

Topic and Research Question

Worldwide, one third of all food that is produced along the food supply chain goes to waste. Especially in Southeast Asia, growing prosperity in tourism and the food retail sector continue to expand and increase the environmental pressure. However, countries like Japan and South Korea have undergone a transition towards sustainable food waste (FW) management. Considering that the challenges for FW are forecasted to increase in Southeast Asia, the thesis seeks to determine in which way policies of Japan and South Korea can provide a possible policy directive for other countries in the region. The research question is:

“Could Japanese and South Korean food waste regulations in households, hospitality and food retailing be used as a policy blueprint for food waste policies in Vietnam and Thailand?”

State of the Art

The Sustainable Development Goal (SDG) initiated by the United Nations seeks to halve the amount of global FW by 2030 at the food retail and consumer level (SDG target 12.3.). Researchers agree that “well-defined regulations” (Schanes et al. 2018, p. 986) are a necessary tool for policymakers to minimize and avoid the negative externalities of FW. Furthermore, there is a broad consensus that the world currently lives through a “food waste crisis” (Reynolds et al. 2020, p.ii). Due to its amplitude on the economic and social sphere, policymakers are challenged to find regulatory solutions that are sustainable and ultimately lead towards the prevention of FW. Prognoses by the World Bank predict that the amount of global waste is expected to grow up to 3.4 billion tonnes by 2050, compared to 2 billion tonnes in 2016 (Kaza et al. 2018, p. 3). Particularly tourism, the food retail industry, and households in Southeast Asian countries are considered as main culprits for waste generation and will contribute to the worsening of the FW crisis (Phu et al. 2019, pp. 4, 1077, 1079; Fig. 1). Therefore, adequate regulations that intend to prevent FW are needed especially in emerging countries in Southeast Asia.

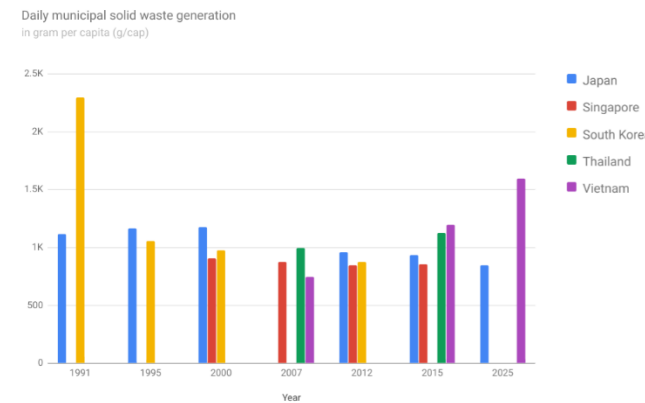


Fig. 1: Solid waste generation in East and Southeast Asia 1991-2025.

Methodology and Approach

The method of this thesis is based on a governance capacity framework (GCF) to identify stakeholders' abilities in tackling the food waste problem. The GCF includes several indicators ranging from public awareness, monitoring and evaluation, multi-stakeholder networking, to a zero-food waste system (ZFWs). To examine the strengths and opportunities (as well as weaknesses and challenges) inherent in using the Japanese and Korean policy models for FW, a SWOT analysis is conducted. In order to analyze the applicability of FW policy schemes for emerging countries in Southeast Asia, a SWOT is conducted based on the modified GCF indicators to give a qualitative overview, by case country, of current FW policies. The strengths of this method derive from its simplicity and flexibility of application. In the SWOT analysis following attributes apply:

- 1) Strengths represent the internal conditions of policies and programs, which can be influenced by policymakers
- 2) Weaknesses are the internal conditions of policies and programs that require countermeasures
- 3) Opportunities are external conditions that require policy implementation not only by policy makers but also depend on the initiative of other public and private actors
- 4) Challenges describe external conditions that could stand in the way of sustainable FW governance if they are not met.

