



REPUBLIC OF CROATIA

Ministry of Environmental Protection
and Green Transition

Institute for Environmental and Nature Protection

Food Waste Prevention and Monitoring

Croatian experience

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REGULATORY FRAMEWORK

Umbrella law: Waste Management Act (OG 84/2021, 142/2023)



Article 109:

The ministry in charge for environment shall be responsible for the development of the Waste Management Plan, **except for the part relating to the prevention of food waste generation**, which shall be governed by the Plan on the prevention and reduction of food waste generation in the Republic of Croatia, which shall be in charge of ministry competent for agriculture (now Ministry of Agriculture, Forestry and Fishery).

Article 110:

The ministry in charge for environment **shall measure the amount of food waste**, in accordance with the methodology prescribed by the EU.

FOOD WASTE PREVENTION MEASURES

Plan on the prevention and reduction of food waste in the Republic of Croatia for the period from 2023 to 2028 (OG 156/2022)

Specific food waste prevention measures include:

- encouraging and further improving the food donation system in the Republic of Croatia (MAFF¹, L/RSGU²)
- encouraging the reduction of food waste generation (MAFF, L/RSGU)
- promotion of social responsibility in the food sector (MAFF, CAAF³)
- raising awareness and informing consumers about the prevention and reduction of food waste (MAFF, CAAF, MSEY⁴)
- monitoring the quantities of food waste (MEPGT⁵)
- investing in research work and innovative solutions that contribute to the prevention and reduction of food waste (MAFF)

¹ Ministry of Agriculture, Forestry and Fishery

² Local/regional self-government units

³ Croatian Agency for Agriculture and Food

⁴ Ministry of Science, Education and Youth

⁵ Ministry of Environmental Protection and Green Transition

ACTIVITIES ON FOOD WASTE PREVENTION

Ministry of Agriculture, Forestry and Fishery



REPUBLIKA HRVATSKA
Ministarstvo poljoprivrede,
šumarstva i ribarstva



#Hrana nije otpad

The food waste prevention portal - a central place for exchanging information, sharing own experiences and best practices and a lot of more

- The first Food waste prevention and reduction Plan (2019 – 2022) was adopted in 2019
- Portal Eat/Share *#Food is not waste* - the food waste prevention portal
- E-donation system
- Sectorial Guidelines
- Education materials
- A voluntary agreement between the Ministry of Agriculture and representatives of food producers and processors, trade sector, hospitality sector, the scientific and academic community, local and regional self-government units, non-profit organizations and initiatives, as well as associations and companies - **currently has 45 signatories** and during its duration of five years it is available for accession by new signatories.

ACTIVITIES ON FOOD WASTE PREVENTION



ENVIRONMENTAL PROTECTION
AND ENERGY EFFICIENCY FUND

Pilot Project “Reduce Food Waste, Cook for your Guests” 2021/2022

- educations for hotel staff and management
- designed informative materials for guests in Croatian and English language and a handbook for hotels
- recording the amount of waste generated during the preparation and serving of food, as well as waste generated after the consumption of food
- preparing recommendations for reduction of food waste based on the results of measurements and conducting the control measurement in a couple of months

Results show that applying simple methods like change of norms, offering smaller plates, serving some food categories according to guests' orders during the last half hour of open buffet, informative leaflets on the visible spots in the restaurant etc. can prevent food waste up to 30 %, while using food waste prevention/reduction devices reduces the amount of food waste by up to 75 %!



