

Strengthening Urban Rural Linkages Through City Region Food Systems

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I. INTRODUCTION

From its beginnings in 1976, the Habitat agenda has acknowledged that strengthening urban rural linkages is vital to achieving sustainable urbanisation in human settlements of all sizes.² This has been reaffirmed by recent inter-governmental debates, with the strengthening of urban rural linkages included both as a sustainable development target and a key issue in the development of the new urban agenda for Habitat III.³

Two thirds of the world's population is projected to be urban by 2050.⁴ Policymakers are increasingly paying attention to the ways in which urbanisation will transform societies and economies. However, less attention is currently being paid to the complex rural-to-urban and urban-to-rural interactions that exist between small to large settlements and food systems as part of the surrounding environment.⁵ We contend urban rural linkages are among the most critical dimensions through which food systems and urban systems interact and further, the more integrated urban settlements and rural territories are, the more resilient and sustainable both cities and subnational regions will be.

Urban rural linkages have been defined broadly as the reciprocal flows of people, goods, services, money and environmental services with many of these linkages related directly or indirectly to food systems. There are significant changes happening within food systems that impact urban-rural linkages, such as the decline of traditional markets, globalization of diets and the increasing availability of highly processed food. Smallholder producers and processors, who often rely on nearby urban areas for markets are increasingly competing with foods produced from distant sources, often selling for lower prices.

As a result of food system changes, with multiple and interacting economic, environmental and social impacts, urban and rural areas have become less interdependent in a food systems context in many countries. Paradoxically, the severing of local food chains linking rural and urban areas has occurred while urban and rural communities are also becoming more interdependent in other ways, for example in the flows of money, labour, culture and social technologies. All these changes are having profound impacts on smallholders across the urban rural continuum. The diverging interdependent realities of urban and rural communities need to be addressed if we are to achieve sustainable urbanisation, resilient food systems and balanced urban rural development.⁶

Experiences from city regions around the world show that strengthening linkages between people growing and consuming food is an effective way to increase harmony and synergy, lessening the gaps between urban and rural communities. The food system provides a particularly effective policy area through which to strengthen urban rural linkages. This paper will demonstrate through selected examples from regions around the world how such efforts can strengthen urban rural linkages. To realize the full benefits of strengthened urban rural

food system linkages, supporting policy needs to be aligned at both local and national levels in order to scale out and up good practice and policy. Normative policy from Habitat III and the New Urban Agenda can reinforce the importance of food systems in strengthening urban rural linkages.

The 2030 Sustainable Development Agenda invites new narratives, including integration of urban, peri-urban and rural sustainable development. Climate change, biodiversity loss, land grabbing, water shortages, outbreaks of disease, forced migrations as a result of disaster, civil unrest, war and occupation, violations of land, food and other human rights all add to the pressures on food systems, most affecting women, children and other marginalized members of society. Despite the fact that food and cities are among the seventeen Sustainable Development Goals (SDGs), both with developed targets, indicators and means of implementation, their integration has not yet been fully articulated. Until the interdependence between these two areas is acknowledged as part of the implementation agenda for the SDGs, balanced urban and rural development may not occur as coherently or not at all in places where urban expansion is the greatest and this balance is most needed.

II. SMALLER TOWNS, INTERMEDIATE CITIES AND RURAL TERRITORIES LINK SUSTAINABLE URBANISATION AND SUSTAINABLE FOOD SYSTEMS

A sustainable and resilient food supply for both urban and rural dwellers is dependent upon building constructive interactions between rural and urban economies, communities, and landscapes. Large cities and smaller or intermediate towns must pursue a more balanced approach to development that properly accounts for surrounding rural productive landscapes. The *hard* infrastructure of roads, processing, storage and agricultural service businesses, and the *soft* infrastructure of knowledge, culture and social support, financial credit and remittances link rural and smaller settlements and intermediate scale cities in different ways than larger cities.

In *Inclusive Rural Urban Linkages*, the authors argue that smaller, intermediate settlements and rural areas can constitute systems of “functional territories” when better integrated and in this they support both sustainable urbanisation and sustainable food systems. The interaction of agricultural producers, input, processing, and other farm services is more proximate in these combined rural and urban spaces. More remote rural areas and larger cities both depend on the functioning of the intermediate cities and rural areas.⁷ More research is needed on how urbanisation and recent changes in food systems interact in these spatial dimensions, and what the impacts of these interactions are upon the world’s smallholder producers, who hold the key to food security and nutrition in much of the world.

The world has approximately 570 million farmers, of whom 500 million are smallholders (95 percent with less than 2ha in production). The majority of these live in the urban, peri-urban and rural areas within market reach of towns and cities.⁸ Even in developed countries, a significant percentage of a country’s agricultural production can be found in metropolitan jurisdictions.⁹ A recent study estimates the total area of urban and peri-urban irrigated cropland at about 24 Mha (11.0 percent of all irrigated croplands) and approximately 44 Mha of rainfed cropland (4.7 percent of all rainfed croplands). Further analysis indicates that 60 percent of all irrigated cropland and 35 percent of all rainfed croplands fall within 20 km of city boundaries.¹⁰

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Rural areas together with small towns and medium cities officially hold the majority of the world's poor, though the urbanisation of poverty also needs attention and is considered undercounted by a number of experts.¹¹ There is evidence that urban poverty has increased since the food price crisis of 2007-8 and that women, youth, indigenous peoples, and smallholders are most impacted. Smaller towns and cities have disproportionately less capacity to bear the effects of climate change than large cities, despite the fact that the food security of larger cities depends on the productive functioning of these mixed urban rural territories. National and local development policy and economic forces unleashed by industrialized and industrializing countries through their development and trade policy have also pushed and pulled flows of people, goods, and services from rural to urban areas.

In the midst of these mounting challenges, especially in settings of protracted crisis, there are signs that food system innovations can bring urban and rural communities of different sizes together. There is a frantic pace of urban sprawl and population displacement in many countries, especially but not limited to developing countries.¹² The growth of towns and cities of all scales has both positive and negative impacts on the urban and rural poor, and has led to increased inequity within and between rural and urban areas. For example, conversion of farmland to urban and peri-urban settlement is only one of many contributions to deep, historic tension between urban and rural communities.

