



Preventing food waste: innovation and solution in the Arab region

Food Waste in West Asia – an Overview

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Background

- **One-third** of global food production is lost or wasted every year along the supply chain from farm to fork. It could feed more than 12% of the global population, lifting them out of hunger and malnutrition.

Food loss and waste



- Food waste exacerbates **food insecurity** and burdens waste management systems
- Nearly a **billion tonnes** of food went into the waste bins of households, retailers, and food service outlets in 2019.

Food security



- Food loss and waste uses labour, capital, fertilizers, pesticides, water, land and energy resources in vain, generating **8% of global greenhouse gas emissions**, impacting biodiversity, costing governments, businesses and households nearly a **trillion US dollars**.

Environmental, Social, and economic impacts



- **Growing population, water scarcity, dependance on food import**, worsening of biodiversity indicators, political instability and conflicts must put **food security in the very focus of Arab region agenda**

Food security in Arab States



- Food waste in West Asia is alarming as it is estimated to be about **34% of the food served**.
- Studies in the region show significant per capita amount of **household food waste**, with **100-150 kg/cap** yearly generated

Food waste in Arab States

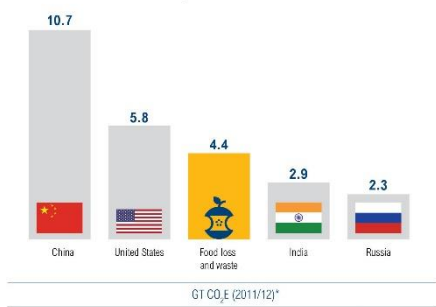


- Arab countries has unique features from its culture, religion, history, **generating significant amounts of food waste over short periods**.
- During **Ramadan** research shows that from **25% to 50%** of the food prepared is wasted.