ACTIVITIES ON FOOD WASTE PREVENTION



Project “Reduce Food Waste” 2021/2022 and onwards

– continuation of the previous project

- EPEEF at annual level publishes public calls through which institutions and companies can get co-funding for purchase biowaste (food waste) reducing devices
- EPEEF organizes workshops and presentations
- recipients of funds are obliged to measure the total annual quantities of waste from the device and report it to EPEEF

<https://www.fzoeu.hr/hr/pilot-projekt-smanji-otpad-od-hrane-kuhaj-za-svoje-goste/8604>

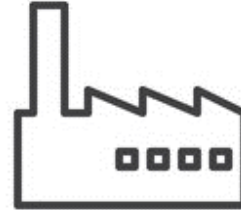
FOOD WASTE MEASUREMENT

Project "Statistical survey on food waste in the Republic of Croatia,, 2021



Primary production and family farms

Total: 40,916 t
Inedible part: 33,010 t
Edible part: 7.906 t



Processing and production

Total: 9,866 t
Inedible part: 5,041 t
Edible part: 4,825 t



Retail and other food distribution

Total: 4,180 t
Inedible part: 2,434 t
Edible part: 1,746 t



Restaurants and catering facilities

Total: 15,072 t
Inedible part: 10,238 t
Edible part: 4,834 t

Total of business sector: 70,034 t
or 17 kg per capita
Inedible part: 50,723 t
Edible part: 19,311 t



Households

Total: 216,345 t or
54 kg per capita
Inedible part: 129.619 t
Edible part: 86.726 t



Republic of Croatia overall

Total: 286,379 t
Inedible part: 180.342 t
Edible part: 106,037 t

AMONG THE LOWEST RESULTS PER CAPITA IN WHOLE EU!

PROJECT “IMPROVEMENT OF DATA ON FOOD WASTE IN CROATIA (HRFWD)”

Single Market Programme (Food Strand)

January 2023 – October 2024



Funded by the
European Union

The purpose of the Project:

- to improve data collection methodology by conducting project activities related to statistical surveys among the business sector including family farms

Expected project results:

- statistical data to be reported to Eurostat
- e-brochure on food waste prevention
- IT application/questionnaire for data collection - a useful tool for future researches
 - import of new sample of stakeholders for each research
 - possibility to amend/change questions
 - entering the questionnaire by PIN code of the user
 - creates graphic displays for
- Web portal [„Food Waste Measurements”](#)



MOH

MJERENJA OTPADA
OD HRANE

PROJECT “IMPROVEMENT OF DATA ON FOOD WASTE IN CROATIA (HRFWD)”

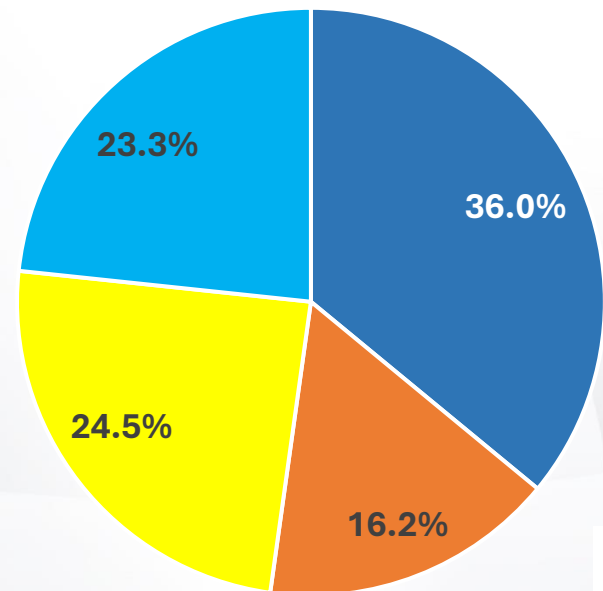
Results – statistical estimation according to conducted survey



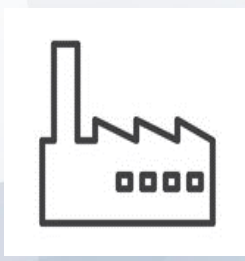
Restaurants and catering facilities
Total: 60,576 t or 16 kg per capita