Amidst this dynamic, often unplanned urbanisation, local authorities and communities across city regions struggle to balance between competing interests, such as land access for development, housing, food security, conservation, and biodiversity protection. Emerging food and agriculture initiatives in areas such as governance, food production, food chain development, waste recovery, and social protection are strengthening the territorial food systems that link farmers and consumers across rural, peri-urban and urban areas. In doing so there are crosscutting rural and urban benefits that have begun to be assessed and evaluated.

Local urban and rural governments can play a key role in the improvement of food policy.¹³ Local authorities' roles can include intentionally integrated policy, more coherence between jurisdictions, and more vertical alignment with other levels of government. For example, involvement of the subnational (provincial) governments is key to addressing agriculture and land-use planning at a larger scale (outside municipal boundaries), or facilitating access to financing and developing provincial policies that should accompany city-level strategies.

Mayors of towns and cities and their rural or provincial counterparts are at the forefront of meeting the challenges of providing a stable, affordable, and nutritious food supply for all their growing populations. However, the challenges that face mayors, planners, and programme managers are more than just a matter of increasing food supply or improving marketing systems. Cities are increasingly vulnerable to climate-related disasters. Local and territorial governments must also account for the impacts of climate change and ecosystem degradation that increasingly threaten the long-term viability of not only food production but water supply, transport systems, and the habitability of the town or city itself. They must balance the economic and environmental impacts of various modes of food production with the accompanying social impacts of hunger, health and malnutrition, disparity of access, and other equity related issues of changing food systems that most impact vulnerable populations.

Strengthening urban rural linkages by focusing on improving the holistic performance of food systems at a city region level can contribute to the broader sustainable urbanisation agenda. The improvement of city region food systems has significant implications for spatial

planning across both urban and rural areas. It also implies a renewed focus on integrating the full range of economic, social, and environmental dimensions of urban rural relations (FAO 2011). While actors other than local governments such as civil society and the private sector may be the initiators of innovative approaches, and help anchor the social production of food systems, local urban and rural authorities can create an enabling environment to help institutionalize innovative approaches.¹⁴

Challenges to integrating urban and rural planning are specific to local places, and there is an urgent need to find constructive ways to address these barriers and inequities in ways that can be adapted to local circumstances. Inclusive and participatory planning for city region food systems can strengthen urban rural linkages, and in turn can generate a range of environmental, socio-economic and governance benefits for both urban and rural areas. Indeed, smaller towns and cities, being closer to sites of food and fibre production, have the capacity -- given appropriate institutional and civil society support -- to innovate faster than larger urban metropolitan areas.

III. WHAT CONSTITUTES A CITY REGION FOOD SYSTEM?

The term “city region food system” was defined in December 2013 in a multi-stakeholder expert consultation hosted by FAO as the

“complex network of actors, processes and relationships to do with food production, processing, marketing, and consumption that exist in a given geographical region that includes a more or less concentrated urban center and its surrounding peri-urban and rural hinterland; a regional landscape across which flows of people, goods and ecosystem services are managed.” (www.cityregionfoodsystems.org)

A food system defined as inclusive of all the functions listed above is often the largest employment sector in a city and territory, encompassing value chains across urban and rural landscapes, including not only food producers at all scales, but food chain workers, food businesses of all kinds from street vendors to small food processors and manufacturers, food service and restaurant workers, and food transport workers.¹⁵ Food and agriculture systems are intertwined with labour markets well beyond the food system and to patterns of migration between urban and rural areas, and as conditions change so do livelihood strategies. These strategies can often include a combination of rural and urban settings for residency and work. As these urban rural communities and places become more integrated, with people moving between areas and families spanning urban and rural, they start to serve as “functional territories”.¹⁶ City region food systems emphasize the food related aspects of these integrated urban rural territories. The interaction between integrated urban rural territories with larger cities can stimulate technical, investment, and policy support to spur innovation.

The term ‘city region’ refers not only to megacities and the immediate, proximate rural and agricultural areas surrounding them, but also to small and medium-sized towns that can serve to link the more remote small-scale producers and their agricultural value chains to urban centres and markets of different types.¹⁷ A number of countries, including Brazil, India, China, Indonesia and many nations in West Africa have initiated development of agricultural or “agropolitan” regions including rural areas with small towns and medium size cities, with explicit attention to urban rural linkages.¹⁸ In Colombia’s northeast region the development of a system of *agropolises* of small cities such as Monteria is another example of striving for

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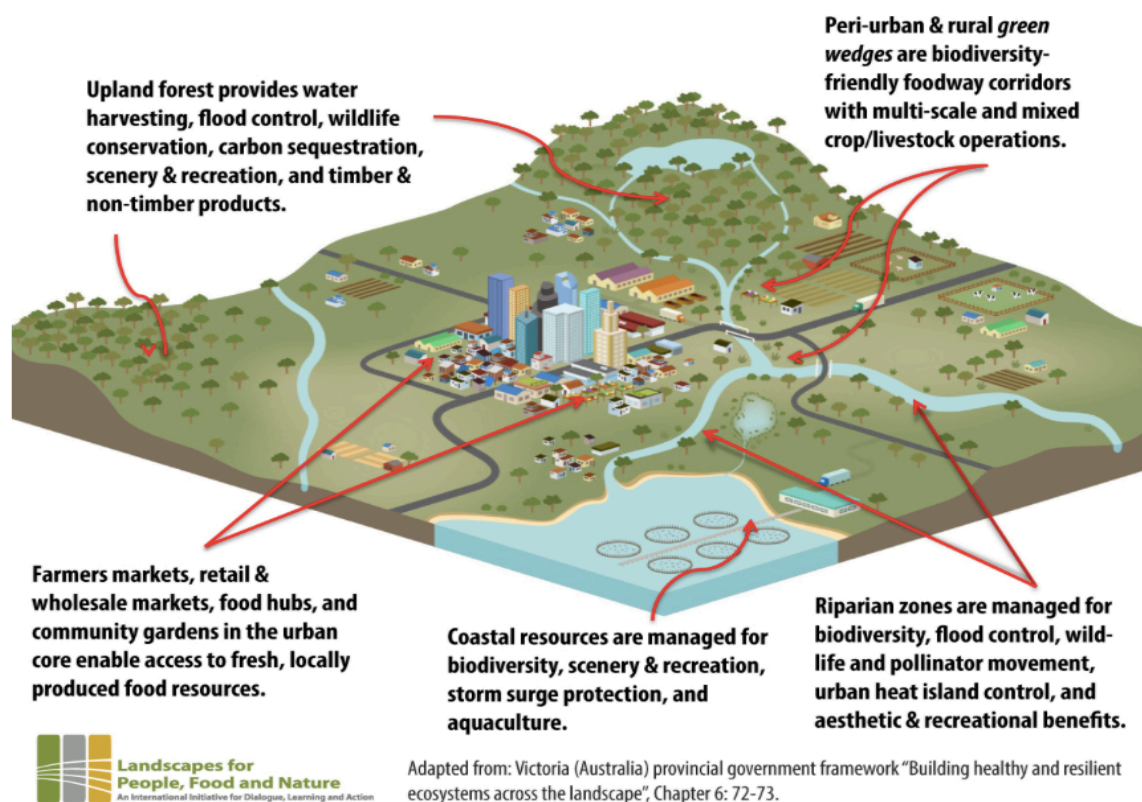
functional city region territories addressing the needs of local smallholders as well as new export markets.¹⁹

