Transforming Food Waste into a Resource

Side event of the 145° FAO Plenary Session

FAO, Rome

4 December 2012

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WORLDWIDE DATA ON FOOD WASTE

(source: Barilla Position Paper on Food Waste)
SOME DATA ON FOOD WASTE IN ITALY

Economic value of food waste in Italy: 3.502.735.191 € equal to 0,23% GDP
(source: Libro Nero sullo spreco di Cibo, 2011, LMM)

Table 1. Fruits and vegetables left in the fields in 2009

- Cereali: 27,57%
- Frutta: 6,26%
- Agrumi: 4,26%
- Olive: 9,47%
- Uva: 15,55%
- Ortaggi pieno campo: 19,89%
- Ortaggi in serra: 11,12%
- Legumi e patate: 5,89%
WHY REDUCING FOOD WASTE IS A PRIORITY

Food waste is expected to rise globally to about **126 Mt by 2020** without additional prevention policy or activities (Eurostat projections).

- 1/3 of the global food production is wasted.
- Food waste has environmental, socio-economic, nutritional and ethical impacts.
- Food waste is a cost.
- Food waste is a market failure.
HOW TO REDUCE FOOD WASTE?
Prevent, Reduce, Reuse, Recycle

- EU

- Apply the “waste hierarchy”
  - (a) prevention;
  - (b) preparing for re-use;
  - (c) recycling;
  - (d) other recovery, e.g. energy recovery;
  - (e) disposal.
FOOD RECOVERY

- Food waste recovery represents an important part of the food system, although it is NOT a solution to food waste.

- Food recovery provides us with an opportunity to reconnect with food and people, whilst following a basic humanitarian ethic to help others.

- In the last decade, many new initiatives whose aim is to recover food and convert it into valuable end uses, have spread all over the world.

**Last Minute Market in Italy**
LAST MINUTE MARKET

- **1998** → A research project
- **2003** → An academic Spin Off of the University of Bologna
- **Aims:**
  - to link shops and producers who have unsold food which would otherwise be discarded with people and charities who need food
  - to reduce food waste
  - to transform food waste into a resource
  - to raise awareness on food waste
PHASE 1
The “non supply”

*Produces no longer on the market*
*Still edible or usable produces*
*Produce with no economic value*
PHASE 2

The “non demand”

People with no purchasing power
People who can not access the traditional market
Unexpressed demand
For profit companies

Win-Win

Public administration

Charity organizations

It provides economic, social and environmental benefits by reducing the amount of waste and improving assistance to people in need.
PHASE 4
Safe recovery model

Procedures
administrative and fiscal steps
hygienic – sanitary safety
Logistics
Organisational communication
Impacts evaluation
LAST MINUTE MARKET
Stakeholders’ benefits

**Companies**
- Reduced disposal costs
- Fiscal benefits
- Better logistics
- Increase visibility in the territory

**Charities**
- Constant supply
- Free food
- Reinvestment of the savings
- Better assistance

**Public Administration**
- Reduce products in landfill
- Better quality assistance
- Ability to grant discounts
- Better management of funds

**Society**
- Minor negative externalities
- Education (do not waste!!)
- “Ethical” behavior
- Reciprocity
LAST MINUTE MARKET
NOT ONLY FOOD

LAST MINUTE MARKET

- FOOD
- NON FOOD
- BOOK
- SEEDS
- HARVEST
- PHARMACY

LAST MINUTE MARKET – TRANSFORMING WASTE INTO RESOURCE
LMM in Italy

Recovery projects sectors
• Food
• Prepared meals
• Gleaning
• Pharmaceutical products
• Books and media products
• Seeds

43 projects in 12 regions
A retailer case

Improved efficiency on supermarket management

Trend of the value and the amount of the recovered products from the supermarket

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>92.4</td>
<td>251,466</td>
</tr>
<tr>
<td>2006</td>
<td>61</td>
<td>161,339</td>
</tr>
<tr>
<td>2007</td>
<td>49.9</td>
<td>203,613</td>
</tr>
<tr>
<td>2008</td>
<td>53</td>
<td>197,828</td>
</tr>
</tbody>
</table>

Source: LMM data

 Decreasing quantity

LMM 1° year
If LMM were adopted in all Italy...

