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Agenda Item: Urbanization and rural transformation Background Document  
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*Contributing to:*

***SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture***

***SDG 11: Make cities inclusive, safe, resilient and sustainable***

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### **Urbanization and Rural Transformation Implications for Food Security and Nutrition: key areas for policy attention and possible roles for CFS**

Second Draft Background Document

#### **Rationale for Addressing Urbanization and Rural Transformation and the Implications for Food Security and Nutrition**

More than 50 percent of the world's population, or around 3.9 billion people, now lives in cities and large towns classified as urban, and this figure is expected to rise to 66% by 2050<sup>i</sup>. In tandem, the dynamics of food systems are changing – an ever increasing number of rural and urban producers and consumers means that achieving food security and nutrition for all may require new policy thinking. There is also increasing attention and agreement that the lines between urban and rural are blurring and more integrated approaches are necessary in order to achieve food security and nutrition for all<sup>ii</sup>. However, little is known about the direct and indirect consequences the expected 6.5 billion urban dwellers in 2050 will have on food systems<sup>iii</sup> or what policies are needed to ensure food security and nutrition given these changing dynamics. Urbanization and rural-transformation projections present challenges and opportunities. Yet, of the myriad of pathways connecting urbanization, rural-transformation and food security, only two links are well-understood: urbanization and diet change and urban area expansion and loss of crop land.<sup>iv</sup> Specifically, how urbanization affects producers, particularly the 500 million smallholder farmers who supply 70 percent of global food production<sup>v</sup>, remains one of the least understood effects of urbanization<sup>vi</sup>.

When looking at the world's poor, approximately 78 percent of those living on less than US\$2 per day live in rural areas, and 63 percent of the poor are working in agriculture<sup>vii</sup>. And yet an increasing share of world poverty is located in urban centers, although it is not

always fully accounted for as a result of current measurement systems<sup>viii</sup>. UN Habitat estimates that about 45 percent of the urban population in developing countries live in slums – or households lacking adequate space, solid construction, improved water, secure residential status, or improved sanitation<sup>ix</sup>. Some have argued that food security is as much of an issue in urban areas as it is for rural, although in varying ways<sup>x</sup>. At the same time, the largest number of internally displaced people and refugees – 60 million – the highest recorded since record keeping began, is creating additional pressure on rural and urban areas. These dynamics illustrate that achieving food security and nutrition will require solutions targeting both rural and urban poor, but even more so building capacity to deal with the fluidity of growing and shifting populations.

Over the last forty years, there has been greater acknowledgement of the need for policies and research that addresses inter-sectoral linkages and to analyze interacting systems and the implications for rural and urban areas. There is substantial experience to support the adaptation of integrated approaches to address the current challenges and opportunities urbanization and rural transformation present. With the agreement on the Sustainable Development Goals<sup>xi</sup> (particularly 1, 2, 11 and 17), and the 2030 Agenda, the Second International Conference on Nutrition<sup>xii</sup>, the adoption of the 10 Year Framework Programmes on Sustainable Consumption and Production at Rio+20<sup>xiii</sup>, the signing of the Milan Urban Food Pact<sup>xiv</sup>, the Global Forum for Food and Agriculture Communique at the 8<sup>th</sup> Berlin Agriculture Ministers' Summit<sup>xv</sup>, and the upcoming UN Habitat III<sup>xvi</sup>, there is even greater attention on the need for integrated policymaking which addresses the specific food security and nutrition challenges and opportunities arising from urbanization and rural transformation. Indeed, the UN Habitat III draft New Urban Agenda makes specific reference to the importance of “promoting coordination of food security and agricultural policies across rural, peri-urban, and urban areas<sup>xvii</sup>.”

## **Objective and methodology**

As part of its Multi-Year Programme of Work (MYPoW) for 2016-2017, the Committee on World Food Security was tasked with holding a Forum on Urbanization, rural transformation and implications for food security and nutrition “*to reach a better understanding of the issues at stake, identify key areas for policy attention and possible roles for CFS. Following the Forum, its outcomes and results will be reviewed and analyzed by CFS participants in one-off open ended working group format of one or two days according to the needs with a view to identifying challenges and policy approaches that would contribute to overcoming existing constraints. The results of this work will be presented for endorsement at CFS 44 in 2017*”<sup>1</sup>.

The objective of this paper is to serve as a background to the Forum discussions by: i) providing a brief summary on the key implications for food security and nutrition presented by urbanization and rural transformation, ii) framing the key areas for policy attention, and iii) providing options for possible roles for CFS going forward.

In order to identify key areas for policy attention, the CFS Secretariat has reviewed existing literature and called for input through two Technical Workshops with key stakeholders already working on this issue, an online consultation on the Zero Draft of this background document hosted by the Global Forum on Food Security and Nutrition (FSN Forum), as well

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<sup>1</sup> CFS Multi-Year Programme of Work for 2016-2017 CFS 2015/42/12, paras 34-35

as comments from the CFS Bureau and Advisory Group. While the literature reviewed in the preparation of this document encompasses the inputs of the aforementioned sources, it is by no means exhaustive.

### **Scope and structure:**

The broad nature of the topic of urbanization and rural transformation and the resulting implications for food security and nutrition means that nearly every topic addressed by CFS – in the past and in its current areas of work – could fall under this umbrella or is relevant in some regard. Applying the guidance found in existing CFS products and forthcoming guidance will contribute to addressing the areas for policy attention outlined in this document.

It is not the aim of this paper to provide answers or draw conclusions but rather to highlight key areas which may require further discussion and attention by policymakers which are specific to achieving food security and nutrition and directly linked to the changing dynamics related to urbanization and rural transformation.

This paper is structured to first provide an overview of the rationale for addressing urbanization and rural transformation and the implications for food security and nutrition, followed by a brief description of some of the changing dynamics that need to be addressed as a result of urbanization and rural transformation (problem statement), and an identification of the key areas for policy attention by CFS. The paper ends with an indication of the options for CFS within its overall global coordination function, as well as within the scope of the mandate provided through the agreed multi-year program of work (MYPoW 2016-2017).

### **Key Concepts**

Inter-linkages between urban and rural areas relate to movement of people, capital, goods, employment, information and technology, and represent economic, social, and environmental dynamics<sup>xviii</sup>. Rural-urban linkages have been defined as ‘consisting of flows (of goods, people, information, finance, waste, information, social relations) across space, linking rural and urban areas, or the ‘functional links between sectors (agriculture, industry and services)<sup>xix</sup> with many of these linkages related directly or indirectly to food and nutrition<sup>xx</sup>.