An integrated food strategy usually has discrete entry points depending on history and political context and depending on the intervention level (local, territorial or national). Efforts to improve a city region food system do not have a universal or set approach, but should recognize that there is great diversity between contexts, the particular character of urbanisation in different regions, different sizes of urban centres (from small and intermediate towns to larger cities), different types of food and agriculture systems, and different qualities of ties between towns and cities and the surrounding countryside and rural populations. Strategies and initiatives from different locations have led to envisioning a broader food system strategy²⁰, including components such as:

- Protecting ecosystems through land-use planning, specifically protecting agricultural land and watershed from urban expansion
- Seeking to secure and protect an affordable and nutritious food supply for the most vulnerable rural and urban poor through cash transfer and other social protection mechanisms
- Supporting and facilitating short food supply chains to reduce dependence on distant supply sources and increase resilience against shocks
- Integrating supply and demand through public procurement of healthy foods for school, hospitals, etc.
- Developing and putting in place inclusive governance frameworks linking urban and rural communities
- Strengthening social relations between consumer and producers and promoting inclusiveness of smallholder producers and vulnerable groups across in the supply chain.

The illustration below gives some indication of the elements that need to be encompassed when considering a city region's food system including additional non-food ecosystem services, such as the provision of water to cities.

Figure 1: Generalized diagram of common components of city region food systems across urban and rural landscapes.²¹



Source: T. Forster and A.G. Escudero, "City Regions as Landscapes for People, Food and Nature" (Washington, DC: EcoAgriculture Partners, on behalf of the Landscapes for People, Food and Nature Initiative, 2014).

The improvement of a city region food system needs to be sensitive to multiple and crosscutting issues, jurisdictions and authorities whose inclusion is essential. Local governments often lack technical expertise in this arena and operate under severe budgetary restraints and food policy is rarely a priority area for local authorities. However, as aspects of the food system are shown to overlap with other areas of policy and programme interest, development of a food policy can begin to link municipal departments, including public health, planning, biodiversity protection, local economic development, transport, to name a few of the more common entry points.²²

IV. TURNING CHALLENGE TO OPPORTUNITY: NEW EVIDENCE FROM CITY REGIONS

As described in earlier sections, characteristics of city region food systems are evolving in the context of larger food system change. The challenges and opportunities described above are evident in recent assessments of city region food system practice and policy. Two recent barometers of city region food system development are the FAO/RUAF Foundation City Region Food System Assessment Project and the Milan Urban Food Policy Pact. Both highlight the need for coherent and inclusive food policy and planning linking rural and urban interests at local, territorial, national, and international levels.²³

The project is being implemented in eight participating cities and their regions through multi-stakeholder dialogue processes. The cities include Lusaka and Kitwe (Zambia), Dakar (Senegal), Colombo (Sri Lanka), Medellin (Colombia), Quito (Ecuador), Toronto (Canada),

and Utrecht in The Netherlands. The dialogues are a fundamental first step to improve understanding between various actors in order to facilitate knowledge and improved practice, and to then transparently take steps to strengthen food system governance through improved policy and practice. A step-wise participatory approach to new food policy has proved more effective.

Initial findings from pilot projects reveal three common types of challenges to improving urban rural linkages including:

- The complexity in defining city region boundaries as flows of food and services are not located in specific geographical areas around the city, but in multiple locations.
- Food is not considered sufficiently as key element in urban strategic and spatial planning. This includes planning of production areas in and around cities, public spaces such as markets and food hubs, and natural resources management including land/soil, water and forests. As a consequence, most of the cities present tenure issues including competition for land and other resources (e.g. water) uses such as land for non-agricultural development vs. agricultural land
- The absence of enabling urban food policy to foster and reinforce rural-urban linkages resulting in:
 - Conflicts of responsibility and leadership between institutions at different scales (e.g. municipal vs. provincial governments)
 - Gaps and overlaps among institutional mandates and lack of linkages among them (e.g. a city council not responsible for food production but responsible for health and nutrition and thus food quality and safety)
- The absence of institutional mechanisms or platforms to facilitate dialogue among stakeholders regarding food-related issues

To illustrate the importance of context, specific priorities and constraints identified in some of pilot cities include:

- In Colombo (Sri Lanka) there is insufficient knowledge among city agencies of the food security and nutrition status of the urban poor and on food safety and hygiene, yet there are initiatives in the area of food waste and food production in peri-urban areas.
- In Lusaka and Kitwe (Zambia) smallholder farmers serving city markets cannot meet production standards for the demand due to lack of inputs and equipment and inefficiency of food distribution and logistics. Rural areas lack infrastructure, creating food losses, and the presence of middlemen maintains a wide margin between the price for farm products and the costs to consumers.
- In Medellín (Colombia) the current food supply is concentrated at the wholesale and retail levels, effectively controlling commodity pricing and logistics. Rapid urbanisation as a result of rural to urban population displacements from civil war are challenges specific to this city region.
- In Toronto (Canada), no system-wide scan of the food landscape for Toronto and its surrounding area has been made so far. There is a need for an integral plan encompassing the entire Greater Toronto Area that includes the City of Toronto and the four neighbouring regional municipalities of Halton, Peel, York, and Durham.
- In Quito (Ecuador), there is insufficient knowledge on the food flows through which food reaches the city. Also there is a need to strengthen urban marketing opportunities for small-scale, agro-ecological producers in the vicinity of the city. At the same time, the city is looking at expanding a successful urban agriculture production and

marketing programme to further reduce the city's ecological footprint and improve the reuse and management of organic and food waste.

