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What Is Food Loss and Food Waste?



Food loss is unintentional food waste that occurs during production, storage, and distribution, while **food waste** is the deliberate discarding of edible food by consumers, retailers, or institutions.



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The Global Impact of Food Loss and Waste



Food loss and waste have a profound **global impact**, straining resources, contributing to hunger, escalating greenhouse gas emissions, and harming the environment, calling for **urgent action and sustainable solutions**.



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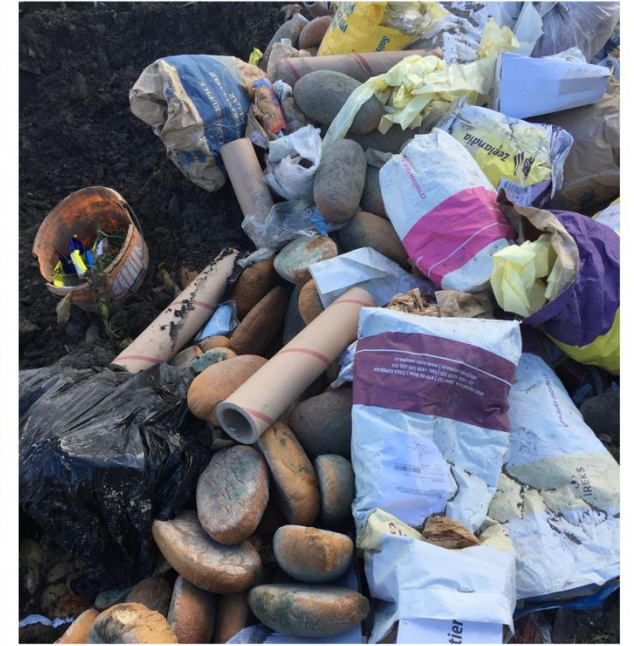
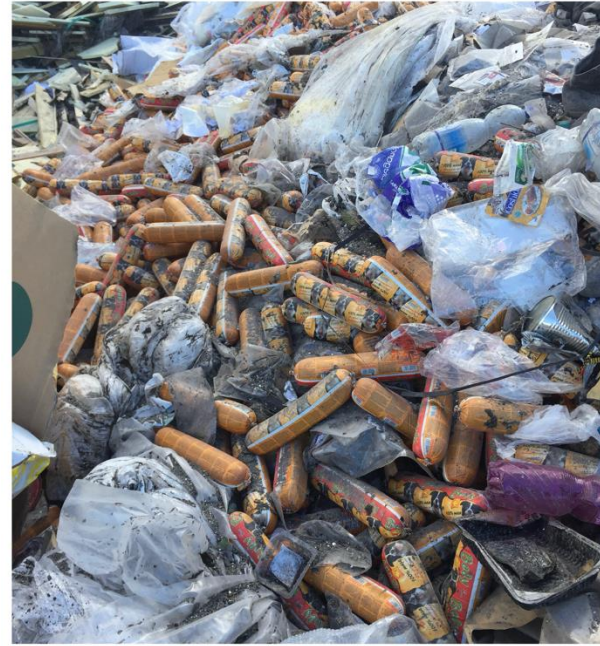
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Causes of food loss and waste



Food loss and waste result from a **variety of causes**, including inadequate storage, transportation issues, market inefficiencies, consumer behavior, hygienic standards, and lack of awareness.





Environmental Impact of Food Loss and Waste

- **Greenhouse Gas Emissions:** Food that rots in landfills produces methane, a potent greenhouse gas that contributes to climate change.
- **Resource Depletion:** The production of uneaten food consumes vast amounts of land, water, and energy, depleting natural resources.
- **Biodiversity Loss:** Agriculture practices linked to food waste, such as deforestation and habitat destruction, harm ecosystems and biodiversity.





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Social and Economic Impact of Food Loss and Waste



Food loss and waste have significant social and economic impacts, leading to increased food prices, reduced income for farmers, and decreased food availability for vulnerable populations. This perpetuates poverty, food insecurity, and social inequalities in many regions.

<https://senoptica.com/food-waste-at-retail/>



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Role of Consumers in Reducing Food Waste



Consumers **play a vital role** in reducing food waste by practicing mindful shopping, proper storage, and portion control, while also supporting sustainable food choices and being conscious of expiration dates.



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Food Loss And Waste Reduction Initiatives

It encompasses various strategies, including improving supply chain efficiency, implementing stricter quality standards, and promoting food rescue and redistribution programs.