Each country defines ‘urban’ and ‘rural’ by using criteria which are suitable for their own national context. Criteria used include administrative criteria, economic criteria, population-related criteria and urban criteria related to the functioning of urban areas<sup>xxi</sup>. Examples include population density, the presence of non-agricultural activity, or existence of paved streets or post offices. The variability in these criteria has a significant impact on the ability to compare ‘urban’ areas globally. The complex nature of cities can be better captured by combining several criteria to define urban areas and is a growing practice among countries<sup>xxii</sup>. Cities are also extending into peri-urban and rural areas, further blurring the lines between historically ‘urban’ and ‘rural’. Many areas previously classified as rural or peri-urban are growing rapidly, often in an unplanned manner, resulting in a mix of historically urban and rural characteristics.

On the other hand rural areas have long been defined as areas with lower population density and where agriculture and other primary activities account for a significant

proportion of land use, employment, income, and economic output<sup>xxiii</sup>. However, defining rural areas along these lines is not applicable in all countries, particularly when looking at developed economy rural areas where there may be a significant amount of manufacturing or other industry, and where rural populations may not rely significantly on agriculture. Similarly, so called ‘urban culture’ is found in many rural areas and many peri-urban areas are less dense than traditional rural villages<sup>xxiv</sup>. Increasingly attention has focused on urban area’s potential to produce food, through vertical farming and community and rooftop gardens, which further blurs the lines between urban and rural.

Increased rural-urban linkages present both challenges and opportunities for achieving food security and nutrition in a variety of complex and interlinked ways throughout food systems<sup>2</sup>, including:

- Achieving productivity increases (or lack thereof) (in agriculture and/or a shift to more productive sectors) as a result of access to technology or greater investment;
- Employment/income generation (or lack thereof) through productivity increases, non-farm activities, and/or closer proximity to markets;
- Access (or lack thereof) to more diverse products, including nutritious and less nutritious food;
- Access (or lack thereof) to quality natural resources (safe, healthy, and productive); and
- Access (or lack thereof) to quality services and infrastructure.

It is impossible to address one of these areas without impacting one of the other areas. Urbanization and rural transformation provide both challenges and opportunities to urban and rural areas alike. For example, urbanization may result in higher incomes and greater access to services, while it might also result in higher costs of living, and poorer quality water or other natural resources, and declining rural areas. There is general agreement that sustained economic growth is difficult to achieve without urbanization<sup>xxv</sup>. However, evidence also suggests that between the 1970s and 2000, urbanization in Sub-Saharan Africa was accompanied by economic contraction<sup>xxvi</sup>. Similarly, the transformation of rural areas can deliver very positive impacts in terms of access to services and higher incomes, and help to contribute to more sustainable urbanization, but it can also mean that certain areas are left behind, and create pockets of poverty.

### **Overarching Areas**

While the changing urban-rural dynamics present specific challenges and opportunities to achieving food security and nutrition, they are also affected by the broader challenges and trends associated with achieving food security and nutrition worldwide. Many of these issues have also been the focus of previous CFS work.

### Human rights<sup>3</sup>

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<sup>2</sup> Food systems encompass the entire range of activities involved in the production, processing, marketing, retail, consumption, and disposal of goods that originate from agriculture, including food and non-food products, livestock, pastoralism, fisheries including aquaculture, forestry, and the inputs and outputs generated at each of these steps. Food systems also encompass a wide range of stakeholders, people and institutions, as well as the socio-political, economic, technological and natural environment in which these activities take place.

<sup>3</sup> [CFS Global Strategic Framework; Voluntary Guidelines to Support the Progressive Realization of the Right to Food](#)

There are many human rights which are at stake when assessing rural-urban linkages including the right to food, the right to water, the right to health, the right to adequate housing, the right to education, the right to work and to social security, the right to information, and the right to take part in public affairs all of which have an integral link to achieving food security and nutrition. Many of these rights are put at risk, particularly in informal settlements and/or for unregistered migrants and refugees. Human rights violations as a result of urbanization and rural transformation include forced evictions, lack of provision of sanitation or safe drinking water, and increased instances of violence or conflict, among many others. The right to food and the right to water and sanitation are particularly relevant considering emerging malnutrition challenges.

Ensuring food security and nutrition across the rural-urban continuum requires attention to human rights from all stakeholders, policymakers and constituents at all levels of governance. Human rights provides a comprehensive lens to address issues related to participation, accountability, non-discrimination, transparency, human dignity, empowerment and the rule of law. However, local government officials often lack capacity to fully address the linkages of rights and achievement of food security and nutrition, or are not versed in participatory process to developing and implementing food security and nutrition policies<sup>xxvii</sup>.

#### Vulnerable individuals and groups<sup>4</sup>:

Though poverty, food insecurity, and malnutrition remain concentrated in rural areas, there is a growing need to understand who contends with malnutrition and food insecurity challenges in urban areas. The most inequitable outcomes of urbanization and rural transformation will occur when the same social groups are excluded from both rural and urban locations – which are often the very poor. Groups or individuals that face social exclusion for reasons such as gender, age, ethnicity, race, religion, or social class, will also tend to be excluded from opportunities emerging from rural-urban linkages, and will face greater challenges to achieving food security and nutrition. For example, children and women may face different food security and nutrition challenges in urban areas. The International Food Policy Research Institutes 2016 Global Nutrition Report suggests that while rural children under five generally have higher rates of stunting in low-income countries, under five stunting rates in several countries is 30 per cent or higher among urban children<sup>xxviii</sup>. At the same time, the report notes that obesity rates in many Sub-Saharan African countries among women aged 19 - 49 is approaching 50 percent in urban areas.

Vulnerable individuals in rural and urban areas often include individuals employed in informal sectors, newly established settlers (including refugees and displaced people), landless or land scarce households, female headed households, youth and children, elderly, disabled, and sick, and low income and resource poor households. Each of these individuals/groups are made more vulnerable by crises including natural disasters, civil unrest, and the outbreak of disease. Identifying vulnerabilities of individuals, and how they differ in rural and urban areas, assists with how best to include all individuals in designing policies to address their needs.<sup>xxix</sup> However, the lack of disaggregated and localized (fine-

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<sup>4</sup> [HLPE.2012.Social protection for food security: A report by the High Level Panel of Experts on Food Security and Nutrition, Rome Italy](#)

scale) data and the greater mobility of people between/within rural-urban areas makes it difficult to identify and target interventions to the most vulnerable.

#### Women<sup>5</sup>:

Food insecurity and malnutrition challenges associated with rural-urban linkages are often more stark for women and girls, as they account for three fifths of the world's one billion poorest, but also in the challenges they face in participating in decision-making and accessing resources and services targeted to their needs<sup>xxx</sup>. While urbanization has often been associated with more independence for women as a result of greater access to employment opportunities and services<sup>xxxii</sup>, this is not always the case and it is also not possible to group issues facing urban women distinct from issues facing rural women, as women's needs and opportunities in all areas are diverse depending in many ways on their level of income.