Lifestyles in Arab States

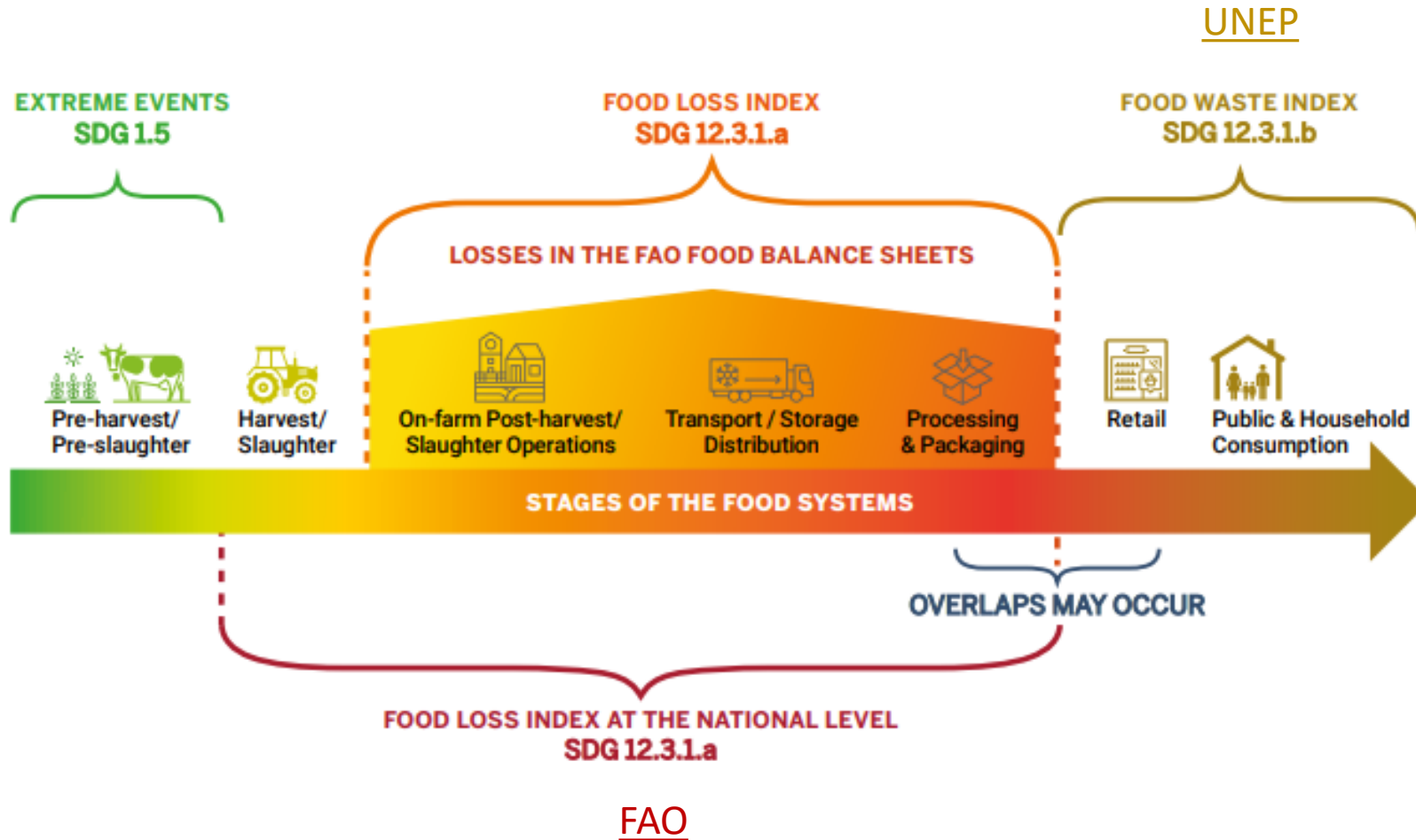


If Food Loss and Waste Were its own Country, it Would Be the Third-Largest Greenhouse Gas Emitter



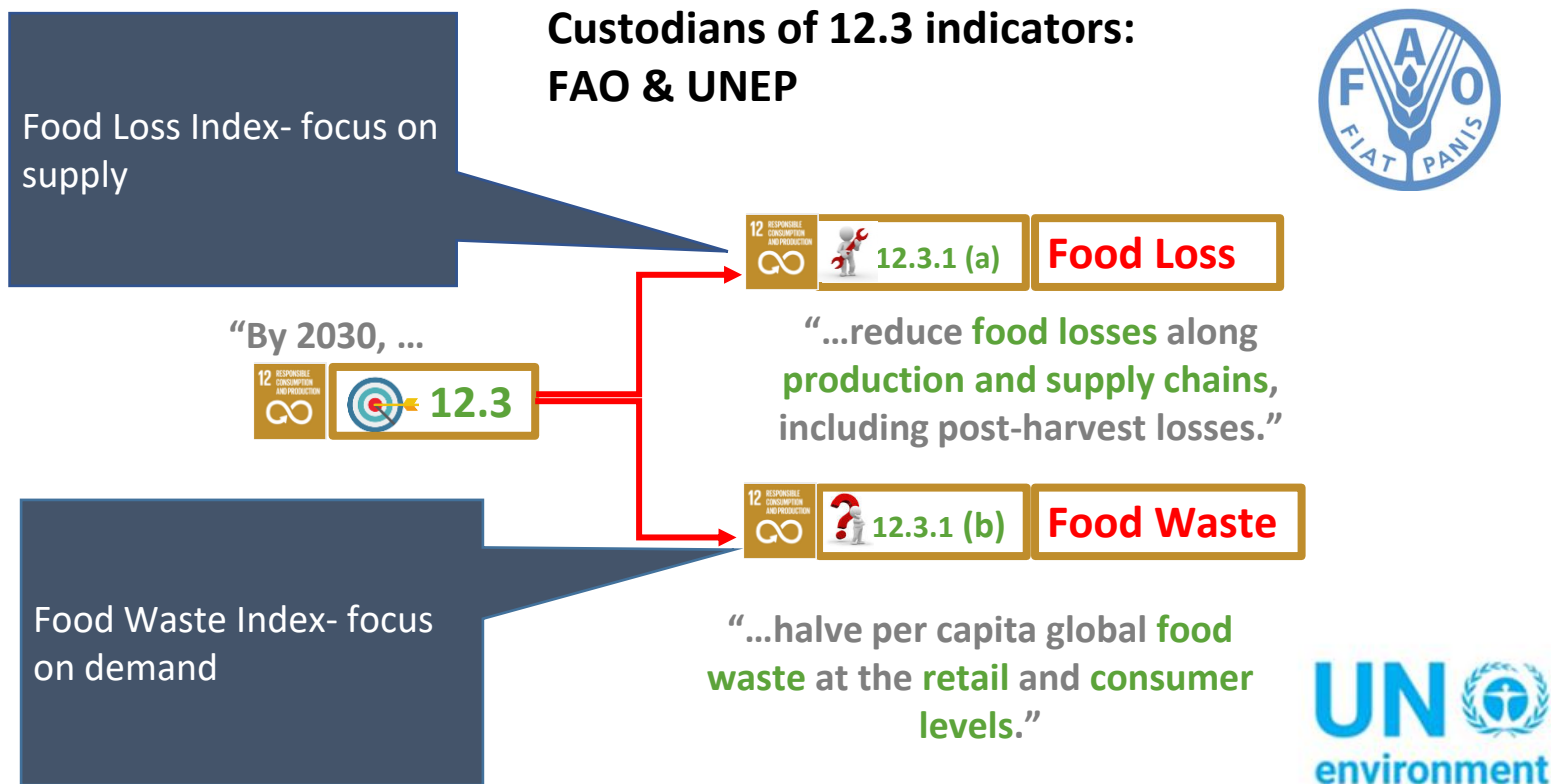
* Figures reflect all direct and indirect greenhouse gas emissions, including those from land use, land-use change, and forestry (LULUCF). Country data is for 2012 unless the food loss and waste data is for 2011 (the most recent data available). To avoid double-counting, the food loss and waste emissions figures exclude net bioenergy use in electricity generation.
Source: FAO, 2019; FAO, 2015; Food Waste Footprint & Climate Change Report FAO
WORLD RESOURCES INSTITUTE

