Third Arab Land Conference

Partner – Led event: Preserving agricultural land from urbanization: a global challenge for sustainable development

Preserving Agricultural Land in the Arab Region: Building Resilience Against Food Insecurity and Inequality Amid Urbanization

19 February 2025

Shared Prosperity Dignified Life

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UNESCWA

- **Established in 1973** to stimulate economic activity in member countries, strengthen cooperation between them, and promote development.
- **One of five United Nations regional commissions**, which are in Beirut, Addis Ababa, Bangkok, Geneva and Santiago.
- An **intergovernmental platform** for advancing regional integration, developing regional norms and standards, exchanging experience and fostering cooperation.
- **Supports its 21 Arab Members States** in their efforts to ensure prosperity and equality.

Cluster 1 Climate Change and Natural Resource Sustainability	Cluster 2 Gender Justice, Population and Inclusive Development	Cluster 3 Shared Economic Prosperity
Cluster 4 Statistics, Information Society and Technology	Cluster 5 2030 Agenda and SDG Coordination	Cluster 6 Governance and Conflict Prevention

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Outline

- Urban Growth and Sustainability
- The Scale of Agricultural Land Loss
- Food Insecurity and Inequality
- Policy Solutions
- Smart Sustainable Cities(SSC): A Solution to Protect Agricultural Land
- SSC and Resilience – Food Security and reduced inequality

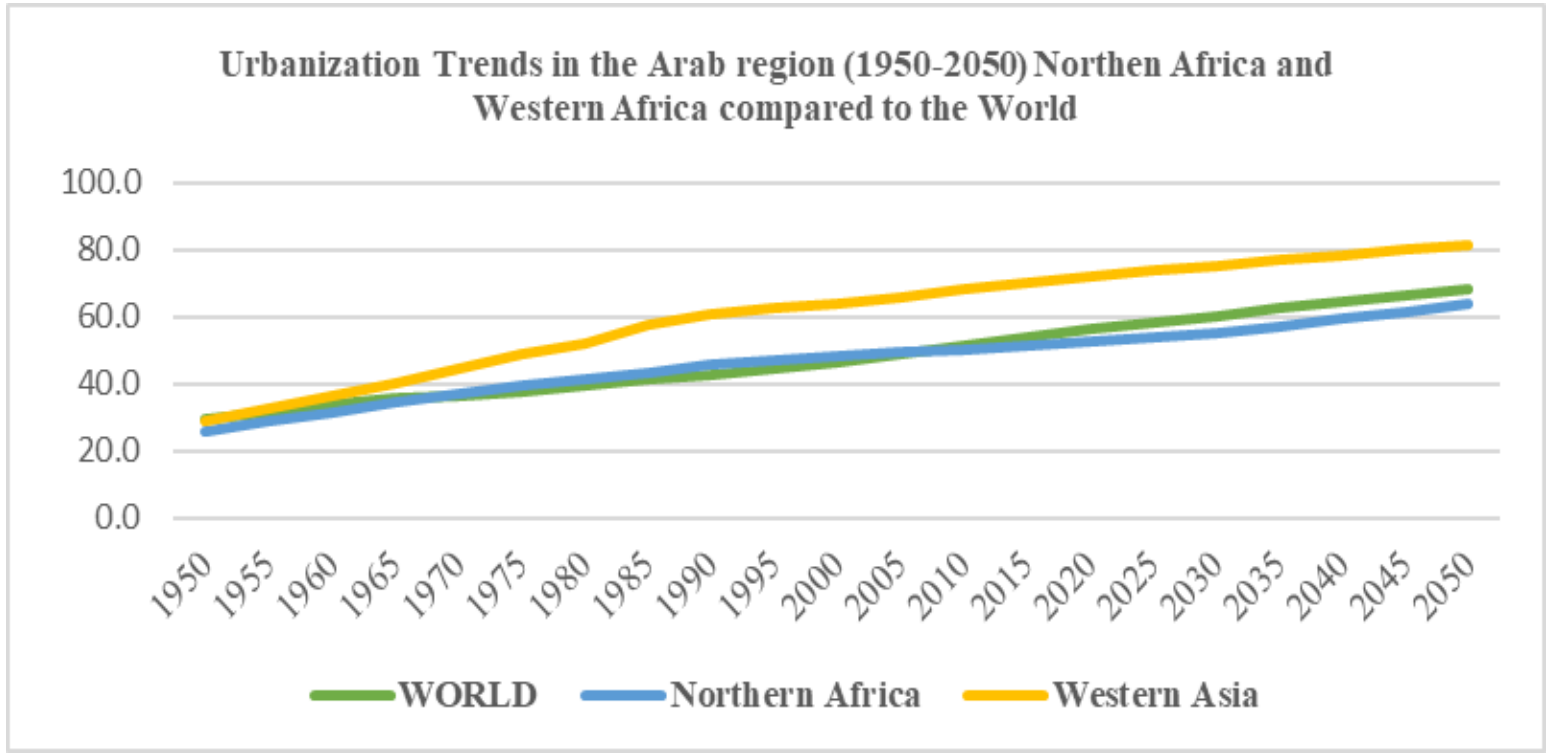
Urban Growth and Sustainability – Key Facts

Urban population

The urban population in the Arab region grew more than fourfold from 1970 to 2010. It will more than double from 2010 to 2050.