<table>
<thead>
<tr>
<th>Stores’ Typology</th>
<th>Expected quantities of recuperated food per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Carry shops</td>
<td>4.644 tonnes</td>
</tr>
<tr>
<td>Superstores</td>
<td>67.467 tonnes</td>
</tr>
<tr>
<td>Supermarkets</td>
<td>128.785 tonnes</td>
</tr>
<tr>
<td>Small shops</td>
<td>43.357 tonnes</td>
</tr>
<tr>
<td>TOTAL</td>
<td>244.252 tonnes</td>
</tr>
</tbody>
</table>

**VALUE OF RECUPERATED FOOD**

928.157.600 euro = 580.402.025 meals in a year

**CO2 emissions**

291.393 tonnes of CO2 are produced because the food end up in landfills
LMM’s benefits

- **Environment:** prevention and reduction of waste
- **Economy:** decreased disposal costs and money sparing for the charities we support
- **Society:** Support to the third sector and to the poorest people
- **Culture:** In addition to material benefits, LMM plays an important educational purpose focused on the issues of waste and conscious consumption.

- Last Minute Market ultimate goal is to contribute to the reduction of waste in all its forms.

- It is active in more than 40 Italian towns, with 2 new projects under development in Argentina and Brazil.
LMM - PREVENTION

- LMM has established national/international collaborations.
- LMM and UNIBO researchers have published books on waste (food, water, energy waste).
- LMM has launched the campaign *A year against Food Waste*.
- LMM has launched the *ZERO WASTE* certification.
- LMM has promoted the *Joint Declaration against Food Waste* presented in 2010 at the European Parliament.
- LMM has supported the *European Resolution to reduce food waste*.
- LMM is part of the European project *FUSIONS*. 
**LMM PREVENTION**

- **Zero Waste** is a mark issued by Last Minute Market, "certifying" the adoption of a set of tools, procedures and control systems, which provide a rational and efficient use of resources and waste management based on the principles of prevention, reuse and recycling of materials.

- Zero Waste is an incentive to progressively reduce resource consumption and environmental emissions related to food waste.
- It is intended for commercial, catering and collective businesses.
LMM has launched the campaign A Year Against Waste (2010-2014)

Aim: to raise Italian and European public awareness on the causes and consequences of waste, on how to reduce it and how to promote civic principles oriented towards sustainability and solidarity.


Main promoter with LMM: the Committee on Agricultural and Rural Development of the European Parliament.
L'intervento Il rapporto di Last Minute Market è lo spaventapasseri di una società incapace di seguire un progetto e di educare.

Cosa finisce in pattumiera

<table>
<thead>
<tr>
<th>Categorie</th>
<th>Valore</th>
<th>Percentuale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frutta</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Lattuga</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>Uno spuntino</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Infreschi</td>
<td></td>
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</tbody>
</table>

75.000 Last minute Market: un bene mai consumato

4.4% Le cultivazione sociali non rientrano nella tipologia dei rifiuti sociali

I Fatti

Sei milioni di tonnellate all'anno L'ITALIA BUTTA VIA MONTAGNE DI CIBO

Gli italiani? Preferiscono il tanto

Premio


28 Campagna promossa da ParmaMia Market Italia, Comitato Nazionale degli Anti Lucro, per la protezione dei diritti umani, Comitato nazionale Agenda 21 e Assoprima generale Italiana dei consumatori equo solidale. www.cittaequosolidale.it
- Events raising people awareness on Food Waste
- Conferences, performances, free lunch videos, articles, books, public events
Joint Declaration against Food Waste

28th of October 2010 - European Parliament
LMM and The European Resolution to reduce food waste

- Based on the Declaration, a Resolution has been elaborated by the Agriculture and Rural Commission (MEP Salvatore Caronna and supported by Paolo de Castro, President) in collaboration with LMM.
- It was presented at the DG Agriculture of the European Parliament on the 23rd of November 2011.

- The Resolution has been approved in the Plenary Session of the European Parliament on the 19° of January 2012: On how to avoid food wastage: strategies for a more efficient food chain in the EU (2011/2175(INI))

- It should then be passed to the European Commission for legislative procedure.
- We consider the resolution a great achievement and a fundamental step in the fight against food waste
Zero Food Waste Charter signed by Italian mayors

The charter is about **10 actions** to be implemented by local municipalities.

- Main actions are education
- Share good practices
- Promote discussion on some topics like labelling
- Modify public procurement in favour of food recovery
Survey on HOUSEHOLD FOOD WASTE in Italy

www.surveymonkey.com/s/foodwastesurvey
EN
www.surveymonkey.com/s/sprecoalimentare
IT

PLEASE FILL IT IN!!

44 questions - divided into 5 sections

AIM: to estimate food waste causes, quantities and impacts at household level
Thank you!
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