B. Milan Urban Food Policy Pact²⁴:

In the fall of 2014, Milan Mayor Pisapia proposed to facilitate development of a global Urban Food Policy Pact (UFPP) to increase the attention to urban food policy in time for the Milan Expo that took place from May to October 2015 with the theme of “Feeding the Planet, Energy for Life”. Starting in January with twenty-six interested cities from around the world, a participatory process led to the drafting of a Pact and Framework for Action. The technical team contracted by the City of Milan consisted of experts drawn from the organizations in the CRFS Alliance. By June, when the Pact was finalized, there were Mayors from nearly fifty cities engaged and the World Food Day signing and launch of the Pact brought mayors and delegates from over 100 cities to Milan.

The Pact is significant in that it commits signatories to three pathways to strengthening their food systems in a way that necessarily engages actors in rural areas:

- The UFPP commits cities to inclusive, resilient and sustainable food system strategies.
- The UFPP commits mayors to seek ways to integrate food policy into existing agencies and departmental mandates, and to integrate food policy in departmental mandates in areas such as food supply and distribution, social protection, nutrition, equity, food production, education, food safety and waste reduction.
- The UFPP commits mayors to include all food system actors (from urban and territorial areas) in formulation, implementation and assessment of food policies and to coordinate with national and international levels.

The Framework for Action consists of thirty-seven voluntary provisions in six thematic clusters including governance, sustainable diets and nutrition, social and economic equity, food production, food supply and distribution, and food waste reduction and recovery. These provisions, while voluntary and generalized, are nonetheless drawn from existing initiatives in participating cities. The Pact is accompanied by a Mayor’s Guidance Document including good practice examples in the thematic areas covered by the UFPP, contributed by cities themselves. What is clear from this research is that cities are recognizing that a systems approach to food is an entry point to address the urban rural linkages, and can lead to urban rural dialogue, common planning and programme coordination. In other words, cities - as hubs of consumption - also increasingly recognise their responsibility in building more sustainable food systems that reduce food waste; provide decent livelihood opportunities for those producing, processing, and selling food (be it in rural, peri-urban or urban areas) and promote environmentally sustainable forms of food production.

For the purposes of this paper on urban rural linkages, there are some preliminary findings at a general level from the UFPP process. (It should be noted that four of the eight FAO/RUAF project city regions are also UFPP cities.) The general findings from the FAO/RUAF assessment are reflected in the deliberations of UFPP cities in terms of the barriers of jurisdiction and institutional silos, the absence of institutional mandates and mechanisms to work on food issues across departments internal to city governments, and early stages for dialogue across urban and rural authorities who are not used to forming joint policy and planning in this area.

In several UFPP cities such as Medellín, Barcelona, Milan and Vancouver, there are examples of peri-urban and near rural land protection initiatives to secure food supply for local urban markets. In all cases these initiatives were begun under the jurisdiction of regional authorities, and at present there appears to be little willingness from amongst municipal governments to share ownership and responsibility. On the other hand, as part of the push for comprehensive urban food strategies (e.g. Toronto, Medellín, Curitiba, London, New York, Milan) there are significant experiences of stakeholders from within municipal governments collaborating with rural actors in the areas of procurement policy, investment in food processing and distribution infrastructure, providing incentives for local markets that carry products from farmers in the production areas within or near metropolitan boundaries, promoting biodiversity friendly farming such as organic or agroecological practices, and linking rural smallholder farmers to poor urban neighbourhoods, waste and nutrition recovery, etc.

TABLE 1. CITIES WITH POLICY AND PRACTICES AT THE CITY REGION SCALE.

<p>Belo Horizonte, Curitiba and Sao Paulo: These cities in Brazil have instituted a variety of policies and programs that integrate the needs of poor rural households for stable markets and income with the needs of poor urban families for healthy foods at affordable prices. They exemplify the ways that deliberate coordination between urban, provincial and national governments can help strengthen urban rural linkages.</p> <p>Melbourne, Montpellier and Paris: These cities have created networks and associated local authorities in formal agreements across urban and rural authorities to support joint food policy and planning.</p> <p>Vancouver, Milan, Barcelona and Toronto: Land banking for food security in these cities is the product of years of exchange between urban and rural actors, leading to formalization of land protection efforts.</p> <p>New York and Paris: Investing in infrastructure for processing and distribution to strengthen short supply chains has required determination of shared priorities between urban and rural local authorities.</p>
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Source: T. Forster, Egal, F., Escudero, A.G., Dubbeling, M., Renting, “Milan Urban Food Policy Pact: Good Practices from Cities”, *Milan: Fondazione Feltrinelli* (2015) (Available at <http://www.fondazionefeltrinelli.it/article/ebook-utopic-milan-urban-food-policy-pact/>: retrieved on 18 November 2015)

Localised innovations need to scale out and up, and to this end, linking practice to policy is vital. Two requirements stand out from the specific experiences evidenced by both these current projects. First, the need to better understand both the urban and rural dimensions of food systems and how they interrelate, and second, the need to coordinate policy interventions between the production, supply, and market aspects and the social, cultural, governance, and rights-based aspects of food systems reform. Most importantly perhaps, is that these efforts at balancing geographic, economic and social dimensions of food systems at the city region level are not theoretical, but are derived from actual, on the ground struggle and present practical solutions to urgent local problems.

In many countries the changing realities of food supply, access, and economics have driven innovations that seek one or more forms of integration, as some of the examples cited above show. In some countries a more comprehensive policy approach is being undertaken to provide coherent territorial approaches to integrated planning that does include the food system. The evolving practices and innovations that will strengthen urban rural linkages through urban and territorial food systems require targeted policy interventions to overcome barriers and take advantage of changes in the food system. Recommended policy options for strengthening urban rural linkages through food systems will be returned to in the last section.