Digital transformation (DX) and **artificial intelligence (AI)** further enhance these efforts by enabling real-time monitoring, predictive analytics, and optimization of food distribution and consumption patterns.



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Cooperation with Okayama University

The cooperation with Japan, particularly with Okayama University, and Associate Professor **Yasuhiro Matsui** (Faculty of Environmental, Life, Natural Science and Technology), has significantly enhanced our research on sustainable waste management and environmental protection.

Joint projects, academic exchanges, and collaborative publications with Japanese partners have contributed to innovative approaches in circular economy, food waste reduction, and carbon-neutral urban development.



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established 1816



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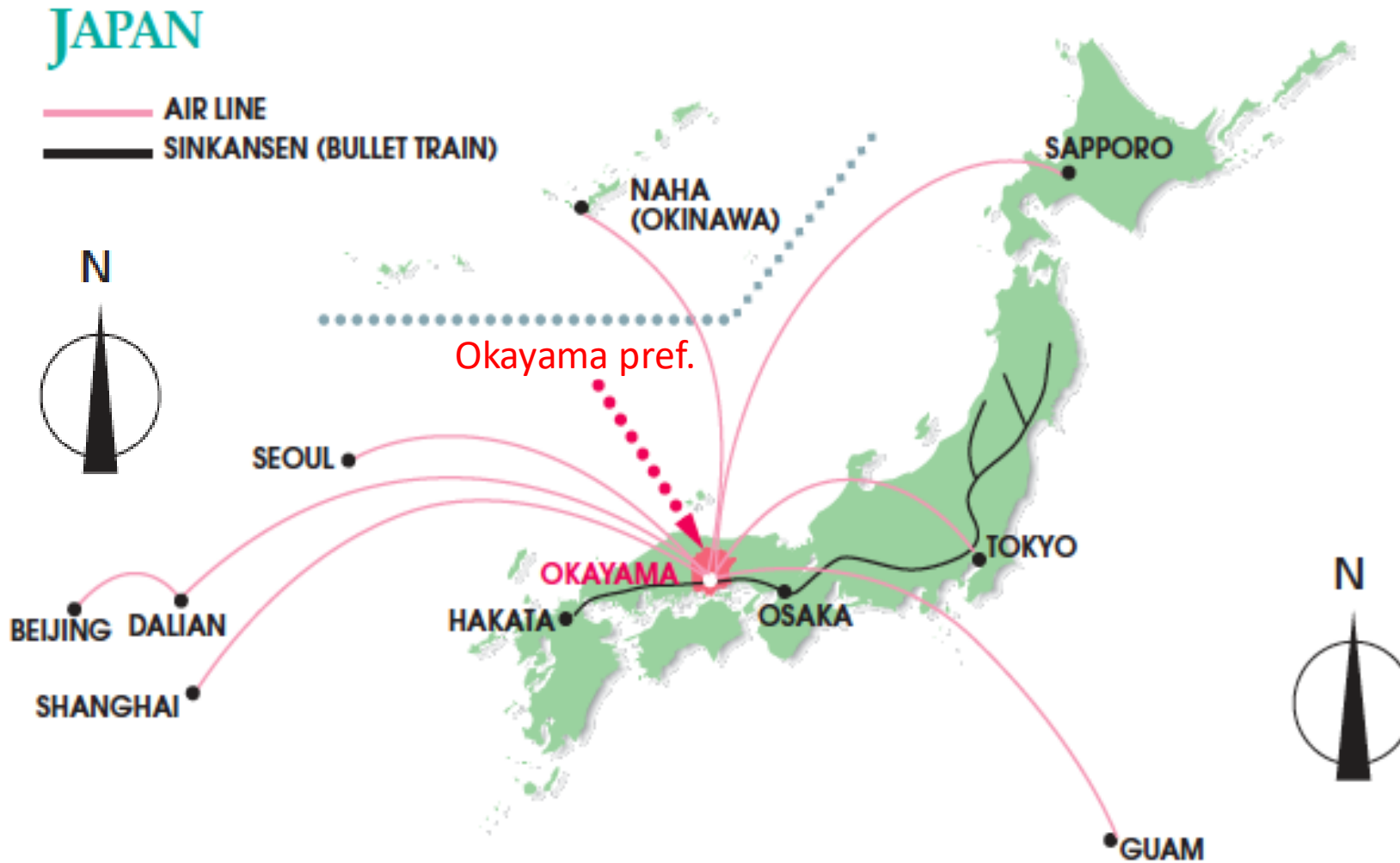


岡山大学
OKAYAMA UNIV.

