

REGIONAL FOOD LOSS & WASTE WORKSHOP

OCTOBER 15, 2020





REGIONAL FOOD LOSS & WASTE WORKSHOP

SESSION 2. STRATEGIES FOR FIGHTING FOOD WASTE IN BUSINESS SECTOR



SESSION 2

Challenges for FLW infrastructure and logistics in GCC countries

Mr. Najeeb Alhumaid Farrelly & Mitchell Business Consultants Ltd

Challenges for FLW infrastructure & logistics in GCC Countries

Oct 15th Regional food loss & waste workshop





Vulnerable Supply Chains



Too Many Eggs In One Basket? Dangers Of Consolidation

Rising incomes, changing consumer preferences driving long term demand for diversified food.

Busier lifestyles driving demand for convenience.

Modernization & internationalization of retail and HORECA changing consumers' expectations of food.

Food & Beverage Market Growth Drivers

200	Favourable Demographic Young & growing population	10 a 20 a	Distribution Channel Modernisation supermarket & convenience, restaurants etc.
(Strong Disposable Income High spending native population		Social & Cultural Changes Convenience food increasingly popular
WARNER I	Changing Dietary Preferences Western & ethnic influences	രി	Growing Tourism Business and leisure tourism

Net Food Trade as Percentage of Consumption



Local environmental conditions mean that KSA and the wider GCC region is one of the most water scarce and food trade dependent regions in the world.

FLW in KSA & GCC1 in the context of Regional Agri-Food Policy



Regional food security agenda – Sustainable high-tech agriculture; legislation to reduce FLW

FOOD SECURITY IN THE REGION

Food security an on-going issue of debate in KSA & GCC. Major challenges & risks to stability of food supply in the region.

GCC Region's food security agenda:

Reduce FLW across the food value chain

Ensure access to balanced food and promote healthy consumption

Enhance national capabilities for emergency and crisis response

Develop high value systems for sustainable local production

Diversity and stability of external food sources

FLW in KSA & GCC1 in the context of Regional Agri-Food Policy



Food Security

(Water Conservation)

Regional food security agenda – Sustainable high-tech agriculture; legislation to reduce FLW

BALANCING FOOD DEMAND, SUPPLY, AND WATER CONSERVATION



GCC Governments are a vital link to production capacity with various support schemes, while conserving underground water resources



However, for food produced in GCC region, water / capita / year wasted due to FLW is estimated at 790 m3 in UAE and 500 m3 in KSA

Food Self Sufficiency (Agricultural Growth)

FLW in KSA & GCC1 in the context of Regional Agri-Food Policy



Regional food security agenda – Sustainable high-tech agriculture; legislation to reduce FLW

ESTIMATED UAE / KSA FLW IN 2019

1.6/6.1 million MT tonnes of FLW AED13 billion/ SAR 40.5 billion Estimated value of consumer food waste **33% - 35%** Of locally available supply in both countries

FLW in KSA and GCC1 in the context of Regional Agri-Food Policy & MITCHELL

Regional food security agenda – Sustainable high-tech agriculture; legislation to reduce FLW

FLW ALONG THE FOOD VALUE CHAIN





FARRELLY

Food Loss & Waste in GCC – Key Drivers



There is a general lack of awareness across stakeholders. Governance and legislation are primary drivers of FLW.



Corporate Infrastructure & Logistics

FARRELLY & MITCHELL

Food loss at primary production and post-harvest is managed on-site. Food Waste at processing, distribution, consumption levels is challenging.

FOOD "LOSS" PRIMARY PRODUCTION & POST-HARVEST



Corporate Infrastructure & Logistics

Food loss at primary production and post-harvest is managed on-site. Food Waste at processing, distribution, consumption levels is challenging.



FOOD "WASTE" (FW) PROCESSING / DISTRIBUTION / CONSUMPTION

Food Material Barriers	Process Barriers	Logistics Barriers
Q Identification of suitability of FW	Food Factory design	Identifying potential customers for
(C) Shelf life of FW		products made from FW
		Distance/transport cost of FW collection**
Removal of harmful substances	Segregation of FW	Competing disposal routes for FW**
		Turnaround time for processing FW to
Need for de-packaging		animal feed.**
Volume & consistency of FW	Contamination risk in FW	Unusable FW from Landfills

Government Infrastructure & Logistics



Excellent roads and marine networks across the GCC region support private sector investment



Other GCC Government Initiatives

International partnerships with private sector for linking infrastructure and Logistics systems internally and across borders.