70% in cities by 2050

Some 58 per cent of people in the region live in urban areas. The share is expected to reach 62 per cent in 2030 and 70 per cent in 2050.



Cities are expected to experience a series of RESILIENCE and SUSTAINABILITY challenges related to growth, competitiveness, performance and residents' livelihood.

The Scale of Agricultural Land Loss – Data Trends and Consequences

Key Facts

- Urban expansion often **encroaches on fertile agricultural lands,** resulting in **irreversible loss of arable land.**
- Globally, an estimated **24 million hectares** of cropland were transformed to urban use by the year 2000.
- In the Arab region, rapid urbanization has led to the **displacement of agricultural communities, threatening FOOD SECURITY.**
- Over **50% of food in the region is imported,** increasing vulnerability to global supply chain disruptions. **Preserving agricultural land supports domestic food production, reducing dependency on imports.**

Consequences

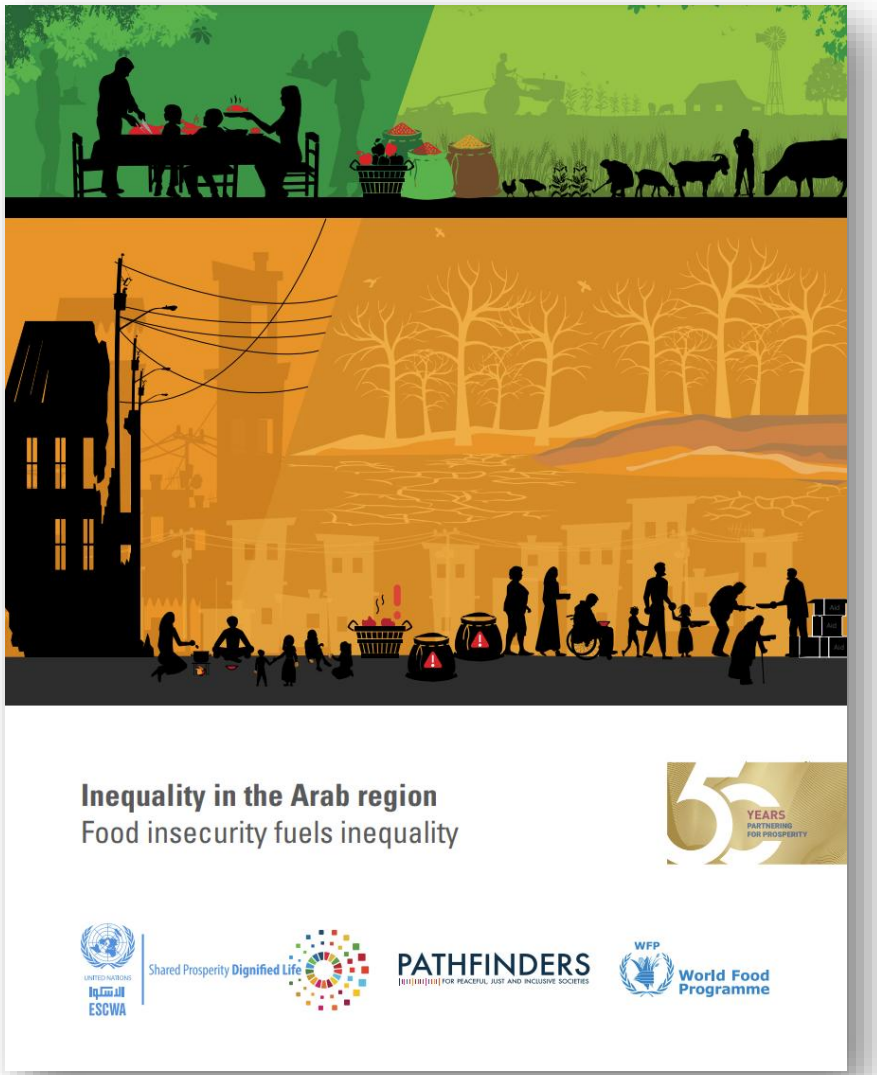
- **Increased food insecurity:** dependence on food imports makes economies more vulnerable to external shocks
- **Rural displacement**: Farmers lose livelihoods, increasing unemployment and migration pressures.
- **Environmental degradation**: Soil erosion, loss of biodiversity, and desertification threaten long-term agricultural productivity.