The analysis aims to include the results of the GCF to answer the research question about the applicability of a blueprint for the case countries in Southeast Asia.

Main Facts

Japan and South Korea started applying sustainable approaches early in policymaking, which led to the implementation of a loop cycling system for FW. Japan started gradually implementing the 3Rs approach (Reduce, Reuse, Recycle) in the mid-1990 and managed to increase its recycling rate to 80% at the commercial stage, reducing food incineration to 19%, and implement a pay-as-you-throw (PAYT) system. South Korea has applied a similar policy scheme that raised the FW recycling rate from less than 2% in 1995 to 95% in 2011. Furthermore, South Korea has put emphasis on FW management with the help of technology-based, smart garbage and recycling systems.

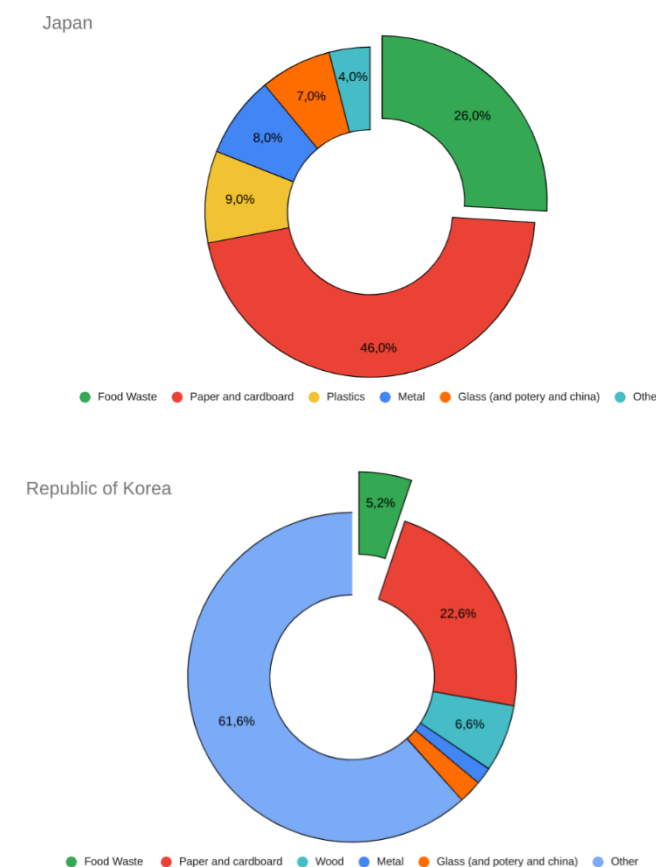


Fig. 2: Municipal Solid Waste Composition in Japan and South Korea (2010).

Results

Japan and South Korea have succeeded in establishing a dense information network that policymakers in the case countries can adopt. It is advisable to involve agents of change to become more involved in the provision and dissemination of information. A payment-and performance system based on points could lead to a significant improvement in the recycling economy for FW in Southeast Asia if the system is accepted and implemented by all actors. Regulations that involve costs for consumers and businesses should be priced in line with national incomes. Consideration might be given to higher financial responsibility on hospitality and food retailing if they are unable to implement guidelines or ‘green tourism’ labelling. However, such measures require strong monitoring and evaluation capacities. The analysis of Japanese and South Korean FW policies offers a variety of external opportunities for the case countries. It has shown that FW policies can, to some extent, provide a blueprint in hospitality, food retailing, and household. Although they cannot offer a one-to-one implementation, they serve as a generic, flexible blueprint that allows for regional adaptations.

References

All references can be found in the full version of the MA thesis available at <http://othes.univie.ac.at>

About the Author

Markus Mueller holds a BA in European Studies and has proficiency in data analytics. During his exchange semester at the Graduate School of Economics at Osaka University, he developed deeper knowledge of sustainable waste management strategies. He has gained professional experience in Europe, West Africa and Japan.



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