

MALAYSIA



LOCATED IN SOUTHEAST ASIA

POPULATION 31.4 MILLION

MULTI ETHNIC

MULTI CULTURAL

MALAY LANGUAGE

FESTIVES
FINE CUISINE

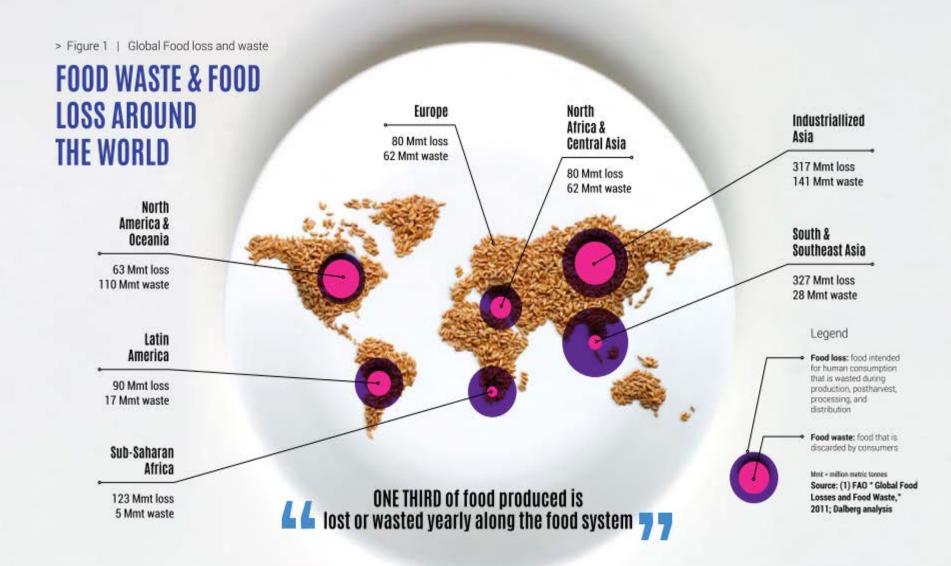












What the number says globally, a staggering **ONE THIRD** of food produced is lost or wasted yearly along the food system, amounting to 1.3 billion metrics tonnes with the cost of RM4.4 trillion. This is

enough to feed 3 billion people. In Malaysia, 28.5% of rice harvest produced is lost along the food chain and the estimated postharvest losses on fruits and vegetables is about 20-50%.

Based on research by SWCorp Malaysia in 2015, approximately **15,000 metric tonnes** of food waste are generated daily in Malaysia, **3000 metric tonnes** are UNTOUCHED and EDIBLE leftovers.

Food is lost or wasted along the entire value chain

Production

Handling and Storage Processing and Packaging Distribution and Market

Consumption

During or immediately after harvesting on the farm After produce leaves the farm for handling, storage, and transport During industrial or domestic processing and/or packaging During distribution to markets, including losses at wholesale and retail markets Losses in the home or business of the consumer, including restaurants and caterers











Source: WRI analysis based on FAO. 2011. Global food loss as and food waste - extent, causes and prevention. Home: UN FAO.

Current Initiatives to reduce food loss and waste Production Stage

Ministry of Agriculture (MOA)

Projects included in 10th and 11th Malaysian Plans

MARDI

- —Postharvest research in rice
 - Harvesting, distribution, storage, drying, milling
 - Guidelines being developed





PADDY POST HARVEST LOSSES (PHL) - MALAYSIA

28.5% Paddy PHL (296 K Tonnes) RM 918 million Paddy PHL (296 K Tormes)

1985

Drying (3.5% PHL)



Storage (4% PHL)



Transportation (6.0% PHL)



Milling (6% PHL)



Harvesting (9.0% PHL)



Improvement of technology
 New approach and practices

11.31% Paddy PHL (296 K Tonnes) RM 355 million Paddy PHL (296 K Tonnes)

*2015

Drying (1.62% PHL)



Storage (1.2% PHL)



Transportation (1.1% PHL)

Milling (2.4% PHL)



Harvesting (4.99% PHL)



* Research Results from Two Main Granary Areas in Malaysia (KETARA & MADA)













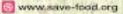












Current Initiatives to reduce food loss and waste

Production Stage

MARDI

- –Minimally processing of fruits and vegetables
 - tropical fruits durian, jackfruits, pineapples
 - local vegetables and 'ulam'
- -R&D on value added product from agriculture waste
 - Biodegradable packaging
 - Food ingredients



Current Initiatives to reduce food loss and waste

Packaging, Distribution and Marketing Stage

Federal Agriculture Marketing Authority (FAMA)