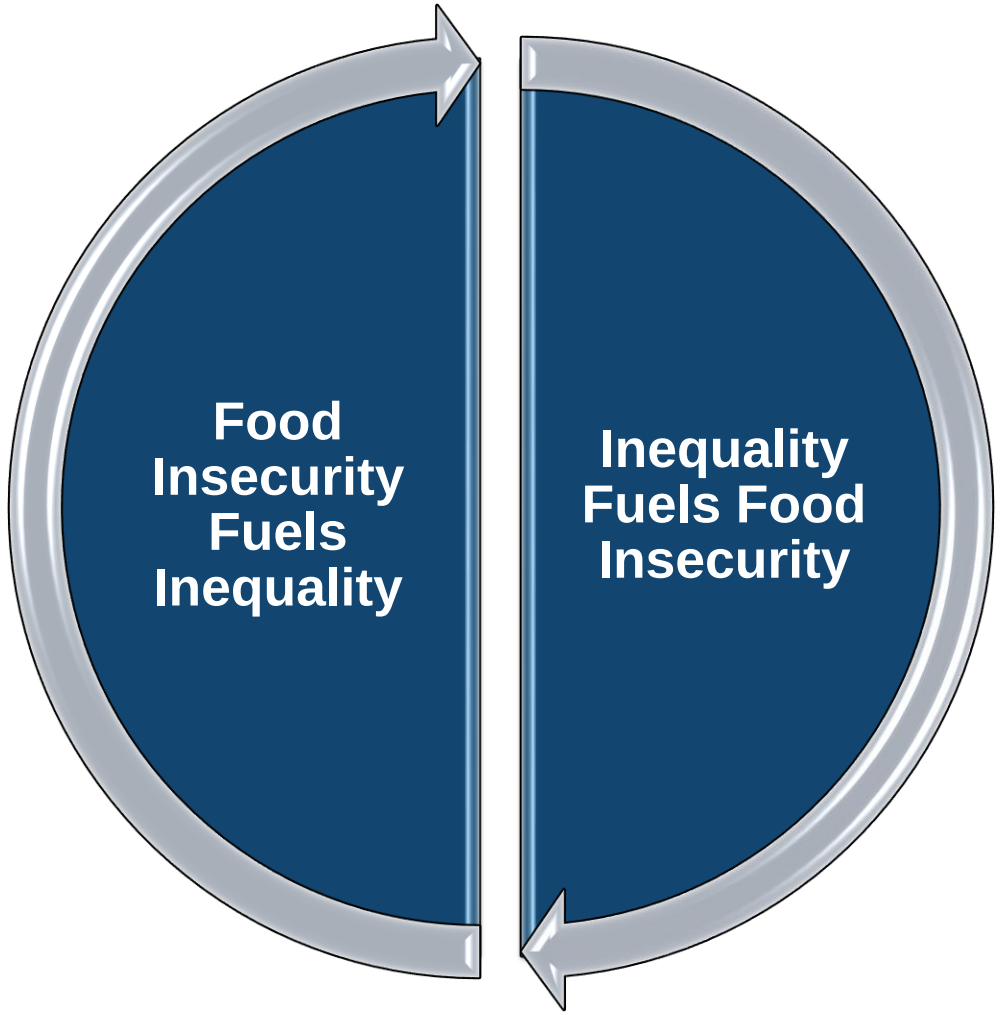
Food Insecurity and Inequality

Food security is defined as “when people have physical, social and economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”.

Source: FAO, The State of Food Insecurity in the World 2001

Food Insecurity and Inequality





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Food Insecurity and Inequality – Key Messages

Food insecurity locks inequality into the next generation: children born to women with an iron deficiency are more likely to be born prematurely and have a lower birth weight.

The Arab region is characterized by severe inequalities in access to quality nutritious food; 33.3 per cent of the population are food insecure and 28.4 per cent are obese.

Undernourishment affects 11.9 per cent of the region's population (53 million people), higher than the global average of 9.3 per cent.

The Arab region produces less than half of the food it consumes.

A third of the women of reproductive age in the Arab region suffer from anaemia.

Floods and droughts, hyperinflation, and conflict and occupation contribute to high levels of food insecurity in Iraq, Libya, the State of Palestine, Somalia, the Sudan, the Syrian Arab Republic and Yemen.

