



REGIONAL FOOD LOSS & WASTE WORKSHOP

OCTOBER 15, 2020

► **Riyadh-Saudi Arabia**



REGIONAL FOOD LOSS & WASTE WORKSHOP

SESSION 3. FOOD WASTE AT HOUSEHOLD LEVEL



SESSION 3

Food Waste Index

Ms. Clementine O'Connor, UNEP

SDG 12.3 and the Food Waste Index
G20 Food Loss and Waste Workshop for West Asia
October 15th 2020

Clementine O'Connor
United Nations Environment Programme

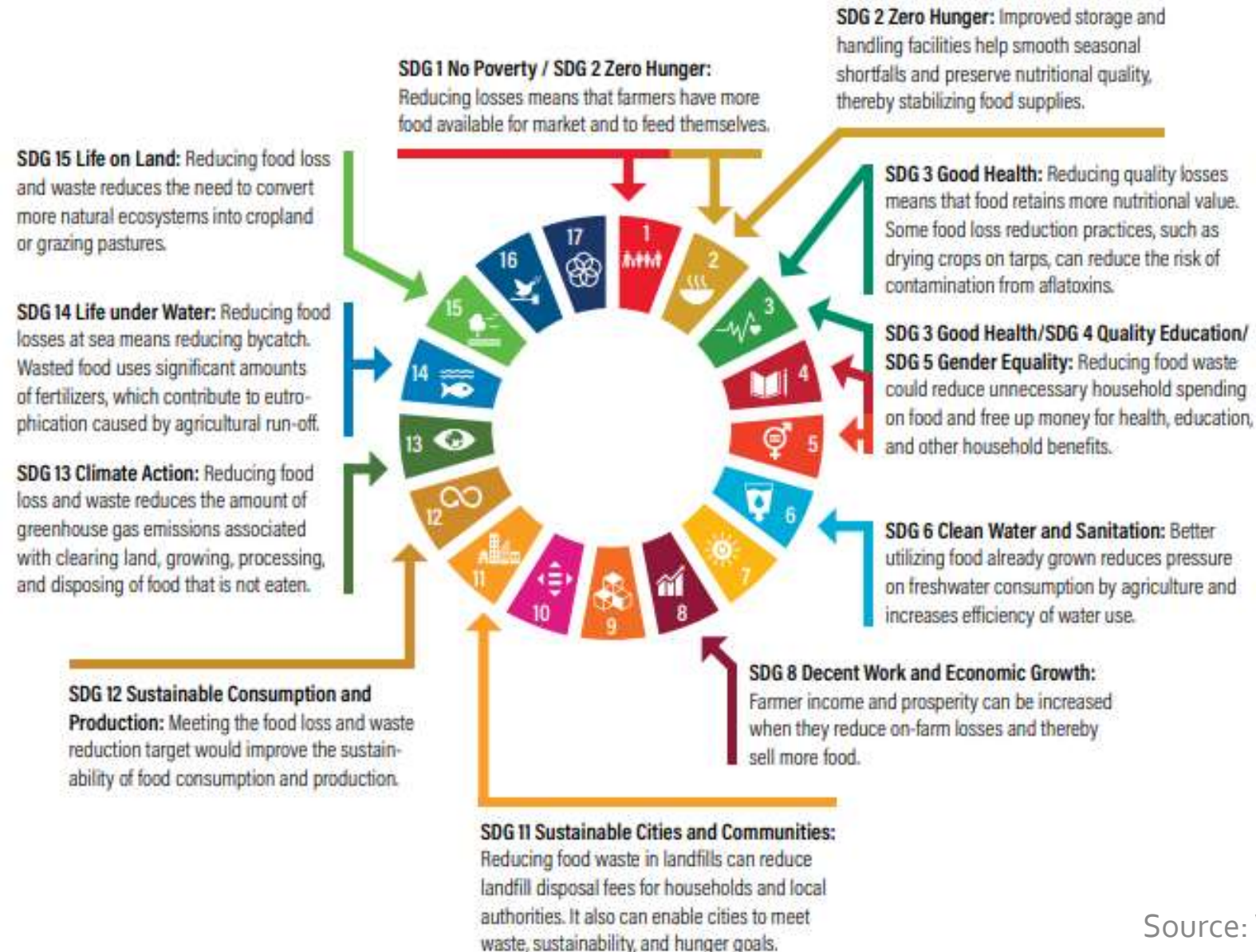


FOOD LOSS & WASTE

- One third of food produced for human consumption
- 1.3 billion tonnes per year
- Valued at USD 990 billion
- While 821 million people are undernourished

Producing food that is lost/wasted requires: water, land, energy, labor and capital, uses inputs such as fertilizers and pesticides, and generates **8% of global greenhouse gas emissions.**

Curbing food loss and waste can help deliver multiple SDGs...



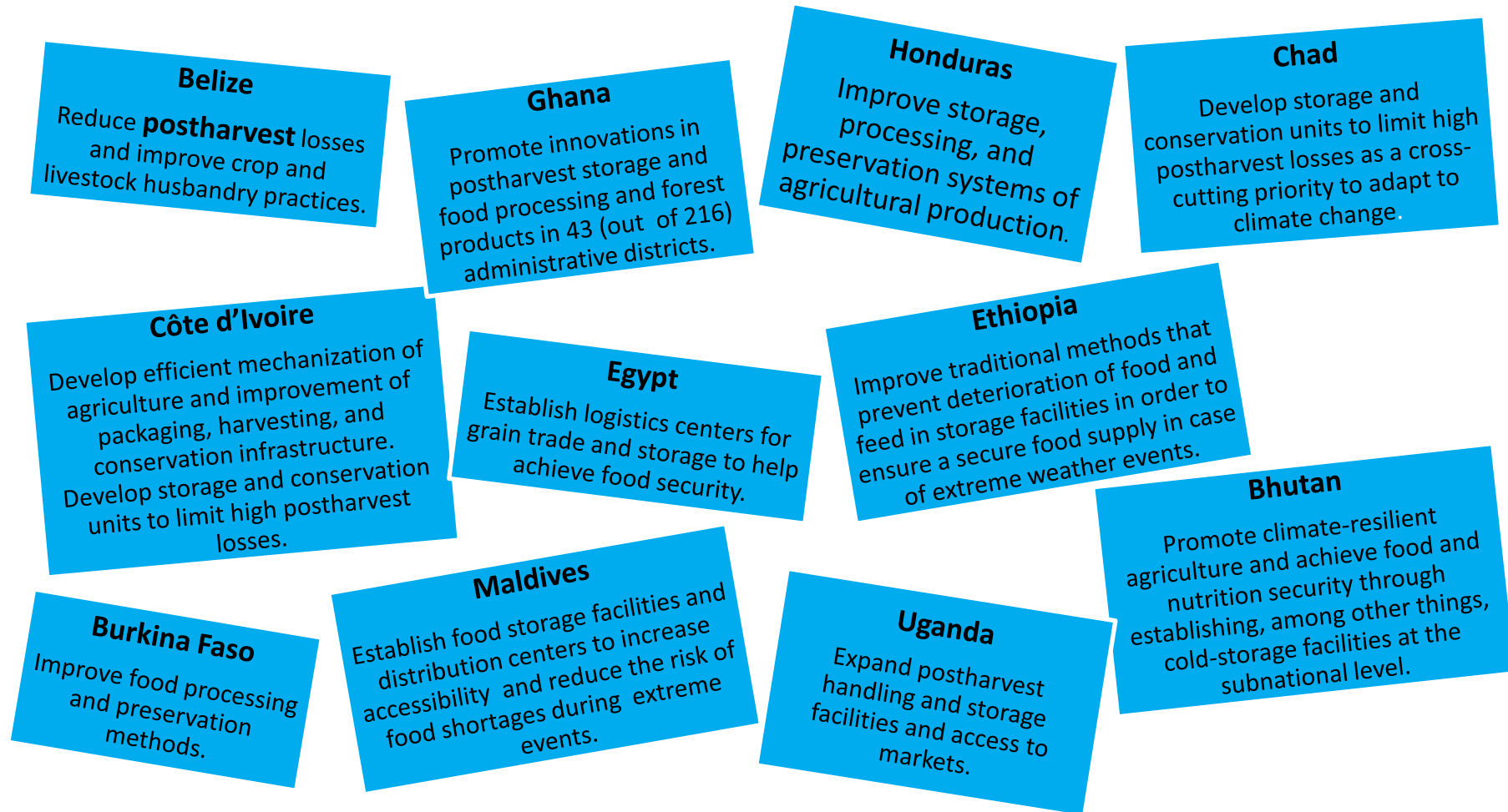
...And raise ambition in the 2020 NDC revision



Article 4.2 “**Each Party shall prepare, communicate and maintain successive nationally determined contributions** that it intends to achieve. Parties shall **pursue domestic mitigation measures**, with the aim of achieving the objectives of such contributions.”

Only 11 countries have Food Loss in their NDCs

None mention Food Waste



Sources: NDCs of the above countries (2016, 2017) accessed via Climate Watch (2019)

Food Loss and Waste in Climate Strategies



Generating 4.4 Gt CO₂e (8% of GHG), food loss and waste has an important role to play in national and business climate strategies.

UNEP's new report with WWF, *Enhancing NDCs for Food Systems*, provides recommendations on how to raise climate ambition in the 2020 NDC revisions with FLW indicators, policies and interventions.

New UN Environment Assembly Resolution on Food Loss and Waste

Urges governments & stakeholders to:

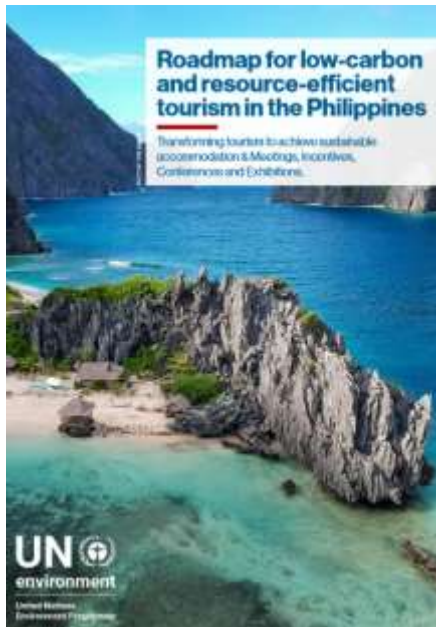
- Set national strategies to reduce FLW in line with SDG 12.3.
- Establish mechanisms for measurement
- Take action through policy, education & awareness-raising
- Promote dialogue & cooperation between private and public sectors across the value chain
- Promote research, best practice sharing and industry engagement around sustainable cooling and cold chain solutions



Snapshot of UNEP action on Food Loss & Waste

UNEP mandate: 2 UNEA Resolutions & custodian of food waste indicator for SDG Target 12.3