- Grading, Packaging and labeling guidelines

Department of Veterinary Services

- Sampling manual and guidelines for diseases in animals and animal products

Department of Agriculture

- Malaysian Good Agriculture Practices Certification (MYGAP)
- Malaysian Good Farm Practice Scheme (SLAM)

Current Initiatives to reduce food loss and waste

Consumption Stage

Ministry of Domestic Trade, Cooperatives and Consumerism

Guidelines for restaurant owners and catering services

Ministry of Health

Guidelines on food safety issues

Ministry of Urban Wellbeing, Housing and Local Government (SWCORP)

- Act 672 Solid Waste Management Public Cleanliness
- Love Food , Hate Waste campaign
- Convert waste to compost





















MYSaveFood

- Received funding from FAO in 2015
- Objectives
 - To establish the MySaveFood NETWORK
 - To raise public awareness through MYSaveFood campaign.
- Launched on 10 March 2016 by YAB Dato' Seri Dr. Ahmad Zahid Hamidi, Deputy Prime Minister Malaysia and Dr. Jose Graciano, Director General of FAO in conjunction with the 33rd Asia Pacific Regional Conference at PutraJaya International Convention Centre





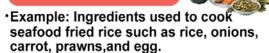
Food Waste Info

Total waste produce in Malaysia 37,000 tonne/day



Waste Generated During Food Preparation

Preparation



•Waste generate while preparing ingredients: egg shells, onion skin, carrot skin and prawn shells.

Food Serving

•The quantity of food serve must adequate with the number of people

Wasted food happens when serving food more than the people / the quantity needed

Disposal of Food Waste In The Bin

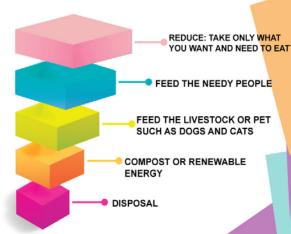
 Leftover food and waste such as excessive fried rice and chicken bones

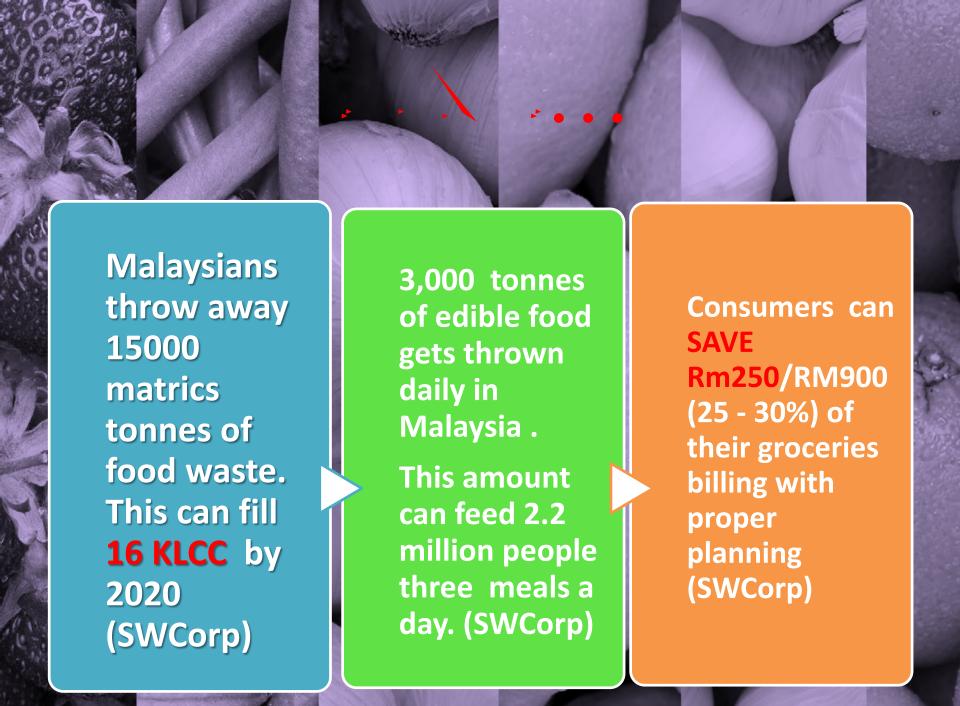
Disposal Sites

- *Total food waste disposed in the landfills are more 40% from the total of waste composition in Malaysia
- Food waste can develope methane gas or green house gases that contributes to global warming

Hierarchy on Food Waste Management

What can you do with your food waste?







