing, prioritizing marginalized communities.
- Evaluate existing city policies, frameworks, investments, and resources directed at food systems in urban and peri-urban areas to collect and consolidate impactful actions, and integrate urban food system solutions into existing priorities.²²
- Create policies focused on shifting towards healthy, sustainable diets, reducing food waste and transforming the food supply chain.
- Integrate sustainable food policies into local climate action planning frameworks, and ensure holistic regulations that balance urban and rural interests. Collaborate with peri-urban areas and regional authorities to advance investment in rural agricultural jobs and education.
- Develop strategies and frameworks that allow equitable cross-sector coordinated decision-making. Create participatory planning processes and multi-stakeholder mechanisms (such as food policy councils) for the convening of diverse food system stakeholders (city agencies, local actors, coalitions of interests). Ensure equitable support and resources to manage inherent power imbalances.²³
- Acknowledge the informal sector's contribution to urban food systems and provide planning support around food safety, sustainable diets, waste management.²⁴
- Develop guidelines, promote strategies (e.g. incentive mechanism, tax reduction, appropriate regulations), and collaborate with the private and public sector to recover and redistribute the surplus safe and edible food (from markets, retail shops and school canteens).²⁵
- Use data from research institutions and food mapping tools to identify and select entry points for food-related activities that will be both successful and demonstrate impact.²⁶
- Spatially plan and provide infrastructure that prioritizes food system interconnections in under-served areas including urban and peri-urban agriculture. ²⁷
- Develop metrics for targets, timelines and guidelines that reduce CBE from food and food waste.²⁸

Procurement

- Create procurement plans that prioritize Planet-Based Diets (e.g. affordable, safe, seasonal and nutritious food that is sustainably produced using agro-ecological principles within planetary boundaries and adapted to local contexts). Based on local contexts and human health considerations, integrate recommendations relating to increased consumption of plant-based foods where relevant and support local governments to do the same. Implement them through schools, prisons, hospitals and other public institutions. Communicate sustainable guidelines to consumers, planners, retailers, producers and processors, and support civic organizations that make sustainable, healthy food more accessible.
- Increase procurement of environmentally labelled, certified foods, and phase out products with low environmental performance. Encourage and support civic organizations to do the same.

²² [Green Cities Action Programme: building back better](#)

²³ [Food in cities: study on innovation for a sustainable and healthy production, delivery, and consumption of food in cities](#)

²⁴ [Milan Urban Food Policy Pact](#)

²⁵ [Green Cities Action Programme: building back better](#)

²⁶ [Understanding City Region Food Systems](#)

²⁷ *ibid*

²⁸ [Green Cities Action Programme: building back better](#)

- Use proven modalities to increase incentives, provide guidelines, and training materials for the use of unavoidable food waste to produce bioenergy and bio-products (e.g. insect farming, fish silage production, mushroom feedstock or compost).²⁹
- Provide guidelines on mechanisms to improve the food retail environment (e.g. incentives, zoning regulations, ordinances and regulatory recommendations for supermarkets, mobile food vendors around schools, and for promotional material developed on food high in fat, sugar and salt)³⁰
- Use policy mechanisms and incentives to stimulate demand for Planet-Based regional food and accelerate sustainable food production and resource efficiency among the food supply chain.³¹

Education and Knowledge Creation

- Use city-to-city knowledge sharing through existing knowledge hubs, best practice toolkits, and city networks to enhance mutual learning and exchange between local authorities, NGOs, universities and public institutions nationally and internationally to encourage people-centered strategies for health and sustainable food.
- Work with the national government, community-based organizations, NGOs, and school districts to advance sustainable healthy diets, urban agriculture, and youth engagement in their food.
- Work with schools, principals, teachers and canteens (both public and private) to increase local, organic, Planet-Based procurement practices and support groups to design learning activities around the topic through a Whole School Food Approach.
- Increase the transparency, quality, quantity, coverage, exchange and understanding of regional food systems ('foodprinting'), foodscapes, food waste, flows of food, and the climatic impacts of food metabolism. Use digital information, communication technology, appropriate metrics, and publicly available data to improve systems, increase actions, reduce carbon emissions, and develop targeted policies. Use available data to map the retail food environment, particularly areas with limited access to nutritious food, and establish a baseline of plant-based protein, meat and dairy consumption.³²
- Support tools and platforms that facilitate and incentivize innovation and financing for accessible small agri-food enterprises and startups³³
- Collaborate with universities, research centers, enterprises, businesses and innovation hubs to collect data, monitor impact, and deliver benefits of regional food system activities.³⁴

