IS FOOD WASTAGE AND FOOD PROCUREMENT METHOD ASSOCIATED WITH FOOD SECURITY STATUS AMONG FILIPINO HOUSEHOLDS?

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INTRODUCTION

Food security is a multi-dimensional phenomenon with numerous underlying factors hindering its achievement. Strategies to reduce food insecurity among households include the reduction of food wastage and cultivation of home grown food for human consumption. According to the Food and Agricultural Organization (FAO, 2015), food loss and food wastage worldwide has reached 1.3 billion tons a year. One third of this wastage can already feed millions of individuals suffering from hunger and malnutrition across the globe.

Philippine law makers had introduced a bill on Zero Food Waste in 2016 which encourages the government to facilitate in redirecting surplus to those who do not have food on their plates. One of its provisions is to address proper information dissemination on how Filipinos can follow the food waste reduction hierarchy. The bill’s goal is to ultimately end the cycle of having food end up in the trash instead of stomachs. Likewise, programs on cultivation of home grown produce is being strengthen, school and home yard gardening are being encouraged to help sustain food security of households.

Recognizing the importance to provide empirical evidence to demonstrate the above claim, the study aimed to determine association of households’ food wastage and procurement method (i.e. purchased, own-production or given-free) with food security status. Findings are hoped to provide local data to support government efforts to reduce food insecurity in the country.

MATERIALS AND METHODS

MULTI-STAGE STRATIFIED RANDOM SAMPLING

1st Stage: Primary Sampling Unit
One barangay or contiguous barangays with at least 500 households

2nd Stage: Enumeration Area
Contiguous area in the barangay with 150-200 households

3rd Stage: HOUSEHOLDS

Four (4) replicates form the NSO Master Sample which utilized 100% of the Labor Force Survey households

One replicate, which includes 9,926 households, was used for data analysis

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Figure 1. Proportion of households with food waste by food security status

Figure 2. Mean food waste by food security status

Figure 3. Odds ratio model showing households without plate waste of major food groups and their likelihood to being food insecure.

More households with food waste were food insecure than secure. Moreover, food insecure households produce twice as much the amount of food waste than food secure households.

## RESULTS

### IS FOOD PROCUREMENT METHOD ASSOCIATED WITH FOOD SECURITY STATUS?

Households, regardless of food security status, have purchasing as their main procurement method. It was also shown that a small but significant proportion of food secure households obtain items from the major food groups through own production.

Logistic regression analysis, thus, showed that no significant association was seen between method of procurement with food security status of households.

### CONCLUSIONS & RECOMMENDATION

- Food insecure households produce twice as much the amount of food waste than food secure households.
- Majority of households obtain food by purchasing.
- Food wastage of body-regulating foods is associated with being food insecure. However, socio-demographic variables particularly household size, place of residence, and wealth level, are significant factors to determine the variation of food security status.
- Sustainable programs on food production, such as home vegetable garden or urban farming must be implemented and monitored to foster self-sufficiency, especially for areas with high proportions of food insecure households.
- Programs which concentrate on proper food storage, use of leftovers to create new recipes, and guidelines on the preparation of adequate yet smaller food portions for family meals must be planned and implemented, along with policies and programs which help raise awareness on the growing problem of food wastage not only on the household level but among food establishments as well.