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FAO REGIONAL CONFERENCE FOR THE NEAR EAST

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**The State of Food Security in the Near East and North Africa:
Adapting food systems to respond to an increasingly urban population**

Executive Summary

The situation in the 30 countries of the Near East Regional Conference (NERC) highlights both the considerable progress needed in many countries to end hunger by 2030 (SDG Target 2.1) and the high level of variation across the region: conflicts and crises continue to be major drivers of hunger in the region, while pockets of deep and often chronic hunger exist in many countries, including several middle and high-income countries, and particularly in rural areas. This underscores the importance of targeted and concerted programmes and investments to eliminate the scourge of hunger in all countries, whether it is the result of protracted crises, deep-rooted and persistent poverty, rural under-development, or of all three and other causes.

Whilst progress has been made to reduce child wasting and stunting and improve maternal health across the region, there is still a considerable gap to close if the SDG target of ending all forms of malnutrition is to be reached in 2030 in the Arab region. Worryingly, available data confirms that the region is affected by increasingly high levels of overweight and obesity. Obesity levels are amongst the highest in the world, particularly amongst women. Together, the findings underscore the importance of governments working together with the private sector, communities, civil society, research institutions and international partners to put in place policies, programmes and investments which promote sustainable food systems, healthy diets and extend prosperity for farmers and rural areas in general and ensure the sustainable use of the region's increasingly scarce and fragile resources, particularly water.

The Near East and North Africa is an urbanizing region. Sixty-three (63) percent of the region's current population lives in urban areas. This is projected to grow to seventy-three (73) percent by 2050, totalling more than 450 million people. In the future, addressing food security and nutrition will increasingly need to consider how the urban food agenda can be met. This paper reviews a number of the food system adaptations required to respond to the needs of the region's growing urban populations and highlights potential policy directions necessary to ensure that future food systems are healthy, sustainable and respond to the challenges of growing urban populations.

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Suggested action by the Regional Conference

- Governments should continue to prioritize the eradication of hunger by 2030, recognizing that hunger affects almost all countries in the region.
- In areas where deep and persistent pockets of poverty and hunger persist, governments should look to develop evidence-based, targeted programmes in partnership with national and international partners to stimulate agricultural transformation, end poverty and drive rural prosperity in order to end hunger in these geographical areas, ensuring that they are integrated into broader policy frameworks focussed on social protection, nutrition and health *etcetera*.
- Governments should adequately finance and implement policy frameworks, investments and education directed towards addressing the multiple burdens of malnutrition, recognizing the growing public health and economic threats of overweight and obesity.
- Governments should ensure that the statistical capacity required to report effectively against all SDG2 indicators are established and that periodic reports are prepared and disseminated, seeking support from FAO if required.
- Governments should implement the policies and investments needed to respond to the growing food and nutritional needs of the region's increasing urban populations, adapting food systems to ensure healthy diets, through linking urban and rural areas, transforming agriculture and encouraging the adoption of sustainable environmental and natural resource management practices
- FAO and other partners should support government efforts to develop appropriate policies and mobilize investments in the comprehensive areas of support needed to build sustainable and healthy food systems to feed growing urban populations, in line with FAO's 2019 Framework for the Urban Food Agenda.

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I. INTRODUCTION

1. Despite significant improvements in the level of undernutrition in many countries, significant progress is still needed to end hunger in the Near East and North Africa region. Conflict and protracted crisis remain the principal drivers of hunger, but pockets of persistent hunger exist in non-crisis settings across the region, often in rural areas, including in middle-income countries. Ending conflict and ensuring investments to transform agriculture and rural areas across the region are therefore pre-conditions for a hunger-free region. However, targeted multisectoral investments in other areas where hunger persists will also be necessary to ensure that hunger's shadow is removed in the long term.
2. The region is affected by multiple burdens of malnutrition with worrying increases in overweight and obesity, particularly with regard to women and children. Food systems need to be adapted to ensure that healthy diets are available to and accessible by all the region's women, men and children, coupled with coordinated policy initiatives linked to nutrition, public awareness and health.
3. The region is fast urbanizing. Ensuring healthy diets for the region's increasing urban populations creates both challenges and opportunities. Food systems must be adapted and transformed. This creates opportunities that help ensure the region's food systems are more sustainable and healthy and at the same time, could provide impetus for transforming rural areas, reducing urban/rural disparities and fuelling long-term poverty reduction, in particular in rural areas.
4. This paper provides (1) a snapshot on the hunger situation in the 30 countries of the FAO NERC; (2) a more detailed analysis of food security and nutrition in 22 Arab countries, nineteen of which are supported directly by FAO's Regional Office for the Near East and North Africa (RNE); and (3) identifies a series of key food system policy directions for governments seeking to respond to the challenges of ensuring food security and healthy diets for a growing urban population in the coming years.