Urban-Rural Linkages

- Develop capacity-building programmes on innovative and sustainable urban agriculture practices and identify spaces for urban and peri-urban farming.³⁵
- Support and incentivize initiatives and innovations that enhance urban-rural and consumer-producer linkages, and shorten supply chains through urban and peri-urban agriculture, local procurement, increasing the accessibility of farmers markets, producer organizations, producer-to-consumer networks/platforms and inclusion of farmers and rural stakeholders in policy discussions.³⁶
- Enable access to land for sustainable food production in urban and peri-urban areas. Prioritize land for community gardens and small-scale producers through land banks or community land trusts. Allocate municipal land for local agricultural production through city development plans and programs that prioritize sustainable agriculture as part of land-use design.³⁷
- Provide technical training and financial assistance to food producers in and around cities to increase economically viable circularity, (animal feed from food waste, compost from food waste, grey water from post-consumer use, sanitized source separated excreta, and energy from waste etc.)³⁸
- Support diverse small to medium scale businesses and programs that link peri-urban and urban areas to enable seasonal food consumption and reduce food security. Support initiatives to improve food storage, processing, transport, and distribution technologies, especially for vegetables, fruits, and legumes.³⁹

²⁹ [Green Cities Action Programme: building back better](#)

³⁰ [ibid](#)

³¹ [Sustainable Food Places, Food for the Planet](#)

³² [Food in cities: study on innovation for a sustainable and healthy production, delivery, and consumption of food in cities, Understanding City Region Food Systems, Green Cities Action Programme: building back better, Milan Urban Food Policy Pact, The Good Food Cities Declaration](#)

³³ [Green Cities Action Programme: building back better](#)

³⁴ [Food in cities: study on innovation for a sustainable and healthy production, delivery, and consumption of food in cities, Understanding City Region Food Systems,](#)

³⁵ [Green Cities Action Programme: building back better](#)

³⁶ [Understanding City Region Food Systems, Milan Urban Food Policy Pact](#)

³⁷ [Milan Urban Food Policy Pact](#)

³⁸ [Milan Urban Food Policy Pact](#)

³⁹ [Milan Urban Food Policy Pact](#)

- Use policy reviews, guidelines, and finance mechanisms to support urban and peri-urban vertical farming (e.g. skyscraper farms, indoor farms using abandoned structures) and high-tech aquaculture (e.g. RAS, aquaponics, microalgae) where relevant, with care taken to lowering energy and resource use.⁴⁰
- Work with partners to train producers on digitization and mechanization of high value crops (green house, rooftop and vertical farms, hydroponics, etc.) where relevant.⁴¹
- Evaluate incentives, financial mechanisms, and training to support water saving initiatives for farmers (e.g. solar irrigation, micro-drip irrigation) and high-tech tools (e.g. drones, aerial imagery, etc).⁴²

Citizen Engagement and Mobilization

- Establish representative and dynamic food partnerships locally by identifying, mapping, and evaluating civil society food movements including grassroots organizations, universities, research institutions, businesses, and faith organizations. ⁴³
- Prioritize participatory policy mechanisms such as food policy councils, and if appropriate appoint a food policy advisor. Ensure stakeholder participation mechanisms are given the necessary funding and power to influence land-use planning, budget allocation, and food policy development.
- Provide and promote education campaigns focusing on behavior change around sustainable diets, awareness of food loss and waste, and the food-climate nexus (such as EU-funded “Food Wave”).
- Ensure communication focuses on food and food practices that are nutritious, safe, Planet-Based, rights-based, culturally appropriate and waste-reducing.⁴⁴
- Support multi-disciplinary, intersectional, formal and informal educational and co-creation projects and events in schools, universities and venues attracting young people to raise awareness among students on increasing plant-based food consumption.⁴⁵
- Empower youth to be involved in policy-making processes, and publicly commit to consider them in policy work. Deepen engagement to help youth make informed purchasing choices as a direct contribution to achieving climate targets. Support organizations that provide youth with tools to be more effective change makers.
- Promote the use of sustainable menus by working with private caterers, restaurants, culinary institutes in the challenge of shifting procurement through voluntary commitments and educational campaigns.⁴⁶
- Support initiatives that combat food insecurity and engage citizens such as: hosting soup kitchens, supporting healthy food carts, creating food waste hubs, and organizing events such as food-waste reduction seminars, cooking classes, edible garden and nutrition workshops. Use public institutions such as school kitchens for events.⁴⁷