Women's empowerment remains pivotal to addressing food security and nutritional challenges across the rural-urban continuum. For example, providing the access to resources to women as men in rural areas could increase yields on farms by 20 – 30 percent and reduce the number of hungry people in the world by 12-17 percent.<sup>xxxiii</sup> Women's status is generally correlated with child nutritional status because more empowered women have better nutritional status themselves, are better cared for, and provide better care for their children. As both rural and urban dwellers become more dependent on purchased food, empowerment of women plays a crucial role in meeting household dietary needs.

#### Youth<sup>6</sup>:

Similarly, youth deserve a targeted focus when assessing food security and nutrition implications of rural-urban linkages. Over 50 percent of the world's population is made up of children and youth, with an estimated 1.8 billion young people between 10 and 24<sup>xxxiii</sup>. Approximately 90 percent of these youth live in developing countries where food insecurity and malnutrition are also highest.

The growing youth population presents an opportunity for economic and social progress, but also presents challenges. Seventy three million youth between the ages of 15 and 24 were unemployed in 2013, with the highest proportions in North Africa and Western Asia. There is a growing movement of youth who want to be agents of change in their communities, and it is often youth who are traveling between cities and rural areas for work and study and are serving a key role in building greater connectivity. However, opportunities could be further strengthened by developing the skills and talent of youth both in agriculture and wider food systems. Ensuring employment opportunities across the rural-urban continuum, including making agriculture attractive and remunerative for youth in rural and urban areas, is a key component to achieving food security and nutrition objectives, given that almost 2 billion young people are or will be entering the workforce in coming years.

#### Climate change and resilience<sup>7</sup>:

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<sup>5</sup> CFS 37 [Policy Recommendations on Gender, Food Security and Nutrition](#) and CFS 2017 Forum on Women's Empowerment

<sup>6</sup> CFS. 2015. [Developing the knowledge, skills, and talent of youth for food security and nutrition. Rome, Italy](#)

<sup>7</sup> HLPE.2012. [Food security and climate change: A report by the High Level Panel of Experts on Food Security and Nutrition, Rome Italy](#)

Climate change impacts all aspects of food security and nutrition for people living in rural and urban areas, although distributed unevenly geographically. Changing climatic conditions affect the availability of water, ecosystem service functioning, and crop, livestock, forestry and fisheries, and will affect regions that depend on rainfed irrigation more dramatically. Some projections predict an average of 2 percent decline in productivity over the coming decades with more significant impacts in areas of high population growth.<sup>xxxiv</sup> Climate change will also affect infrastructure such as energy sources and transport infrastructure used to transport goods and services between rural and urban areas as a result of more extreme weather events and higher temperatures<sup>xxxv</sup>.

Globally, the poorest people, in rural and urban areas, who are contributing the least to climate change, are increasingly those most at risk, due to heavier reliance on natural resources, lack of access to services and location of settlements. Many low income and informal settlements are located in areas exposed to floods and landslides, and where there may be very little or no provision for sanitation, surface water drainage and waste collection<sup>xxxvi</sup>. While greenhouse gas emissions vary greatly within and across cities, urban areas directly and indirectly contribute to as much as 80% of the world's emissions<sup>xxxvii</sup>. However, cities may provide a pathway to leverage co-benefits of adaptation, mitigation, and improved services<sup>xxxviii</sup>. Climate change will compound food security and nutritional challenges posed by urbanization and rural transformation, yet both processes provide avenues to enhance adaptation and mitigation to achieve food security and nutrition objectives.

## **Changing Dynamics for Policy Attention**

With the general acknowledgement of a need for a more holistic approach to food security and nutrition across rural, peri-urban, and urban areas and throughout food systems, broader themes and specific key areas have been identified through the literature, the Technical Workshops and the online consultation which require greater attention to *how* this could be achieved. Urbanization and rural-transformation present new challenges and opportunities food security and nutrition. As such, the changing dynamics presented in this section should be viewed through the lens of the basic components of food security and nutrition that include the stable availability, accessibility and utilization of food with the objective of achieving long-term sustainability of the world' food system<sup>xxxix</sup>.

### **Evolving Governance Issues**

*Multi-level, multi-sectoral, and multi-stakeholder governance:* Recent case studies have indicated that while there is growing incorporation of food security and nutrition in national policymaking, including cross-sectoral policies and strategies, does not necessarily translate to cross-sectoral collaboration in implementation<sup>xl</sup>. With livelihoods being less easily classified as 'urban' or 'rural' and an increase in income diversification across different activities among the most vulnerable, and especially among smallholders, addressing food security and nutrition will require a combination of policies and programs from a variety of areas of expertise. This means that the main entry point for addressing food security and nutrition issues in a particular context should include all governmental decision makers, including, but not limited to, Ministry of Agriculture, Ministry of Land, Ministry of Commerce, Ministry of Public Works, Ministry of Health, and many others. There is a need for coordination and input from engineers, planners, lawyers, doctors, teachers

and not just food or nutrition specialists. Coordination and collaboration extends beyond government, particularly as non-state actors are playing key roles in healthcare, value chains, infrastructure, services, and education in urban and rural areas. Similarly, there is a need to empower and better articulate the role of local governments in implementing policies and program aimed at achieving food security and nutrition in both rural and urban areas<sup>xli</sup>.

- **Key area:** Identify key themes and lessons from existing initiatives which apply more integrated approaches based on territories<sup>xlii</sup>, particularly focusing on vertical and horizontal multi-stakeholder and inter-ministerial collaboration

*Not just multi-stakeholder but those with a direct stake:* While there is an overall focus on multi-sector and multi-stakeholder engagement in order to incorporate the wide range of actors from both rural and urban areas into policy design and interventions, the involvement of those most vulnerable to food insecurity and malnutrition is highlighted as a key element to ensure that policies and interventions are inclusive and equitable. Inclusion and equity are stressed as key qualifiers to add to urbanization and rural transformation discourse, though they remain elusive in practice. Recent research has illustrated that involving communities or residents in planning<sup>xliii</sup>, can address sustainability and land management issues, while also making residents and communities happier with the outcomes<sup>xliv</sup>. Low income households in both rural and urban areas are often left out of planning and policy development, which has implications for the level of infrastructure and service provision targeted to meet their needs<sup>xlv</sup>.