II. UNDERNOURISHMENT IN THE NERC COUNTRIES

5. This section examines the undernutrition situation in the 30 countries of the FAO NERC.¹ It shows both the considerable progress needed in many countries to end hunger by 2030 and the high level of variation that exists across the region.
6. It is clear that zero hunger remains an elusive goal in the Near East and North Africa region and that considerable progress is required if SDG 2.1 is to be achieved. Almost 100 million people are undernourished in the 21 countries for which official data is available for the period 2016-2018. There are significant variations in both prevalence rates and in the absolute numbers of undernutrition. Four countries (Afghanistan, Iraq, Pakistan and Yemen) account for 82 percent of the total number of undernourished people (noting that data for Somalia and Syria is not available for this time period). Prevalence rates vary considerably across the region. They are as high as 40 percent in Yemen, 30 percent in Afghanistan, 20 percent in Pakistan and the Sudan, and 19 percent in Djibouti. However, there are only three countries for which data is available where the prevalence rate is below 2.5 percent, Azerbaijan, Malta and Turkey. In the other countries, including many that are high- and middle-income, persistent pockets of undernutrition exist.
7. The available data also paints a highly mixed and varied picture. The prevalence of undernutrition fell in 14 countries between 2004-06 and 2016-18. It rose in five countries however

¹ The thirty (only 29 countries are listed) countries for which official under-nutrition data is provided are: Afghanistan, Algeria, Azerbaijan, Bahrain, Cyprus, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Kyrgyzstan, Lebanon, Libya, Malta, Mauritania, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Somalia, the Sudan, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, United Arab Emirates.

during the same period, including an 8.8 percent increase in Yemen, a 7.6 percent increase in Lebanon and a 5.6 percent increase in Jordan.

8. The undernutrition picture is less positive when examined in terms of the absolute number of undernourished people in the region. The number only fell in six countries for which official FAO data is available (Algeria, Djibouti, Iran, Kyrgyzstan, Morocco, Tunisia), remained unchanged in two (Oman and United Arab Emirates), and has risen in ten (Afghanistan, Egypt, Iraq, Jordan, Lebanon, Mauritania, Pakistan, Saudi Arabia, Turkmenistan and Yemen).² (See Table 1). The total number of hungry people in the 21 countries of NERC for which data is available is 98.8 million. This underscores the progress still required if hunger is to end in the region.

9. Crisis is the principal driver of undernutrition in the region, with both conflict and conflict-related displacement the biggest causes of undernutrition. The largest reported prevalence increase (8.8 percent) between 2004-06 and 2006-18 was in Yemen, a direct result of conflict. The next two highest reported increases in the prevalence of undernutrition during this period were in Lebanon (7.6 percent) and Jordan (5.6 percent), both countries that have absorbed very large number of people displaced due to the crisis in Syria. However, ending crisis and restoring peace will not lead automatically to the disappearance of hunger. The persistence of undernutrition in many countries across the region, particularly in rural areas, points to the need for focussed, targeted multisectoral approaches to address these problems directly.

Table 1: The prevalence and number of undernourished people, 2004-06 and 2016-18

Country	Prevalence of undernourishment in the total population		Number of undernourished people	
	2004-06	2016-18	2004-06	2016-18
	(%)	(%)	(millions)	(millions)
Afghanistan	33.2	29.8	8.3	10.6
Algeria	8.8	3.9	2.9	1.6
Azerbaijan	5.5	<2.5	0.5	n.r.
Bahrain	n.a.	n.a.	n.a.	n.a.
Cyprus	5.7	5.6	<0.1	<0.1
Djibouti	32.2	18.9	0.3	0.2
Egypt	5.4	4.5	4.2	4.4
Iran	6.1	4.9	4.3	4
Iraq	28.2	29	7.6	11.1
Jordan	6.6	12.2	0.4	1.2
Kuwait	<2.5	2.8	n.r.	0.1
Kyrgyzstan	9.7	7.1	0.5	0.4
Lebanon	3.4	11	0.1	0.7
Libya	n.a.	n.a.	n.a.	n.a.
Malta	<2.5	<2.5	n.r.	n.r.

² Official FAO data covering either one or both time periods is unavailable in the remaining twelve countries.

Mauritania	12.1	10.4	0.4	0.5
Morocco	5.7	3.4	1.7	1.2
Oman	10.5	6.8	0.3	0.3
Pakistan	23.3	20.3	35.9	40
Qatar	n.a.	n.a.	n.a.	n.a.
Saudi Arabia	7.9	7.1	1.9	2.3
Somalia	n.a.	n.a.	n.a.	n.a.
Sudan	--	20.1	--	8.2
Syrian	n.a.	n.a.	n.a.	n.a.
Tajikistan	n.a.	n.a.	n.a.	n.a.
Tunisia	5.6	4.3	0.6	0.5
Turkey	<2.5	<2.5	n.r.	n.r.
Turkmenistan	4.8	5.4	0.2	0.3
United Arab Emirates	4.1	2.6	0.2	0.2
Yemen	30.1	38.9	6.2	11
NERC TOTAL			76.5	98.8
WORLD	14.4	10.7	940.5	809.9
Least developed countries	28.6	23.6	215.7	236.9
Low-income economies	30.3	27.7	159.5	202.8
Lower-middle-income economies	19.6	13.8	479.1	409.1
Upper-middle-income economies	11.6	7.1	276.4	183.4
High-income economies	<2.5	<2.5	n.r.	n.r.
Low-income food-deficit countries	22.7	18.4	518.9	524.9

Source:

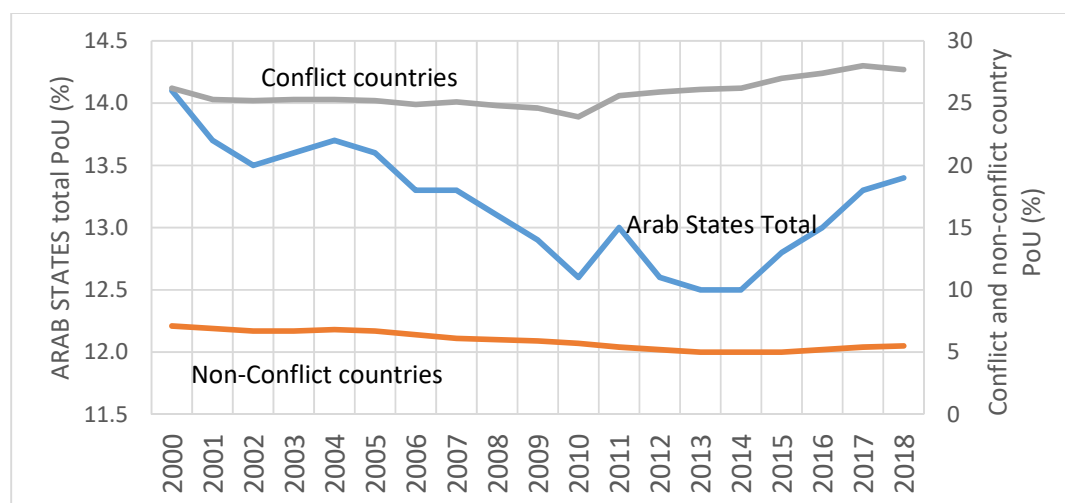
III. FOOD INSECURITY AND MALNUTRITION IN THE ARAB REGION

10. This section looks at malnutrition data in 22 Arab countries, nineteen of which are supported directly by FAO's Regional Office for the Near East and North Africa (RNE).³

11. The Prevalence of Undernourishment (PoU) in the Arab region is 13.2 percent (Figure 1 refers), equivalent to fifty-five million women, men and children (SOFI, 2019). This means that more than one in every eight people across the region can be considered hungry, with food consumption that is insufficient to provide the dietary energy levels required to maintain a normal, active and healthy life. The overall PoU in the region is increasing, and is now higher than that in Asia and Pacific region, and the global average for the world's developing countries. Figure 1 shows the trends for both the number of undernourished people in the region and the prevalence rates.

³ The 22 Arab countries for which official undernutrition and malnutrition data is provided are: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, the Sudan, Syria, Tunisia, United Arab Emirates and Yemen. Only Comoros, Djibouti and Somalia are not supported by RNE.

Figure 1. Prevalence of undernourishment (PoU) in the Arab States, 2000-2018



Source: FAO, 2019b.

12. The average prevalence rate in non-conflict countries in the Arab region is a little over 5 percent, only two percentage points above the global average for developed countries. This highlights the relatively low hunger situation in many countries across the region and reinforces the potential to eradicate hunger at the regional level. However, this should not obscure the absolute scale of hunger that exists: 14 million people in these countries still face hunger. Deep and enduring pockets of hunger persist in many of these countries, particularly in rural areas, affecting vulnerable rural households. The drivers of this persistent hunger must be addressed too. Significant efforts are thus required to ensure people's equitable access to the food that is available, particularly the region's most vulnerable and marginalized groups, who are most commonly found in rural areas.

Stunting and wasting in the Arab region

13. Between 1990 and 2017, there was progress in reducing maternal and child malnutrition across the region. These changes have been part of a region-wide fall in mortality and morbidity rates from communicable, maternal, neonatal, and nutritional diseases. Figures 2 and 3 show the latest available data on stunting and wasting of children under-five years old, respectively. Whilst these figures are lower than they were thirty years ago, they point to continuing challenges. In some cases, the levels are closely linked to conflict and protracted crisis (e.g. Somalia, the Sudan, Syria and Yemen), in others they point to other drivers that can be addressed through integrated policy responses linking health, nutrition, education and agriculture and food supply policies (e.g. Comoros, Egypt, Iran and Mauritania).

Figure 2: Prevalence of stunting in the Arab region: children under 5-years old (%) (FAO, 2019b)(SOFI, 2019)