⁴⁰ [Green Cities Action Programme: building back better](#)

⁴¹ *ibid*

⁴² *ibid*

⁴³ [Sustainable Food Places, Food Governance and Strategy, Milan Urban Food Policy Pact](#)

⁴⁴ [Green Cities Action Programme: building back better](#), [Milan Urban Food Policy Pact](#), [The Good Food Cities Declaration](#)

⁴⁵ [The Good Food Cities Declaration](#)

⁴⁶ *ibid*

⁴⁷ *ibid*

APPENDIX 1

Current Outline of Urban Food System Governance

Initiative	Overview	Innovation/Significance
National Enabling Frameworks		
Glasgow Food and Climate Declaration	Pledge by subnational and local authorities to accelerate the development of integrated food policies and a call on national governments and international institutions to act at COP26.	Builds on previous work by the World Urban Forum Medellin, the MUFPP, the C40 and others with the aim of taking a food system approach to the climate emergency with co-benefits for biodiversity, ecosystem regeneration, circularity, access to sustainable and healthy diets for all, and the creation of resilient livelihoods for farm and food workers.
Milan Urban Food Policy Pact (MUFPP)	The MUFPP launched in October 2015 forming a network of over 100 cities globally committed to developing and implementing sustainable food systems and supports the exchange of ideas and experience on how to address common problems. Among the signatories, some have already developed their own food strategies, while others are working on them now.	Provides a working tool for cities with a framework for Action listing 37 recommended actions, clustered in 6 categories including Governance, Sustainable Diets and Nutrition, Social and Economic Equity, Food Production, Food Supply and Distribution, Food Waste. For each recommended action there are specific indicators to monitor progresses in implementing the Pact. Lacks connection to climate.
C40 Good Food Cities Declaration and Planned Actions	14 cities have committed to work with citizens to achieve a 'Planetary Health Diet' for all by 2030, with balanced and nutritious food, reflective of the culture, geography, and demography of their citizens. The cities will support a shift in consumption towards healthy, plant-based foods; reducing food loss and waste by 50%; working with city stakeholders to develop a joint strategy for implementing these measures; and incorporating the strategies into their climate action plans.	Each city develops and shares an action plan, including baseline figures and environmental, health, social, and economic co-benefits where available, upon which they will regularly report.
FAO Framework for the Urban Agenda	This framework defines the Urban Food Agenda as the vast range of policies, programmes and initiatives developed and implemented by national and sub-national governments, jointly with different stakeholders from the public and private sectors, to enhance food security and nutrition and sustainable development in urban areas and in the rural areas under their influence.	The Urban Food Agenda identifies four cross-cutting principles: 1) Rural-urban synergies, 2) Social inclusion and equity, 3) Resilience and sustainability, and 4) Food system (inter)connections. Areas of support: 1. National urban policies and transformative institutions 2. Local governance and food system planning 3. Short food supply chains and public food procurement 4. Agri-food innovation across small towns 5. Food environment and green public spaces for healthy cities 6. Optimized supply chains and sustainable bioeconomy for reduction food losses 7. Evidenced-based outreach for improved global urban food governance.
UN Habitat 3 New Urban Agenda	New Urban Agenda Resolution was adopted by the General Assembly in December 2016. The framework points	Promotes coordination of sustainable food security and agriculture policies across urban, peri-urban and rural areas to facilitate the production, storage, transport and marketing of