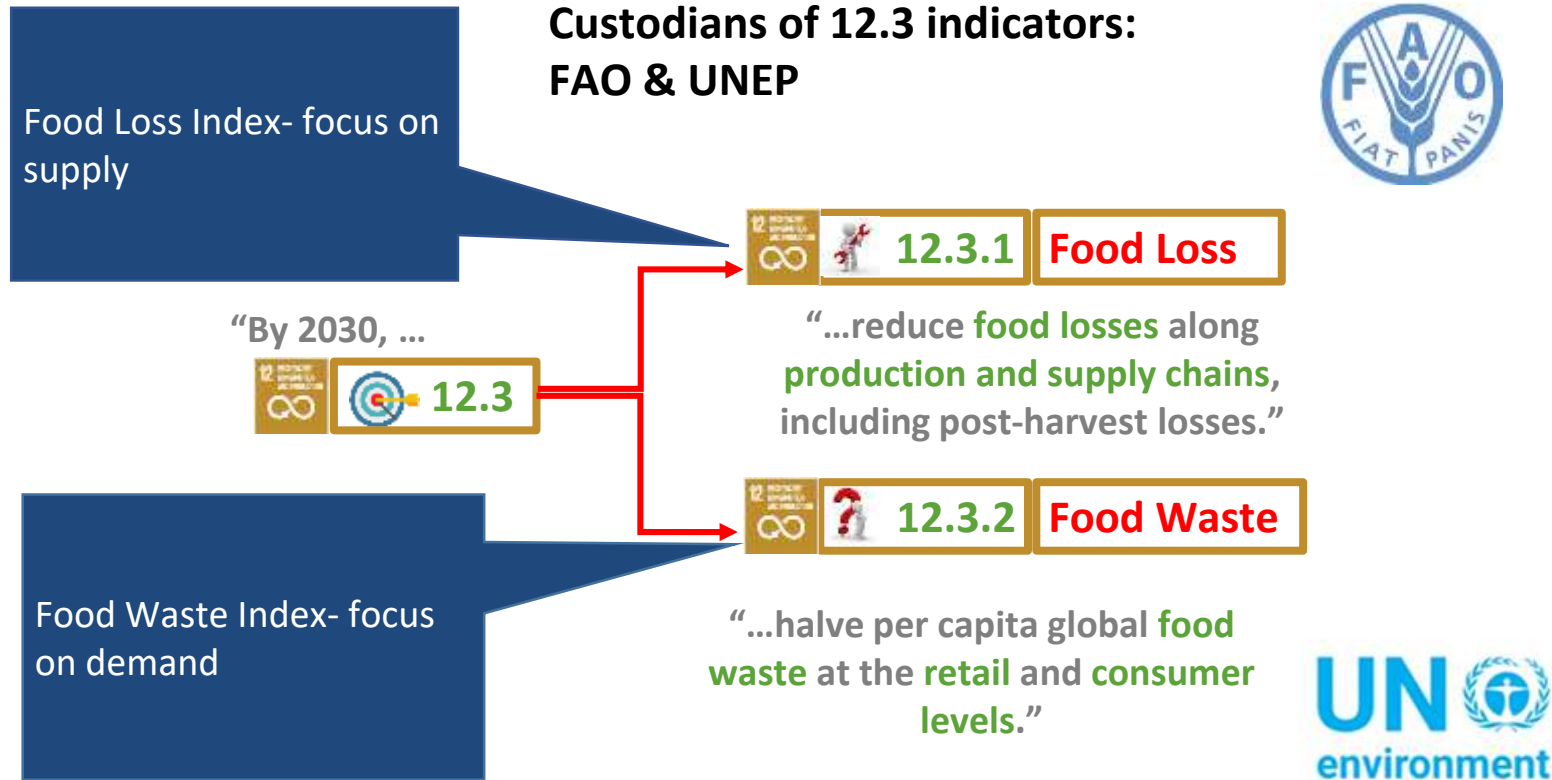
- Think Eat Save awareness campaign launched 2013
- Food waste prevention guidance for Countries & Companies published 2014, with FAO
- Founding member of high level coalition Champions 12.3, delivering SDG 12.3.
- Managing Food Waste Index



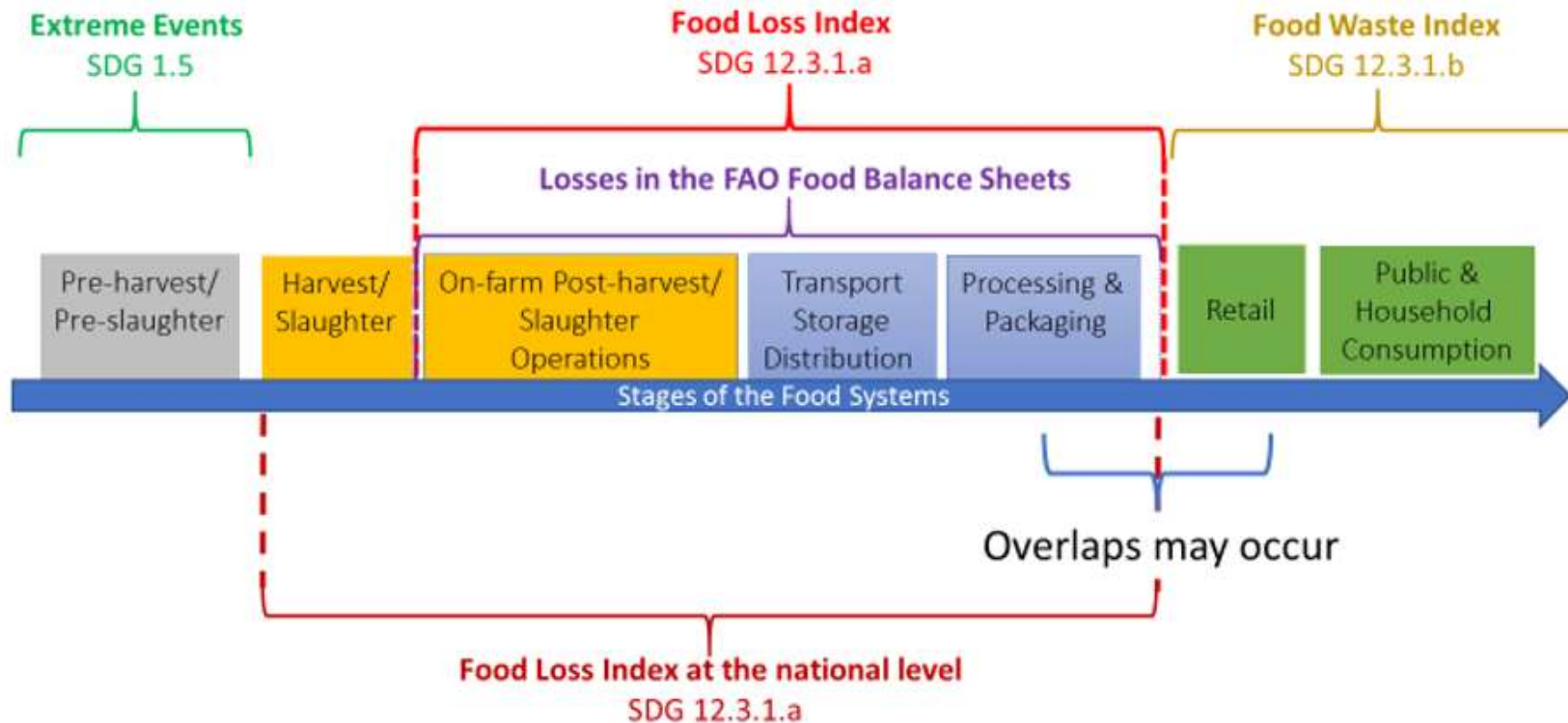
- Regional capacity building workshops on FLW (Tokyo 2019, Riyadh, 2020)
- New Regional Working Groups on Food Waste Measurement
- New Sustainable Food City Partnership to be developed in Rio de Janeiro
- Modelling global cold chain capacity and needs
- Roadmaps for tourism sector/hotels to address food waste & plastics together



Tracking Progress on SDG 12.3



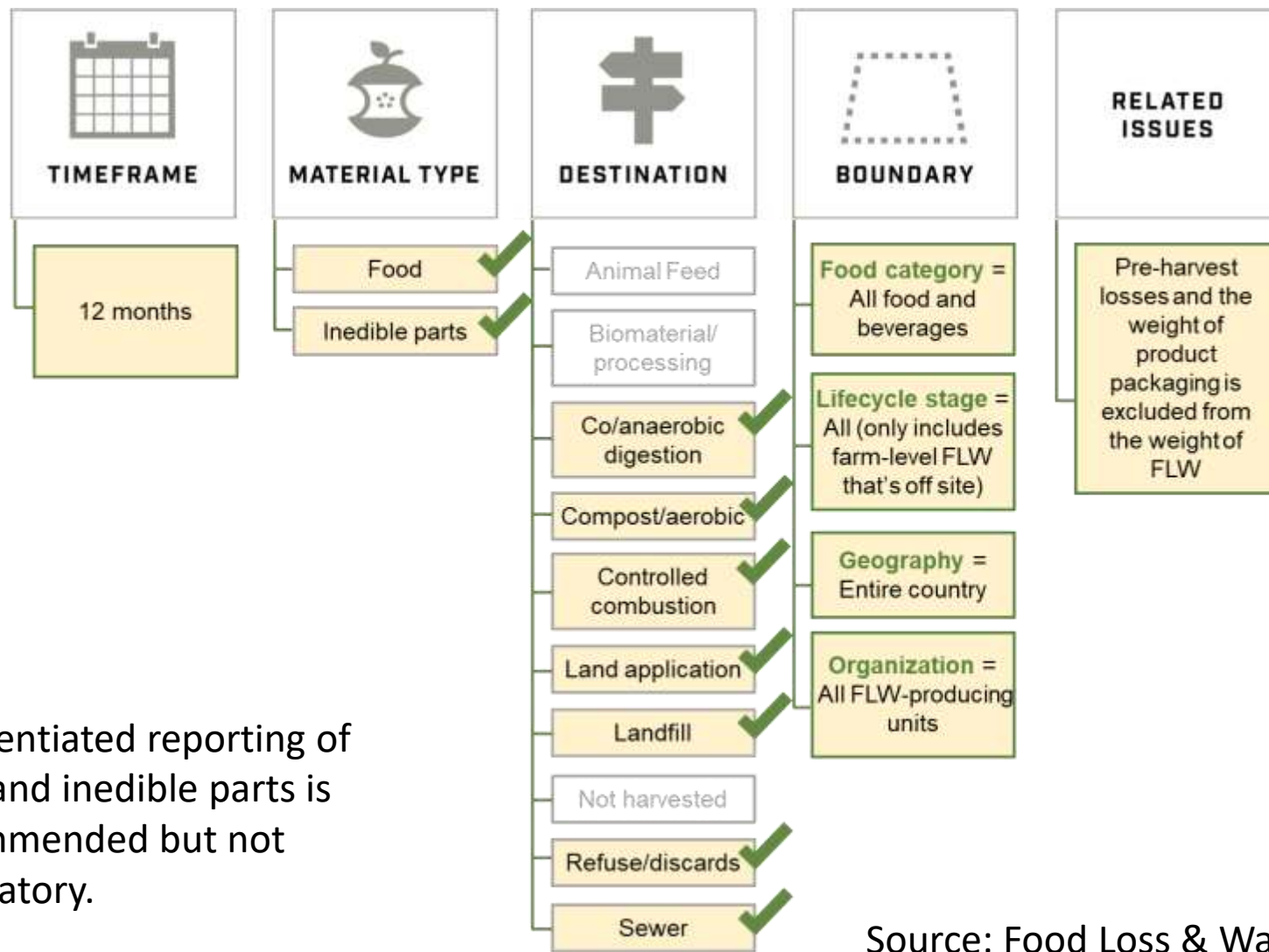
Interactions between SDG 12.3.1.a and 12.3.1.b



Scope

Lifecycle stage: retail and household

Countries can also report manufacturing, food service, & out-of-home consumer food waste



Differentiated reporting of food and inedible parts is recommended but not mandatory.

Source: Food Loss & Waste Protocol

Food Waste Index

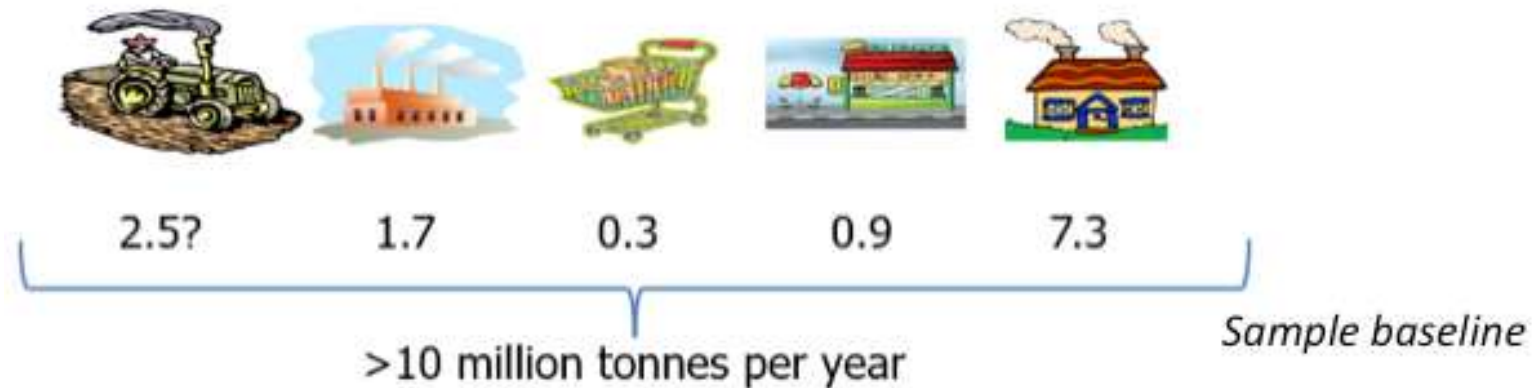
The Food Waste Index has a three-level methodology, increasing in accuracy and usefulness of data, but also increasing in the resources required.