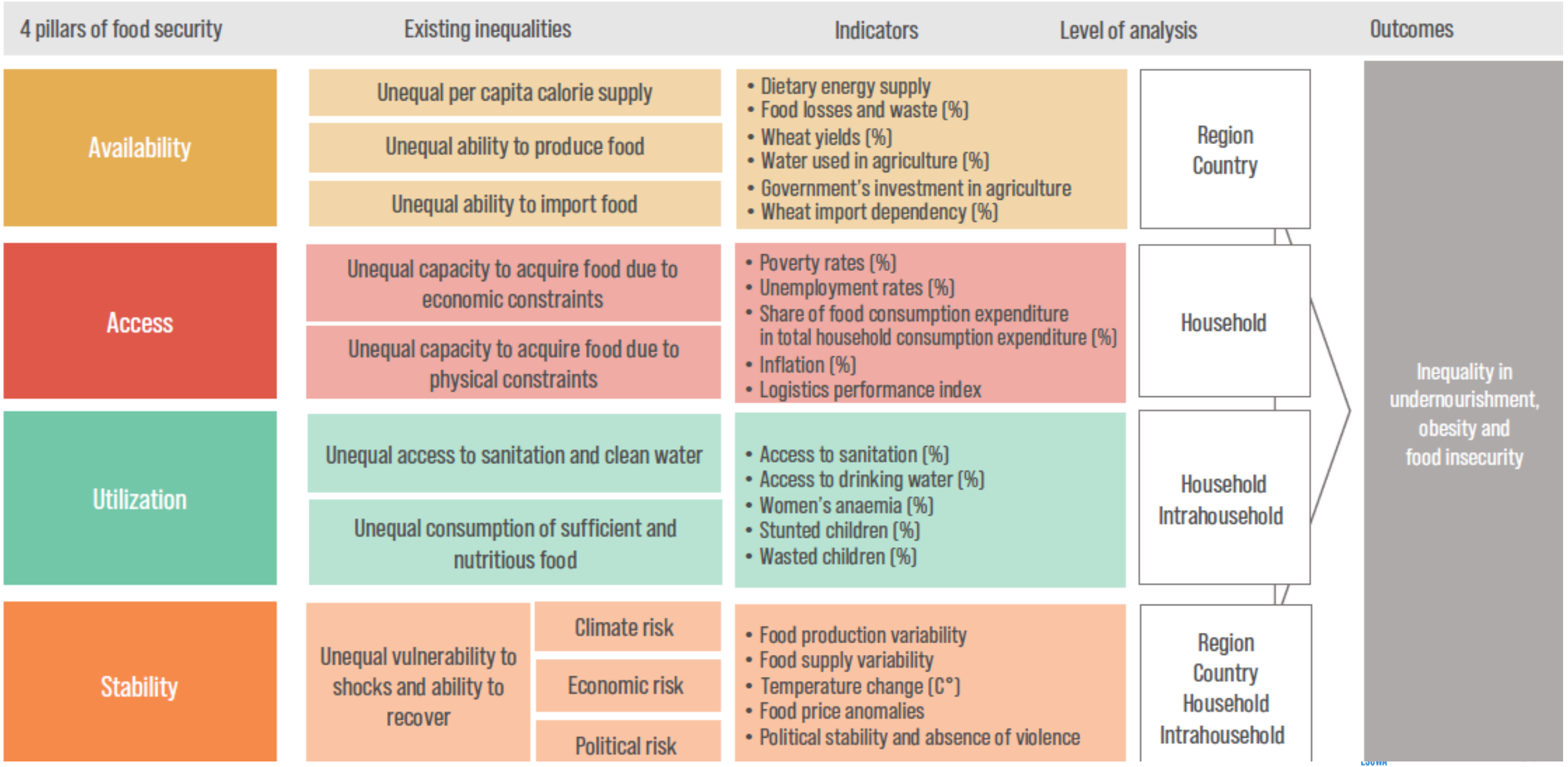
Between 76 and 120 kg of food is wasted per person per year in the Arab region, with varying rates between countries; wealthy households waste more food than those living in poverty.

The entire population of the GCC has access to safe drinking water and sanitation services while in LDCs, only two-thirds of the population have access to drinking water and less than half to sanitation services.

The average Arab household spends one third of its earnings on food.

Building Resilience Against Food Insecurity and Inequality amid Urbanization is CENTRAL for sustainable development

Food Insecurity and Inequality – Monitoring Framework



Food Security and Inequality – Risk and Trend Analysis

Poly-crisis in the Arab Region

Intersecting crises: The overall impact is far greater than the impact of individual crises.

Impacts of Intersecting Crises:

- Rising levels of food insecurity and inequality
- Decreased crisis response capacity
- Declining ability to adapt

Policy Solutions

Economic growth alone cannot achieve food security. In the absence of integrated policy solutions, inequality dynamics can cause vulnerable population groups to continue to suffer from poverty and food insecurity.

Policy Solutions

A combination of integrated policies is required to reduce inequality.

To reduce inequality in food security, a three-pronged approach is needed: promoting solidarity, delivering visible impact, and securing credibility and trust.

Immediate provision of development and humanitarian assistance, without political implications, should be a priority to ensure that nobody suffers from food insecurity.

A solidarity fund should be established to facilitate shared responsibility between the rich and those living in poverty.

Redistribution should finance social protection systems, which should be designed to break intergenerational inequalities through providing assets, educations, skills and access to opportunities.

National nutrition strategies can improve the population's access to nutrition and increase awareness of health eating and exercise practices.

Rural development and agricultural development go hand in hand.

Early warning systems, disaster management units, and climate change mitigation and adaptation can protect against the growing impacts of climate change.