Reduce food waste in Arab States, minimizing the impacts on human health and environment, to achieve SDGs and generating inclusive green growth opportunities to build back better.



FAO and UNEP mandates are **complementary** along the food value chain, and synergies between the two organizations are key to achieve the ambitious targets set by the 2030 Agenda.

Tracking Progress on SDG 12.3



UNEP Food waste initiatives in West Asia



Raising awareness
and education



Capacity building and
knowledge exchange



Influence policy initiatives
and trigger actions

UNEP West Asia

The region is diverse in terms of national needs. UNEP supports the countries to tailor solutions and shape proper strategies inspired by sustainability and inclusiveness.

Benefit for countries

Sustainability

- Alignment with UN agenda 2030 (SDG12.3), build back better, sustainable lifestyles

Food security

- Social and economic access to safe and nutritious food to everyone, reduce food import needs

Environmental protection

- Reduce climate change impact, biodiversity depletion, and pollution risks

Waste management and circular economy

- Reduce landfill needs, reduce organic waste, reduce operational costs for waste management (collection, disposal), circular organic waste treatment

Business opportunities

- Inclusive Green Innovation and sustainable opportunities for SMEs and start ups. The connection between rural and urban areas could also be key and circular models may play a major role.

State of Food Waste in West Asia

- The report will be launched in few weeks
- Following the publication of the Food Waste Index 2021 report (UNEP 2021), this report dives into the challenges of the West Asia region.



Food waste facts

17% of food is wasted at consumer level and an estimated 690 million people were hungry in 2019 - a number that is expected to rise sharply during and post COVID-19. (UNEP 2021)

Household food waste estimations in West Asia range from 75 to 163 kg/cap year. (UNEP 2021)

Country name	Study area	Household food waste estimate (kg/capita)	Reference
Bahrain	Nationwide	132	Alayam 2018
Iraq	Baghdad	75	Al-Maliky and ElKhayat 2012
	Mosul	85	Al-Rawi and Al-Tayyar 2013
	Karbala	142	Al-Mas'udi and Al-Haydari 2015
	Al-Kut City	138	Sulaymon, Ibraheem and Graimed 2010
	Nassiriya	163	Yasir and Abudi 2009
Lebanon	Beirut	105	Chalak et al. 2019
Saudi Arabia	Nationwide	105	SAGO 2019

Source: UNEP 2021, pp. 43-44.

Regional insights

West Asia comprises 12 countries with income disparities.

The region has unique regional features related to its diverse culture, religion, history, and climate, impacting food waste generation over short periods. During Ramadan research shows that from 25%-50% of food prepared is wasted.