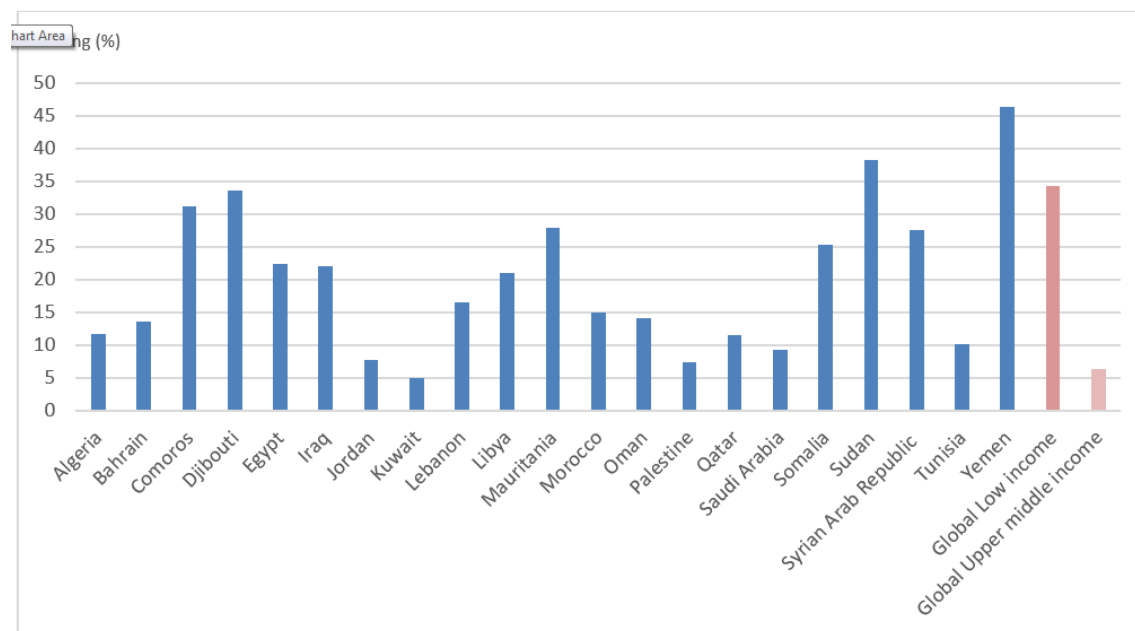
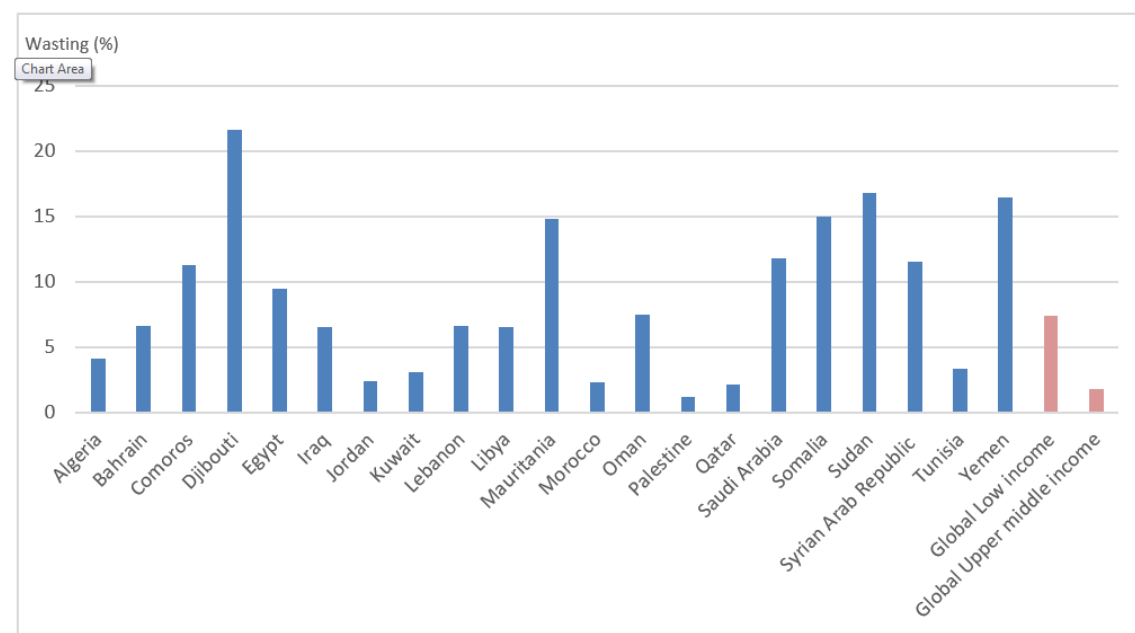


Figure 3: Prevalence of wasting in the Arab region: children under 5-years old (FAO 2019b)



RNE SOFI 2019, unpublished

Overweight and obesity in the Arab region

14. The Arab region is the second most obese in the world (Table 2). In the region, the overall trend shows that overweight and obesity rise logarithmically as GDP per capita increases (Figure 4). This means that as countries progress from low- and low-middle income to middle-income status the prevalence of overweight and obesity rises rapidly. Middle-income countries such as Jordan, Iraq,

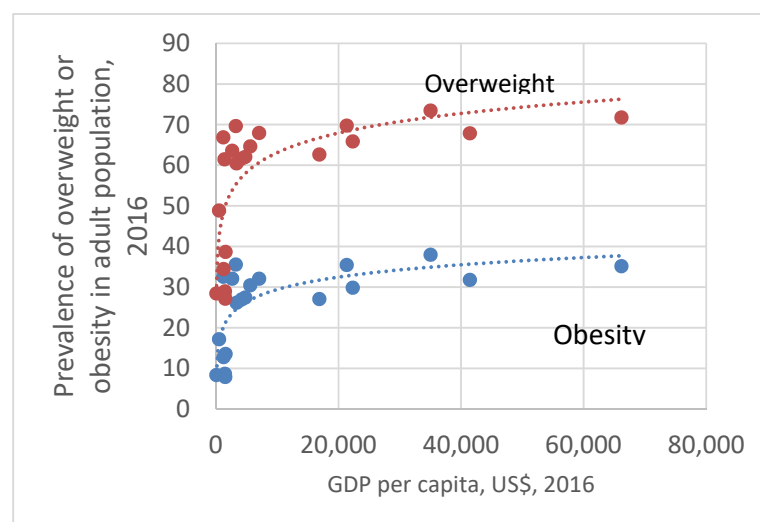
Lebanon, Libya, Tunisia and Syria, all have rates of overweight and obesity nearly as high as the high-income countries of Kuwait, Qatar and Saudi Arabia.