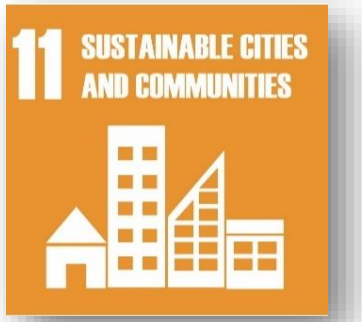
Policy Solutions

Pillars of food security	Existing inequalities	Policy solutions		
		Delivering visible impact	Promoting solidarity	Securing credibility
Availability	Unequal per capita calorie supply Unequal ability to produce food Unequal ability to import food	**Support agriculture:** • Deliver extension and advisory services to smallholder farmers • Support agricultural cooperatives • Embrace innovative technologies • Finance smart irrigation techniques • Unlock the potential of rain-fed agriculture **Facilitate food trade:** • Ensure preferential trade for perishable goods • Support fast and reliable testing procedures for agricultural trade	**Support agriculture:** • Support youth agricultural initiatives **Facilitate food trade:** • Promote regional trade integration	**Support agriculture:** • Ensure an efficient outcome for public investment in agriculture • Address food losses and waste **Facilitate food trade:** • Digitalize trade and customs procedures
Access	Unequal capacity to acquire food due to economic constraints Unequal capacity to acquire food due to physical constraints	• Review food subsidies • Adopt comprehensive social protection systems • Provide free school meals • Implement cash transfer schemes	• Create a regional solidarity fund • Invest in education	• Implement progressive taxation • Coordinate policies: avoid duplication, inefficiencies and contradictory outcomes

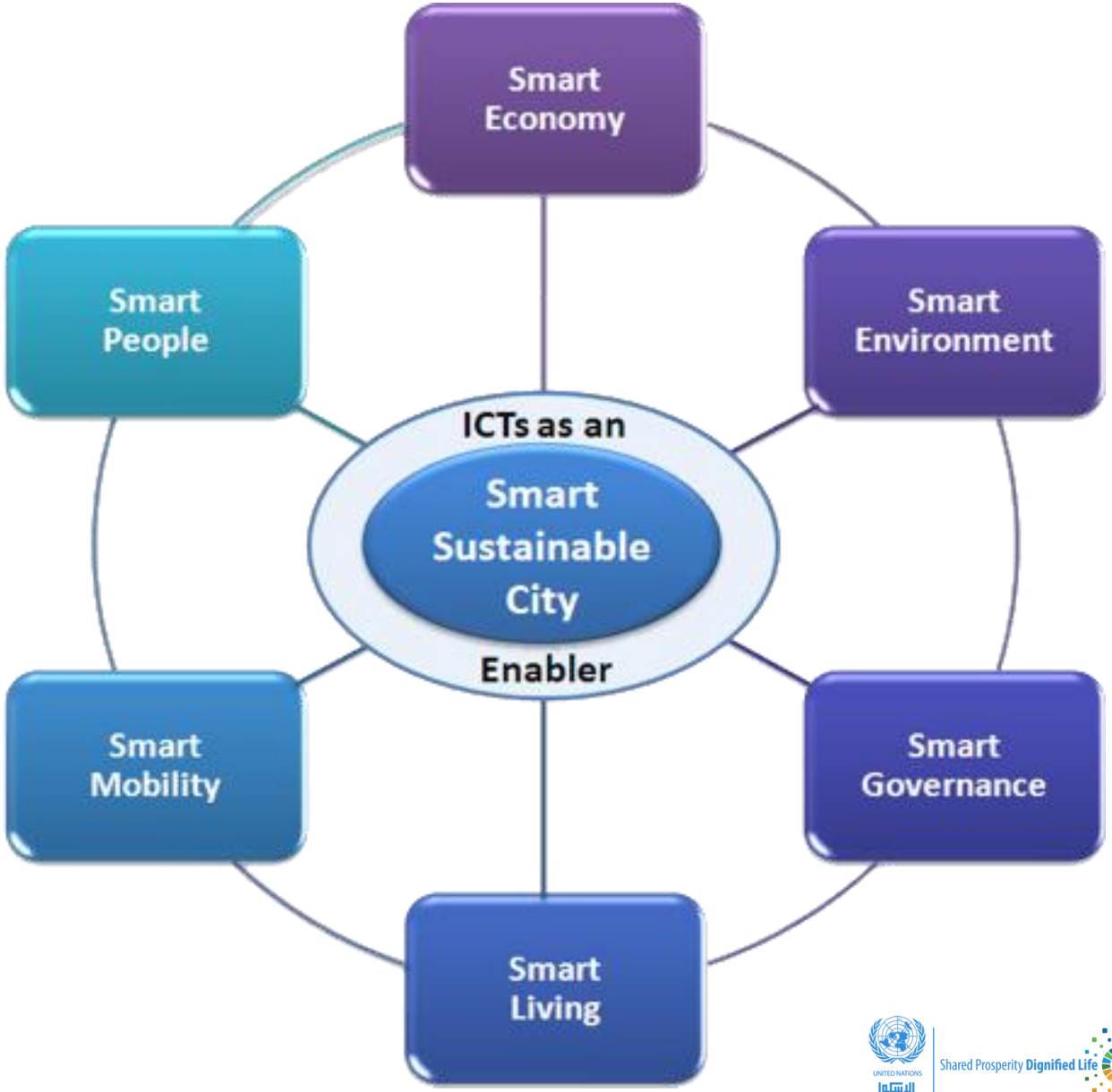
Policy Solutions

Pillars of food security	Existing inequalities	Policy solutions		
		Delivering visible impact	Promoting solidarity	Securing credibility
Utilization	Unequal access to clean water and sanitation Unequal consumption of sufficient and nutritious food	• Develop national nutrition strategies and guidelines	• Invest in infrastructure	• Improve food control systems • Provide incentives for healthy food consumption
Stability	Unequal vulnerability to climate, economic and political shocks and ability to recover	• Invest in nature-based solutions • Finance climate-smart agriculture	• Increase humanitarian financing • Mainstream climate change adaptation and mitigation across fiscal policies	• Enhance disaster management • Increase transparency in humanitarian assistance