- Level 1 is a modelling approach, undertaken by UNEP, that will provide approximate estimates of food waste using best available data and regional extrapolation, providing insight into the scale of food waste at country level, but insufficiently accurate to track food waste over time.
 - **Level 2 is the recommended approach for countries.** It involves measurement of food waste levels at household, retail, and food service level, with sufficient accuracy to evaluate progress towards SDG target 12.3. Methods for each sector are provided, alongside guidance and examples.
 - Level 3 is the advanced option. It enables countries to report disaggregated information (by destination) and include destinations not included in Level 2 (sewer, home composting, animal feed and biochemical processing).
-

There is a significant lack of food waste data in developing and emerging economies

But emerging insights suggest per capita household food waste is comparable in developed and developing countries.

UNEP is currently modelling national food waste estimates for the first Food Waste Index report. We are aware of the FLW baseline of Saudi Arabia but have not identified other data in West Asia.



Please get in touch if your country has food waste data that we might have missed.

GO4SDGs Regional Working Groups on Food Waste Measurement & Strategy

UNEP will be developing a West Asia Working Group for the Food Waste Index, providing guidance on how to measure food waste in the four relevant sectors: households, food service, retail and advanced manufacturing. It will include recommendations on definitions, scope, waste destinations to cover and most appropriate methodologies in each sector.

The Working Group will bring together countries in LAC that are motivated to halve food waste by 2030, to develop baselines using a common methodology, work through measurement challenges, and learn from one another's experiences.

The group will meet quarterly starting late 2020 and will conclude with a session on designing effective national food waste prevention strategies. Governments are invited to contact UNEP to express their interest in joining the group.

Call to Action for G20 and West Asia

UNEP together with the Champions 12.3 coalition calls upon the governments of the G20 and West Asia to pursue the following strategies to dramatically accelerate efforts to halve their food loss and waste by 2030:

- (1) Follow the "Target-Measure-Act" approach, including reporting baselines using the Food Waste Index
- (2) Integrate food loss and waste reduction into climate strategies, and
- (3) Pursue food loss and waste reduction as part of COVID-19 Build Back Better responses

More information:

<https://champions123.org/publication/call-global-action-food-loss-and-waste>

Thank you

Clementine O'Connor
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<https://www.unenvironment.org/thinkeatsave/foodwasteindex>

SESSION 3

Strategies for Food Waste Reduction at Household Level

Mr. Tarik Ismail

Chief Executive Officer - Savola World)

Strategies for Food Waste Reduction at Household Level

Tarik M. Ismail

Executive Director, Savola World



Key Features

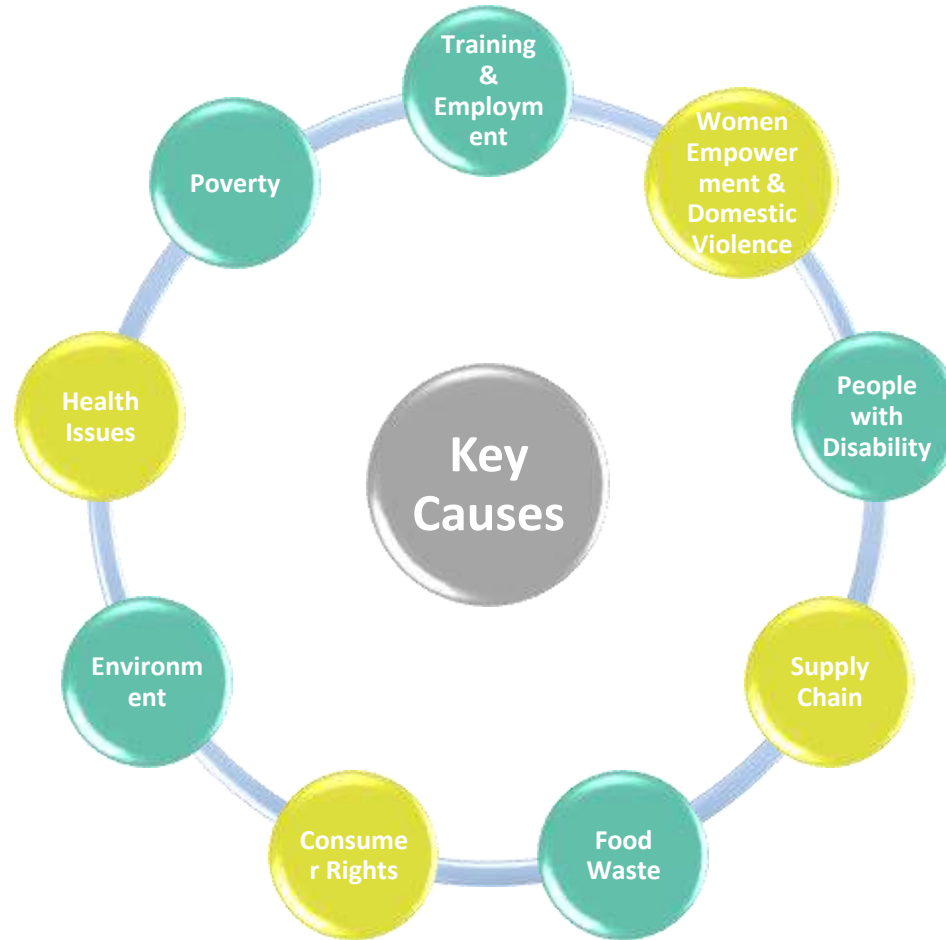


- **CSR Benchmarking & Studies**
- **Savola World CSR Strategy**
- **Negaderha Program**
 - **Partners**
 - **FW Quantification Research**
 - **Negaderha Key Visuals & TVCs**
 - **Key Touchpoints for Household Awareness (grocery shopping, storage, portion planning, leftover)**
 - **Negaderha Portal & Mobile Application**
 - **Communication Campaigns**
 - **Negaderha SROI Analysis**
 - **National NGOs Alliance**
- **Strategies: Food Waste Reduction at Household Level**



CSR Benchmarking & Studies

- Based on our studies, desktop research and sustainability benchmarking of best practices across local, regional and international markets, we were able to identify causes that have proven to be of high impact to the local society.
- The objective was to identify Real Social Causes linked to Savola Core Business (Food & Retail)



Why Excess Food Management?

Real need
of the Saudi
society*



TOP 5

Food waste is among the
top 5 social issues in KSA



SR.25

Average daily food
waste per household



20%

Of food in a household
goes to waste

43%

Respondents aren't
aware of any local
resources to manage
waste



90%

Respondents throw
leftover food after a
meal



* Source: Kingdom wide research conducted by Savola in October 2013 covering 1,000 respondents (100% Saudi, 50%M, 50%F)

Developed for:



Powered by:





- Aligned with core competency
- CSR best practices & potential for impact
- Real social issue in the Saudi society

Food Waste Management Program

HORECA

(Hotels, Restaurants &
Cafes)

Households



المؤسسة العامة للحبوب
Saudi Grains Organization (SAGO)
المملكة العربية السعودية



إسلام

Objective:

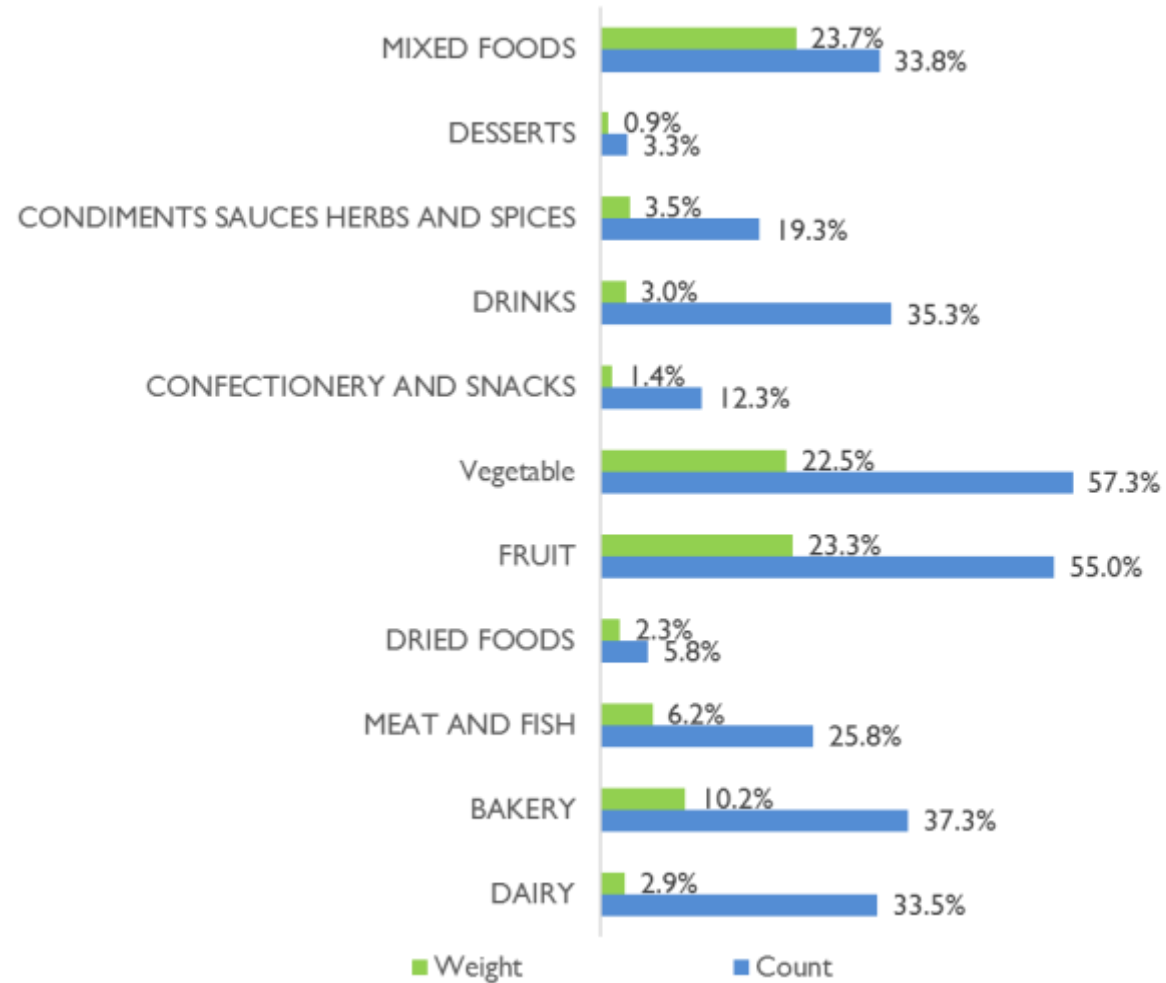
- Under the Savola group's CSR direction, a Food Waste Prevention Program has been developed to address food waste as a national issue, with the objective of delivering a strategy and specific projects to prevent and reduce food waste. sing an approach compatible with the Food Loss and Waste Protocol, a global standard for food loss and measurement. **The primary objective was to establish a national baseline for food wastage in KSA.**
- The insights gathered from the research informed our strategy to reduce food waste in Saudi Arabia, beginning with an awareness-raising campaign led by Savola World.

Methodology:

Two approaches for the food waste quantification were employed in parallel: a waste composition analysis and a food waste diary analysis. **Waste composition analysis (WCA) is a process used to collect, physically separate, weigh, and categorize food waste.** The research team used this method to understand the total quantity and the different components that make up food waste in Saudi households (e.g., types of food categories, amounts of food).



Examined Food Categories



- **Onions** are the most wasted vegetable in households as it makes up **to 53.7%** of the food wasted.
- **+50%** of wasted food have been in good condition (not expired or gone bad).
- **White bread** represents **77%** of wasted baked goods.
- **Fruit & Vegetables** represent over **50%** of the quantity of wasted food.
- The **highest category** of food wasted at home is **mixed meals** in terms of **weight** where it amounts **to 23.7%**.
- **16%** of a **regular garbage container** is **bread & meat**.