Integration with systems for driving higher performance...



Leaner processes

More efficient customs system

Waste Regulation is rapidly evolving in GCC



Whilst existing waste laws are elementary, new waste management laws for KSA are imminent - expected to include mandatory fees and waste separation

Existing Regulation		New Draft Regulation	
Existing regulations lack integrated waste management.	Most landfills neglected; environmental issues (groundwater contamination).	New draft waste management law proposed by MEWA in Jan 2020 New law comes into force 180 days after publication	
Food waste disposed with other solid waste in Iandfills.	Limited recycling Lack of source segregation.	قزارة البيئة والمياه والزراعة Ministry of Environment Water & Agriculture المملكة العربية السعودية Kingdom of Saudi Arabia	
Lack of landfill tipping fees is a disincentive to improving the standard of waste disposal	Not a pressing issue until recent years. Now seen as a high priority to address.	National Waste Management Centre (NWMC) Governing body for waste management in the country Including developing operation and commercial regulations	

Waste Regulation is rapidly evolving in GCC



Whilst existing waste laws are elementary, new waste management laws for KSA are imminent - expected to include mandatory fees and waste separation

LIKELY ACTION POINTS OF NWMC

	SERVICE PROVIDERS	
KPIS IN WASTE MANAGEMENT STOP ILLEGAL WASTE DUMPING	Public tenders to select service providers	
STRATEGIC INITIATIVES FIVE-YEAR STRATEGIC PLAN.	Exclusive licenses to waste management service providers	
RECORD WASTE PRODUCTION. DEVELOP NECESSARY REGULATIONS	Compliance with controls, conditions and procedures	
	Severe penalty in case of breach of terms	
IMPROPER SEGREGATION – WASTE RETURNED TO PRODUCER. RECYCLING FEE TO WASTE PRODUCER	Liability for environmental damage, public health and safety	

Waste Infrastructure Opportunities – KSA examples



Further to new regulations, SIRC was established to drive waste infrastructure development & opportunities. Private Sector also more proactive.



Waste Infrastructure Opportunities – KSA examples



Further to new regulations, SIRC was established to drive waste infrastructure development & opportunities. Private Sector also more proactive.

PRIVATE SECTOR

Best practice waste disposal contractors... Increasing demand by large food companies for responsible disposal.



Provide consulting service on proper waste disposal



important element in CSR initiatives Some food manufacturers have launched FLW awareness programs among households and HORECA

Mitigating Supply Chain Challenges in managing FLW in GCC



Our Food Manufacturers should employ best-practice methodology for process mapping in the context of Suppliers, Inputs, Process, Outputs, and Customers (SIPOC) for reducing FLW



Farrelly & Mitchell At a Glance





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SESSION 2

Measuring FW at hotels and restaurants and economic benefit from prevention: The Food Waste Opportunity

Mr. Ignacio Ramirez Winnow Solutions, UAE Measuring FW at hotels and restaurants and economic benefit from prevention

The Food Waste Opportunity

How can you reduce your waste today?

Friday 14th February 2020/25C Time Distribution & Total Waste

SILO

Friday 21st February 2020/22C Expected+ Sales & Covers (3)

1/3 of all food is never eaten



Data shows that in the hospitality sector food waste is typically between 4% to 12% of food costs



Distribution of cost of food waste as % of annual food cost at ~500 kitchens worldwide

winnow

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The global impact of food waste

11 %



Emissions of single use plastics

Of annual greenhouse gas emissions "Our ambition is to become climate positive by 2030"

Jesper Brodin, CEO IKEA



The biggest savings opportunity lies in overproduction



- Plate Waste
- Overproduction
- Preparation
- Spoilage

Reduce, redistribute



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Our data shows that post Covid businesses are becoming less efficient



Winnow worldwide







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winnow

Our approach to deliver improved productivity



What gets measured gets managed. Use Winnow to find out exactly what you're wasting

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Accurate, automated, actionable data. Empower teams to reduce waste. Cut waste, reduce costs, reduce impact. Aligned organisations drive savings at scale.