Smart Sustainable Cities: A Solution to Protect Agricultural Land



Smart Sustainable Cities: an innovative city that uses Information and Communication Technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social and environmental as well as cultural aspects. (ITU)



Smart Sustainable Cities: A Solution to Protect Agricultural Land

Country	Existence of SSC Initiatives	SSC Project	Used Approach
Algeria	Yes	Algiers Smart City Cyberpark City of Sidi Abdellah	Brownfield Greenfield
Bahrain	Yes	Manama	Brownfield
Comoros*	No	-	-
Djibouti	Yes	Iroley Smart City (in planning stage)	Greenfield
Egypt	Yes	New Administrative Capital Smart Village	Greenfield Greenfield
Iraq	No	-	-
Jordan	Yes	Amman Smart City Eco-city Feta	Brownfield Brownfield
Kuwait	Yes	Kuwait City South Saad Al Abdullah City	Brownfield Greenfield
Lebanon	Yes	BeitMisk Village	Greenfield
Libya	No	-	-
Mauritania	No	-	-
Morocco	Yes	Rabat City Casablanca Tangier Tech City BenGuerir	Brownfield Brownfield Greenfield Greenfield
Oman	Yes	Muscat	Brownfield
Palestine	Yes	Ramallah City Rawabi City	Brownfield Greenfield
Qatar	Yes	Doha City Lusail City	Brownfield Greenfield

Country	Existence of SSC Initiatives	SSC Project	Used Approach
Saudi Arabia	Yes	Riyadh City Jeddah City Al-Ahsa City King Abdullah Economic City Knowledge Economic City Prince Abdul Aziz Bin Mousaed Economic City Jazan Economic City Neom Smart City	Brownfield Brownfield Brownfield Greenfield Greenfield Greenfield Greenfield Greenfield
Somalia	No	-	-
Sudan	No	-	-
Syria	No	Marota City (near Damascus city)	Greenfield
Tunisia	Yes	Tunis Smart City Tunisia Economic City (in planning stage)	Brownfield Greenfield
United Arab Emirates	Yes	Dubai City Abu Dhabi City Masdar City Dubai Silicon Oasis Desert Rose City	Brownfield Brownfield Greenfield Greenfield Greenfield
Yemen	No	-	-

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Smart Sustainable Cities: A Solution to Protect Agricultural Land

Smart Land-Use Planning & Green Infrastructure

- **Compact city design** limits land consumption while optimizing urban growth.
- **Zoning regulations & green belts** protect agricultural areas from urban encroachment.
- **Nature-based solutions (e.g., green roofs, urban forests) maintain ecological balance.**

Urban Agriculture & Vertical Farming

- **Smart food supply chains** reduce waste and optimize distribution.
- **Hydroponics, aeroponics, and rooftop gardens** integrate food production within cities.
- **Community urban farms** enhance local food security and reduce reliance on rural land.

Digital & IoT-Based Smart Farming

- **Precision agriculture** (AI, drones, sensors) maximizes yields on limited land.
- **Smart irrigation systems** conserve water and adapt to climate conditions.
- **Data-driven land monitoring** prevents illegal land conversion and promotes efficiency.

Circular Economy & Resource Efficiency

- **Waste-to-energy systems** convert organic waste into compost and biofuels.
- **Water recycling technologies** support both urban and agricultural needs.
- **Sustainable transportation & logistics** reduce the carbon footprint of food distribution.

Using smart and digital solutions while building urban resilience

Smart Sustainable Cities: A Solution to Protect Agricultural Land

🌱 Why It Matters: Benefits of Smart Cities for Agricultural Land Protection

- **Preserves food security** by ensuring local food production.
- **Reduces environmental degradation** through smart land management.
- **Protects rural livelihoods**, reducing urban-rural inequality.
- **Enhances climate resilience** by integrating green solutions into urban development.