	toward the importance of food policy making at the local level. Emphasizes access to food security and nutrition as it relates to land, housing, public space and sustainability. Notes the importance of considering food system linkages and environmental impact as well as creating policies and plans that align and coordinate with energy, water, health, transport and waste	food to consumers in adequate and affordable ways in order to reduce food losses and prevent and reuse food waste.
Research and Resources		
WWF Planet Based Diets	A scientific assessment of how dietary shifts in 147 countries can bend the curve on the negative impacts of the food system. The report provides high level strategic actions.	Offers interactive tools to explore local solutions and build low-carbon diets. Offers policy recommendations for national governments and multilateral bodies.
EAT-Lancet Report	First full scientific review of what constitutes a healthy diet from a sustainable food system, and which actions can support and speed up food system transformation. Uses endpoints of consumption and production.	Provides quantitative scientific targets for healthy diets and sustainable food production. These targets are used as the basis for C40 Good Food Declaration indicators and targets.
FAO CRFS Program	FAO in collaboration with RUAF contributes to the Urban Food Agenda through the City Regional Food System process. The process aims to help strengthen local governments by increasing the understanding of the current functioning and performance of a city region food system through mapping, data collection on regional food systems, and analyzing the CRFS components.	Supports a toolkit for city guidance, that outlines the approach, techniques and tools used by cities that engaged in a CRFS assessment and planning process in the period 2015-2017. Pilot cities include: Colombo, Sri Lanka ; Lusaka, Zambia ; Medellin, Columbia ; Utrecht, The Netherlands , Quito, Ecuador ; Toronto, Canda ; Kigali, Rwanda ; Antananarivo, Madagascar .
FAO Urban Food Actions Platform	Database of resources related to urban policies and programmes, to achieve sustainable urban food systems. Partnership with MUFPP, ICLEI, UCLG, C40, ORU, and RUAF.	Covers governance and planning, sustainable diets and nutrition, social and economic equity, food production and ecosystem management, food supply and distribution, food loss and waste.
European Commission Food in cities study	Study provides an overview of the food innovation dynamics in 40 cities, in addition to providing evidence on the role and impact of European funded projects for R&I in cities. Findings are based on input provided by the MUFPP signatory cities and EUROCIITIES members through an open survey, interviews, desk research and focus group meetings.	Observed innovations: 1. Emphasis on community buy-in; 2. Enhancing participation in the governance system; 3. Local empowerment as a policy goal; 4. Shortening food supply chains; 5. Systemic thinking; 6. Translocalism <i>Rotterdam, Ljubljana, Gothenburg, Milan and Lisbon</i> received in-depth analysis.
GAIN Urban Menu of Actions	Actions that city governments have taken to shape the urban food environment for improved nutrition, using the powers and	Emphasis on collaboration with other public sector agencies and non-governmental actors.

	policy instruments that are available to them.	
C40 Addressing Consumption-Based Emissions in Cities	Report by C40, Arup, and University of Leeds on future scenarios to show how consumption-based emissions in C40 cities may evolve if no action is taken, if limited action is taken, or if ambitious action is taken.	Study shows the most impactful strategy is increasing plant-based diets. This has led C40 to focus efforts on increasing accessibility of healthy food, moving away from a previous focus on urban agriculture. Provides progressive and ambitious targets based on the EAT-Lancet report for each food intervention. Shows reduction level of beef consumption, dairy, food waste, for each regional area.
3Keel Understanding City Region Food System	The Prince of Wales' International Sustainability Unit commissioned 3Keel and University of Leeds to create a synthesis paper on City Region Food Systems, presented as the centerpiece to a high-level meeting on CRFS in February 2015 convened by the Prince of Wales.	Highlights substantial opportunities and challenges for cities.
C40 Knowledge Hub	How C40 cities can shift toward Planetary Health Diets.	Documents ideas and approaches in use locally. Contains examples and case studies from cities such as: <i>Paris, France; New York, USA; Zhenjiang, China; Sydney, Australia</i>
UCLG Beyond the Outbreak	A Live Learning Hub on Food Systems during and after the pandemic. Features report "Food systems: Lessons from the Pandemic"	Shares needs and solutions from regionally diverse areas of the world. Provides resources on CITYFOOD projects in Africa , South America and videos from "Frontliners" around the world.
World Bank Food Systems in an Urbanizing World	How the World Bank can most effectively support public, private and civil society actors in efforts to advance the transformative urban food system agenda.	Contains a highly comprehensible overview of urban food trends and drivers, traditional, informal, and modern food systems. Documents TRANSFORM framework, enabling conditions for future food systems, and intervention areas.
Networks		
Sustainable Food Places (UK)	Network of pioneering food partnerships from towns, cities, boroughs, districts and counties across the UK that are driving innovation and best practice on all aspects of healthy and sustainable food. Helps places create partnerships with local authorities and third parties, develop action plans.	Guides, toolkits, local policy, evidence of impact, case studies, webinars are consolidated resources for Food and Governance Strategy, Good Food Movement, Healthy Food for All, Sustainable Food Economy, Catering and Procurement, and Food for the Planet.
Food Policy Networks (FPN) (US)	A project of the Johns Hopkins Center for a Livable Future (CLF) that works directly with food policy councils, national organizations, and other groups seeking to improve the food system through public policy in North America.	Compiles up to date research on food policy groups and maintains a comprehensive online directory of food policy council across North America. Provides training and technical assistance to Food Policy Councils.
EAT-C40 Food Systems Network (International)	The Network is open to all C40 cities interested in food systems issues and works in collaboration with the MUFPP. The Network seeks to build on the commitments of the Pact and support cities to accelerate projects and programs that refer to its Framework of Actions or are inspired by pertinent good practices.	The Food System Network focuses on priorities in the fields of: Food Procurement, Food Environment, Food Waste, Regenerative Agriculture and Governance.

