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Food waste away-from-home in urban China: A field study based estimate

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Then China continues to urbanize and increase the income of their in habitants, consumer food waste becomes increasing challenging in China. However, there is hither to little information on the scale and impacts of food waste in China. In this presentation, we will summarize the preliminary results from a Natural Sciences Foundation of China funded project on away-fromhome food waste in urban China. This 4-year project aims to investigate the food consumption and waste patterns based on large-scale surveys in Beijing and Lhasa and analyze their resource and environmental impacts, drivers behind and policy implications. Our first round surveys in Beijing and Lhasa in 2013 (including 187 restaurants, 3833 samples) show that the amount of catering food waste per capita in urban area was about 80 grams or about 13% of the ordered amount and this is higher in Lhasa (120 g) than in Beijing (75g). The food waste comprises many different groups including cereals (25%), vegetables (41%), meats (13%), aquatic products (11%), poultry (7%) and others. The scale of food waste varies greatly depending on saving awareness, portion sizes, preferences, income and ages and so on. The total catering carbon footprint of food waste in Beijing is 1.9-2.1 Mt CO2-eq with meat and vegetables contributing the most (together over 87%). We targeted mainly for restaurant consumers in the survey but included also schools meals because we believe school students are in significant stages of physiological and psychological growth and their attitudes towards food waste should not be neglected. Our first round surveys in Beijing show that about 130 gram food/cap/meal is wasted in school which consists of staple foods (45%), vegetables (30%), meat (15%) and other categories like soup and oil (10%). For the next step, we will expand our surveys in more cities in China. Meanwhile, we will be involved in an EU Horizon 2020 project from 2015 on where we will collaborate with University of Southern Denmark for further analysis of our surveyed results.

Biography

Shengkui Cheng is a Professor and Director of the Center for World Geography and Resources at the Geographical Sciences and Natural Resources Research (IGSNRR), Chinese Academy of Sciences (CAS). He is also the president of China Society of Natural Resources, a board member of the International Urban Agriculture and Food Security Foundation (RUAF), and a board member of the Chinese Association of Agricultural Science Societies. He is Editor-in-Chief for Resources Science and deputy Editor-in-Chief for *Journal of Natural Resources*. His research activities involve mainly on agriculture ecology and sustainable resource use. In recent years, he initiated research on food waste and its environmental impacts in China. He is Principle Investigator of the Natural Sciences Foundation funded key project "Food waste in urban China: Patterns, environmental impacts, and sustainable consumption" (2013-2017). The preliminary findings have been published in the first *Chinese Food Waste report*, with support from Oxfam. He has close collaboration with researchers in the Europe on food waste and would like to initiate similar collaboration with US partners as well.

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