V. WHY CITY REGION FOOD SYSTEMS ARE VITAL TO THE NEW URBAN AGENDA

City Region Food Systems are vital to the new urban agenda in two key ways. First, the benefits of CRFS are multiple and stretch far beyond the food system to key policy areas of concern to the new urban agenda, including local economic development and urban governance, spatial and economic planning, public health, and ecosystem protection. Second, the development of city region food systems can generate positive political support for wider urban rural linkages through coalition building centred on food.

The benefits of seeking to optimise the full suite of food systems' outcomes at a city regional level are multiple and just beginning to be catalogued. There is already an increasing amount of evidence to suggest how beneficial this can be and how it can also serve to strengthen urban rural linkages as a by-product of a more resilient and sustainable city region food system. A recent study commissioned by the Prince of Wales' International Sustainability Unit, *'Food in an Urbanized World: The role of city region food systems in resilience and sustainable development'* collated and analysed this growing body of evidence in order to identify what specific areas will yield the most significant benefits from developing a city region food system approach²⁵.

The range of benefits of stronger city region food systems are demonstrated from the field and from a growing literature on the topic. The analysis spans those benefits directly related to the food system, such as food prices, as well as those benefits that reflect the range of systems that the food system closely interacts with, such as the rural economy and ecosystem as a whole. A summary is presented in the table below.

TABLE 2. BENEFITS OF CRFS APPROACH.

Theme	Proposed benefits
Food security	Increased livelihood resilience for small-scale producers
	Reduced food prices for urban consumers
	Increased resilience of urban food supply against shocks
Economic development	Regional economic growth
	Increased rural incomes and jobs
	Economic vitality, entrepreneurship and innovation
Environment	Opportunities for 'circular economies', including reduced

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	food waste and loss
	Increased local agroecological diversity
	Increased recognition and valuing of ecosystem services
	Lower greenhouse gas emissions
Health	Increased knowledge about food and nutrition amongst urban dwellers, resulting in more healthy diets
	Increased availability of, and access to, nutritious food
Governance	Promoting local food culture over imported food fashions
and culture	Integrated ('joined-up') policy and action
	Greater participation in and transparency of the food system

Source: World, S. Jennings, J. Cottee, T. Curtis, S. Miller, "Food in an Urbanising World, The Role of City Region Food Systems in Resilience and Sustainable Development," *London: International Sustainability Unit* (2015)

Of the above benefits, those that were identified as having the potential to yield the most significant positive impact included local economic development and governance. For example, one study demonstrated that containing more of the food chain within a particular city region could generate increased employment in urban and rural areas; with one UK study finding that £1 spent on a locally sourced school meal generated 85 pence of additional economic activity, or a multiplier effect of 1.85.²⁶

Overcoming urban rural challenges through food systems change has been shown to generate positive political value and coalition building potential. As catalogued in the cases listed in this paper, at the city region level there are widespread institutional barriers and jurisdictional silos. However it is at this level of a city and its territory, through organizing and planning for city region food system strategies, that specific benefits can and do motivate coalitions of sectors and actors, including local authorities and national governments, across both urban and rural constituencies. Such coalitions of actors are demonstrating they can catalyze political will, such as having impact on local elections, and/or create pressure to adopt new initiatives. The positive experiences from one city region are stimulating replication of demonstrated good practice to scale out solutions across other city regions. One example among others is the exchange of experiences between cities integrating rural and urban food policy in Brazil and Namibia.²⁷ The relevance of these processes to the New Urban Agenda and the 2030 Sustainable Development Agenda need to be encompassed more clearly in the implementation process for both inter-related agendas.

VI. POLICY RECOMMENDATIONS TO STRENGTHEN URBAN RURAL LINKAGES THROUGH CITY REGION FOOD SYSTEM GOVERNANCE

The most important policy recommendation for the New Urban and Sustainable Development Agendas in one sentence is this:

Integrated urban, peri-urban and rural planning for city region food systems will require national enabling in order to overcome challenges and scale out and up innovation in different thematic areas adapted to local places that are economically, socially and environmentally diverse.

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Enabling policy to strengthen urban rural linkages should incorporate measures adapted to local conditions that address the sustainability of the food system in concrete ways, but also in a progressively comprehensive approach. The good news is that there exist various different models for new approaches to food systems governance that cuts across agency silos, including the involvement of newly mandated metropolitan regional governments, (e.g. Mexico City) and multi-stakeholder governance partnerships such as city food policy councils (e.g. Toronto).

Some food system policies addressing urban rural linkages are explicitly authorized and resourced from the national level. Many more are initiated at local and territorial levels. In every region there is some experience in networks linking communities of good practice originating from local governments, civil society or multi-sector by design.²⁸ The most dynamic are also the most inclusive, with representatives of not only governments, private sector and civil society, but of farmers at different scales, and managers of forests, waterways and biodiversity. Indeed, a key condition for success is that participation allows all relevant stakeholders (small-scale producers, consumers, food processing and retail, financing agencies, planners, and government bodies) to jointly develop an agenda of required improvements and innovations.

Initiatives rooted in multi-stakeholder participation will be more effective in reaching their objectives, more transparent/accountable in the use of resources, and can ensure longer-term sustainability beyond temporary government administrations. The processes of dialogue and discovery of common interests across urban rural landscapes will have to be institutionalized in order to last, and to institutionalize governance structures and mechanism will need policy support, resources, and capacity building. One promising methodology for evidence-based participatory dialogue and decision-making is the recently developed SHARED technology applied to urban rural cross-jurisdiction deliberations in Kenya. The SHARED process offers decision makers and stakeholders from various sectors, levels and affiliations a space to interact with and interrogate evidence, to understand risks and development implications associated with potential investment options and decision outcomes.²⁹

Irrespective of how governments, civil society, and the private sector react to the new agendas for food and for cities, it will be up to local actors to adapt and integrate as they implement new goals and targets. Most national and local governments are not well equipped to take adaptive and creative measures to, for example, integrate urban and rural food policy and planning processes. They certainly cannot change practice and adopt innovation without concerted effort and support. This is especially true in those parts of the world where the economic and ecosystem challenges are the greatest. Civil society, especially associations of smallholder farmers and consumers have often provided an essential push and occasionally private actors such as foundations and committed food businesses have provided support. Every specific urban place and every specific rural place has a unique cultural and political history, relative strengths and weaknesses to take action, and effective entry points to address the challenges facing their urban and rural areas.