- **Key Area:** Focus on community level engagement with direct participation of the food insecure and malnourished in designing policy interventions or programs addressing food security and nutrition

### **Data to Reflect Changing Dynamics**

*Data on which to base policy decisions:* Current systems and approaches for data collection and analysis are not always adapted to the changing dynamics presented by urbanization and rural transformation related to increasing mobility and temporary migration, informal settlements, and the scale at which food security and nutrition data is often collected. There is no published global index of food security which differentiates between urban and rural conditions or is disaggregated to account for the differing impacts of those conditions. The establishment of the poverty line and the relationship with urban food prices is just one example of this gap. Recent case studies have highlighted the need to address geographic disparities within national borders in terms of food security and nutrition outcomes<sup>xlvi</sup>. While productivity growth, including in agriculture, has led to poverty reduction and improved food security and nutrition in many countries at the national level, acute areas of malnutrition and poverty still exist and are not always captured or adequately addressed.<sup>xlvii</sup> Achieving the right to adequate food for all and leaving no one behind will mean that a better understanding of the specific areas of vulnerability and need are adequately captured in data collection and analysis methodologies. This means that there is a need for greater disaggregation and granularity of data to capture differences by gender, youth, geographies, and locality specific information, including data that can measure possible heterogeneity within urban areas. There is also a need for more integrated data across sectors with the ability for data from one sector able to interact with data from other



sectors (e.g. health and agriculture). The central role of data in eradicating poverty and promoting sustainable development is also recognized in the context of the Agenda 2030. The adoption of the SDGs and related follow-up and review activities present a strategic opportunity to prioritize Governments' efforts to undertake comprehensive needs assessments of their statistical capacity and readiness in order to monitor the agenda.

- **Key Area:** Determine the key gaps in data collection and analysis
- **Key Area:** Identify ways to capture more localized and gender specific data through participatory collection and analysis

### Changing Consumption Patterns and Implications for Nutrition

*Focusing on consumption patterns and the achievement of healthy and sustainable diets<sup>xlviii</sup>:* One of the key inter-linkages between urban and rural areas is demand for food. Rising incomes are correlated with rising demand for processed foods. However, there is also an increase in purchased and processed foods in poor and rural areas<sup>xlix</sup>, with purchased food accounting for more than 50 percent of total economic value of food consumed in rural areas of Africa and Asia. Of this percentage, a portion is processed food which is making up an increasing share of food expenditure in not just urban but also rural areas. Deserving particular attention is that demand for processed and perishable goods is growing most rapidly for those making under \$2 per day<sup>l</sup>. This means that those most vulnerable are increasingly exposed to price volatility and the resulting impacts on food security and nutrition<sup>8</sup>. Chronic malnutrition is attributed to micronutrient deficiencies (iron, vitamin A, zinc, iodine) as a result of not consuming enough food with these nutrients, even if consuming enough calories. In addition, the rise of 'hidden hunger'<sup>9</sup> and non-communicable diseases (NCDs) like diabetes and cardiovascular diseases are exacerbated by malnutrition, particularly in urban areas but increasingly so in small towns and cities. This means that food prices and the nutritional value of processed and perishable goods accessible to those living in poverty in rural and urban areas is increasingly important.

- **Key Area:** Develop strategies to enhance nutrition education and consumer awareness
- **Key Area:** Ensure that nutritious food is accessible and affordable in both rural and urban area, given the of overall rise in consumption of purchased and processed food

*Changing Food Safety Needs:* Food safety and health for many of the rural and urban poor is threatened largely by environmental hazards and infrastructure deficits, including lack of access to or poor quality sanitation and contaminated or inaccessible sources of water. Street food from vendors plays a role in food security and nutrition in a variety of ways, and often makes up a large portion of non-home prepared meals, particularly for the urban poor<sup>li</sup>. While food vending provides an income generating opportunity, there are

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<sup>8</sup> HLPE.2011. Price volatility and food security, A report by the High Level Panel of Experts on Food Security and Nutrition

<sup>9</sup> Hidden hunger is defined by the WHO as "a lack of vitamins and minerals" and it occurs when the food people consumes lacks sufficient micronutrients needed for growth and development. See: [http://www.who.int/nutrition/topics/WHO\\_FAO\\_ICN2\\_videos\\_hiddenhunger/en/](http://www.who.int/nutrition/topics/WHO_FAO_ICN2_videos_hiddenhunger/en/)

considerable constraints in terms of poor physical infrastructure, environmental hazards and spatial conflicts. Many markets, particularly in urban areas, are located in areas with inadequate solid waste collection and without adequate shelter and storage facilities to keep food from spoiling<sup>lii</sup>. Inadequate hygiene training may further contribute to food safety threats, particularly when vendors concerned with incurring losses resort to selling spoiled or contaminated foods. However, food vending both provides an important income stream particularly for women, and can provide a cheap and accessible food option, particularly in urban areas. Therefore, there is a trade-off in terms of food quality and safety with lower prices, accessibility, and for vendors an income generating opportunity.

- **Key Area:** Increase focus on how food is purchased from informal markets and vendors in both rural and urban areas to assess the benefits they provide and the risks they present to food security and nutrition

### Growing Scarcity of Land and Natural Resources

*Focusing on integrated land-use, natural resource, and circular economy<sup>10</sup> planning across territories:* Shifting populations present unique challenges for land use planning as demand for land may rise in some areas faster than planning may be taking place. According to a United Nations report, if land conversion into urban use continues at current rates, every new urban resident in developing countries will convert on average 160 kilometers of non-urban land to urban land by 2025<sup>liii</sup>. As urban areas grow and land is converted into other uses, or as land prices rise close to urban areas, in some cases agricultural production is shifting into hinterland areas, or to other countries, where land is cheaper. This presents challenges for land governance and the rights of landowners and users, but may also present an opportunity where formerly hard to access or more distant regions left out of focus for investment may now be attracting increasing attention. There is growing information on the use of the *Voluntary Guidelines on the Governance of Tenure of Land, Fisheries and Forests*<sup>11</sup> in both rural and urban areas to facilitate more integrated land use planning which safeguards tenure rights and use of the *CFS Principles for Responsible Investment in Agriculture and Food Systems* to facilitate more responsible investment in agriculture and food systems.