It takes 100 days and 3000 L of water to produce 1 kg of rice (MARDI)

Reduction of 1% of rice postharvest losses in Malaysia will be able to provide a year supply to

340 000 people (MARDI)





MYSAVEFOOD FORUM AND WORKSHOPS





Waste not, want not

on. It is discussed at various orld forums and seminars on merous occasions but the many rategies and approaches adopted far have not brought tangible

All we get is the magnitude of e problem at hand and the likeliood of greater losses at various ages of production, processing, tailing and consumption. A ecent report by the United ations Environmental rogramme (UNEP) and the World sources Institute (WRI) says bout one-third of all food prouced is lost worldwide

30 O NASIONAL

270,000 tan makanan tak terusik dibuang

» Perkhidmatan bufet hotel antara punca pembaziran bulan Ramadan



mulia berkenaan.

Pengarah Bahagian Penyelidikan dan Teknologi SW Corp Malaysia Ir Zainuddin Abdul Samad berkata, purata sisa makanan dibuang di seluruh negara sebanyak 3.000 tan se-

"Hasil penyelidikan dilakukan, kita percava ada penambahan antara 15 hingga 20 peratus sisa makanan sepanjang Ramadan berbanding hari biasa," katanya.

Dalam pengiraan wartawan, jika dikira lori berkapasiti 1 tan, 3,600 lori diperlukan bagi mengisi sisa makanan berkenaan yang di-

The point is, we need and see how mark our performance and see how effective we are. And along the way, we may also want to collect data and see how our want to collect data and see how our want to collect data and see

RM918m in rice lost yearly

KUALA LUMPUR: Malaysia is losing RUALA LUNPUR: Malaysia is iosing
About 20 to 50 per cent of the value of its
Up to 28.5 per cent of the value of its
Vegetables and fruits in Malaysia
About 20 to 50 per cent of the value of its
Vegetables and fruits in Malaysia to retail display each year.

and Development Institute (Mardi) and pevelopment institute (Martin)
cent, post-narvest handling (2020)
director-general Datuk Dr Sharif
per cent), distribution (5 to 15 per every step of the value chain: harvesting (9 per cent), milling (6 per cent), drying (3.5 per cent), transportation (6 per cent) and storage

awareness and knowledge of proper try. post-harvest handling. It is impor-

int to reduce 1000 1088.

Reducing food loss will leave an overs. impact on food security, the envi-Impact on lood security, the envionment, natural resources, the
waste deserves special attention, each of the content of the Where rice is concerned, our

Where rice is concerned, our Marci initiated the MYSave-study with Ketara (Northern Food programme in Malaysia last Transcouguage Intercepted Associations of the Control Food Server and Event Lower and Eve Study with Ketara (Northern Food programme in Malaysia last Terengganu Integrated Agricultur-year to reduce food loss and food Terengganu integrated Agriculturyear to reduce tood ioss and food
al Development Area) and Mada waste in the country, with the exat Development Area) and Area waste in the country, we (Muda Agricultural Development tablishment of the waste in the Country waste in Authority) reveals that reducing network

up to 28.5 per cent of the value of its vegetables and trutts in manayana rice, of RM918 million, from harvest have been hit by losses at different Orean display each year.

Malaysian Agricultural Research
oran Pumphousurus Institute (Marti)

**Count Pumphousurus Institute (Martin)

**Count Pumphou cent) and consumers (3 to 20 per

At the after-retail and consumer per cent).

Food loss occurs due to a lack of waste generated daily in the counphase, vast quantities of food are mately 15,000 metric tonnes of food

These include 3,000 metric tonnes of untouched and edible left-

pecially now that people are battling

bagi mengagihkan lebihan makanan kepada

"Ini bukan sisa, ia lebihan makanan yang disediakan pihak hotel. Contohnya, hotel A makanan ataupun juadah ber-Namun, pe

dalam tempoh s Dalam perke Bazir berkata, pelba 15,000 tan haknya bagi r makanan

Memperir nuddin ber dua hotel v

Stadium Nasiona

termasuk ker



Food and money down the drain

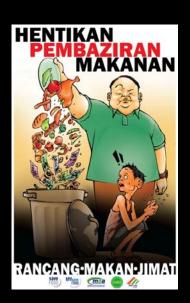
Research shows Malaysians waste enough to feed millions daily