Some countries and cities will come to food security through health and nutrition. For example, an entry point for the development of food policy and planning at a city regional level might be to improve health and nutritional outcomes.³⁰ Other countries and cities will prioritise access to markets for rural smallholders and social protection for the urban poor.³¹ Support to various forms of urban and peri-urban agriculture (from self-sufficiency to commercial programmes) are among other strategies local authorities have put in place.³² What has been lacking until recently was a way to clearly frame responses to food system

challenges in a more localized spatial manner, one that balances perspectives, realities, and interests found in towns and cities, and in territories or regions – linking rural and urban communities. Now that the city region food systems are entering policy discourse and practical applications are beginning to be shared and accepted, more national governments following Brazil’s example may support measures benefitting the urban and rural poor simultaneously, decreasing risk and vulnerability, with positive economic, social, or environmental impacts.

Thematic approaches or entry points to policy interventions as described above are examples of what works for different city regions, and these can expand and integrate with other thematic policies. The table below presents a typology of policy interventions that if linked, become a comprehensive strategy that deserves enabling policy at national levels.

TABLE 3. POLICY RECOMMENDATION TO STRENGTHEN URBAN RURAL LINKAGES THROUGH CRFS.

Area of need:	Proposed policy objectives:
Increase food security and nutrition	Link urban social protection programmes through procurement policy, cash transfer, and commodity support to livelihood resilience for small-scale producers within reach of markets in towns and cities
	Provide incentives to urban and peri-urban producers to increase access to healthy, affordable food for consumers
	Protect and provide permanent access and secure tenure to land for smallholder food production for nearby food markets
Equitable economic development	Establish inclusive processes for setting of development priorities across urban rural landscapes (farm and non-farm)
	Support investment in new food hubs and value chains including food processing, distribution, and manufacturing, with an emphasis on locally-owned micro to medium scale business
	Promote local food procurement
	Supply technical and credit assistance, food safety training and other services to support smallholder (be it rural, peri-urban or urban) market access
Environment	Incentivise opportunities for ‘circular economies’, including reduced food waste and loss and nutrient recapture from organic waste and waste water for agricultural production
	Include biodiversity friendly production practices such as agroecology or organic farming in procurement policy and regulations
	Increase recognition and valuing of ecosystem services

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	through education through policy that rewards land managers for multiple benefit practices that provide food while maintaining water and soil quality
	Through procurement, tax or zoning policy incentivise the use of technologies along the supply chain that reduce greenhouse gas emissions
	Include food and agriculture as a critical component of climate change and disaster risk reduction strategies
Health	Link health, economic and environmental policy to support “sustainable diets” that provide urban and rural consumers with affordable, nutrient dense but energy conserving food
	Provide incentives for poor consumers at risk for non-communicable diseases (NCDs) to access healthy food affordably, including directly from gardens and small farms, at farmers markets, retail markets, etc.
Governance and culture	Promote initiatives and campaigns to increase “food system literacy” and engage consumers directly in the future of their food system as well as in their healthy food choices.
	Promote mechanisms and initiatives that lead from dialogue and common priorities for rural and urban communities to food councils and participatory and inclusive governance
	Institute transparency requirements for the sources of all foods in markets to guide institutional food procurement and allow consumers to make informed choices

Source: World, S. Jennings, J. Cottee, T. Curtis, S. Miller, “Food in an Urbanising World, The Role of City Region Food Systems in Resilience and Sustainable Development,” *London: International Sustainability Unit* (2015), p 35

The level of locally adapted detailed interventions discussed above deserve to have more general coordinated policy messages for implementation of the SDGs and the New Urban Agenda. In debate and negotiation of the post-2015 agenda, there were countries in support of a comprehensive approach to ending hunger and malnutrition *and* addressing transformation of agricultural practices to protect and preserve ecosystems – but not addressing urban rural linkages in concrete ways. There were countries in the same debate pushing for rural linkages to urban sustainability, but not addressing the importance of food in relation to sustainable urbanisation. The preparatory committees (prepcoms) for Habitat III have had attention to urban rural linkages, but again with less attention to the connections of food systems and sustainable urbanisation. Messages aimed at filling the gaps between SDG 2 and 11 and presenting an integration agenda for implementation will be needed in the parallel and interconnected debate leading up to Habitat III in one year.

The effort to link these processes through relevant policy targets began with a 'Call for Global Action' launched at the Medellín World Urban Forum in 2014³³. Policy briefs were then submitted to both the first and second Habitat III prepcoms by the CRFS Alliance³⁴. The issue paper presented by the CRFS Alliance and policy briefs written for Habitat III maintain that city region food systems as part of urban rural linkages is vital to the new development agenda. These interventions argue specifically that potential benefits of CRFS add cross-cutting value to the new urban agenda. Clear demonstration of these benefits can help to overcome challenges, concretely improve urban rural relations, and profoundly impact the broader national sustainable development agenda. A synthesis of recommendations from both the research and analysis of issue and the experiences of cities and regions is presented in the table below. Thematic entry points (see Table 3 from *Food in an Urbanised World* on page 13) for strengthening urban rural linkages through city region food systems include integrated policy approaches from local to national and international levels. All these approaches are part and parcel of the new narratives that present urban and rural *together* as profoundly interdependent, part of a common spatial territory, including rural spaces, small and larger urban centers -- or city regions.

VIII. CONCLUSION

Integrated planning for urban and rural areas around the world is extremely challenging and the rise of structural inequity and polarization is not reducing the level of challenge. And yet, there are new openings and opportunities that did not exist even a few years ago. One such opening is in relation to city region food systems. As stated in *Food and Urbanising World*, “The evidence regarding the potential benefits of specific city region food system interventions reinforces the general assertion that strengthening and improving the quality of rural-urban linkages is prerequisite to an integrated and inclusive food system.”³⁵ However, the benefits of a balanced urban and rural approach to strengthening urban rural linkages summarized in this paper will only occur with deliberate efforts to integrate urban, peri-urban and rural food system planning in sustainable development planning at all levels. For this reason, food systems need to be incorporated into target 11.a calling for integrated urban, peri-urban, and rural planning.