As natural resources grow increasingly scarce and are impacted by the effects of climate change, greater integrated planning across landscapes, ecosystems, and territories which balance natural resource availability, demands, and look at ways to enhance efficiency and reuse are necessary. Natural resource use and contribution to environmental damage often pose and exacerbate inequities, and it is estimated that 40 percent of all violent conflicts in the last 60 years have been linked to natural resources<sup>liiv</sup>. With greater attention on circular economy systems, there are opportunities to identify resources produced and used in rural and urban areas, their by-products or wastestreams, and how to direct them to productive uses in both areas<sup>liv</sup>. Examples include the use of wastewater for agricultural production in rural, peri-urban, and urban areas; as well as the opportunities for producing energy from

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<sup>10</sup> Circular economy is an emerging concept generally defined as an “economy...that is restorative and regenerative by design, and which aims to keep products, components and materials at their highest utility and value at all times, distinguishing between technical and biological cycles.” See: <https://www.ellenmacarthurfoundation.org/circular-economy>

<sup>11</sup> [CFS.2012.Voluntary Guidelines on the Governance of Tenure of Land, Fisheries and Forests, Rome, Italy](#); [CFS.2014. Principles for Responsible Investment in Agriculture and Food Systems, Rome, Italy](#)

wastestreams or by-products for household cooking or heating to reduce demand on wood products.

- **Key Area:** Assess the use of the existing tools and guidance to ensure security of tenure and foster participatory spatial planning and responsible investment for food security and nutrition across landscapes, ecosystems and territories, given the changing dynamics urbanization and rural transformation present<sup>lvi</sup>
- **Key Area:** Identify mechanisms to improve efficiency and the use of waste and by-products to reduce demand on natural resources and facilitate greater rural-urban synergies

### Shifting role of Agriculture

*Facilitating agriculture production synergies and ways to achieve inclusive sustainable intensification:* Without significant reduction in food loss and waste, evidence suggests that population growth in both rural and urban areas may require 50-60 percent increase in global food production by 2050. A large percentage of agricultural production can be found in urban and peri-urban areas, with a recent study indicating that approximately 60 percent of all irrigated cropland and 35 percent of all rainfed cropland is within 20 kilometers of city boundaries<sup>lvii</sup>. There is also an increasing focus on urban agriculture<sup>lviii</sup> and ‘greening’ urban spaces with a rise in urban forestry and mixed use green areas, referred to by some as ‘ruralizing’ urban settlements<sup>lix</sup>. Some estimates indicate that 1 billion people are farming and fishing in cities, meaning 15-20 percent of the world’s food supply is coming from urban areas<sup>lx</sup>. Vertical farming and rooftop gardens are examples of areas of growing interest, and ways to integrate agriculture into urban areas where there is significant competition for space. At the same time, at least for the near term, a large percentage of agriculture will still take place in areas classified as ‘rural’.

With a growing call for shortening value chains, many cities and developed economies are focusing on buying more local across goods and services. However, the increasing demand of urban areas and the scarcity of land in peri-urban settings means that in many cases value chains are lengthening within a country, across regions and internationally. The lengthening of domestic value chains and regional value chains presents opportunities for mid-stream actors and smaller and medium size urban areas<sup>lxi</sup>. However, it also presents challenges as agriculture production may shift to areas with lower regulation and result in externalizing negative impacts. The shift in diets and demand from both rural and urban consumers away from grains also presents opportunities to expand production of perishables. There are also opportunities to further explore how to connect agricultural smallholder producers<sup>lxii</sup> – be they rural or urban, farmers, fishers, or foresters – more directly to consumers with benefits associated with greater value captured by the producer<sup>lxiii</sup>, potentially less food loss and waste<sup>lxiii</sup> potential for more access to nutritious and fresh foods<sup>lxiii</sup>, and socializing consumers about where their food is coming from. This includes the growing potential for local self-produced food by both professional and non-professional farmers, related below with the discussion of non-farm income.

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<sup>12</sup> Building on outcomes of the forthcoming CFS Policy Recommendations on Connecting Smallholders to Markets

<sup>13</sup> [HLPE.2014.Food losses and waste in the context of sustainable food systems: A report by the High Level Panel of Experts on Food Security and Nutrition, Rome Italy](#)

- **Key Area:** Identify opportunities to integrate and sustainably intensify agriculture into peri-urban and urban contexts
- **Key Area:** Specify how rural and urban producers can derive greater value (income and access to more nutritious foods) from engagement in local and regional value chains<sup>14</sup>

## Labour and Mobility

*Identifying income generating opportunities on and off-farm:* The concentration of employment in urban areas is one of the main drivers of urbanization and rural-urban migration. Discussions around rural transformation also often focus on the labor/employment element, and the shift away from agriculture and what this means for the considerable portion of the population which may be shifting from part-time farming into more full-time non-farm work<sup>lxiv</sup>. The rise of small towns and cities and their increasing urbanization means that rural areas are not just inhabited by farmers, but include a growing number of people working in processing, repair and maintenance, trade, transport, education, health services, and other areas. The people working in these areas are buying their food at markets, and even those still active in primary production often have another income, which may be their primary income or a secondary source such as remittances. Employment data often may only focus on primary employment and may not capture the range of income earning activities that many households are engaged in. More recent data seems to indicate that farm households are increasingly engaging in non-farm income earning activities<sup>lxv</sup>. As non-farm income becomes increasingly important with urbanization and rural transformation, employment opportunities and challenges deserve greater focus, particularly with extremely young populations in many developing countries. In Africa, 300 million youth are expected to enter the labor market over the next 15 years and over 700 million in the next three decades<sup>lxvi</sup>.

- **Key area:** Identify ways to enhance income generation from both farm and off-farm activities particularly geared to small producers, women, and young people<sup>15</sup>, acknowledging that full-time production is not in the interest of all producers

*Migration and Remittances:* Increasing mobility has meant that migration may not be a long-term decision, where many rural-urban migrants return to rural areas after a short-time. Migration is often referred to in a negative way, when in many cases it also presents opportunities. For example, the remittances sent by migrants back to local areas are often key components of supporting rural livelihoods and risk diversification. The value of international remittances to developing countries in 2011 exceeded \$400 billion and in some countries accounted for as much as 20 percent of GDP.<sup>lxvii</sup> Migrants are some of the largest investors in rural communities, even as they themselves struggle to meet their own food security and nutrition needs. However, in a 2011 survey of population policies, 82 percent of developing countries reported that they had implemented policies to curb rural-

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<sup>14</sup> Building on outcomes of the forthcoming CFS Policy Recommendations on Connecting Smallholders to Markets; [CFS.2012.Voluntary Guidelines on the Governance of Tenure of Land, Fisheries and Forests, Rome, Italy](#); [CFS.2014. Principles for Responsible Investment in Agriculture and Food Systems, Rome, Italy](#)

<sup>15</sup> Integrating recommendations from forthcoming SOFA 2017 report on *Transforming Agriculture and Food Systems: Opportunities and Challenges for Sustainable Food Security and Poverty Reduction*

urban migration<sup>lxviii</sup>. Migrants and displaced people are often moving due to situations of conflict or as a result of natural disasters, environmental degradation, and largely because of economic distress and food insecurity. Given high migration costs and uncertainties associated with migration, a large portion of migration is internal within national boundaries.

