The Italian Food Waste policy: data and perspectives

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Context (policy framework; food waste diagnosis)

- **Waste Framework Directive** (Directive 2008/98/EC) as revised in 2018 requires Member States to integrate food waste prevention programmes in national waste prevention programmes.
- Italy adopted in 2016, the law n. 166 – so called "**legge Gadda**". The law encourages food donation, through simplification, rationalization and harmonization of the legislative framework (procedural, fiscal and hygienic-sanitary) that regulates this sector.
- Italy's participation in the **EU Platform on Food Losses and Food Waste** from 2018.

- **The National Strategy on Circular Economy** – one of the Mission of the Recovery and Resilience National Plan – updated in 2022, includes "food waste" indicators.

- **The National Sustainable Development Strategy**, updated in 2022.

- **The National Waste Prevention Programme**, currently under review, identifies food waste as one of the main priority flows on which prevention measures are concentrated.

- By Decree of the Ministry for Environment and Energy Security 10th march 2020, the «**Minimum Environmental Criteria (MEC) on catering services and food supplies**» have been adopted, that are mandatory under the art. 34 of the D.Lgs n. 50/2016 (code of public contracts).

- **Minimum environmental criteria on all events.** With DM 19 ottobre 2022 n. 459, G.U. n. 282 del 2 dicembre 2022 have been established **MEC on EVENTS**, issued to implement mission 1, component 3 of the *National Recovery and Resilience Plan* (NRRP).

- **Some National Waste Prevention Programme implementation measures: behaviour change from global to local restaurant and school.**

Law 19 agosto 2016, n. 166 (Legge Gadda) establishes a round table with:

- All the food supply chain;

- Charitable Organizations;

- Ministries, Regions and Municipalities.

The Table is coordinated by the Ministry of agriculture.

Primary sector

Confagricoltura

Confcooperative

Coldiretti

Confartigianato

CNA

Agrea

Industry

Federalimentare

Confesercenti

Confartigianato

CNA

Wholesale Distribution

Italmercati

Fedagro

Retail Distribution

Federdistribuzione

ANCC-Coop

ANCD-Conad

Confcommercio

Collective and private catering

Angem

Fipe

Charitable organizations

Banco alimentare

Caritas italiana

Croce Rossa Italiana

Sempre Insieme per la Pace

Comunità S. Egidio

Banco delle opere di carità

ANCI

WG1 - Consumer behavior and information also through labeling
Aim: evaluation of labeling information of household FW

WG2 - Measurements of losses at the level of primary production - products of plant and animal origin
Aim: Differentiation of FLs impact of different food sources

WG3 - Measurements of losses at the level of primary production - fisheries
Aim: Impact of fisheries and fishery products on FLs

WG4 - Local policies and regional best practices for the prevention of waste
Aim: Collection of local best practices

WG5 - Donations: measurements, policies and impact assessments
Aim: Impact of redistribution on FW indicators

Key actions undertaken

Observatory on food losses and waste, surplus, recovery and reuse

The Italian Observatory on Food Surplus, Recovery, and Waste: The Development Process and Future Achievements

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Directive Action 1: To Fill Information Gaps

- Collecting primary sector data and information through the Agencies for Agricultural Supply, at the national and regional levels, carrying out an exploratory survey on the primary sector companies.
- Collecting information at distribution and consumer level.
- Carrying out an exploratory survey on the food service sector.
- Carrying out qualitative and quantitative surveys with consumers.

Directive Action 2: To Improve Policy and Intervention Actions

Carrying out educational programs aimed at increasing the awareness of food chain operators and consumers of the importance of preventive actions to be established, alongside counteractions for food surplus redistribution and recovery. Two other actions aimed at reducing or preventing FLW during redistribution were identified: the optimization of the use of

Funded by Ministry of Agriculture

Products: reports, website, social network, and scientific papers (Available at: https://www.crea.gov.it/web/alimenti-e-nutrizione/-/osservatorio-sugli-sprechi-alimentari)

https://www.instagram.com/oersa_ita/

https://www.facebook.com/OERSA-103469301798441

https://twitter.com/_OERSA

Key actions undertaken

➤ Website: The OERSA official website.

➤ Weekly updates on social networks.

➤ The Second Edition of the National Nutrition Day carried out in 2019 was dedicated to food waste and was entitled "Nutrinformation: Waste on the Plate".

➤ A chapter dedicated to FLW was included in the Italian Food based Dietary Guidelines that were updated in 2018 by the CREA Food and Nutrition Research Center.

➤ The "Decalogue against Food Waste," a set of 10 recommendations that can be publicized in schools, events, and information sessions.