#متى_نقّذرها



8

مليون وجبة
تهدر يومياً في
المنازل بالسعودية



عالم
أفول | نقّذرها

Engage with the world. Inspire change with every step you take.

#متى_نقّذرها



90%

من المنازل في السعودية
تقوم برمي الوجبات
المتبقية يومياً



عالم
أفول | نقّذرها

Engage with the world. Inspire change with every step you take.

#متى_نقّذرها



70

مليون ريال
قيمة الطعام
المهدر يومياً في
المنازل بالسعودية



عالم
أفول | نقّذرها

Engage with the world. Inspire change with every step you take.

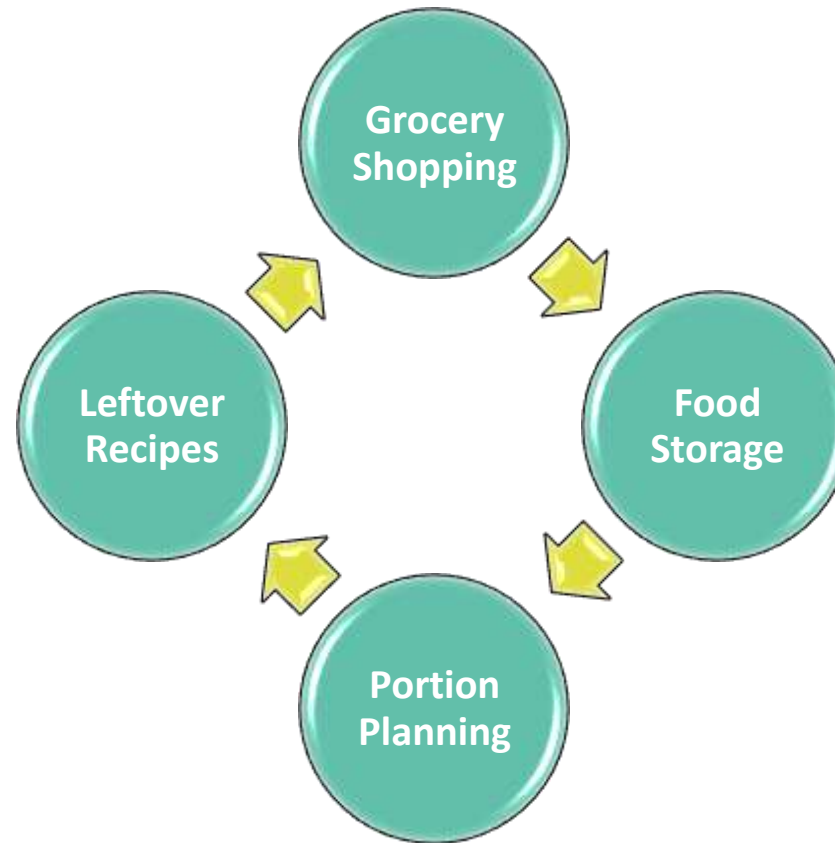


Household Awareness

- ^ Grocery Shopping
- ^ Food Storage
- ^ Portion Planning
- ^ Food Leftovers



Awareness tips categorized under four pillars, covering the consumption cycle from a consumer-end point of view:





Grocery Shopping: No Hassle, No Waste

We provide practical tips and hints to help you prepare for your next food-shopping journey. These tips are inclusive of preparing your shopping list, meal planning and in-store food shopping techniques, which will give you a more effective grocery shopping experience that will result in the end in more resource efficient and sustainable buying behavior.

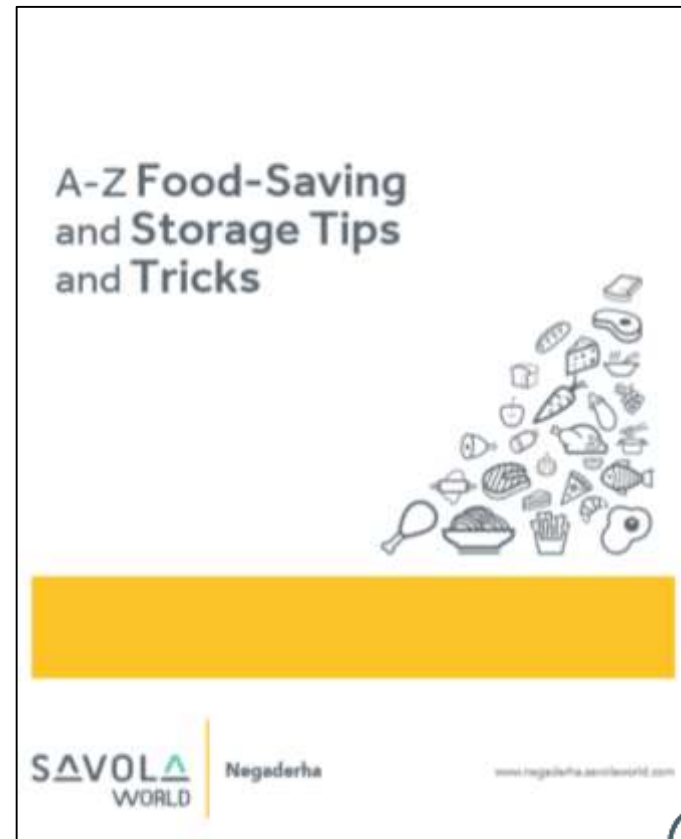
Tips & Hints





Food Storage: A Serious Business

The importance of storing and arranging food properly is to easily find the required food items and ingredients when searching for them, but most importantly, proper storage ensures food safety. So, storage should be handled seriously. Here are some practical food storage tips:



This is our A-Z of tips on how to make your food last longer, leftover ideas and handy hints on the best ways to store your food!



Making the Right Food Portions & Meal Planning

The Portion Planning Tool:

Negaderha Program has developed the portion planner calculator in collaboration with a specialized research agency with expertise in the Saudi market and in the region. The research was based on conducting in-depth interviews with experienced food and nutrition experts, including professional chefs, restaurant owners, dietitians, academics and housewives. The research aimed to identify the scientific recommendations of specialists in the field in order to make the right estimates on the correct meal size based on the number of people eating that meal. The average quotas were produced then divided based on the food groups. This tool eliminates the guesswork and random cooking, which reduces food waste. Make use of our calculator tool when you start preparing any meal!

The Portion Planning Tool

Search According To



The Meal



Food Item



Meat & Fish



Chicken



4

Calculate

Weight of Food Item in Grams

938



Check +60
Interactive
Leftover Recipes!!

Leftover Food Recipes: We provide a wide range of delicious suggestions for new recipe: food leftovers with the purpose of reducing food waste .Recipes include appetizers, main dishes, dessert, and other types of various recipes that inspire those who are concerned with minimizing food waste to make special recipes out of leftovers. Enjoy seeing Negaderha leftover recipes.



Cheese Meatballs

What can I do with leftover feta cheese?



Ouzi Bundles

What can I do with leftover rice with chicken?



Fruit Popsicles

What can I do with ripe fruits?



Maalobe

What can I do with ripe vegetables?



Kleeja

What can I do with old dates?



Fried Rice

What can I do with leftover cooked plain rice?



Download / تحميل



أبدعي وقدري

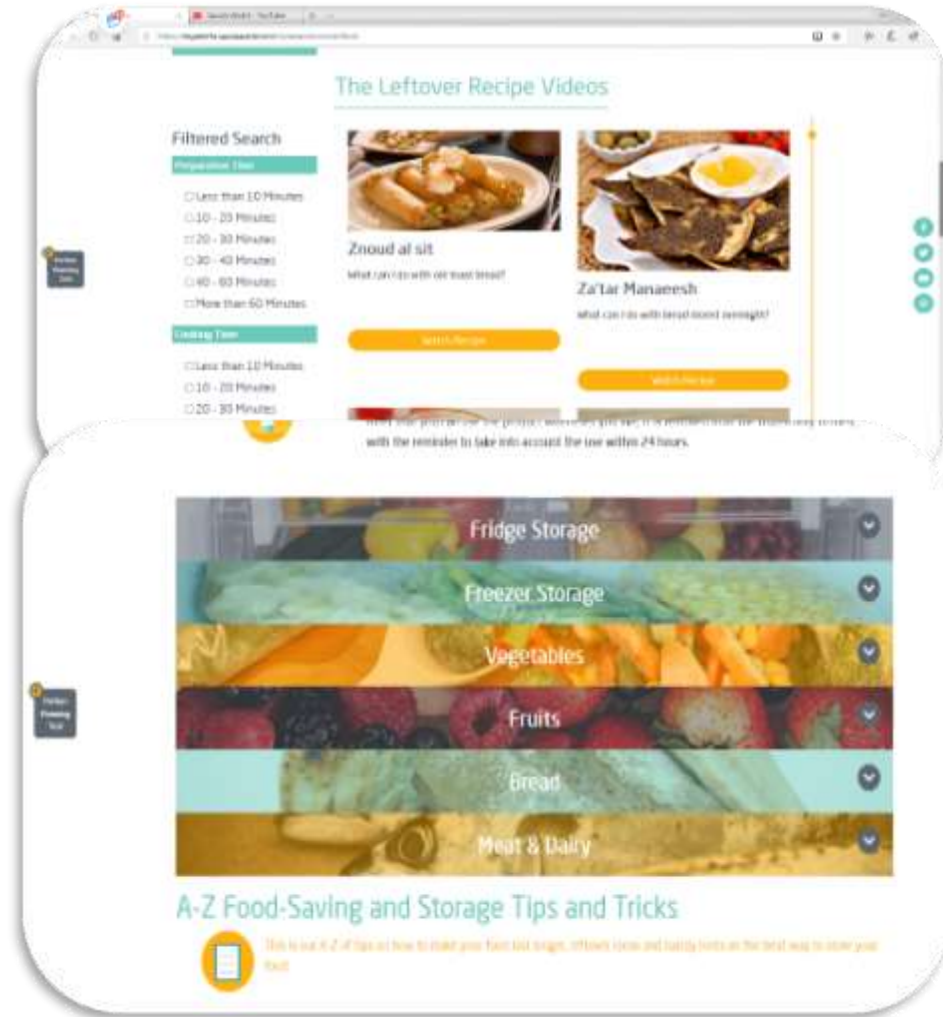
كتاب مليئاً بالوصفات المبتكرة قدمها برنامج نقدرها، يحتوي على العديد من الخيارات المتميزة ووصفات الطبخ المبتكرة والموفرة



امسح هنا



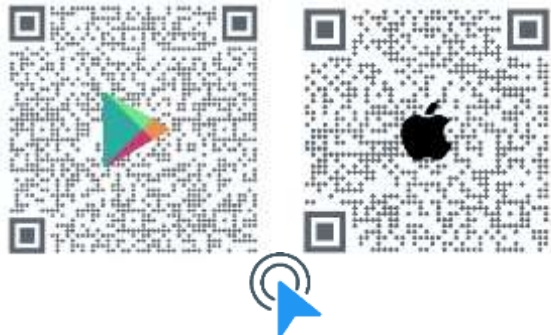
- **Negaderha** portal offers a user-friendly browsing experience, many useful **resources, tools, solutions, guiding booklets, videos** and a lot more for all who are interested to enhance their food waste management knowledge and adapt more sustainable lifestyle.
- <https://negaderha.savolaworld.com/en>



Launch of Negaderha Mobile Application

- In Negaderha continuous efforts to reduce food waste, through raising social awareness and offering various initiatives and services, we launched Negaderha Mobile Application.

We encourage you to download and start using the App!!



SAVOLA
WORLD

Negaderha



On-ground Communication Campaign

- 3 Cities / 3 Malls of highest footfall
- Social Media Influencers
- Direct Interaction in food courts and stand
- Viral video / Flash Mob performance

Digital Communication Campaigns

- Negaderha launched two edition of an online competition entitled "Innovate & Appreciate," with the objective of raising awareness about food management practices and solutions within the household sector, practically food leftover recipes. The concept of the competition was to utilize food leftovers from Iftar meal to create new innovative recipes for Suhour meal. The competition was featured on Savola World social media platforms, and it received a great interaction among the target audience and many valuable entries were received.