- **Key Area:** Identify ways to leverage and improve migrants' skills to enhance coherence between employment, skills and migration policies
- **Key Area:** Address how migration may stress environmental, social, and economic conditions along the rural-urban continuum which may result in a rise in inequality and food and nutrition insecurity

### Shifting needs for services, infrastructure and social protection

*Identifying gaps in social protection<sup>16</sup>, service and infrastructure provision:* There are challenges with increasing mobility and shifting populations associated with the ability to ensure adequate infrastructure and service provision to growing populations and for people who may live and work in different areas or go back and forth between areas. There are also opportunities to reach a greater portion of the population with quality services and access to income generating opportunities in a growing number of more dispersed 'hubs' of small towns and cities. Similarly, there are challenges with understanding the dynamics and fluidity of migration and how to allocate resources to adjust services and infrastructure which can address this fluidity. But there are also opportunities to provide a greater diversity of options for the rural and urban poor to meet their food security and nutrition needs depending on their skills, needs, and desires and to adapt and respond to changing dynamics. Opportunities also exist to connect social protection schemes with livelihood resilience, such as through provision of food from local producers for distribution to those receiving food assistance.

- **Key Area:** Assess how to allocate resources for services, infrastructure and social protection which respond to increasing mobility (in and out migration, circular migration, and short term moves) and the 'unofficial' status of many migrants and/or those working and living in different areas

### Roles for CFS

There are three interconnected and mutually reinforcing functions of CFS, all of which contribute to the function of global coordination, which are summarized in the chart below and guide the nature of CFS activities.

Developing a shared understanding on good practices is essential for effective policy development. The *Forum on Urbanization, rural transformation and implications for food security and nutrition* held at CFS 43 will be a first opportunity for all stakeholders to exchange practical experience on the challenges, opportunities and positive outcomes that they have seen as a result of a more integrated rural- urban approach.

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<sup>16</sup> [HLPE.2012.Social protection for food security: A report by the High Level Panel of Experts on Food Security and Nutrition, Rome Italy](#)

Building on the outcomes of the Forum, CFS can task the Open Ended Working Group to convene a two day meeting in 2017. The first day could consist of a targeted peer and multi-stakeholder learning and good practice sharing exercise aimed at identifying practical examples of effective policy approaches on addressing food security and nutrition in the context of changing rural-urban dynamics. Under this function, CFS can also invite the participation of relevant bodies and initiatives including, but not limited to, UN HABITAT and the Milan Urban Food Policy Pact network. The second day would be dedicated to reviewing the compilation of identified good practices which would be submitted at CFS 44 as a compendium of effective policy approaches. The two day meeting would not be held on consecutive days to allow sufficient time for the Secretariat to prepare the draft compendium, and for Members and Participants to consult their constituencies.

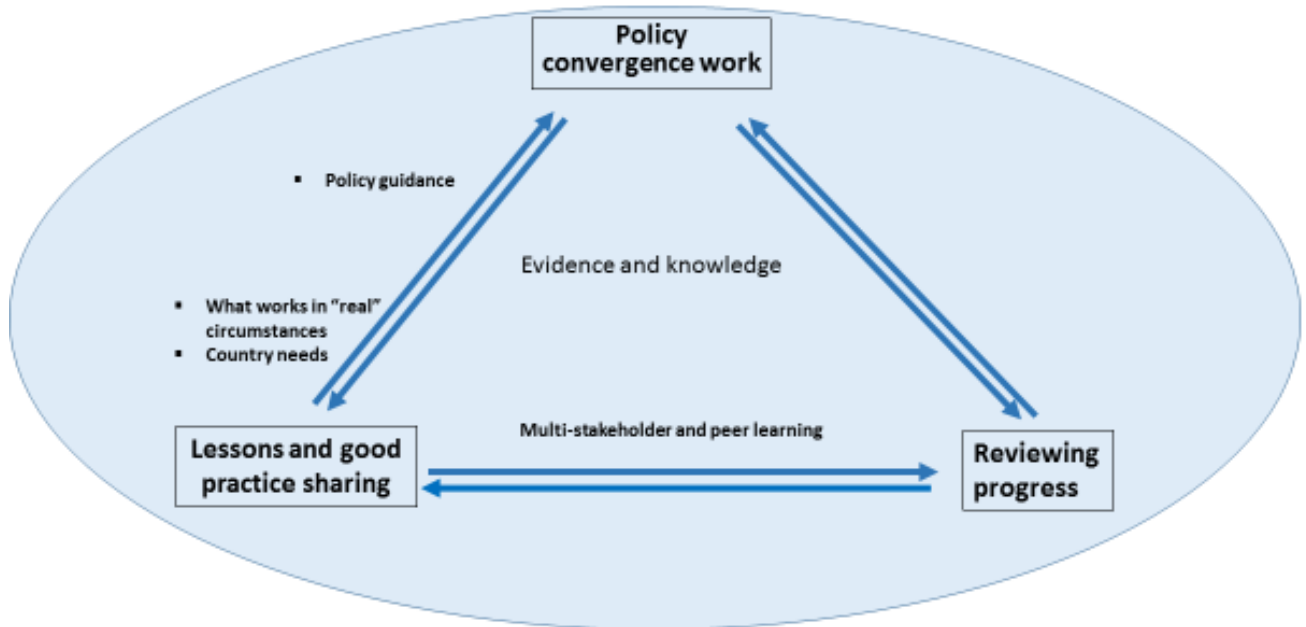
In addition, CFS could task the MYPoW Open Ended Working Group, as it continues its work elaborating priorities for CFS activities in the biennium 2018-2019, to consider an HLPE report for presentation to CFS in 2019.

An HLPE report may take stock of additional evidence and provide a systemic analysis of the policy shifts that would be required to adequately address the direct and indirect consequences of a rapidly growing urban population on food systems. The report could also provide evidence on how producers, particularly smallholder farmers, are affected by urbanization and which policies would ensure better planning for food security and nutrition across territories.

Given its ability to bridge scientific and political multi-stakeholder discussions, CFS is uniquely positioned to tackle this issue. No other international forum is currently addressing or expected to address the challenge of integrating food security and nutrition objectives into territorial planning. An HLPE report would therefore fill a global gap and contribute to fulfilling the CFS vision for a world free of hunger by strengthening countries' capacity to formulate policies that are aligned with the changing rural urban dynamics.

The evidence and knowledge based HLPE report, combined with the compendium of good practices and information obtained through the thematic reviews of the High Level Political Forum and other global progress reviews, would provide the starting point for the development of a CFS global policy guidance tool after 2019 making use of all three functions of CFS within its global coordination framework. This would take the work on urbanization and rural transformation beyond the 2016-17 MYPoW, but would allow CFS a deeper engagement on the issue over the longer term.