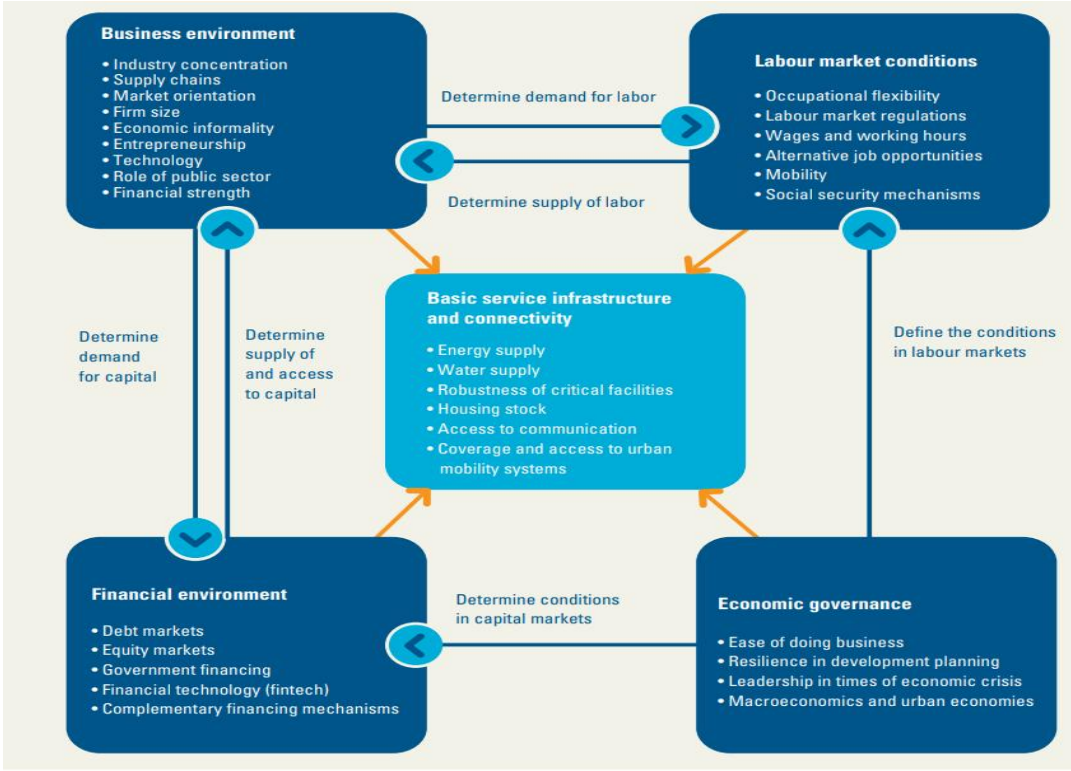
🚀 Call to Action for Policymakers & Urban Planners

- **Implement policies** that protect agricultural land and promote smart urbanization.
- **Invest in agri-tech and smart infrastructure** to balance urban growth and food security.
- **Strengthen urban-rural linkages** to create a sustainable and resilient future.

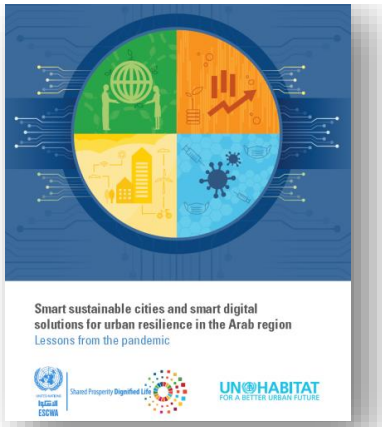
SSC and Resilience – Food Security and reduced inequality

Interconnected Dimensions & Targets

Urban Resilience	SSCs
Urban Services (Housing stock, robustness of critical facilities, access to communication)	**Smart Living** (Housing quality, educational facilities, cultural facilities, individual safety)
Urban Services (coverage and access to urban mobility systems)	**Smart Mobility** (Local accessibility, (Inter)-national accessibility, sustainable, innovative, safe transport systems)
Urban Services (Energy supply, water supply)	**Smart Environment** (Environmental protection, pollution, Sustainable resource management, attractive natural conditions)
Economic Governance (Resilience in development planning, ease of doing business, leadership in times of economic crisis)	**Smart Governance** (Political strategies & perspective, public and social services, participation in decision-making) **Smart Living** (Social cohesion)
Economic Governance & Business Environment & Labour Market Conditions	**Smart Economy** (Innovative spirit, Economic image and trademarks, Flexibility of labour market, Ability to transform, Entrepreneurship, Productivity, International embeddings)



Source: UNCDF and others (2021). Urban Economic Recovery and Resilience: Diagnostic and Planning Tool. p. 8.



Source: ESCWA Technical Paper on "Smart Sustainable Cities and Smart Digital Solutions for Urban Resilience: a Pandemic Lens, 2021

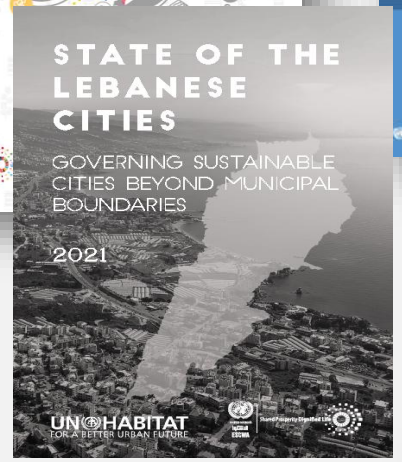
Conclusion

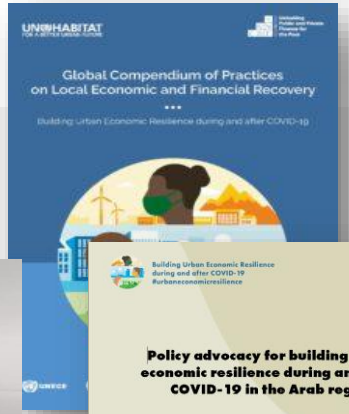
Urbanization does not have to be at the expense of Agricultural lands. The future of our cities depends on the land that feeds them!