New narratives native to specific local geographies are needed urgently in order to present the necessary cultural, biological, and economic symbiosis of urban and rural. It is important to underscore the depth and breadth of the debate that has emerged in every region about the need for a broader understanding of the interactions of rural and urban in the context of sustainable urbanisation, including feeding an increasingly urban planet. This debate is not fully mainstreamed in the context of the 2030 Sustainable Development and New Urban Agendas. It should be. Indeed, continued urbanisation of productive rural landscapes is not inevitable, but the result of forces supported by vested interests and policy that give priority to certain kinds of development over others. Examples include large land development or agrifood or non-agricultural infrastructure investment projects for a few firms that aim primarily at global markets. The narrative that renders such pathological forms of urbanisation “inevitable” may not only be out of step with the dynamic reality of urban rural linkages, but is fed by a dangerously polarized and simplistic narrative based on outdated assumptions of the definitions of “urban” and “rural”. Supporting these complex and dynamic urban rural linkages is key to ensuring a healthy, sustainable urbanisation and to a secure, nutritious and resilient food supply.

In conclusion, the experiences of urban and rural actors seeking to implement a healthier, more resilient and sustainable food system reveals many challenges. Some of the challenges have been described above such as divided jurisdictions and the absence of policy mandates and policy coherences across levels of government. There are only a few cases, in Latin America and Europe in particular, where territorial development and explicit references to urban rural linkages are incorporated into national policy. Examples include the support given by Brazil for comprehensive urban food policy that links food security interventions with those addressing urban and rural poverty and the European Commission's support for local food councils to promote territorial food systems in a number of European countries. This linked up *horizontal* rural-urban policy and *vertical* local-national policy runs up against top-down national policy that prioritizes labour efficiencies, technology and global trade. But it is vital to advance new combinations of horizontal and vertical policy integration. Instead of being biased primarily towards an industrial and global food system, food and agriculture policy must respond to the local challenges and impacts summarized here if the full benefits of city region food systems to strengthening urban rural linkages are to be realized.

Notes and references

¹ This article was commissioned by the Food for Cities Initiative of the Food and Agriculture Organization (FAO) and by the International Sustainability Unit (ISU) of the Prince of Wales Charities and contributed on behalf of the City Regions Food Systems (CRFS) Collaborative (www.cityregionfoodsystems.org). Additional reviews and contributions are gratefully acknowledged from Karim Hussein, IFAD; Arthur Getz Escudero, Cardiff University; Emily Mattheisen, Habitat International Coalition; Meg Davidson, The New School; and Marielle Dubbeling, RUA Foundation

² City region food systems are recognized as a vital component of urban rural linkages in the Habitat III “Issue Paper on Urban Rural Linkages” (May 2015) (Available at <http://www.urban-response.org/resource/20555>)

³ The new goal and targets on cities and human settlements can be found at <https://sustainabledevelopment.un.org/topics> (retrieved 10 October 2015)

⁴ UNDESA (United Nations, Department of Economic and Social Affairs Population Division), “An Overview of Urbanisation, Internal Migration, Population Distribution and Development in the World,” *Paper prepared for the United Nations Expert Group Meeting on Population Distribution, Urbanisation, Internal Migration and Development*, New York, (12-23 January 2008).

⁵ A food system covers the complete cycle from food growing by farmers and gardeners, to processing, distribution, marketing, consumption and waste. In this article the use of food system is generally plural as in fact there are many food systems in the world. However there is also a “global food system” which is increasingly integrated through global supply chains and concentrated agrifood sector multinational companies. The impacts of both global and city region food systems on urban rural linkages are complex and a recent analysis of the Latin American Center for Rural Development or RIMISP develops these impacts. J.A. Berdegúe and F.J Proctor with C. Cassuffi, “Inclusive Rural-Urban Linkages,” *Working Paper Series No 123. Working Group: Development with Territorial Cohesion, RIMISP* (2014). Territorial Cohesion for Development Program. (Available at http://rimisp.org/wp-content/files_mf/1431869344123InclusiveRural_UrbanLinkages_edited.pdf; retrieved on 29 November 2015)

⁶ C. Tacoli, “Reframing the debate on urbanization, rural transformation and food security: *IIED Briefing Paper* (2015), (Available at <http://pubs.iied.org/17281IIED.html>).

⁷ Berdegúe, “Inclusive Rural Urban Linkages”, *Development With Territorial Cohesion*, p. 25.

⁸ S.K. Lowder, J. Skoet, and S. Singh, “What do We Really Know About the Number and Distribution of Farms and Family Farms Worldwide?” Background paper for *The State of Food and Agriculture 2014*. ESA Working Paper No. 14-02. Rome, FAO. (2014).

⁹ In the United States two-thirds of the total value of U.S. agricultural production takes place in, or adjacent to, metropolitan counties. About one-third of all U.S. farms are actually within metropolitan areas, representing 18 percent of the total farmland in the US: Natural Resources Conservation Service, “Land Use Overview,” United States Environmental Protection Agency (2012) (Available at <http://www.epa.gov/agriculture/ag101/landuse.html>; retrieved 4 September 2015).

¹⁰ A.L. Thebo, P. Drechsel and E.F. Lambin. “Global Assessment of Urban and Peri-Urban Agriculture: Irrigated and Rainfed Croplands,” *Environ. Res. Lett.* 9, 114002 (2014): 9 (Available at <http://dx.doi.org/10.1088/1748-9326/9/11/114002>).

¹¹ D. Satterthwaite, “The Multidimensional Poverty Index: Another Underestimate of Urban Poverty”, *International Institute for Environment and Development*, blog post (2014) (Available at: <http://www.iied.org/multidimensional-poverty-index-another-underestimate-urban-poverty>, retrieved on 14 October 2015).

¹² UNDESA “World Urbanisation Prospects: The 2014 Revision, Highlights,” *United Nations, Department of Economic and Social Affairs, Population Division (UNDESA)* ST/ESA/SER.A/352 (2014).