Solutions for every kitchen

Winnow app

Bring your own Android device. Simple menu captures what food was wasted and why. Connected scale

Automates weight capture saving teams time and improving accuracy Winnow Vision camera

Automatically captures images of food being wasted Al Powered Waste Identification

Processes images in real time. Fully automates waste recording process using AI

Cafe/Kiosk

Small kitchen

Medium/Large Kitchen

Maximum impact



Automated Action Planning to optimise production

Actionable overproduction suggestion for teams

Data led action planning helps teams cut costs quickly

Receive daily smart reduction tips to focus on big wins How can you reduce your waste today?



Weight wasted

49ka

Friday 14th February 2020 / 25C 🔅

Time Distribution & Total Waste

Value wasted

\$148

Area with most waste

19 kg of Overproduction (Time or Temp)

5 kg of Sausage breakfast / Rest - Breakfast & Brunch

12 kg of Handling & Cooking Issues

Most wasted items

2 kg of Lasagne / Staff - Mains

16 kg of Mashed Potatoes / Rest - Add-on

\$13

The power of pictures

Poor





Average





Good



W

Helping the hospitality sector reach maximum productivity









Prevent Spoilage Prep efficiency Production optimisation

Plate waste monitoring

We'd expect to halve hospitality food waste

Typical food cost savings





Typical year 1 ROI



Source Winnow data collected in >1,000 kitchens



Kitchens using Winnow are saving \$40m a year in reduced food waste costs

Typical annual savings

\$10k

Small site \$200k Annual spend Medium site \$400k Annual spend

\$20k

Large site \$1m Annual spend

\$50k

\$200k+

Cruise & Casino \$4m Annual spend

Trusted by chefs in 40+ countries in over 1,300 kitchens



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IHG MEA work with Winnow

IHG

Working together since 2018, IHG have successfully deployed at 19 properties across the Middle East and Africa.

19	68%	>\$45k	>500k
Hotels using Winnow worldwide	Reduction in value of food waste	Estimated annualized gross savings per hotel	Meals saved from the bin by Winnow users

"Our partnership with Winnow will help our hotels be smarter and savvier in their approach to creating compelling menus that result in less waste "

nnov

Kenneth Macpherson, Chief Executive Officer, EMEAA, IHG

winnow







Almost 900 media placements

High profile global partners





There is a financial and environmental opportunity in reducing FW in the hospitality sector

#ForTheLoveOfFood

SESSION 2

Food Bank cooperation as a strategy to fight Food Waste

Mr. Amer AlDakhil General Secretary, Saudi Specialized Council for Food Preservation





Food Bank Cooperation as a Strategy to Fight Food Waste

Amer AlDakhil,

General Secretary, Saudi Specialized Council for Food Preservation

15 October 2020



Worldwide Food Waste Impact

- Approximately 30% of food produced for human consumption around the world is either lost or wasted each year.
- This is equivalent to 1.3 billion tons of food



Source: FAO, 2014

Content

- Food Waste/Loss in the Food Supply Chain
- Food Banks Current Utilization of Excess Food
- Council Forward Strategies
- Food Banks Future Utilization of Food Waste

Food Waste/Loss in the Food Supply Chain



Food Waste/Loss Percentage Throughout the Food Supply Chain

33.1%



Source: Saudi Grains Organization, 2019

Food Waste/Loss in the Food Supply Chain



Food Waste/Loss Percentage Throughout the Food Supply Chain

33.1%



Source: Saudi Grains Organization, 2019

Food Banks Current Utilization of Excess Food

- Approximately 40 food banks in the Kingdom (25 are specialized)
- Food banks provide door to door service in collecting excess food to ensure safe handling



Food Banks During Covid-19



6 million meals

 Food banks distributed approximately 4 million meals in support of
➢ Needy People
➢ Communities
➢ Covid-19 shelters

Food Banks Current Utilization of Excess Food

- Approximately 40 food banks in the Kingdom (25 are specialized)
- Food banks provide door to door service in collecting excess food to ensure safe handling
- Growing interest to utilize unfit food for human consumption



Food Banks Models in Utilization of Excess Food

Instant distribution

Cooling, next-day distribution

Cooling, next-day heating and distribution



Excess Food Handling Process



Role of the Specialized Council for Food Preservation





Council Forward Strategies





Food Banks Future Utilization of Food Waste





Excess/Wasted Food Utilization Benefits



Strategic Partners



Ministry of Environment, Water & Agriculture

Saudi Grains Organization

Ministry of Education

Ministry of Commerce and Investment

Public Investment Fund

Recycling Companies



Thank You

Specialized Council for Food Preservation

Amer AlDakhil, 15 October 2020



OPEN DISCUSSION