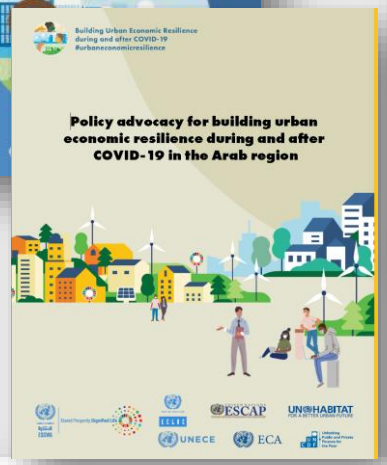
So let’s build resilience, protect our fields, and ensure no one is left behind in the race toward urbanization.

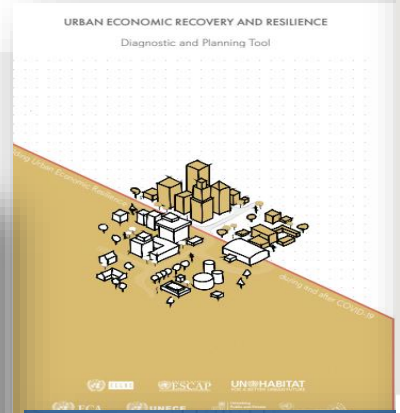
Selected ESCWA publications and interactive tools on urban development

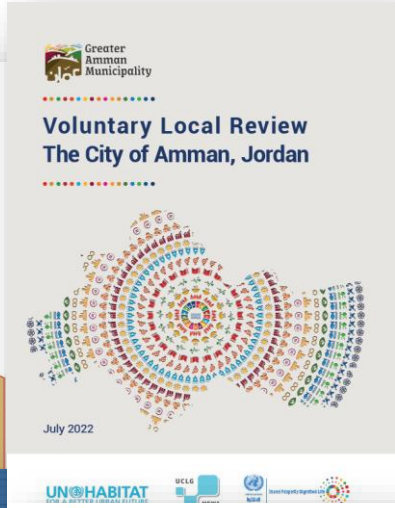
https://www.unescwa.org/

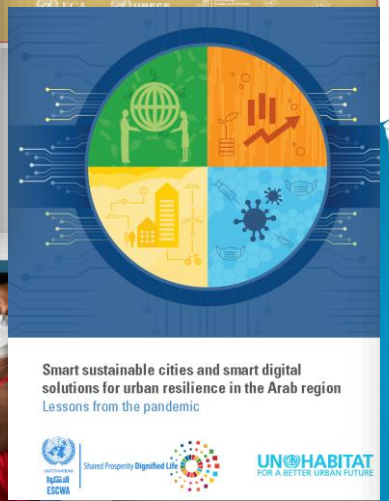


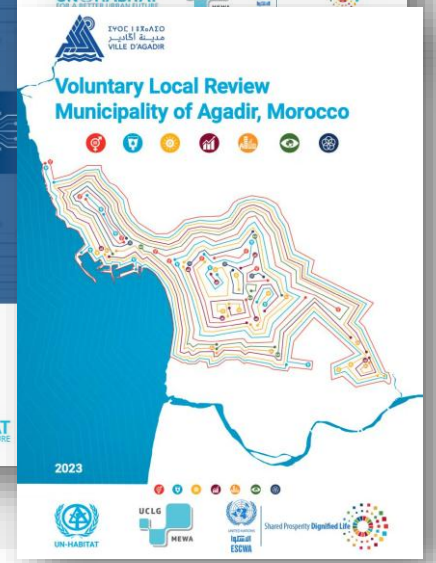


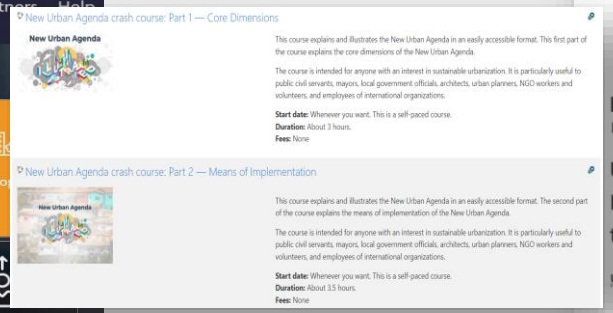


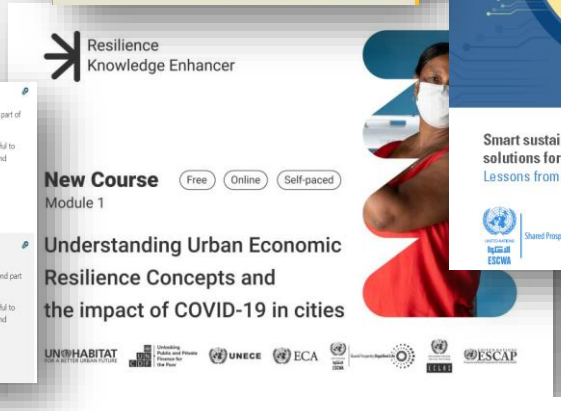












Thank you!

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