Highlights:

- **+4,000** Recipes received
- Prizes at **75,000 SAR**
- **12** Winners
- **+7,000,000 Social Reach** achieved



Objective:

In 2019, we commissioned a Social Return on Investment (SROI) study for Negaderha. SROI is a relatively new methodology that can measure broader socio-economic outcomes in a singular monetary ratio. The purpose of the analysis was to evaluate the value creation of Negaderha Program run in 2017 and 2018 and to measure the social impact that is generated for the participants of the program and for the local community. Also, Negaderha **conducted a social research survey**, in order to measure the community awareness about the program and effectiveness of the solutions and tools offered by Negaderha.

Results:

The SROI analysis confirmed that the **project is highly effective** and it **creates a substantial positive impact**. It also demonstrated how Negaderha creates a measurable value for its stakeholders (Household and HORECA), and proved that it **generates a positive return on investment and high financial value**.



Objective:

- To build national strategic partnerships with NGOs that specialize in food waste management in KSA, pave the way to conduct future initiatives and extend Negaderha presence and activities to include all KSA main regions & cities.

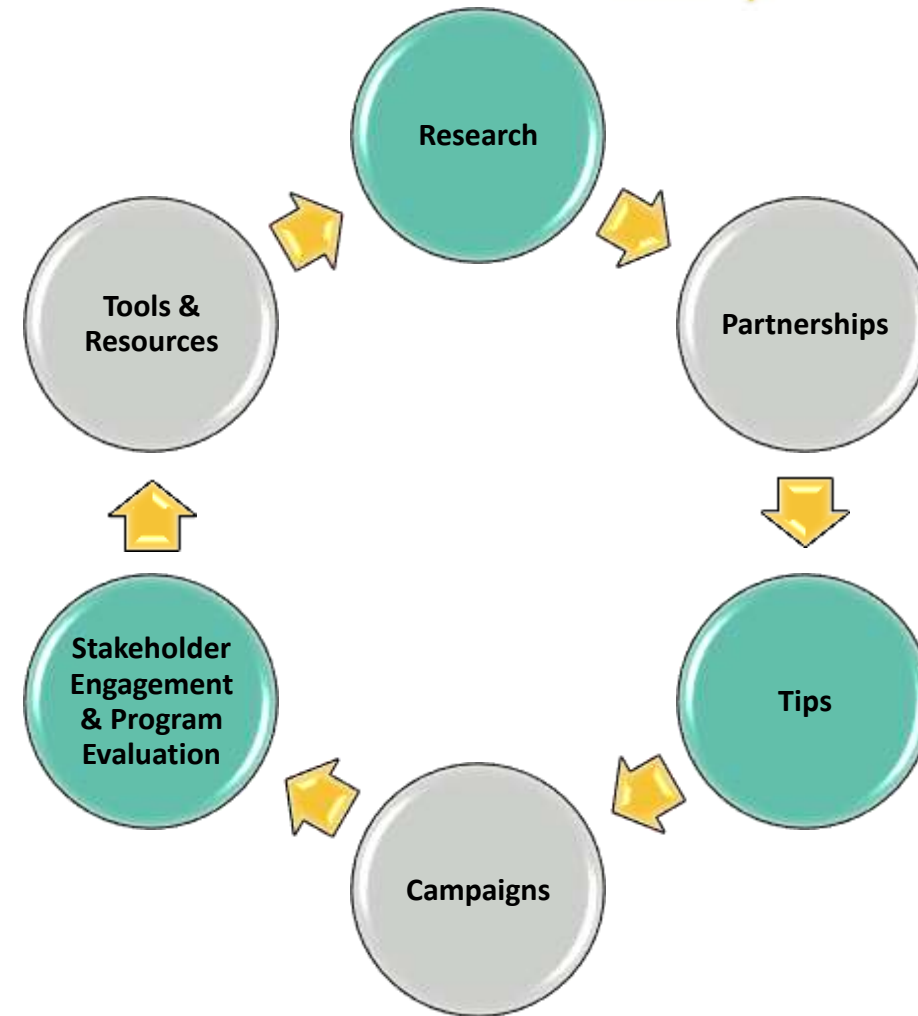
Highlights:

- **30** representatives from Saudi NGOs attended
- **15** Food NGOs across the Kingdom Signed MOU with Negaderha.



Strategies: Food Waste Reduction at Household Level

- **Creating well-structured programs, based on scientific research and methodologies**
- **Forming the right partnerships (local, regional, international)**
- **Building applicable food waste management tips & techniques, and creating the right channels/formats to promote them**
- **Conducting highly-effective communication campaigns, and allow interactivity with the target audience**
- **Effective Stakeholder Engagement & frequent Program evaluation**
- **Building useful tools, platforms & resources to assist in building a collective food waste reduction knowledge & practices**
 - (portal, portion planning tool, Mobile Application, guiding booklets, social media platforms, media materials ..etc)



www.savolaworld.com

www.negaderha.savolaworld.com



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THANK YOU



SESSION 3

KSA FLW Baseline

Dr. Mohammed S Alamri
Saudi Grains Organization (SAGO)



Saudi FLW Baseline

Food Loss & Waste index

In Kingdom of Saudi Arabia

Saudi Grains Organization (SAGO) methodology for baseline determination and most important results

- The impact of Food Loss and Waste (FLW) has a big importance on the economic, social, and environmental levels, which leads to loss and waste of scarce resources that are an integral part of the food production process, such as water, land, energy, and human resources.
- Hence, the Kingdom of Saudi Arabia launched several actions to preserve the natural resources and utilization, such as the "National Program to reduce FLW" implemented by the Saudi Grains Organization (SAGO).

- The first phase of the program was completed, issuing the "baseline" food loss and waste index in the Kingdom, which is known as one of the first at the local and global level in terms of the number of food products that were included in the survey, the geographical scope, the size of a sample, and the methodology “Impact Methodology®” according to the international standard for FLW.

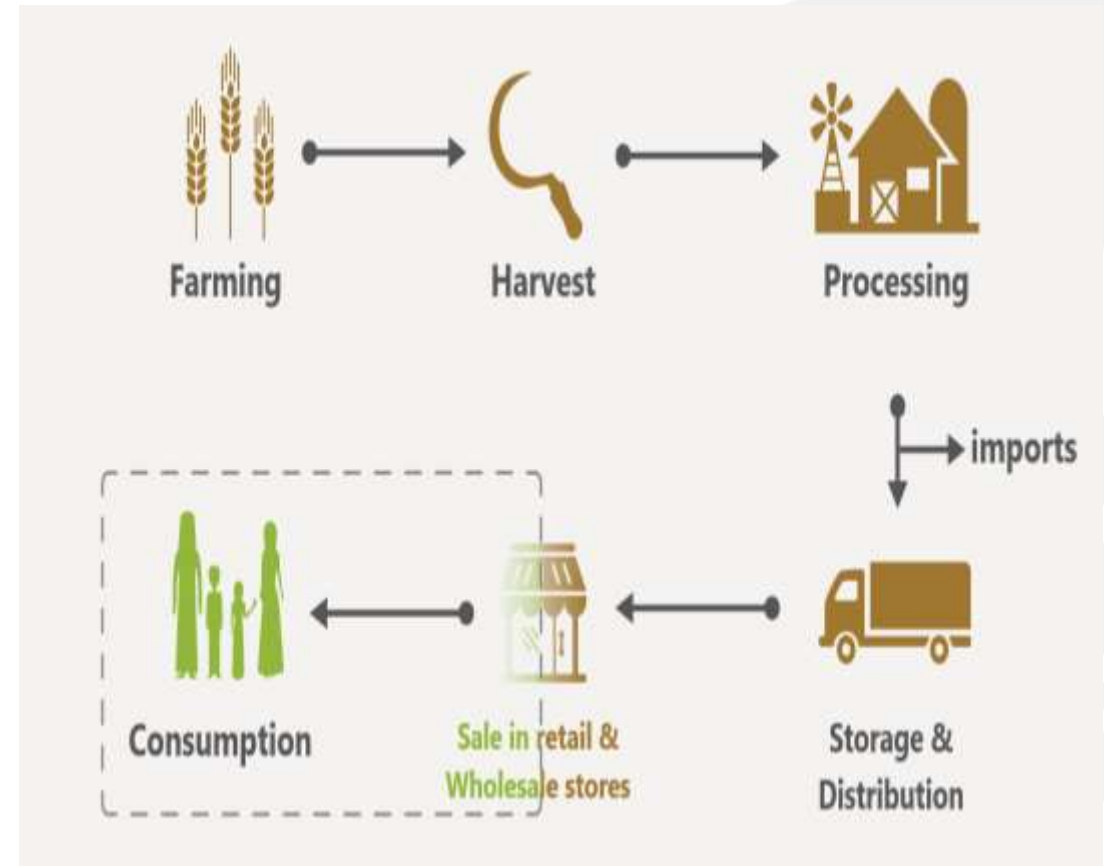
Concepts and terminology

Food Loss

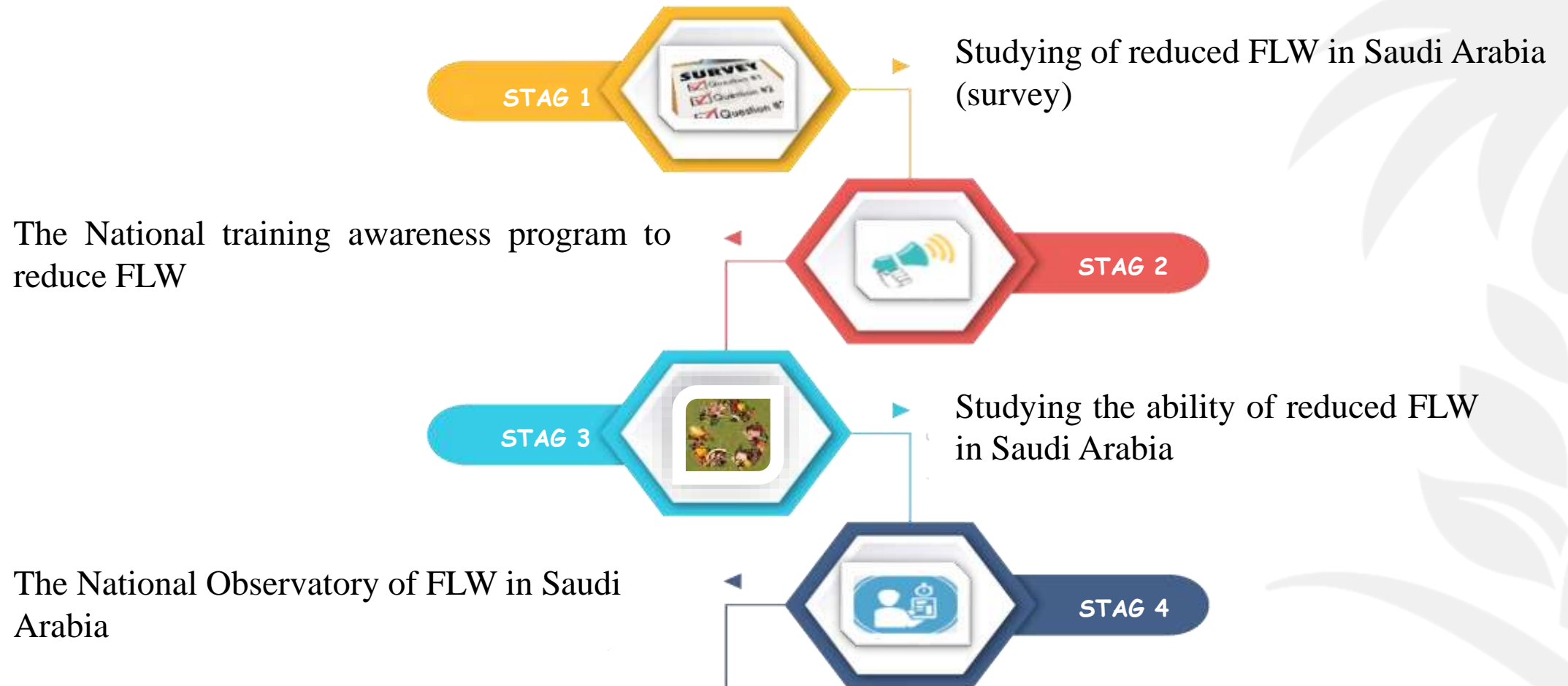
This means the quantities of food loss along the food supply chain (on farms, factories, transportation, etc.) that don't reach end consumer.

Food Waste

Is taking place after the stages of production and distribution in restaurants, hotels, houses, etc.









