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## Food Risk Awareness, Trust, and Urban Consumers’ Willingness to Pay for Safe Vegetables in Burkina Faso and Ghana

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### Abstract

Smallholder farmers cultivating in West African cities often lack access to sufficient, clean irrigation water. Many urban farmers rely on the use of wastewater and may also lack knowledge about the safe use of agrochemicals in agricultural production. Thus, urban consumers are exposed to health risks, especially when eating raw vegetables, such as cabbage. Agricultural innovations to produce vegetables that are safe, i.e. free from pathogens and heavy metals, increase a farmer’s production costs which he would only bear if they are compensated by higher market prices. However, safety of food is not observable. Thus, consumers are unable to judge food risks prior to purchase. One option to guarantee consumers that vegetables are safe is certification. The aim of this paper is to reveal \*urban consumers’ willingness to pay (WTP) a price premium for uncertified and certified safe cabbage, and \*WTP-influential determinants. Consumers’ WTP was elicited using the double bounded dichotomous choice approach of the contingent valuation method. Two standardised surveys were conducted in each of the two cities Tamale (Ghana) and Ouagadougou (Burkina Faso). Each of the surveys covers a GIS-based random sample of 318–403 households. The two surveys slightly differ in the hypothetical market scenario presented to the consumers indicating differing risk settings. In the first scenario, the WTP for safe but uncertified vegetables is assessed. In the second scenario, WTP for certified safe vegetables is elicited. Probit regressions show high price premia for one averaged sized uncertified and certified safe cabbage in both countries with slightly higher WTP estimates for certified cabbage. Both justifies certification on the farmers’ side. Determinants that influence consumers’ WTP are inter alia awareness of risks associated with agrochemicals and wastewater in agricultural production, trust in farmers and traders, and trust in potential certifying institutions. Because food safety is not observable, trust in the persons and institutions providing it is required. For uncertified cabbage, trust in farmers increases and distrust in traders decreases WTP. For certified cabbage, the opposite is true. This is in line with theoretical expectations.

**Keywords:** Contingent valuation method, food certification, food safety, trust, willingness to pay