Table 2: Prevalence of adult overweight and obesity in NENA and other regions, Arab subregions and countries, 2016

Country	Prevalence of overweight in adults (%), 2016			Prevalence of Obesity in Adults (%), 2016		
	both sexes	Males	females	both sexes	Males	females
Total Arab region	61.7	57.8	65.6	27.0	20.6	33.6
Comparator WHO Regions						
Americas	62.5	64.1	60.9	28.6	25.9	31.0
Europe	58.7	63.1	54.3	23.3	21.9	24.5
(WHO) Global	38.9	38.5	39.2	13.1	11.1	15.1
Africa	31.1	22.8	38.8	10.6	5.6	15.3
Western Pacific	31.7	33.7	29.6	6.4	6.0	6.7
Southeast Asia	21.9	19.7	24.1	4.7	3.3	6.1
Arab Subregions						
Low-income	48.2	43.0	53.2	18.5	13.0	23.9
Lower-middle income	61.7	56.0	66.9	25.6	17.9	32.8
Upper-middle income	64.3	60.7	67.8	29.8	22.7	36.8
High-income	69.0	67.5	71.5	34.0	29.5	41.7

Source: WHO GLOBAL HEALTH, 2019.

Figure 4: The relationship between prevalence of overweight and obesity and GDP per capita



Source: UNDP, 2019; WHO GLOBAL HEALTH, 2019

15. World Health Organization (WHO) data on obesity by country between 2012 and 2016 show that none of the countries in the region is on track to curb obesity rates. Efforts to encourage healthier eating and lifestyle have not been successful in halting the growth of overweight and obesity in the region. In addition, the continuing policy in many countries focusing on ensuring stable supplies of wheat and other grains has led to diets that are both high in carbohydrates and low in nutritional diversity.

16. Table 2 highlights the clear and strong gender dimension to overweight and obesity in the region. The prevalence of obesity amongst females is 63 percent higher than for males and is one of the highest in the world. The prevalence of overweight is 13 percent higher for females than males. Governments are recognizing that the role of women is key to improving nutrition, as they are the main agent of behaviour change for the consumption of healthy diets. Largely responsible for the domestic economy of families, they play an essential role in promoting food knowledge within the family and hold thereby the key to re-shaping food consumption habits.⁴ However, the reasons for such a situation are not always clear and further research is required to build understanding of how gender roles and norms influence overweight and obesity in the region.

IV. ADDRESSING THE FOOD AND NUTRITIONAL NEEDS OF A RAPIDLY URBANIZING REGION

17. By 2050, urban areas will be the home to almost three-quarters of the population in the Arab region, slightly above the world average of 68 percent (Table 3). At the global level, urban populations currently consume a disproportionate amount of food, accounting for an average of 70 percent of total food consumption compared with about 55 percent of the total population. The region's fast growing cities therefore require corresponding policy responses to ensure that the food security needs of their populations are met in the future.

Table 3: Urbanization trends by major regions, 1950-2050 (percentage urban)

Region	1950	1970	2000	2019	2030	2050
Africa	14.3	22.6	35.0	43.0	48.4	58.9
Asia	17.5	23.7	37.5	50.5	56.7	66.2
Europe	51.7	63.1	71.1	74.7	77.5	83.7
Latin America and Northern America	41.3	57.3	75.5	80.9	83.6	87.8
Oceania	62.5	70.2	68.3	68.2	68.9	72.1
NENA Region	26.1	39.8	55.5	62.3	65.6	72.8
World	29.6	36.6	46.7	55.7	60.4	68.4

Source: UN. 2018. World Urbanization Prospects

18. Continuing urban growth across the region has galvanized government attention on the challenges of ensuring adequate food supply in these fast expanding areas. Urbanization requires decision-makers to address food issues from new perspectives. Challenges associated with rapid urbanization are related to questions of public administration and policy at national and local (municipal)

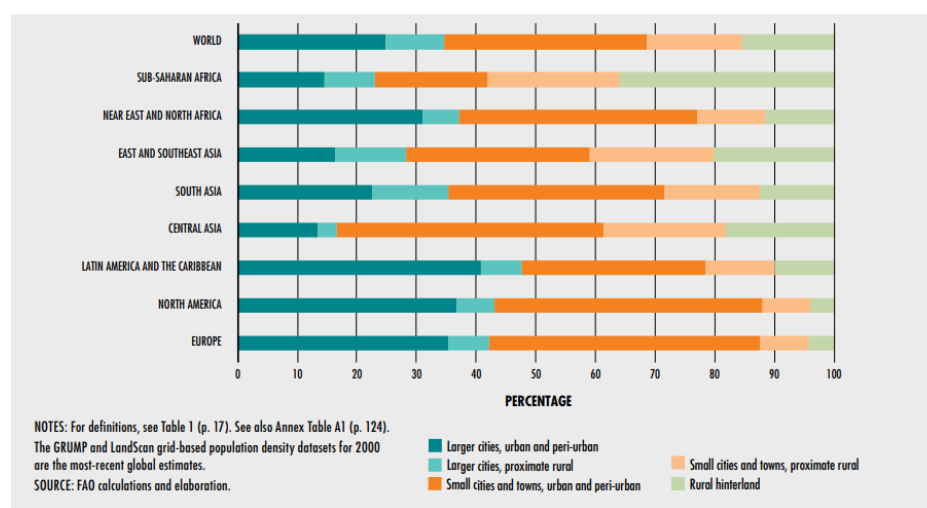
⁴ See Chair's Summary: CFS Regional Consultation For Near East On The Preparation Of The Voluntary Guidelines On Food Systems And Nutrition Cairo, 25-26 September 2019 (http://www.fao.org/fileadmin/templates/cfs/Docs1819/Nutrition/OEWG_29_November/CFS_OEWG_Nutrition_2019_11_29_01d_Near_East.pdf)