ICLEI-RUAF CITYFOOD Network (International)	Builds a global information exchange platform among cities around city-region food systems. Delivers training, technical assistance, food policy development, system assessment, guidelines, toolkits, multi-stakeholder food systems planning, establishing food councils and designing municipal food strategies.	Runs a city hub where cities can present online their food policies and programs, including their components and results. Establishes a Community of Practice where practitioners can share experiences on food system analysis as well as on the planning and design of city food strategies.
Projects and Practices		
WWF Eat4Change	Eat4Change engages citizens, specifically youth, to adopt healthy and sustainable diets. The project collaborates with food producers and retailers on sustainable agricultural production and works to create an enabling policy environment.	Central to the approach is moving young Europeans ‘up the pyramid’ to greater levels of engagement. The Eat4Change Campaign provides the unifying basis: raising awareness, and creating engagement on healthy and sustainable diets. Young changemakers are then incubated and supported as Active Global Citizens to magnify change with peers and within key systems (markets and policy). Provides guides and resources for meat, fish, and eating vegan.
WWF Save 1/3	A global education and awareness campaign that aims to reduce food waste and the natural resources required to produce food that is not eaten.	Provides resources on how to shop, cook, and eat smarter. Asks individuals and organizations globally to pledge to reduce their food wasted by a third.
WWF OPCC	The OPCC is a biannual global competition to catalyze climate action and resilience among cities. WWF reviews cities’ climate actions and ambitions, and assesses whether they align with the goals set forth in the Paris Agreement. By celebrating and supporting local and national frontrunners in climate action, the OPCC raises the global profile of participating cities, and builds awareness and support for success at COP26 and future climate events.	In 2021, WWF is offering special assistance to Swedish cities on food policy. Customized resources will be given for cities to advance urban food systems.
European Commission FoodSHIFT2030	FoodSHIFT2030 is a 7.5 million Innovation Action project funded by the EU Horizon 2020 programme with a consortium composed of 30 partners comprised of 7 municipalities, 8 SMEs, 8 NGOs and 7 research institutes from 12 European countries to launch an ambitious citizen-driven transition of the European food system towards a low carbon circular future, including a shift to less meat and more plant based diets.	FoodSHIFT2030 establishes FoodSHIFT Accelerator Labs. Strong focus on revitalizing urban-rural linkages, reducing GHG emissions, citizen engagement, operationalizing innovation labs, co-creative governance strategies.
EAT Shifting Urban Diets	A 3-year project, launched in April 2019, and funded by Climate-KIC, working with the City of Copenhagen and partners to translate the findings of the EAT-Lancet Commission on Food, Planet, Health into local action and interventions. The Eat-Lancet Commission’s Brief for Cities .	The objective of ‘Operationalizing Food System Targets for Health and Sustainability’ is to enable cities to set smarter and more ambitious food system targets with greater accountability and measurable benefits to climate, environment, public health, and societal well-being. The project is the first to operationalize the science, paving the way for a planetary diet. With Copenhagen as a prototype and other cities consulted throughout, the project aims to demonstrate how scientific targets for food

		systems can be operationalized in the city context.
Food Policy Councils	Cities around the world have developed food policy councils as a diverse participatory mechanism to influence local food policy.	While impactful, food policy councils must be given funding decision making power to influence land-use planning and food policy by the local government. Some successful examples include: Copenhagen, Denmark ; Toronto, Canada ; Ghent, Belgium .

WWF Cities

Anchored within WWF's Climate & Energy Practice, WWF Cities coordinates local government and urban stakeholder engagement. Over 600 cities have joined WWF, namely via the One Planet City Challenge, which supports cities to align to 1.5 °C while fostering co-benefits, including on nature conservation, equity and healthier cities. The work on Urban Food Systems is developed in partnership with WWF's Food Practice.

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