## CFS global coordination framework



## References

- <sup>i</sup> UN DESA.2014. Revision of World Urbanization Prospects
- <sup>ii</sup> Seto, K.C., Reenberg, A., Boone, C.G., Fragkias, M., Haase, D., Langanke, T., Marcotullio, P., Munroe, D.K., Olah, B. and Simon, D., 2012. Urban land teleconnections and sustainability. Proceedings of the National Academy of Sciences, 109(20), pp.7687-7692.
- <sup>iii</sup> Seto, K.C. and Ramankutty, N., 2016. Hidden linkages between urbanization and food systems. Science, 352(6288), pp.943-945.
- <sup>iv</sup> *Idem.*
- <sup>v</sup> Lowder, S.K., Scoet, J. and Singh, S. 2014. 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.
- <sup>vi</sup> Seto and Ramankutty, 2016.
- <sup>vii</sup> Olinto, P.; Beegle, K.; Sobrado, C.; Uematsu, H. 2013. The State of the Poor: Where are the poor, where is extreme poverty harder to end, and what is the current profile of the world's poor. Economic Premise, World Bank. Washington D.C. Available at: <http://siteresources.worldbank.org/EXTPREMNET/Resources/EP125.pdf>
- <sup>viii</sup> Mitlin, D. and Satterthwaite, D. 2013. Urban poverty in the global South: scale and nature. New York: Routledge
- <sup>ix</sup> UN Habitat. 2012. The State of the World's Cities Report 2012/2013: Prosperity of Cities. Nairobi: United Nations Human Settlements Programme
- <sup>x</sup> Crush, J. and Frayne, B. 2010. The Invisible Crisis: Urban Food Security in Southern Africa, Urban Food Security Series No.1. Queen's University and AFSUN: Kingston and Cape Town.
- <sup>xi</sup> [Sustainable Development Goals](#)
- <sup>xii</sup> [Second International Conference on Nutrition](#)
- <sup>xiii</sup> [10 Year Framework Programmes on SCP](#)
- <sup>xiv</sup> [Milan Urban Food Policy Pact](#)
- <sup>xv</sup> [GFFA Communiqué, 8th Berlin Agriculture Ministers' Summit 2016](#)
- <sup>xvi</sup> [UN Habitat III Zero Draft of the New Urban Agenda 18 June 2016](#)

- xvii *Idem*
- xviii [Sietchiping, R.; Kago, J.; Zhang, X.Q.; Augustinus, C.; Tuts, R. 2014. Role of Urban-Rural Linkages in Promoting Sustainable Urbanization, Environment and Urbanization ASIA 5 \(2\) 219-234, National Institute of Urban Affairs, Sage Publications.](#)
- xix Tacoli, C.2015. The crucial role of rural-urban linkages. The Sahel and West Africa Week, EXPO 2015. Available at <http://www.oecd.org/swac-expo-milano/presentationsanddocuments/session-1-insight-tacoli-iiied.pdf>
- xx Forster, T.; Santini, G.; Edwards, D.; Flanagan, K.; Taguchi, M. 2015. Strengthening Urban Rural Linkages Through City Region Food Systems, Paper for a joint UNCRD-UN Habitat issue of the Regional Development Dialogue, Vol 35 on "Urban-Rural Linkages in Support of the New Urban Agenda."
- xxi Buettner, T.2014. Urban Estimates and Projections at the United Nations: the Strengths, Weaknesses, and Underpinnings of the World Urbanization Prospects, *Spatial Demography* 2014 2 (2). Available at: [http://spatialdemography.org/wp-content/uploads/2014/03/Buettner\\_in-press.pdf](http://spatialdemography.org/wp-content/uploads/2014/03/Buettner_in-press.pdf)
- xxii *Idem*
- xxiii Berdegue, J., Rosada, T., Bebbington, A.2014. Chapter 27, The Rural Transformation: Environment and Health, <http://www.developmentideas.info/chapter/rural-transformation/>
- xxiv Tacoli, C.; McGranahan, G.; Satterthwaite, D. 2015. Urbanisation, rural-urban migration and urban poverty. IIED working paper. IIED, London, <http://pubs.iied.org/10725IIED>
- xxv Glaeser, E. 2011. Cities, Productivity, and Quality of Life, *Science* 333 (6042):592-594
- World Bank. 2009. World Development Report 2009: Reshaping Economic Geography. Washington D.C.: The World Bank
- xxvi UN DESA, 2014.
- xxvii [Human Rights Council 30<sup>th</sup> Session. 2015. Research-based report on the role of local government in the promotion and protection of human rights, A/HRC/30/49](#)
- xxviii International Food Policy Research Institute. 2016. Global Nutrition Report 2016: From Promise to Impact: Ending Malnutrition by 2030. Washington, DC.
- xxix [ILO.2012. Social Protection Floors Recommendations, Geneva, 101<sup>st</sup> ILC session](#)
- xxx UNDP.2006. Taking Gender Equality Seriously
- xxxi Tacoli, C. and Satterthwaite, D.2013. Editorial: Gender and urban change, <http://eau.sagepub.com/content/25/1/3.full.pdf+html>
- xxxii FAO. 2011. The State of Food and Agriculture 2010-2011: Women in Agriculture Closing the gender gap for development, Rome, Italy, <http://www.fao.org/docrep/013/i2050e/i2050e.pdf>
- xxxiii UNFPA.2014.The State of World Population 2014
- xxxiv Leclere, D.; Havlik, P.; Fuss, S.; Schmid E.; Mosnier, A.; Walsh, B.; Valin, H; Herrero, M.; Khabarov, N.; and Obersteiner, M. 2014. Climate change induced transformations of agricultural systems: insights from a global model. *Environmental Research Letters*, 9 (124018)
- xxxv Tacoli, C.; Bukhari, B.; Fisher, S.2013. Urban poverty, food security and climate change, Human Settlements Working Paper No 37, Rural-urban interactions and livelihoods strategies. IIED, London, <http://pubs.iied.org/pdfs/10623IIED.pdf?>
- xxxvi *Idem*
- xxxvii Hoornweg, D., Sugar, L. and Gomez, C.L.T., 2011. Cities and greenhouse gas emissions: moving forward. *Environment and Urbanization*, p.0956247810392270.
- xxxviii *Idem*
- xxxix Berry, E.M., Dernini, S., Burlingame, B., Meybeck, A. and Conforti, P., 2015. Food security and sustainability: can one exist without the other?. *Public health nutrition*, 18(13), pp.2293-2302.
- xl Conference Report 2015, The Territorial Approach to Food Security and Nutrition Policy, International Conference in Milan, Italy
- xli [Human Rights Council 30<sup>th</sup> Session. 2015. Research-based report on the role of local government in the promotion and protection of human rights, A/HRC/30/49](#)
- xliv [FAO' Regional Initiatives for Latin America and the Caribbean; Rural-Urban Linkages, Urban Agriculture Magazine; Milan Urban Food Policy Pact, Selected Good Practices from Cities; Organic and conventional public food procurement for youth in Italy;](#)
- xlvi [Kent, G.2014.Building Nutritional Self-reliance, University of Hawaii, Honolulu, Hawaii](#)
- xlv Usavagovitwong, N. et al. 2013. Housing density and housing preference in Bangkok's low income settlements. Working Paper. International Institute for Environment and Development, London.
- xlv [Sohel Ahmed, Edwin Simiyu, Grace Githiri, Alice Sverdlik and Shadrack Mbaka.2015. Cooking up a storm: Community led mapping and advocacy with food vendors in Nairobi's informal settlements. IIED Working Paper. IIED, London.](#)