levels. For most countries, sustainable urban development will need to be closely related to coordinated and synchronous progress in rural areas, fuelling their economic transformation in environmentally sustainable ways. This will depend on multiple factors, including advances in water use efficiency and agricultural productivity (especially labour productivity) on the one hand and the expansion of off-farm employment and income-generation opportunities on the other. Investments and growth in the food system, linked for example to food processing and transportation will be key as will the growth in support services necessary for ensuring dynamic rural economies.

19. Urban growth provides a source of demand for rural products, sustaining the incomes of rural areas, but sometimes the role of imports and exports alters the importance of domestic agriculture with respect both to urban dependence on domestic food and to generating national income.

20. In the Near East and North Africa region, the proportion of populations living in or around smaller urban centres averages approximately 51 percent, compared with 37 percent in or around large metropolitan areas; while about 12 percent now lives in the rural hinterland (Figure 5). This indicates that smaller intermediate cities and rural towns, which are now home to over 40 percent of the urban population in the Near East and North Africa region are increasingly becoming the main points of reference for the rural populations to access inputs, markets and public services; yet evidence indicates that they receive disproportionately lower investments for infrastructure and social services.⁵ This is an important point, for it shows that the historically sharp distinctions in many countries between rural and urban are less and less relevant and highlights the potential for transformed food systems to become the engine of growth for smaller intermediate cities and rural towns, especially in countries which lag behind in terms of structural transformation and which may not have strong prospects for growth in the industrial and manufacturing sectors. The importance of smaller urban centres, often surrounded by agricultural production areas, highlights the potential to strengthen linkages between the urban and rural spheres, reduce disparities between the two, and strengthen the availability of healthy diets in the region's fast growing cities.

Figure 5: Rural-Urban spectrum by region



Source: FAO SOFA 2017

Food systems serving an increasingly urban population

21. Food systems in the Near East and North Africa region are amalgamations of traditional, modern and informal subsystems operating simultaneously (see definition in Box 1). **Traditional food systems** operating in cities are well-established as tested networks, connecting farmers to buyers and

⁵ Note that the data in Figure 6 is from 2000, but FAO is in the process of updating it to 2015 and the data seem to confirm the situation.

consumers. These networks are mediated through many assembling/aggregating intermediaries who are usually based in rural and peri-urban areas. The traded products are often minimally processed, can be moved in bulk, and have limited sophisticated storage.⁶ The products often reach the consumers through open markets and small stores after wholesale.

Box 1: Food systems: basic definitions

Food system can be defined as the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded. It is composed of subsystems such as farming system, waste management system, input supply system, etc. and it interacts with other key systems (e.g. energy system, trade system, health system, etc.

A sustainable food system exists when it delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised. This means that the system is profitable, has broad-based benefits for society; and has a positive or neutral impact on the natural environment⁷.

22. **Modern food systems** are characterized by scale economies, capital intensity, and sophisticated wholesale operations, and in general, their emergence is highly correlated with economic development (Figure 6). Processing, sophisticated storage, food safety, and logistical systems are typically highly integrated. Often these integrated chains cover long distances and rely on foreign sources for their supply. The modern system, with its large investment requirements, relies on the relatively recent growth of infrastructure, population densities and incomes of urban areas and its development in smaller cities depends on the continued deepening of the local physical and institutional infrastructure.

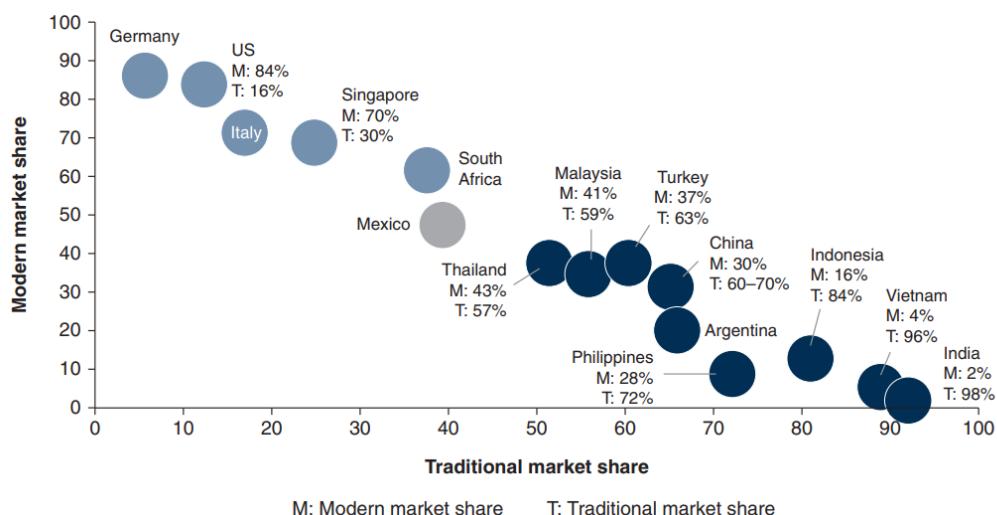
23. In the **informal food system**, significant elements of the system are unregistered, catering to the demands of people with limited resources, in particular those in low-income informal residential urban areas and poor rural areas. The informality of vendors and their limited and highly localized investments, permit adaptability of the system to changes in the location and mobility of customers and to changes in product sources and customer ability to pay.