Retail and other food distribution
Total: 63,541 t or 16 kg per capita



Primary production
Total: 93,440 t or 24 kg per capita

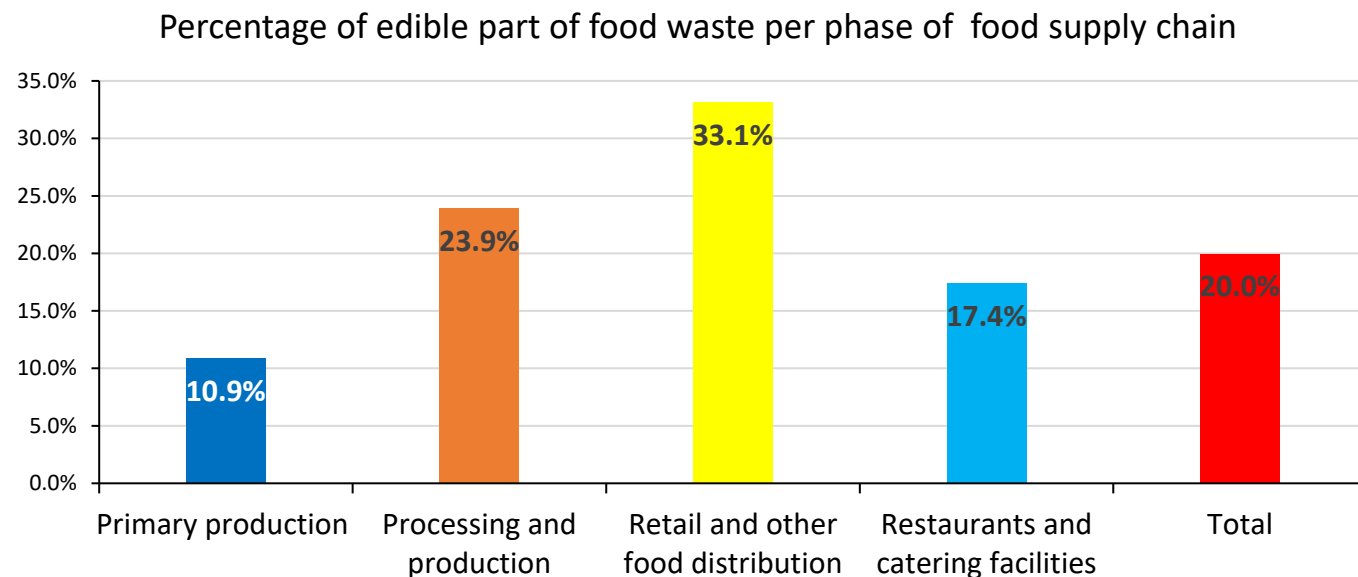


Processing and production
Total: 42,188 t or 11 kg per capita

Total quantity: 259,745 t or 67 kg per capita

PROJECT “IMPROVEMENT OF DATA ON FOOD WASTE IN CROATIA (HRFWD)”

Results – statistical estimation according to conducted survey



Total amount of edible part of food waste per capita is 13 kg.

More results are available on the project web - portal



OBSTACLES AND LESSONS LEARNED

Main obstacles during the first research:

- the choice of entities in the business sector – lots of them weren't part of the food supply chain
- too complicated questionnaire plus lots of entities didn't understand terminology used in waste management and definitions related to food
- pandemic year

Improvements in the second research:

- careful selection activities of NACE classification that might participate in the food supply chain
- simplification of the questionnaire
- creation of user-friendly IT application including clear definitions and terminology
- opened a special phone-line and an e-mail for questions and clarifications and employees of the Institute on disposal during whole research

Lessons learned:

- According to former experience, response to the survey is about 1/3 of entities chosen for statistical sample
- It is needed to exclude self-sufficient family farms from the sample of business entities
- Larger entities that are already obligees to some registres are more willing to respose to the survey
- It is needed to be more persistent while contacting smaller entities
- During research, professional help from the Institute employees to all involved entities is necessary
- This experience was very interesting but also very demanding

Thank you for your attention!

**ENJOY
THE FOOD...**

**...and take only
what you can eat
to avoid food
wastage.**



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