¹³ As evidence of this trend, the Milan Urban Food Pact, signed by over 100 cities on 15 October, 2015 demonstrates a commitment to a comprehensive approach to urban rural cooperation on strengthening food and nutrition security systems. For more information see <http://www.foodpolicymilano.org/en/urban-food-policy-pact-2/>.

¹⁴ Habitat International Coalition, “Defining Social Production,” *HIC* (2004) (Available at <http://www.hic-gs.org/document.php?pid=5113>; retrieved 14 October 2015).

¹⁵ J.A. Berdegúe and F.J Proctor with C. Cassuffi, “Inclusive Rural-Urban Linkages,” *Working Paper Series No 123. Working Group: Development with Territorial Cohesion, RIMSP* (2014). Territorial Cohesion for Development Program. (Available at http://rimisp.org/wp-content/files_mf/1431869344123InclusiveRuralUrbanLinkages_edited.pdf).

¹⁶ Ibid p. 25. The description of the spaces between megacities and very remote rural places, or the agglomerations of rural spaces between and towns and cities, as “functional territories” is an important contribution to the delineation of city region food systems.

¹⁷ These elaborations of the core definition of CRFS can be found on the www.cityregionfoodsystems.org website and are the product of expert consultations and multi-actor dialogue in a series of global events from December 2013 to July 2015.

¹⁸ Berdegúe, “Inclusive Rural Urban Linkages”, *Development with Territorial Cohesion*, 23-4.

¹⁹ Presentation of Mayor of Monteria, Colombia to UN Habitat Expert Group Meeting, 27-8 October 2015.

²⁰ The Milan Urban Food Policy Pact and Framework for Action is one amongst other sources of examples of these food strategies for urban territories.

²¹ T. Forster and A.G. Escudero, “*City Regions as Landscapes for People, Food and Nature*” (Washington, DC: EcoAgriculture Partners, on behalf of the Landscapes for People, Food and Nature Initiative, 2014).

²² Examining these different professional, disciplinary and departmental entry points to city region food systems planning, policy and development is detailed in this study. (Forster T and Escudero A.G 2014)

²³ Horizontal knowledge sharing between city regions and vertical alignment with national and international policy have been the core purposes for the City Region Food Systems Alliance (www.cityregionfoodsystems.org), a multi-actor platform which aims to increase coordination, share knowledge, and advance policy to strengthen CRFS strategies around the world.

²⁴ The Milan Urban Food Policy Pact, “Milan’s Food Policy Pact,” *The City of Milan*, (Available at <http://www.foodpolicymilano.org/en/urban-food-policy-pact-2/>; retrieved 5 September 2015)

²⁵ S. Jennings, J. Cottee, T. Curtis, S. Miller, “Food in an Urbanising World, The Role of City Region Food Systems in Resilience and Sustainable Development,” *London: International Sustainability Unit* (2015) (Available at <http://www.fao.org/fileadmin/templates/agphome/documents/horticulture/crfs/foodurbanized.pdf>; retrieved on 12 October 2015). The typology presented here from *Food in an Urbanised World* is a synthesis of recent typologies of specific thematic areas of impact on urban rural linkages, and as they become increasingly integrated, lead toward stronger city region food systems. (p. 35)

²⁶ (Ibid. p. 37)

²⁷ T. Forster, Egal, F., Escudero, A.G., Dubbeling, M., Renting, “Milan Urban Food Policy Pact: Good Practices from Cities”, *Milan: Fondazione Feltrinelli* (2015) (Available at <http://www.fondazionefeltrinelli.it/article/ebook-utopia-milan-urban-food-policy-pact/>; retrieved on 18 November 2015)

²⁸ These institutional mechanisms include Food Policy Councils (FPCs), intergovernmental territorial councils or private public partnerships, and other multi-actor arrangements.

²⁹ Neely, C., S. Chesterman, T-G. Vagen, and R. Prabh, “Stakeholder Approach to Risk Informed and Evidence Based Decision Making (SHARED): Shifting decision culture for sustainable development,” (Nairobi, 2015) (For more information see http://www.worldagroforestry.org/sites/default/files/SHARED%20brochure_updated_no%20bleed.pdf, retrieved 26 November 2015))

³⁰ There are governments from national to local levels helping actors from the consumer (including institutional buyers) to farmer (including processors and distributors) integrate demand and supply to achieve healthy sustainable diets from a healthy sustainable environment. Examples include municipalities such as New York, Toronto, or London, motivated by the budgetary impact to their public health systems resulting from inadequate nutrition, (non-communicable diseases such as obesity, hypertension and diabetes). Absent national policy support, it may require a mayor or county/provincial governor to take initiative to link communities at risk to healthy, fresh and minimally processed food from local farmers. National policy support would change this through dietary guidelines, procurement policy guidance and normative policy linking agricultural practices to human health (such as removing routine use of human antibiotics from animal agriculture).

³¹ United Nations ECLAC, “Efficiency – A Key Ingredient Towards Sustainable Supply Chains” (Position Paper on Efficient and Sustainable Supply Chains presented to International Transport Forum’s Annual Summit of Ministers, Leipzig, 21 May 2014). (Available at: <http://www.internationaltransportforum.org/2014/pdf/FL-ECLACSustainableSupplyChains.pdf>) In cases such as in several Latin American countries (Bolivia, Chile, Colombia, Ecuador, and Peru) there is new support (policy and programmes) for short supply chains to more directly link smallholder farmers and especially poor urban consumers, even embracing the informal sector and farmers markets where the social production of food is seen as an important dimension of a vibrant and resilient food security system.

³² Examples include municipal urban agriculture programmes in Quito, Rosario (Argentina), Cuba, Amman (Jordan), Nairobi County, and several others. (cite RUAF here)

²⁶ City Region Food System Alliance, “The City Region Food Systems Call for Global Action,” (2015) (Available at http://www.fao.org/fileadmin/templates/FCIT/documents/Call_for_Global_Action_City_Region_Food_Systems_V0.1.pdf; retrieved 5 September 2015).

²⁷ Contributions to the Habitat III process include a CRFS “non-issue paper” and a policy summary: FAO, “City Region Food Systems in the Context of Sustainable Urbanisation,” *FAO* (2015) (Available at <http://cityregionfoodsystms.org/resources/>; retrieved 5 September 2015).

³⁵ Jennings S., *Food in an Urbanising World*.