24. Countries and cities satisfy food demands from a combination of these subsystems. There is overlap and competition between the different systems and between different players. At the same time, there are opportunities for positive and mutually-beneficial synergies between the systems and players and/or for growing competition to trigger adaptations and changing relationship, for example, with regard to local groceries, supermarkets and fresh-food and convenience retailers. Traditional small-scale food retailers, such as open-air fresh produce retailers for example, are adapting and will likely be able to attract a segment of consumers away from supermarkets.

Figure 6: Food retail market shares: modern versus traditional

⁶ The term “sophisticated storage” refers to the use of technologies and practices that through time have been refined to better and more efficiently achieve specific tasks.

⁷ For more details, see the FAO note on the concept of sustainable food systems at: <http://www.fao.org/3/ca2079en/CA2079EN.pdf>.



Source: Tefft et al. (2017). Food systems for an urbanizing world.

The implications of urbanization for food supply

25. The growing complexity of the food-system associated with urbanization has important implications for policies to monitor and protect public health related to food safety and nutrition. Traditionally, policy institutions focused on production are separate from those focused on public health and nutrition. With growing urbanization and food-system sophistication there is a growing need for coordination. For example, food safety policy related to contamination now involves farm-level practices, traceability at even the earliest stages of processing, and certification and accountability all along the marketing chain. Ministers for Agriculture could have an important role in such coordination of food-related health and nutrition policy for growing urban populations⁸.

26. The increasing size and complexity of urban systems and the lengthening of food value chains make it more difficult for small-scale producers and intermediaries to compete in the food system. The food-value chain in urban settings usually produces greater “distance” between most consumers and farmers and small-scale processors. This distance is both geographical and in terms of the transactions that take for products to reach consumers. It privileges actors who operate at larger scales, puts a premium on credibility via traceability, reputation-protection and other activities that add costs to participating in the value chain.

27. Clearly, there are opportunities for synergies between rural and urban economies, particularly adjacent ones, and it is not surprising that, for historical and logistical reasons, cities locate close to food sources and farmers tend to locate near collection, transport and population centres. Peri-urban and urban agriculture, while of smaller-scale and oriented to horticultural products, can contribute to satisfying the demands of urban consumers, both in terms of fresh products and in terms of urban amenities. The costs associated with smaller-scale production are offset to some extent by the advantage of shortening the supply chain and being able to adjust to the preferences of the community in which it operates. Urban and peri-urban agriculture can also be option for part-time work and employment for urban residents migrating from rural areas. In addition, it may help the greening of cities and provision of a better environment should proper production processes and technologies be used.

⁸ See also the Committee on World Food Security (CFS) developing voluntary guidelines on Nutrition and food systems, and the results of the Regional Symposium on Sustainable Food Systems for Healthy Diets and Improved Nutrition in the Near East and North Africa held in Oman in December 2017.

28. Another important consideration in many countries in the region is that fact that domestic agriculture cannot satisfy total domestic demand, even where agriculture is relatively large.⁹ Imports are inevitable, in many respects desirable, although trade introduces risks that require attention. Exports, especially of higher value products (e.g. grapes in Egypt, olive oil and dates in Tunisia), generate incomes and increase ability to afford imports. Innovations and productivity improvements are essential in this regard. In situations in which there are high levels of import dependence on imports, policy-makers should emphasize rural employment and raising rural incomes as a means for improving access to food.

29. FAO's 2019 Framework for the Urban Food Agenda identifies a range of key policy action areas for leveraging subnational and local government action to ensure sustainable food systems and improved nutrition. Seven Comprehensive Areas of Support (CAS) are identified, that together provide governments with an integrated multisectoral approach to ensuring that the food and nutrition needs of growing urban populations are met. They include many of the areas that have been highlighted in the regional analysis above. The seven CAS are:

- **CAS 1:** Effective national urban and territorial policies and transformative institutions to enhance sustainable food systems
- **CAS 2:** Integrated food system planning and inclusive food governance mechanisms
- to support sustainable urbanization and territorial development
- **CAS 3:** Short supply chains and inclusive public food procurement to untap the potential of production in the city and surrounding region
- **CAS 4:** Innovative and sustainable agro-food business for employment generation and the development of functional and prosperous territories across small towns
- **CAS 5:** Improved access to food and green environments for healthy cities
- **CAS 6:** Optimized supply chains and circular bioeconomy for reduction of food losses and waste in urban centers
- **CAS 7:** Evidence-based outreach initiatives to improve global urban food governance and to boost investment

Priorities for the development of sustainable food systems in support to food security and nutrition in the Near East and North Africa region

30. First and foremost, ending hunger and malnutrition in the region requires an end to conflict and crisis. Beyond ending conflict, as FAO and the World Bank have noted,¹⁰ there is need for a transformation in the food system from one that focuses on producing sufficient quantities (of calorific energy) to one that sustainably enables remunerative jobs and agribusinesses; and ensures affordability and accessibility for all to nutritious, diverse, and safe foods. This requires a wide-ranging change in approach, to one that links nutrition, rural prosperity, food system investment and strengthened linkages between rural and urban areas.