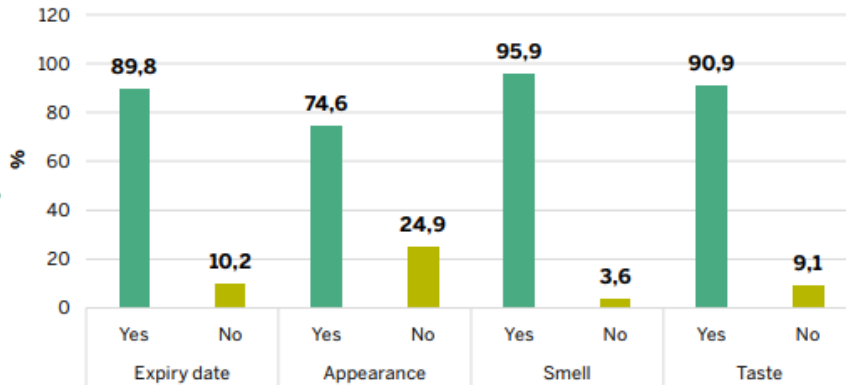
Saudi Arabia's baseline study conducted by the Saudi Grains Organisation (SAGO 2019):
food loss and waste levels of around 33% throughout the food supply chain

- food loss estimated at 14.2%
- food waste estimated at 18.9%

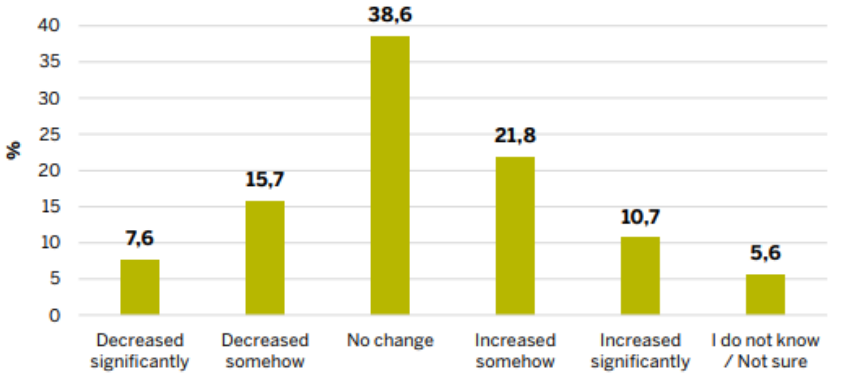
State of Food Waste in West Asia

PERCEPTIONS OF FOOD WASTE GENERATION IN WEST ASIA: A CROSS-SECTIONAL STUDY

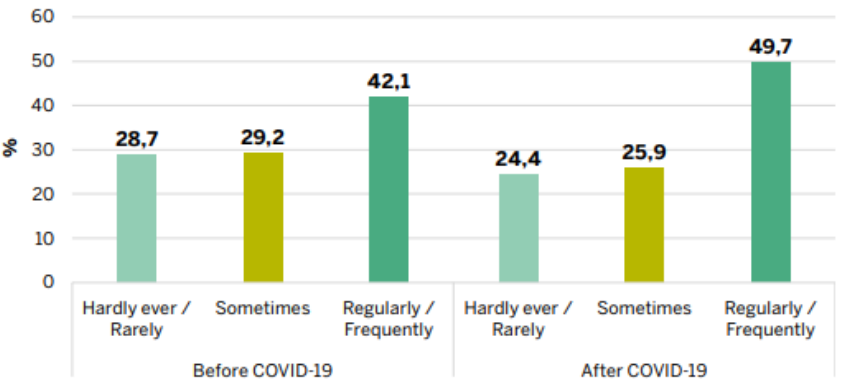
Based on what criteria do you decide to dispose of food items from your fridge or pantry at home?



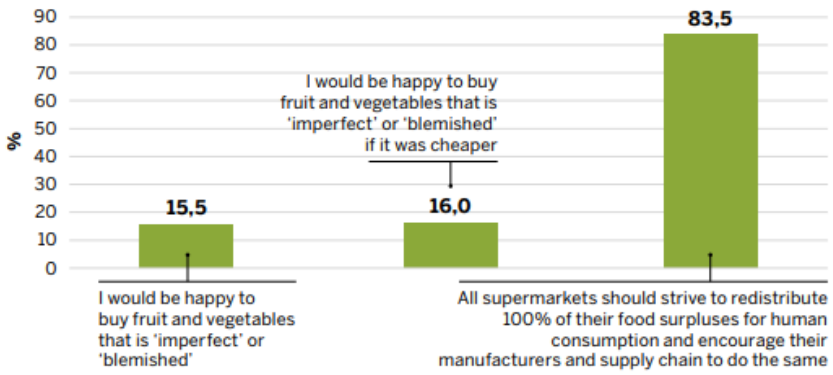
How did COVID-19 pandemic affect your food waste generation?



How often did you use the leftovers in any way in your household each day?