➤ A booklet with creative recipes showing how to use no longer fresh foods that have been in the fridge for a while as well as how to prepare meals with leftovers.
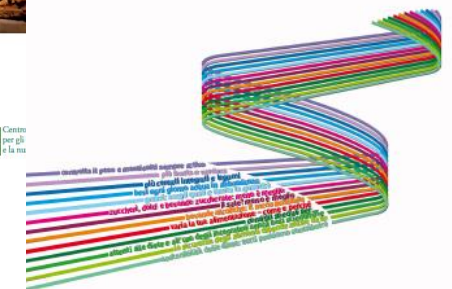
M   Waste

ntary level of
household level:

Characterization of household food waste in Italy: Three year comparative assessment and evaluation of seasonality effects

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to Mediterranean data and
ns)

- 2021 (FW Refresh method
- Use of questionnaires, qua
  Opportunity and Ability) a
- Comparisons with other EU
- Internal monitoring
- MOA and adherence to nut
  monitoring of HH preventi

Sustainable choices: The
relationship between adherence
to the dietary guidelines and
food waste behaviors in Italian
families

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Fu

Main outcomes:

➢ Average HH food waste was 370 g/family/week in 2018 and 480 g/family/week in 2021. Quantity of food wasted off in 2018 were in line with Netherlands (365 g/week), progressively different from Germany (425 g/week), Hungary (464 g/week), and Spain (534 g/week).

➢ Fresh and perishable foods such as fruit, vegetables, bread, milk, and yogurt, were the most wasted products.

➢ Foods were most commonly thrown away as unopened packages.

➢ The assessment of consumer behaviors related to preventing or reducing HFW showed that difficulties in planning and organizing the meals due to unforeseen events were frequently reported.

➢ The leftovers were largely reused, and the waste of cooked foods was an uncommon practice.

➢ It was observed a strong correlation among the adherence to nutritional recommendations and the attitude at preventing waste at home, indicating the importance of setting up actions against food waste in the framework of nutritional educations activities.

Next step of monitoring process:

➤ Data collection with different methodologies (Questionnaire and Diaries).
➤ The data collected will allow the development of indicators to monitor the progress of the implementation of preventive measures and the development of correlation indices that would optimize the FW surveillance system.
- The outcomes of WASTE-FITS will be a user-friendly data collection template that could be used for future data collection and the provision of informative, usable and searchable datasets.
- Based on the WASTE-FITS results, actionable recommendations will be developed to propose a system where indirect measurement methodology could be corrected to provide, to some extent, comparable results with direct measurements optimizing resource allocation.

WASTE-FITS

Funded by the
European Union

Covering the other aspects of the food chain: Waste in school canteens
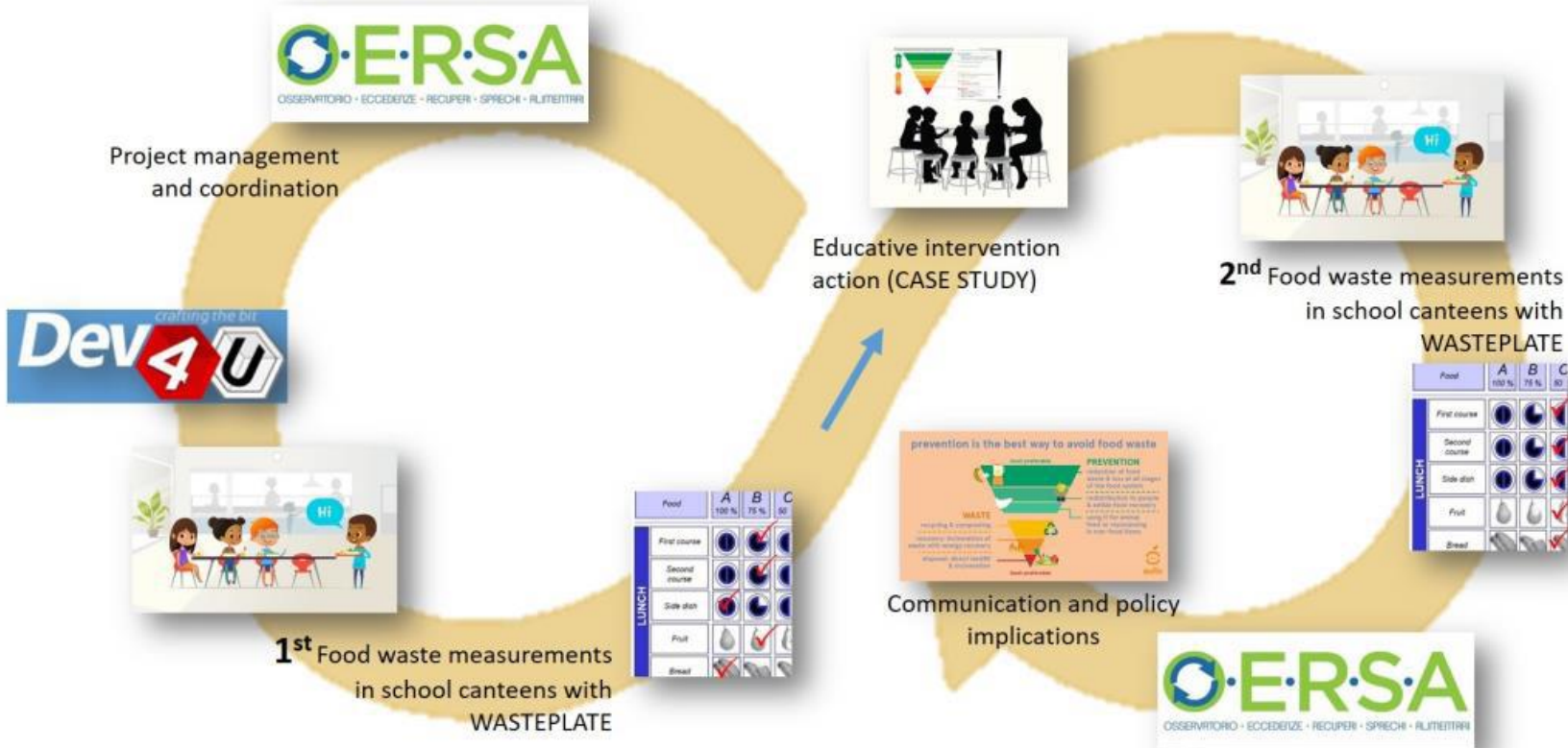
OERSA Research 1