Program Stages

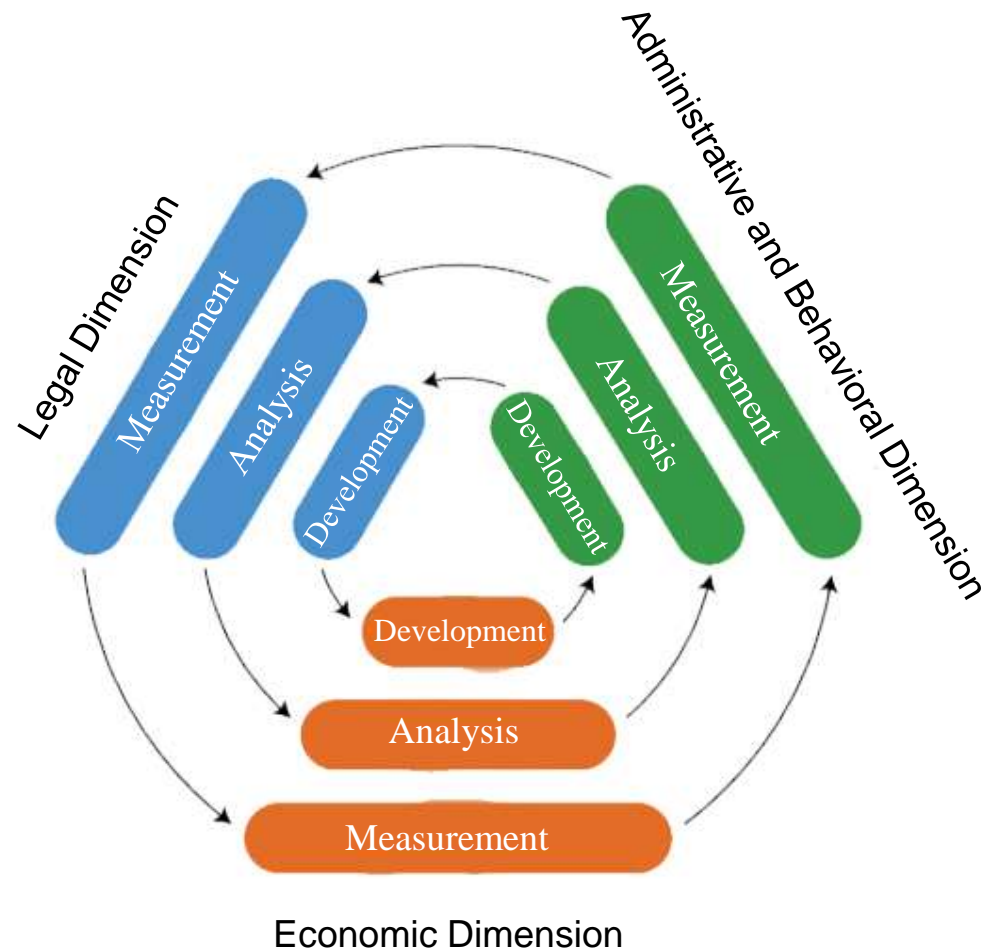


Program Objectives



-  To increase awareness of the importance of food diversity sources.
-  To improve awareness of efficient agricultural sources usage.
-  To aware the community of the negative impacts of food waste and how we could utilize it.
-  To encourage the reducing of FLW.
-  To support food recycling in Saudi Arabia.
-  To enhance the cooperation between governmental and non-governmental authorities and agencies, retail stores, and restaurants.





The most characteristic of this study is the scientific methodology "Impact Methodology", that has not been used in the Arab countries, "Impact Methodology®", to study the phenomenon at the macro and micro levels by considered the economic, administrative - behavioral and legal dimensions separately, according to the standard indicators, analysis and development.

Program Objectives (Stage 1)



➤ To estimate the amount of FLW in S A in a scientific way according to international standards.



➤ To measure the economic losses resulting from FLW in S A.

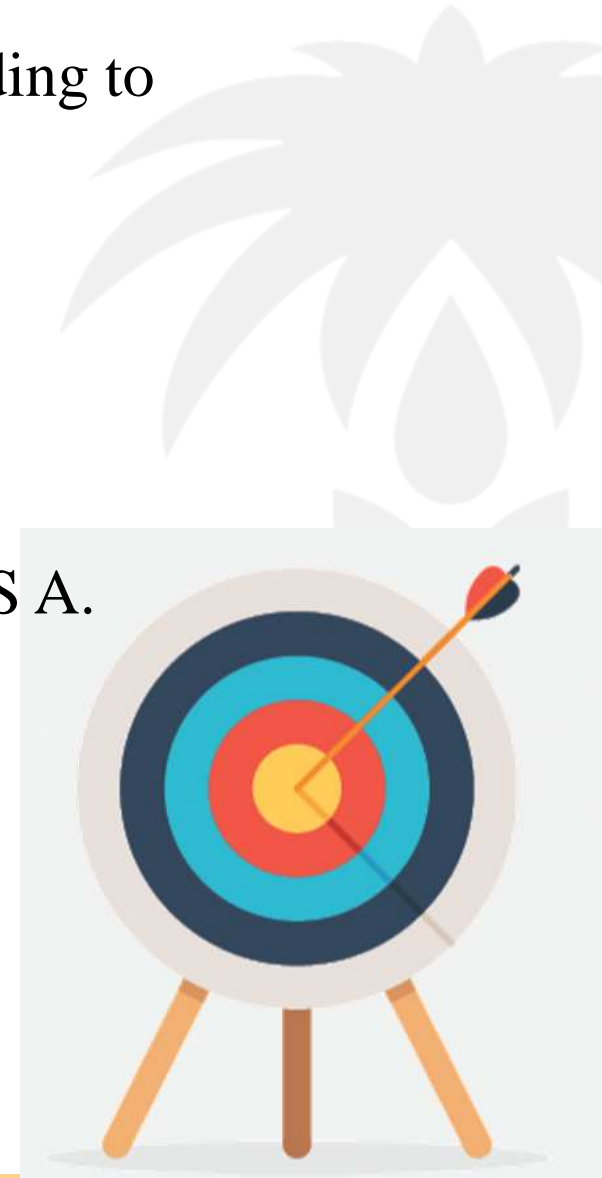


➤ To analyze the economic, social, and cultural causes of FLW in S A.

➤ To compare the size of FLW in SA with some other countries.



➤ To propose policies and plans to reduce FLW in SA.



- A quantitative and qualitative field survey (with more than 600 researchers).
- Imports and exports for the year (2016), By General Authority for Statistics, SA.
- Statistical Book on Arab agricultural, Volume 37 (2016), Arab Organization for Agricultural Development.
- United States Department of Agriculture USDA (Foreign Agriculture Service). (2016).
- The Food and Agriculture Organization "FAO".

The additional value of this study



- This study was done based on the Protocol of FLW, which designed by international partners (FAO - UNEP - FUSIONS - WRI - WBCSD - WRAP - CGF).
- The study was applied, by cooperation with an international research institute, which focused on natural resources studies, especially food, it covers more than (50) countries and has more than (700) experts and employees. Also, we cooperate with two Saudi professional companies, they are focusing on market research and survey studies. In addition, we cooperate with some charities that deal with food wasted in Saudi Arabia.

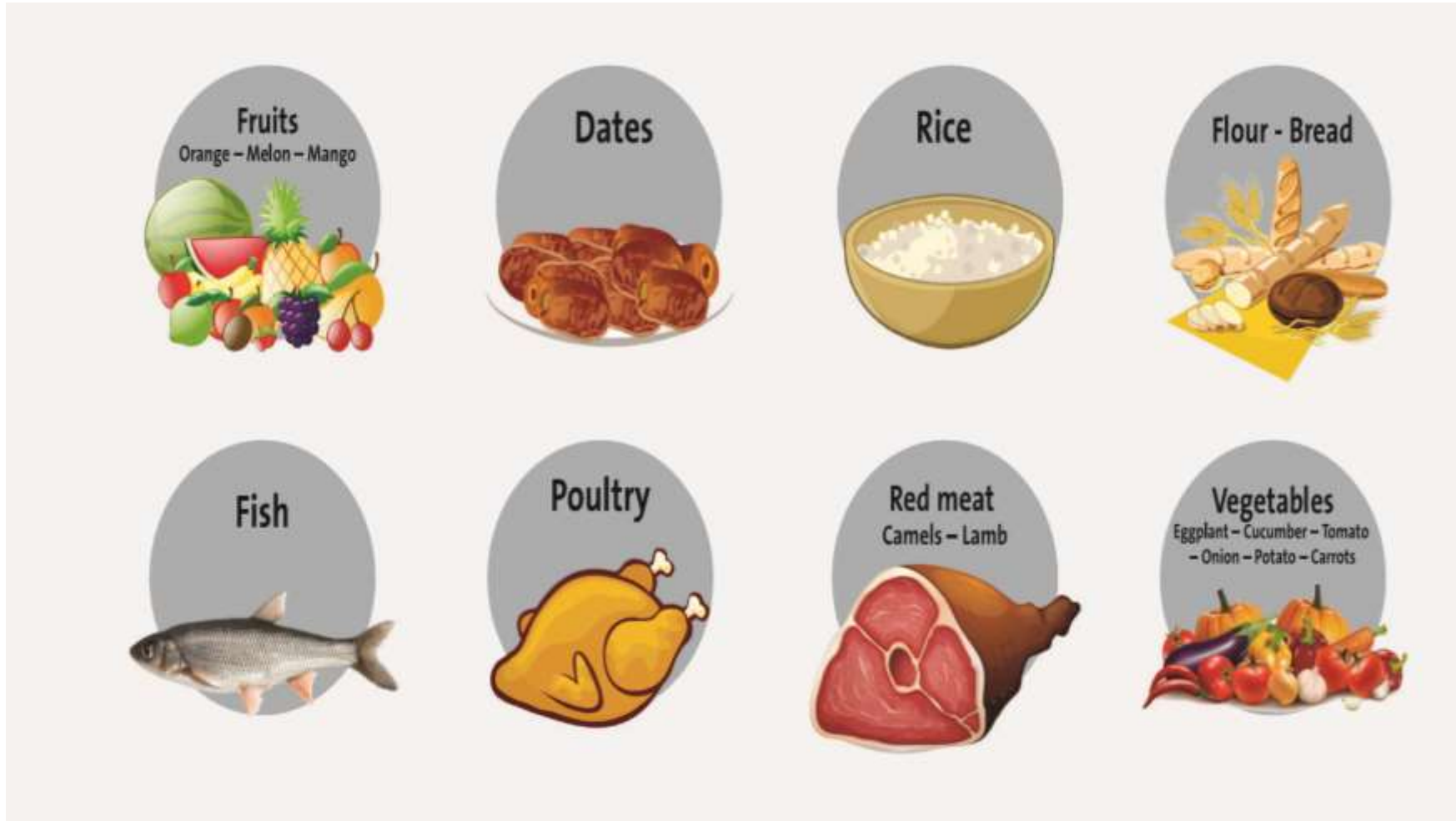
The additional value of this study



- A survey was conducted among more than (6000) participants using (6) scientific methods in major cities of Saudi Arabia.
- The methodology of this study its "Impact methodology" which investigates FLW by three dimensions (the economic dimension, the administrative and behavioral dimension, and the legal dimension).
- This study predicting a strategy for economic impact to reduce FLW.
- Besides the theoretical and quantitative analysis, also this study includes the behavioral economics method in applying and evaluating the results.

Food products under study

The study sought to determine the amount of loss and waste of (19) food products grouped into (8) groups:



Food supply chain sites



	Loss				Waste	
Food products	Farming	Post harvest	Food industry	Wholesale and retail trade	Food services	Domestic consumption
Flour-Bread		<ul style="list-style-type: none"> Flour Mills Packaging flour 		<ul style="list-style-type: none"> Wholesalers Major markets Retail stores 	Bakeries Restaurants /Pies and Bakery shops	Domestic residents
Rice		Packaging rice			Popular food restaurants Wedding palaces Hotels	
Dates	Farms	<ul style="list-style-type: none"> Packing factories Repacking factories 	<ul style="list-style-type: none"> Dates Factories Canned and pickled factories 	<ul style="list-style-type: none"> Wholesalers Major markets Retail stores 	<ul style="list-style-type: none"> Juice Shops Sweets and pastry shops 	
Vegetables						
Fruit						
Red meat (camel/ lamb)	Farms	<ul style="list-style-type: none"> Slaughterhouses and Central markets 			<ul style="list-style-type: none"> Major markets Retail stores 	
Poultry	Farms	<ul style="list-style-type: none"> Slaughterhouses and Central markets 			<ul style="list-style-type: none"> Major markets Retail stores 	
Fish	<ul style="list-style-type: none"> Fishermen Farms 	<ul style="list-style-type: none"> Major markets 			<ul style="list-style-type: none"> Major markets Retail stores 	

- A food supply chain is all steps from the farm to ends up on food table, including production, processing, distribution, consumption, and disposal.
- Each group or even each food product has a different pathway of processing.