Malaysians produce 15,000 tonnes of food waste every day

MEDIA PR VALUE: RM 3.5 MILLION >150 newspaper articles >20 TV/Radio



CAMPAIGN MATERIAL



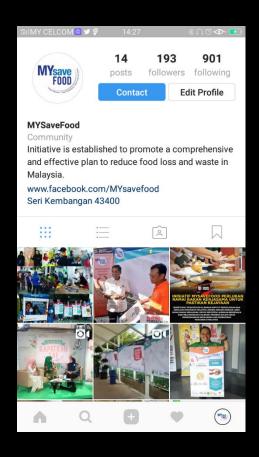




- POSTERS
- **BROCHURES**
- BADGES
- STANDING POSTERS
- BOOKMARK



SOCIAL MEDIA AWARENESS









































FOOD AID FOUNDATION

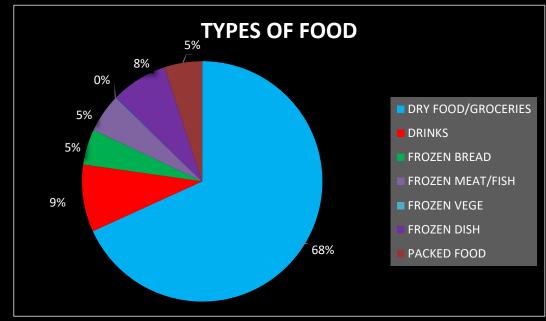
YEAR	KG	TONNES	MEALS
JUNE -DEC 2014	64126.6	64.1	256506
JAN-DEC 2015	63668	63.7	254672
JAN-JUNE 2016	60039.6	60	240158
TOTAL	187834.2	187.8	751336



FOOD DISTRIBUTION FROM JULY 2014-JUNE 2016

RECIPIENTS

-Homes – 131 7475 individuals -Families - 1000













SOCIETY OF

























































Klinik Desa Ringlet



































Development Corporation

















































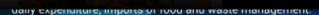


At a junction



- DESTALIDANTS /
- Managing a network
- Lack of data on food loss and waste
 - most critical areas
 - policy/act/law needed

- Funding
 - Government
 - Private Public Partnership





Key Players of France Food Waste Reduction









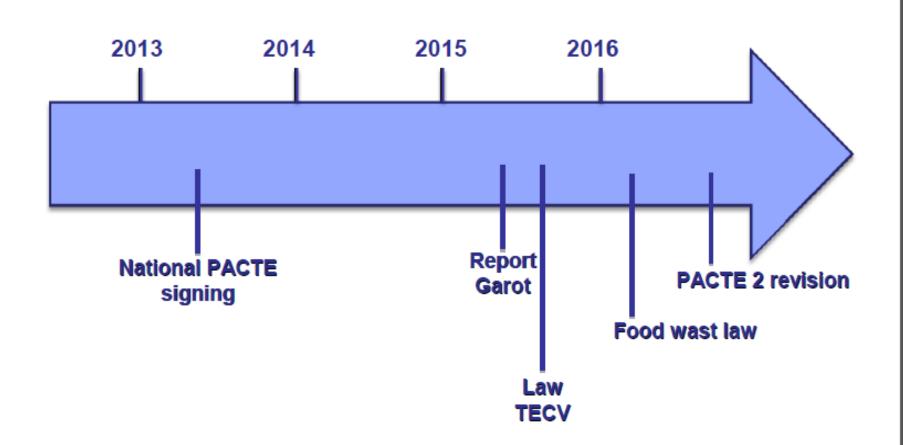




Regulatoy framework

Political commitment against food waste

Recent actions





MINISTÈRE DE L'AGRICULTURE DE L'AGROALIMENTAIRE ET DE LA FORET

National Pact against food waste

Food waste definition

=

Any edible food, intended to human consumption which, at any stage of the food chain, is lost, disposed or degraded

- Signed in june 2013
 - Purpose = <u>halve food waste by 2025</u>
 - 34 signatories (economic actors, NGOs, local communities...)
- Parliamentary report in 2015
- National law against food waste in february 2016
- New version of the Pact in 2017

Pacte national de lutte contre le gaspillage alimentaire

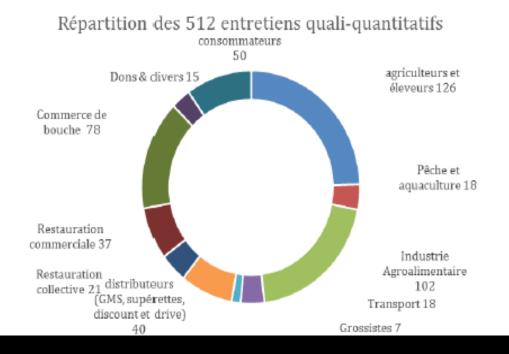




National inventory & management

General methodology:

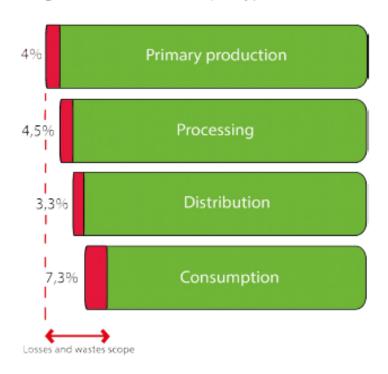
- Data collection among food and consumption stakeholders:
 512 qualitative and quantitative interviews and 70 qualitative interviews
- Privileged measured data / global assessment data
- ·Literature review and cross-analysis with data collected





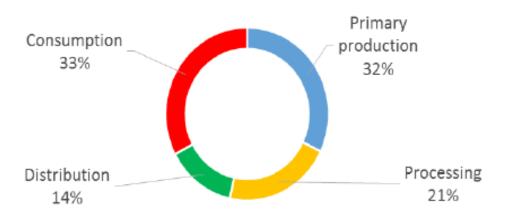
Food losses and waste in France (may 2016)

Percentage of losses and waste per type of actors



Losses and waste are not the same and take place at different stages

Distribution of losses and waste by weight



Food Waste Law 2016

1. All retailers

- Destruction of food is forbidden
- Industrial producers will be able to donate store brand products to charities if retailers refused the products

2. Retailers above 400 m2

 To invite partners so that if there is food to be donated, there would b an avenue

However steps were taken to ensure the safety of the food donated as well as ensuring that the charities will not b a dumping ground for inedible food.

- No Ministry for Food
- Breakdown of Food Waste across value chains not known
- Unclear scope for law

- Charity organizations less structured
- No tax- exemption for food donation





ROADMAP FOR 5 YEARS

MYSAVEFOOD TARGET

TO REDUCE HALVE OF FOOD LOSS AND WASTE IN MALAYSIA



TO STRENGHTEN PUBLIC-PRIVATE NETWORKING



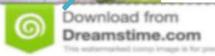
TO DRAFT A FOOD LOSS AND FOOD WASTE POLICY BY 2018



AWARENESS AND VISIBILITY CAMPAIGN



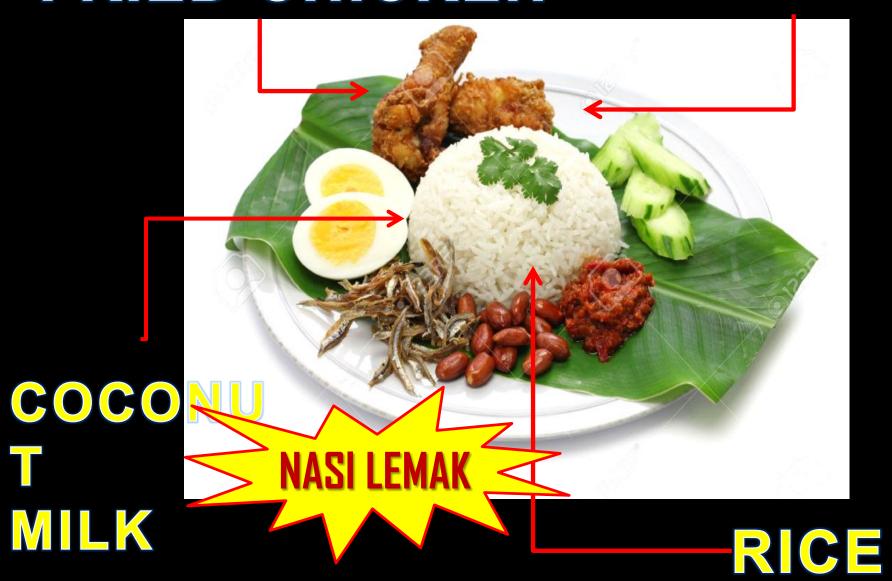
R&D TECHNOLOGY DEVELOPMENT







FRIED CHICKEN CUCUMBE





Ploughing





Harvesting

RICE



Distribution



Processing



Cooking



Nasi Lemak

COCONUT MILK





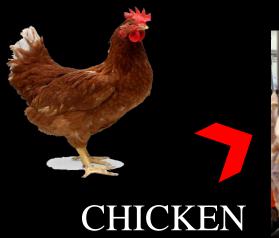
Processing and Cooking







Seedling









6 Weeks





- The last of the

Cooking

chicks



Thanks for your attention.