

Hypothesis: Som sold in the Wet Markets of Chiang Mai will support the Sustainability Rubric stronger than som sold in Supermarkets.

Method: Research was conducted so as to gauge the sustainability of the importing and the selling of som¹ in Chiang Mai's Wet Markets and Supermarkets. Data were collected through the method of surveying. Vendors were asked a series of questions in Thai regarding the importing and the growing of som.

Data were collected on the 9th and the 10th of February. Nineteen wet markets stands and six supermarkets were surveyed throughout the greater Chiang Mai area.

Results Data collected in Wet Markets around Chiang Mai presented a familiarity with the general location som come from, the Fang province. Every som vendor of the 17 stands surveyed knew that their product was grown or purchased from Fang², 151 Km North of Chiang Mai, or roughly 94 miles. Som sold in Wet Markets varied in price, based on the grade of the product—som that were more expensive were not from any greater distance than cheaper som.

In Supermarkets around Chiang Mai, workers demonstrated familiarity with som origin in some cases. Only 66.67% of the som researched in Supermarkets originated in Fang or within Thailand, and 33.33% originated in China³. Prices in Supermarkets did not show any correlation with distance traveled. None of the Wet Market Stands or Supermarkets provided som that were grown organically.

Use of unsold som by vendors demonstrated varying sustainability between Wet Markets and Supermarkets. Research showed that within Wet Markets, 35.29% of people surveyed used unsold som to make juice, 5.88% used unsold som to wash clothes, 29.41% claimed they sold all of their product, and the other vendors surveyed either threw away their product, or researchers were unable to collect the data.

In Supermarkets, 33.33% threw away their product if unsold and 16.67% sent it back to the provider with 50% unknown due to communication barrier or workers' unfamiliarity.

Analysis: Because produce data were collected within one season, any conclusions drawn are only applicable to a very specific time period within Thailand. However, this general picture indicates that food importation and sale within Chiang Mai is not a sustainable process.

The distance som travel to Chiang Mai in a majority of the observed markets is 151 Km or above, a distance that is not sustainable environmentally for food to travel. Ideally, all produce would be grown within a shorter distance, preferably walking distance from farm to consumer. Also, for Chiang Mai, importing som from Fang is not economically sustainable as business between farmer and consumer is not being undertaken in the same city.

Supermarkets purchased more Som from greater distances than did Wet Markets, showing greater use of fossil fuels and thus a greater negative environmental impact.

Data shows that Wet Markets reuse the unsold products more often than Supermarkets, meaning that Wet Markets generate less waste than Supermarkets and therefore Wet Markets are more sustainable environmentally and economically. By using what would be waste product to either create new products such as juice or replace products such as

¹ Tangerines or Oranges

² One vendor stated that their product originated in Chiang Rai, nearby Fang. Possibly could have meant the Chang Rai province, in which Fang resides.

³ City of Shantou was one of the areas som originated in within China.

laundry “detergent,” Wet Markets minimize creation of trash limiting their negative environmental impact along with generating more profit for the product purchased showing greater economic sustainability.