Survey Phases



Phase: 1

- Preparation/ Pilot study
- 7210 samples
- 13 regions
- 13 cities

Phase: 2

- Main study
- 41790 samples
- 13 regions
- 35 cities

Phase: 3

- Behavior qualitative study
- 1000 samples
- 13 regions
- 27 cities

Phase: 4

- Standard deviation study
- 500samples
- 11 regions
- 11 cities

Phase: 5

- Confirming study
- 20 associates
- 13 regions
- 11 hotels

Geographical and sample distribution



Distribution of the Pilot Study Sample						
Food products	Loss				Waste	
	Farming	Post harvest	Food Industry	Wholesale & retail trade	Food services	Domestic consumption
Flour-Bread		70		420	700	1,400
Rice		70			700	
Dates						
Vegetables	70	70	70	420	700	
Fruit						
Red meat (camel/ lamb)	70		70		700	
Poultry	70		70		700	
Fish	70		70		700	
Total= 7210	280	1,330			4,200	1,400

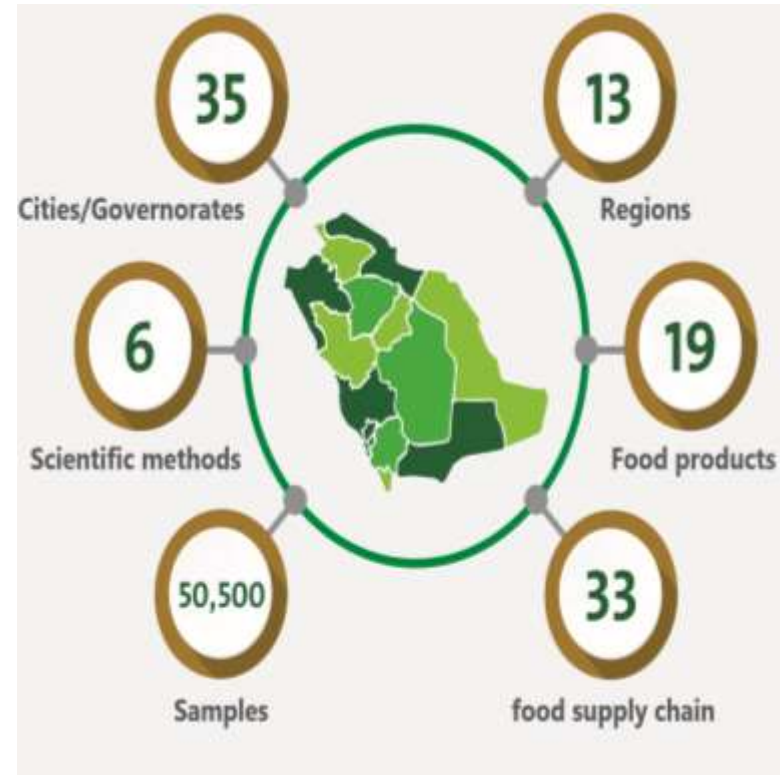


Distribution of the Main Study Sample						
Food products	Loss				Waste	
	Farming	Post harvest	Food Industry	Wholesale & retail trade	Food services	Domestic consumption
Flour-Bread		700		700	2,100	20,090
Rice		700			2,100	
Dates						
Vegetables	700	700	700	700	2,100	
Fruit						
Red meat (camel/ lamb)	700		700		2,100	
Poultry	700		700		2,100	
Fish	700		700		2,100	
Total= 41,790	2,800	6,300			12,600	20,090

Geographical and sample distribution

Distribution of Behavioral Qualitative Study Sample

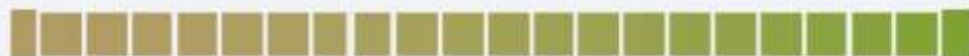
Sector	Preparation of questionnaires
Families	(617) questionnaires
Restaurants	(383) questionnaires
Total	(1000) questionnaires



Distribution of Quality Assurance Study Sample

Food products	Loss				Waste	
	Farming	Post harvest	Food Industry	Wholesale & retail trade	Food services	Domestic consumption
Flour-Bread		12		12	12	152
Rice		12			12	
Dates						
Vegetables	36	36	36	36	36	
Fruit						
Red meat (camel/ lamb)	12		12		12	
Poultry	12		12		12	
Fish	12		12		12	
Total= 500	72		180		96	

Regions, cities and governorates "survey geographical distribution"



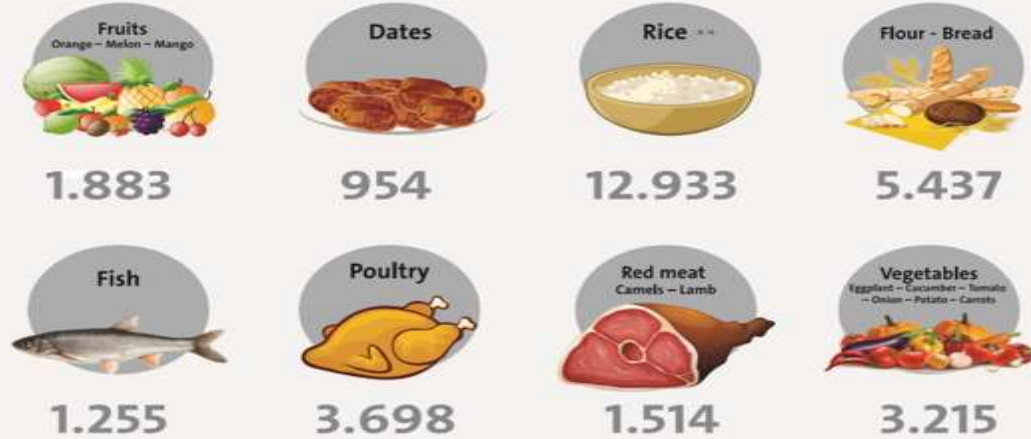
Min

Max

Region	Loss	Waste	Total
Al Baha	207	748	955
Al Jouf	71	199	270
Northren Border	99	758	857
Riyadh	932	3,472	4,404
Eastern Province	683	3,750	4,433
Al Qassim	297	1,433	1,730
Al Madinah	656	2,878	3,534
Tabuk	52	737	789
Jizan	527	1,622	2,149
Ha'il	181	407	588
Asir	159	700	859
Makkah*	2,111	7,563	9,674
Najran	187	460	647
Total	6,162	24,727	30,889

* The increase in the samples of Makkah region because it contains three major cities (Makkah, Jeddah and Taif)

Distribution of Loss -Waste Samples by the Supply Chain



* Total samples is (52,720) , The incomplete and incorrect samples were excluded.
 ** The increase in rice samples because it's the main meal in most supply chain sites (houses, restaurants ,...).

Preparation for survey

Preparation



All equipment, personal stuff, and more than 500000 bags were provided, where the specific color assigned to each product.

Training



Several training courses were held to qualify the survey team

Products separation



Food type Separation (separating meat, rice, bread, vegetables, etc.).

Weighting of samples



Research teams for the study, more than (600) male or female researchers.

E. Registration

أنت: محمد

2
8

عنوان لوحة المعلومات

قائمة المواقع المحالة لك

	<p>رقم الإحالة: 717</p> <p>رقم الموقع: 897</p> <p>تاريخ الإحالة: 10/1/2018 AM 11:15:39</p>
	<p>رقم الإحالة: 694</p> <p>رقم الموقع: 921</p> <p>تاريخ الإحالة: 10/1/2018 AM 9:37:44</p>
	<p>رقم الإحالة: 1121</p> <p>رقم الموقع: 89653625</p> <p>تاريخ الإحالة: 10/16/2018 AM 3:04:05</p>
	<p>رقم الإحالة: 5053</p> <p>رقم الموقع: 36958787</p> <p>تاريخ الإحالة: 11/2/2018 م 06:52:35</p>
	<p>رقم الإحالة: 5095</p> <p>رقم الموقع: 3265986</p> <p>تاريخ الإحالة: 11/3/2018 م 02:56:35</p>
	<p>رقم الإحالة: 5095</p> <p>رقم الموقع: 3265986</p> <p>تاريخ الإحالة: 11/3/2018 م 02:56:35</p>

قائمة العمليات

إشادة الجسر

إشادة المد

E. Registration



إدخال بياناتي

2

8



وزارة الزراعة والصيد

عنوان لوحة المعلومات

قائمة المواقع المحالة لك

قائمة العمليات

50%

رقم الإحالة: 717
رقم الموقع: 897
التاريخ الإحالة: 10/1/2018 AM 11:15:59

50%

رقم الإحالة: 694
رقم الموقع: 921
التاريخ الإحالة: 10/1/2018 AM 9:37:44

50%

رقم الإحالة: 1121
رقم الموقع: 89653625
التاريخ الإحالة: 10/16/2018 AM 3:04:05

50%

رقم الإحالة: 5053
رقم الموقع: 36958787
التاريخ الإحالة: 11/2/2018 06:52:35 م

50%

رقم الإحالة: 5095
رقم الموقع: 3265986
التاريخ الإحالة: 11/3/2018 02:56:35 م

50%

رقم الإحالة: 5095
رقم الموقع: 3265988
التاريخ الإحالة: 11/3/2018 02:56:35 م



إشغلة اليد



إشغلة الجهد

survey



Received Data

FAKD FINAL Quantity.xlsx - Excel							
ملف الشريط الرئيسي إدراج رسم تخطيط الصفحة وضع بيانات مراجعة عرض المظهر تعليمات Acrobat Power Pivot تصدير آخرى بما تريد القيام به مشاركة التعليقات							
1	رقم الاستبانة	المنطقة	المدينة	مواقع سلسلة الإمداد الغذائي	المنتج	وزن السلع المفقودة بحسب الكيلو غرام	الفقد في الموقع إجمالاً (وزن)
3	11	6	18	15	2	3.45	3.45
4	12	6	18	15	9	3.45	3.45
5	17	3	7	7	7	0	123
6	21	6	18	7	9	1.5	1.5
8	26	3	7	7	7	261	261
9	28	3	7	6	5	104	104
10	29	13	27	9	2	3.34	3.34
11	30	6	18	7	7	0.3	0.3
13	32	6	18	2	3	0.15	0.15
17	36	6	18	7	1	3.9	3.9
19	38	13	27	9	7	0	4.13
20	39	13	27	9	7	0	5.1
21	40	13	27	9	6	0	4.4
22	41	13	27	9	6	0	13.38
23	42	13	27	2	3	0	3.25
24	43	13	27	2	3	0	1.13
25	44	13	27	2	3	0	0.82
26	45	13	27	2	3	0	1.31
27	46	13	27	2	3	0	1.7
28	47	13	27	2	3	0	0.93
45	64	13	27	7	7	0	7.39

Loss sample

6.162

sample

Total

30.889

samples

Received Data

[illegible]

24.727

sample



30.889

sample

Results of Food Loss & waste index "Saudi FLW-Baseline"



Total FLW ratios for study products



*FLW ratios is calculated according to international FLW protocol, 2016, pages (16-19).

**The value of FLW was calculated according to the data from General Authority for Statistics, 2016, page (65).

***The total per capita in FLW was calculated according to the formula on page (19) based on the population of KSA, 2018, reached (33 million) according to General Authority for Statistics website.

****The total per capita in FLW includes all the food products in the KSA that was included in the study and not included (e.g. dairy products, eggs, sugar, milk, tea and spices) according to the international FLW protocol.