- 
- xlvi OECD, FAO, UNCDF, Comune di Milano, UN EXPO. 2015. International Conference in Milan, Italy “The Territorial Approach to Food Security and Nutrition Policy”, 19 -20 October 2015. Conference Report available at <http://www.oecd.org/regional/regional-policy/Territorial-FSN-report.pdf>
- xlvi Conference Report 2015, The Territorial Approach to Food Security and Nutrition Policy, International Conference in Milan, Italy
- xlvi [FAO.2013. Food Systems for Better Nutrition, The State of Food and Agriculture, Rome, Italy; FAO.2011.Food for the Cities multi-disciplinary initiative position paper, Rome, Italy;](#)
- xlvi [UNSCN Statement.2015. Nutrition Security of Urban Populations at the Sixth World Urban Forum, Naples, Italy; Walker, R.; Keane, C.; Burke, J.2010. Disparities and access to healthy food in the United States: A review of food deserts literature. Health & Place, Vol 16, Issue 5, September 2010, pp 876-884](#)
- l Tschirley, D.; Snyder, J.; Dolislager, M.; Reardon, T., Haggblade, S.; Goeb, J. 2015. Africa’s Unfolding Diet Transformation: Implications for Agrifood System Employment, Journal of Agribusiness in Developing and Emerging Economies, 5 (2), October 2015.
- li [Sohel Ahmed, Edwin Simiyu, Grace Githiri, Alice Sverdlik and Shadrack Mbaka.2015. Cooking up a storm: Community led mapping and advocacy with food vendors in Nairobi’s informal settlements. IIED Working Paper. IIED, London.](#)
- lii [Sohel Ahmed, Edwin Simiyu, Grace Githiri, Alice Sverdlik and Shadrack Mbaka.2015. Cooking up a storm: Community led mapping and advocacy with food vendors in Nairobi’s informal settlements. IIED Working Paper. IIED, London.](#)
- liii Roberts, B.2014. Managing Systems of Secondary Cities: Policy Responses in International Development, Cities Alliance, Belgium.
- liv United Nations Environment Programme. 2009. From Conflict to Peacebuilding: The Role of Natural Resources and the Environment. Geneva
- lv [Lee-Smith, D.2010. Cities feeding people: an update on urban agriculture in equatorial Africa, Environment and Urbanization, International Institute for Environment and Development \(IIED\); Lee Smith, D. 2013. Which way for UPA in Africa?, City: analysis of urban trends, culture, theory, policy, action, 17:1, 69-84](#)
- lvi Wehrmann, B. and Antonio, D. 2015. Applying the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) in Urban and Peri-Urban Areas: An Exploratory Framework, 2015 World Bank Conference on Land and Poverty, Washington DC
- lvii 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>)
- lviii [Soulard, C.T.; Banzo, M.; Perrin, C.; Valette, E. 2015. Urban strategies and practices for agriculture and food: six Mediterranean case studies. Second International Conference on Agriculture in an Urbanizing Society, Reconnecting Agriculture and Food Chains to Societal Needs, 14-17 September 2015 Rome, Italy;](#) Robineau, O. 2015. Toward a systemic analysis of city agriculture interactions in West Africa: a geography of arrangements between actors, *Land Use Policy*, 49, 322-331
- lix McGranahan, G. and Satterthwaite, D.2014. Urbanization concepts and trends. IIED Working Paper. IIED, London. <http://pubs.iied.org/pdfs/10709IIED.pdf>
- lx FAO. 2015. <http://www.fao.org/ag/agp/greenercities/en/whyuph/foodsecurity.html>
- lxi Reardon, T. 2015. The hidden middle: the quiet revolution in the midstream of agrifood value chains in developing countries, *Oxford Review of Economic Policy*, Volume 31, Number 1, 2015, pp.45-63
- lxii Chapoto, A.; Haggblade, S.; Hichaambwa, M.; Kabwe, S.; Longabaugh, S.; Sitko, N.; Tschirley, D. 2013. Institutional models for accelerating agricultural commercialization: Evidence from post-independence Zambia, 1965-2012. In E. Hillbom &P. Svensson (Eds.), *Agricultural Transformation in Global History Perspective* (pp.281-310): London: Routledge.
- lxiii [Lee-Smith, D. and Lamba, D.2015. Nutrition and Urban Agriculture in Sub-Saharan African Cities. Right to Food and Nutrition Watch, Issue 7 2015](#)
- lxiv Chapoto, A.; Haggblade, S.; Hichaambwa, M.; Kabwe, S.; Longabaugh, S.; Sitko, N.; Tschirley, D. 2013. Institutional models for accelerating agricultural commercialization: Evidence from post-independence Zambia, 1965-2012. In E. Hillbom &P. Svensson (Eds.), *Agricultural Transformation in Global History Perspective* (pp.281-310): london: Routledge.
- lxv [Berdegue J. A. and Proctor F.J. with Cazzuffi C., 2014. Inclusive Rural-Urban Linkages. Working Paper Series N123. Working Group: Development with Territorial Cohesion. Territorial Cohesion for Development Program. Rimisp, Santiago, Chile.](#)
- lxvi Tschirley, D.; Snyder, J.; Dolislager, M.; Reardon, T., Haggblade, S.; Goeb, J. 2015. Africa’s Unfolding Diet Transformation: Implications for Agrifood System Employment, Journal of Agribusiness in Developing and Emerging Economies, 5 (2), October 2015.
- lxvii Roberts, B.2014. Managing Systems of Secondary Cities: Policy Responses in International Development, Cities Alliance, Belgium.