31. Ensuring that food systems deliver nutritious and healthy diets to growing urban populations require increased policy emphasis on (1) reducing sugar and salt in processed foods and eliminate trans-fats; (2) improving and enforcing food safety and quality regulations and mechanisms; (3) re-balancing and/or improving the various forms of subsidies used, for example by limiting support to staple crops and inclining the subsidy structure towards fruit, vegetables and other high-value crops; (4) limiting the direct subsidies to producers and consumers to increase investment in research and development (R&D) extension services, infrastructure, institutions and better access to markets; and (5) revisiting trade instruments such as import tariffs, which in some countries in the Near East and North Africa put higher import tariffs on fruits and vegetable in comparison with sugar. These policy shifts can also help drive

⁹ Imports may be undesirable when a country may have the comparative advantage to produce competitively, but also in the case of nutrient-empty foods which do not contribute to healthy diets.

¹⁰ World Bank/FAO. 2017. Urban food systems diagnostic and metrics framework.

broader transformations in rural economies and food systems by raising rural incomes that reduce rural poverty, in addition to contributing to the delivery of nutritious and healthy foods.

32. Policy reforms should also focus on stimulating environmentally sustainable practices across the food system, focusing on all elements of the food system, including the supply chain, the food environment and consumer behaviours. Policies must create the incentives and enabling conditions for stimulating large-scale private sector investments that will be required to finance food systems transformation in the region towards increased sustainability and healthy diets. In this regard, policy-makers should look to identify policy measures that target the large numbers of Small and Medium-Sized Enterprises (SMEs) that are often untouched by public sector policies and investments but nonetheless, create significant value additions for the economy.

33. More efforts are needed to tackle food losses and waste. Recent estimates suggest that around 11 percent of the food is lost in post-harvest phases up to, but excluding, the retail level. This indicates that the figure will certainly be much higher when losses and wastes of harvesting, retailing and consumption are added. When considering actions and policy options, food loss and waste reduction should be emphasized as a means to achieve other objectives, notably improving 1) food system efficiency; 2) food security and nutrition; and 3) environmental sustainability¹¹.

34. The roles of local governments in addressing food security and nutrition challenges and the importance of multistakeholder, multiscale and multisector collaboration will be key in policy formulation and implementation, especially considering the needs for inclusiveness.

35. There are risks that future food system transformations could marginalize and/or exclude small-scale farmers. This risk has a potentially doubly negative impact. First, it could reduce the positive impacts in terms of hunger and poverty. Second, it could lessen economic gains, given that in many instances, the smallholder productivity is often very high (if the denominator reflecting the seasonality of farm labour is normalized); excluding this group therefore underplays their potential contribution. Government agencies dedicated to agriculture and rural development should therefore consider programs tailored to assist small farmers to adapt in an environment of increasing urbanization. Agricultural institutions can offer assistance by: (1) promoting the associativity of small-scale operations; (2) reducing fixed-cost barriers to third-party certification and raising the awareness about the food safety and quality of their products; (3) facilitating the introduction of blockchain and traceability systems; and (4) shortening the economic distance between farmer and large buyers through promotion of direct-buying programs that link supermarket chains to cooperatives or other small farmer associations.

36. A territorial perspective, which places cities within the broader system of land, labour, food and other resources, will increasingly become a necessity. Zoning laws, public infrastructure investments, housing policies and the fiscal and regulatory regimes are often treated as separate policy decisions without putting much attention to their impacts on food systems. Keeping the food system central to policy formation would assist the transformation of the farming-processing-logistics chain, better linking producers and consumers in urbanizing regions. Moreover, accounting for the joint dependence between the evolution of the urban space and the transformation of the food system, would help policy makers to take advantage of mutually reinforcing urban-rural and agriculture-health-environment linkages.

It is inevitable that agriculture and the rural economy will evolve towards greater sophistication and integration with the rest of the economy, which will be concentrated in urban areas. The FAO's framework for the Urban Food Agenda¹² discusses in greater detail the overall objectives of food policies and programmes designed in the context of an increasingly urbanized region, proposing comprehensive areas of support to attain these objectives. These support areas emphasize the importance of local governance, because it is at the local level that national laws and regulations will be adapted to the

¹¹ See FAO. 2019. The State of Food and Agriculture, and FAO. 2016. Food Losses and Waste (FLW) work at Regional and National Level. NERC 16/INF/10 Rev.1

¹² FAO (2019). Leveraging subnational and local government action to ensure sustainable food systems and improved nutrition.

specific conditions of each territory, understood in both geographical and functional terms. This includes the development of an institutional environment that encourages private investments and enterprise, territorial development and rural-urban linkages, but also the promotion of policy goals such as developing circular bio-economy for improved food waste management. Furthermore, making the food system more resilient to shocks will likely require consideration of shorter supply chains and the balancing of competing uses of natural resources.