Results of Food Loss & waste index "Saudi FLW-Baseline"



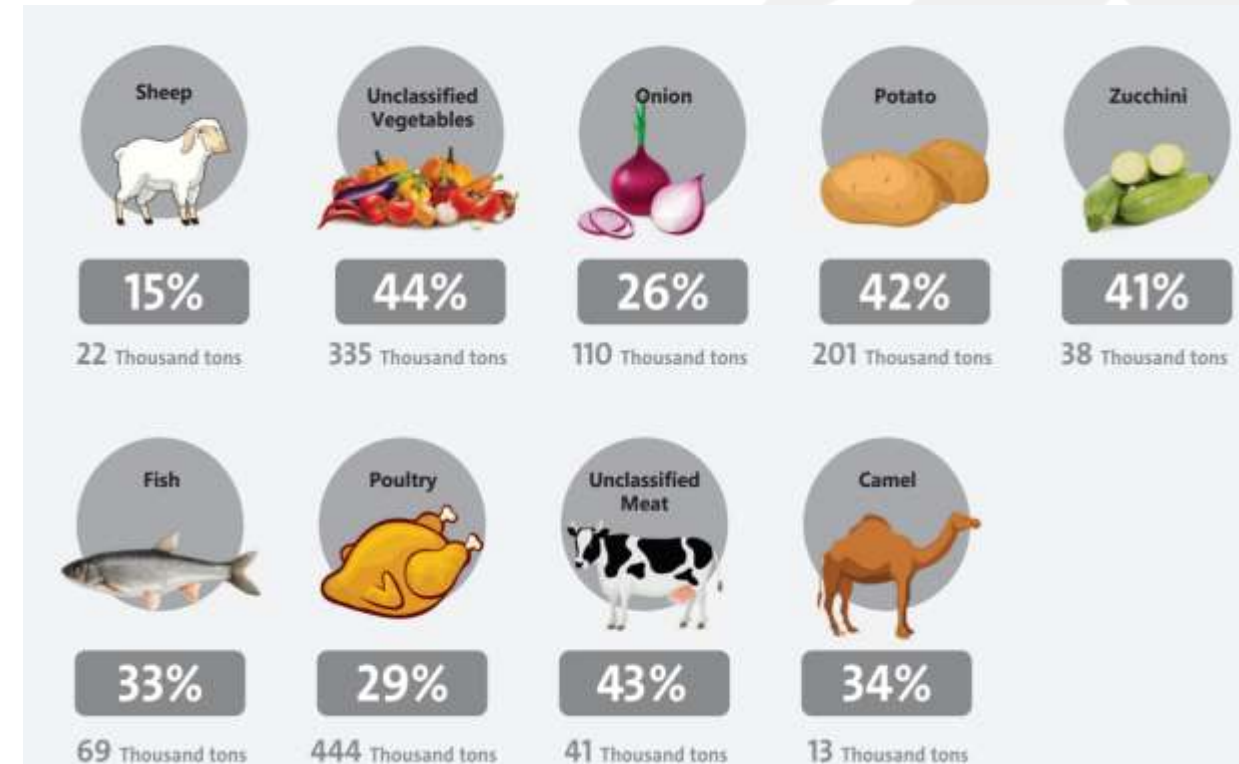
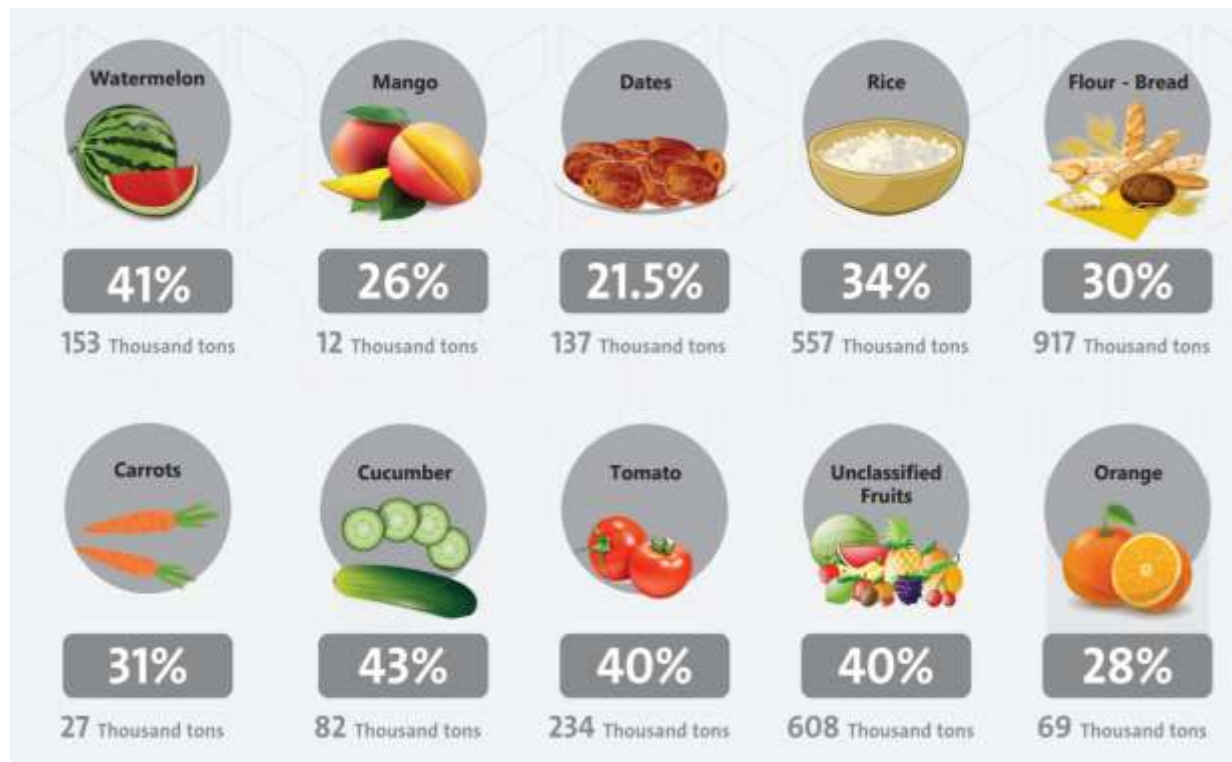
The estimated waste value of all food products according to consumer spending in KSA



Results of Food Loss & waste index "Saudi FLW-Baseline"



FLW ratio for each products



Survey Outputs



Awareness films

يمكنك مشاهدة الفيديو من هنا

فيلم توعوي بعنوان
«سلوكنا في رمضان»



موشن جرافيك لنتائج مؤشر الفقر والهدر
في الغذاء بالمملكة «خط الأساس»



حفل إطلاق مؤشر الفقر والهدر في
الغذاء بالمملكة «خط الأساس»



يمكنك مشاهدة الفيديو من هنا

فيلم ترويجي (برومو) لاطلاق دراسة المسح
الميداني للفقد والهدر في الغذاء بالمملكة



فيلم قصير بعنوان
«سبع طرق للاستفادة من هائض الخبز»



فيلم «حزء النعمة بحفظ النعمة»
مع الترجمة (لغة الإشارة/الأوردو)



مشهد تمثيلي بعنوان «لا تحبها»



فيلم تقديمي (برومو) التعريف بدراسة المسح
الميداني للفقد والهدر في الغذاء بالمملكة



Note: All films have been published on social media.

Partners



1



WORLD
RESOURCES
INSTITUTE



Food
Loss + Waste
PROTOCOL



#	Task	#	Results and achievements
1	The international standard for measuring food loss and waste (definition and explanation)	1	Reviewing the technical proposal to perform the survey that will use to measure the food loss and waste the ways of reduction
		2	Seminar and workshop discussion on the international standard for food loss and waste measurement
		3	Training courses for the team on the international standard for food loss and waste measurement
2	Reviewing of International standard measurements for food loss and waste	1	Reviewing the method used for the international standard for food loss and waste measurement in Saudi Arabia
		2	Translating the International Standard for Food Loss and Waste into Arabic
3	Reviewing the survey results of food loss and waste and the ways of reduction	1	Reviewing the results of the survey for food loss and waste measurement and ways of reduction

Partners



2



#	Task	#	Results and achievements
1	Determining of distribution suitable sample to collect quantitative data through an economic and international comparison study	1	Baseline determination for food loss and waste quantity " Results".
2	Measuring the amount and reasons that effects on FLW for (8) products in (27) cities in Saudi Arabia		
3	Results analysis by using the statistical programs and provides recommendations to reduce the food loss and waste.		
4	Training and guidance charity participators to procedures that must be followed to measuring food loss and waste.	2	Ensuring the participation of (20) societies, and grace conservation project, among the regions of Saudi Arabia (13 regions)
5	Training the participators on the international standard for measuring food loss and waste.		

Partners



3

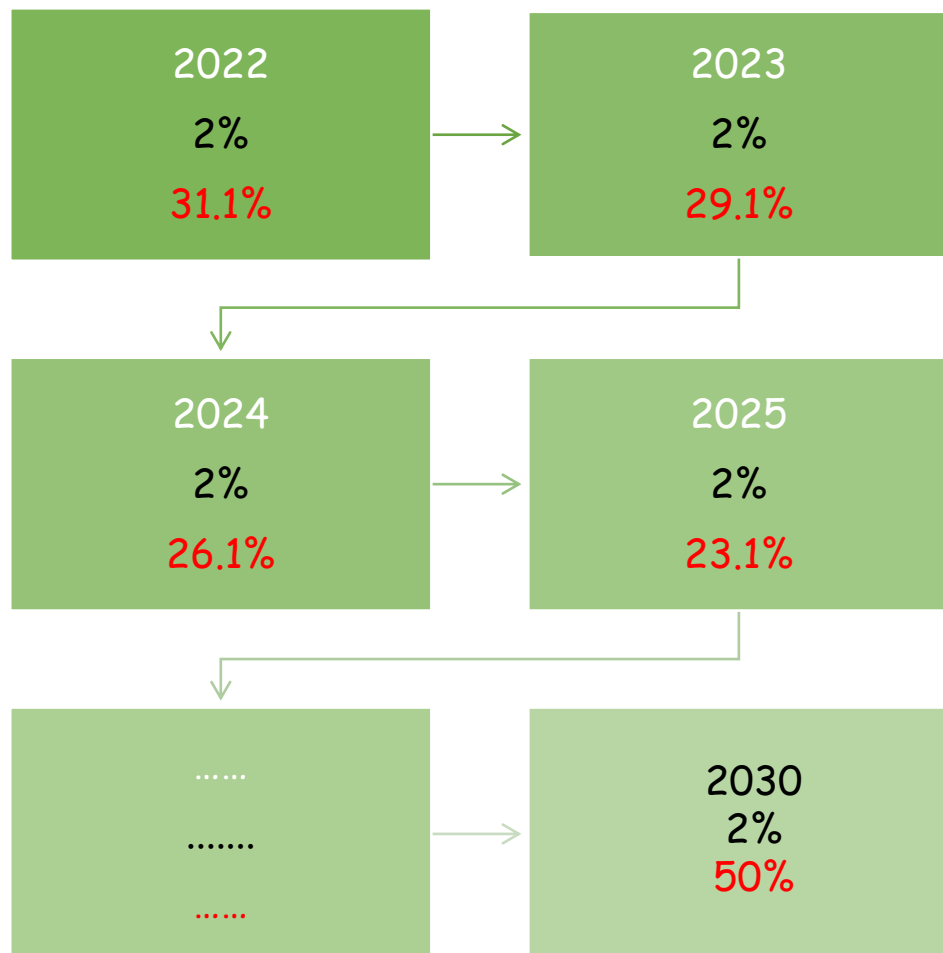


#	Task	#	Results and achievements
1	Reviewing the data that collected from partial and Whole study.	1	Initiatives and solutions to reduce food loss and waste by using the behavioral economics applications.
2	Monitoring and analysis the global experiences on food loss and waste reduction.		
3	Behavioral study and experimental designed which treated the food loss and waste phenomenon in Saudi Arabia.		
4	Behavioral experiments application on reducing the food loss and waste	1	Participation One of restaurant chain
		2	Participation of two (2) food manufacturers, packaging factories
		3	Participation of (10) families
5	Results analysis by using the statistical programs and provides recommendations to reduce the food loss and waste.	1	The best initiatives and solutions for food loss and waste reduction in Saudi Arabia by using the behavioral economics applications

Targets until 2030



- The main objective is reduce FLW to (50%) by 2030.



المؤسسة العامة للحبوب
Saudi Grains Organization (SAGO)
المملكة العربية السعودية



**National Program for Reducing
FLW in KSA**

OPEN DISCUSSION