THE FOCUS WAS ON THE AGRICULTURAL PRODUCTION SECTOR, PARTICULARLY ON FRUIT AND VEGETABLE AREA

The analysis of statistical archives:

- The survey concerning land and farm production (ISTAT)

2017 about **3%** of the fruit and vegetables grown were not harvested.

Horticultural crops Losses were greater in the area of vegetable cultivation (**4%**) than fruit (**2.6%**)

Data concerning unharvested fruit and vegetables vary significantly for every product and can fluctuate considerably depending on the harvest every year.

- The annual PO (Producer Organisations) document: the **2017** Report shows that **32.237 tonnes** of products were collected from the fruit and vegetables trade, the majority of which consisted of fruit (**84%**)

- The total collection rate amounted to **0.3 %** of products in the organizational system

- Compared to national production, there was a higher collection rate for fruit, especially fruit from fruit trees and orchards

In the five years between **2013** and **2017** plums, peaches and kiwis were the most commonly recovered products

The majority of food collected was distributed for human nutrition (**82%**) Nevertheless, only **27 % of POs** take advantage of this system

- The aggregation of farming companies and cooperatives into POs has been shown to create competitive advantages in preventing criticalities generated by food surpluses and therefore food waste.
- Thanks to the incentive mechanism, the majority of food collected was distributed for human nutrition (82%).
- Nevertheless, only 27 % of POs take advantage of this system with positive economic results and the the optimisation of the recycling of surplus production.

Funded by Ministry of Agriculture

OERSA Research 2

AN EXPLORATORY SURVEY WAS CARRIED OUT BETWEEN NOVEMBER 2019 AND MARCH 2020

Representatives of the supply chain fo kiwis, peaches and plums were interviev

It was used a qualitative and quantitative quest

The POs that participated in this survey mar commercialized production and trading collection compared to the total

The average surplus rate (considering surplus compared to production) of 23 crops in **2018** which produced excess food was **3%**, while there was no surplus for another 9 crops

The organisations analysed in the study reported to have had a higher surplus of plums, a variable level in peach and apple production, while kiwi production produced a lower excess

The **17 POs** work in different fruit supply chains, and for this reason many of them completed more than one questionnaire, reaching a maximum of 39 questionnaires

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Causes:
- the difficulty of finding space in the market
- product appearance and shape, changing customer orders
- weather conditions and market contingencies

Over **10%** of products were processed despite not being planned for this purpose in nearly half of the answers

Causes: strong hailstorms, the Asiatic cimicid invasion and commercial problems

Causes:
- the difficulty of finding space in the market
- product appearance and shape, changing customer orders
- weather conditions and market contingencies

To prevent food surplus: improving production (**32 answers**), recovering food surplus for human nutrition (**26 answers**) and looking for new space in the market to redirect the sales of the surplus food (**19 answers**)

The POs were careful about the food surplus that was low also thanks to the processing of food into edible products

(V gamma products, juices, vegetable extract, ingredients for cakes etc.)

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In many cases, food surplus was given to people in economic difficulty

Thanks for your attention