OKAYAMA UNIVERSITY
established 1870



Where is Okayama?



Okayama City, with a population of 714,000, is Japan's 20th largest city.

Where is Warsaw?

LOCATION



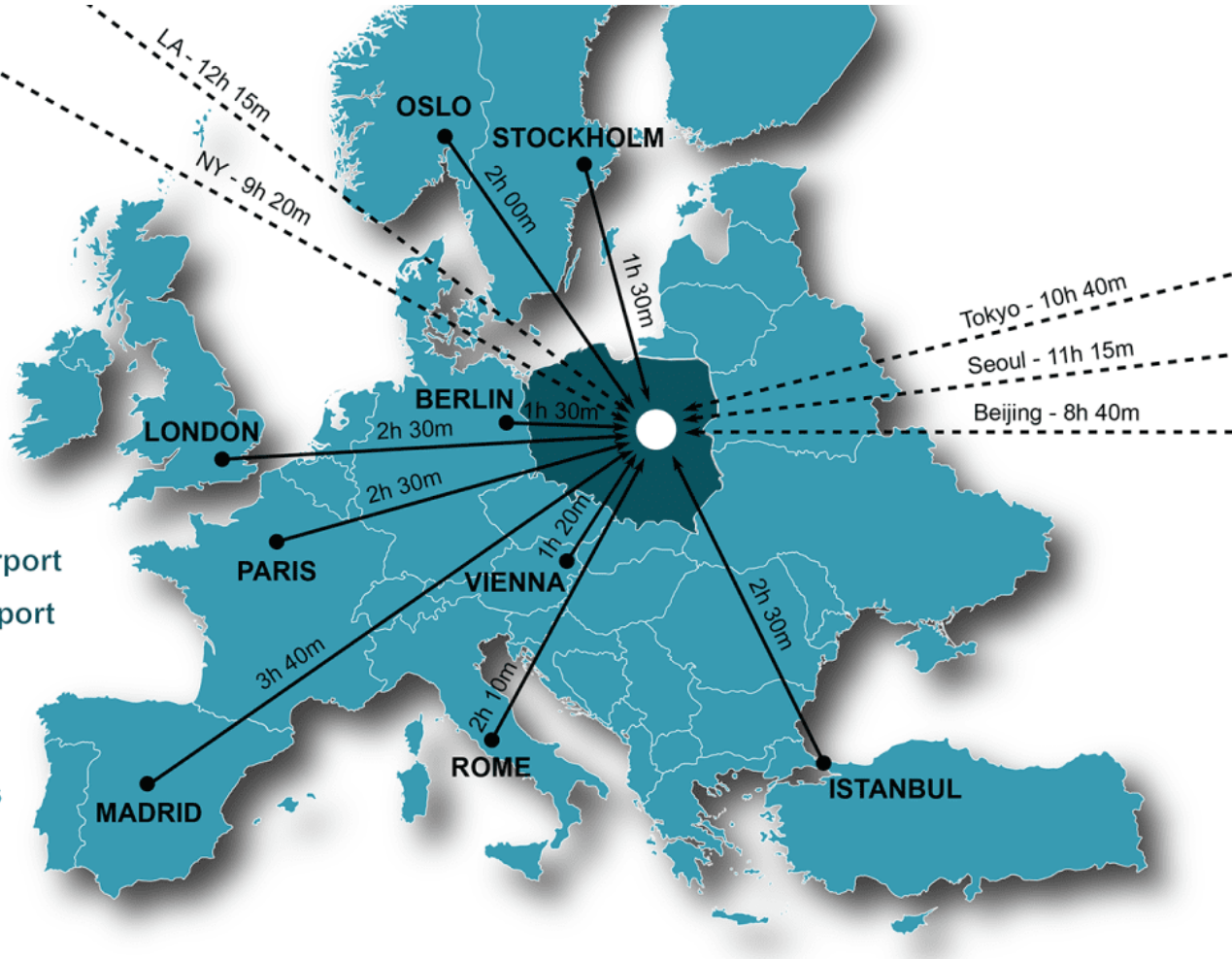
2 AIRPORTS

Warsaw Chopin Airport

Warsaw Modlin Airport



Almost 150 destinations



Warsaw, with a population of approximately 1.8 million, is the capital and largest city of Poland.





Eugeniusz Koda

KODA Eugeniusz

**Director of the Institute
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Warsaw University of Life Sciences**

Warsaw,

Date : *July 5, 2024*

In the presence of:

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Kenji Tsuruta

TSURUTA Kenji

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