I agree about the following statements:



State of Food Waste in West Asia



Key findings:



A sample of 200 participants from 10 countries in West Asia was requested to complete an online survey between July and November 2020. One-third of the survey respondents reported an increase in their food waste generation following the emergence of the COVID-19 pandemic. However, respondents simultaneously increased their use of food leftovers.



Collecting data on national food loss and waste generation enables governments to understand the scale of the problem, target hotspots, assess the efficacy of policy interventions and track progress towards 2030.



Raising awareness of the impact of food waste on the environment and food security, and the financial benefits of reducing food waste, is important, as well as promoting gender inclusive strategies across the food value chain.



Policies and institutions are the main drivers for reducing food loss and waste. Appropriate policies should be developed to encourage stakeholders to adhere to directives while encouraging various supply chain operators to invest and adjust.



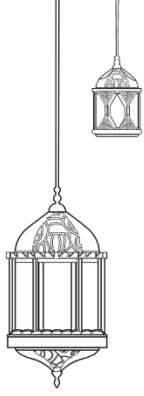
Given the magnitude of food loss and waste in West Asia, an increase in investments needs to go hand in hand with adopting and transferring appropriate technologies.



Recommendations:

- Measure **baselines and report progress on SDG 12.3**
- Improve knowledge and **raise awareness** to promote good practices
- Promote **gender inclusive strategies** across the food value chain
- Adopt **appropriate policies** and adopt an adequate regulatory framework
- **Promote investments** to adopt and transfer pertinent technologies

Sustainable Ramadan campaign



@unepwestasia @UNEP_WestAsia

رمضان مستدام

حملة برنامج الأمم المتحدة للبيئة لمنع الهدر الغذائي



السياق:

الهدر الغذائي في منطقة غرب آسيا وفقاً للحوث والدراسات، إن الهدر الغذائي الكبير يُنجم خلال المناسبات الاجتماعية والدينية على مستوى العالم، ولا تستثنى دول غرب آسيا من ذلك.

البيئة والمشكلة الاقتصادية الاجتماعية

يسجل برنامج الأمم المتحدة للبيئة أن الفاقد والهدر من الأغذية يستخدم العمالة ورأس المال والأسمدة ومبيدات الآفات والمياه والأراضي ومصادر الطاقة دون جدوى، مما يؤدي إلى توليد 10-30٪ من انبعاثات غازات الاحتباس الحراري العالمية، ويؤثر على التنوع البيولوجي، وتكثف الحكومات والشركات والأسر ما يقارب المليون دولاراً أميركياً.

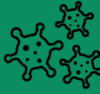


حقائق رمضانية

وفقاً لمراجعة السلوكيات التي أجراها المكتب الإقليمي لغرب آسيا لبرنامج الأمم المتحدة للبيئة، يُظهر الأبحاث أن الطعام المهدر خلال شهر رمضان يُهدر بنسبة 25٪ إلى 50٪ من الطعام.

يبدأ العمل من المنزل

على الصعيد العالمي، تعد الأضرار مسؤولة عن 61٪ من الهدر الغذائي العالمي في عام 2019. وفي غرب آسيا، تُظهر الدراسات وجود هدر غذائي كبير لأنظمة المزارية للرد بمعدل 100-150 كجم / الفرد سنوياً مع الاحتفالات التي من المرجح أن تقام في المنزل هذا العام. إن الاستهلاك الواعي ومنع النفايات هو في غاية الأهمية.



برنامج الأمم المتحدة للبيئة - غرب آسيا

لمنع الهدر الغذائي خلال شهر رمضان 2021

يطلق المكتب الإقليمي لغرب آسيا حملة لزيادة الوعي حول الحد من الهدر الغذائي خلال شهر رمضان لتعزيز تغيير السلوك.



Stay tuned on our social media channels and website!

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نصائح لرمضان مستدام

- تسوق بعناية وبشكل مستدام
- قم بتخزين الطعام بشكل صحيح لا تترك الطعام خارج الثلاجة
- الطهي بطريقة إبداعية (اكتشف وصفات بقايا الطعام)
- خطط للوجبات مسبقاً وتحكم في حصصها
- قلل من الهدايا ذات الاستخدام الواحد (الطلب الوجبات الجاهزة بدون أدوات مائدة)
- قلل من الأكياس البلاستيكية التي تستخدم مرة واحدة
- لا تنسى حقائب التسوق التي يعاد استخدامها



Thank you

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