

# Do Indonesian Consumers Value Organic Rice? Evidence from a Willingness-to-Pay Experiment with Randomised Pricing

## Background

- Rising awareness about adverse health and environment effects of conventional farming after the Green Revolution
- Organic farming as one alternative to contested conventional agriculture which addresses social, economic and political dimensions
- The government and various non-governmental organizations have started to promote organic farming in Indonesia
- Most efforts on supply-side policies and interventions (i.e. training of farmers)
- Increasing local demand for organic products, but still at a low level

➔ Are local consumers prepared to adopt organic products?

## Research Approach

### An Incentive-Compatible Willingness-to-Pay Experiment

This study aims at eliciting the willingness to-pay (WTP) of consumer for organic products

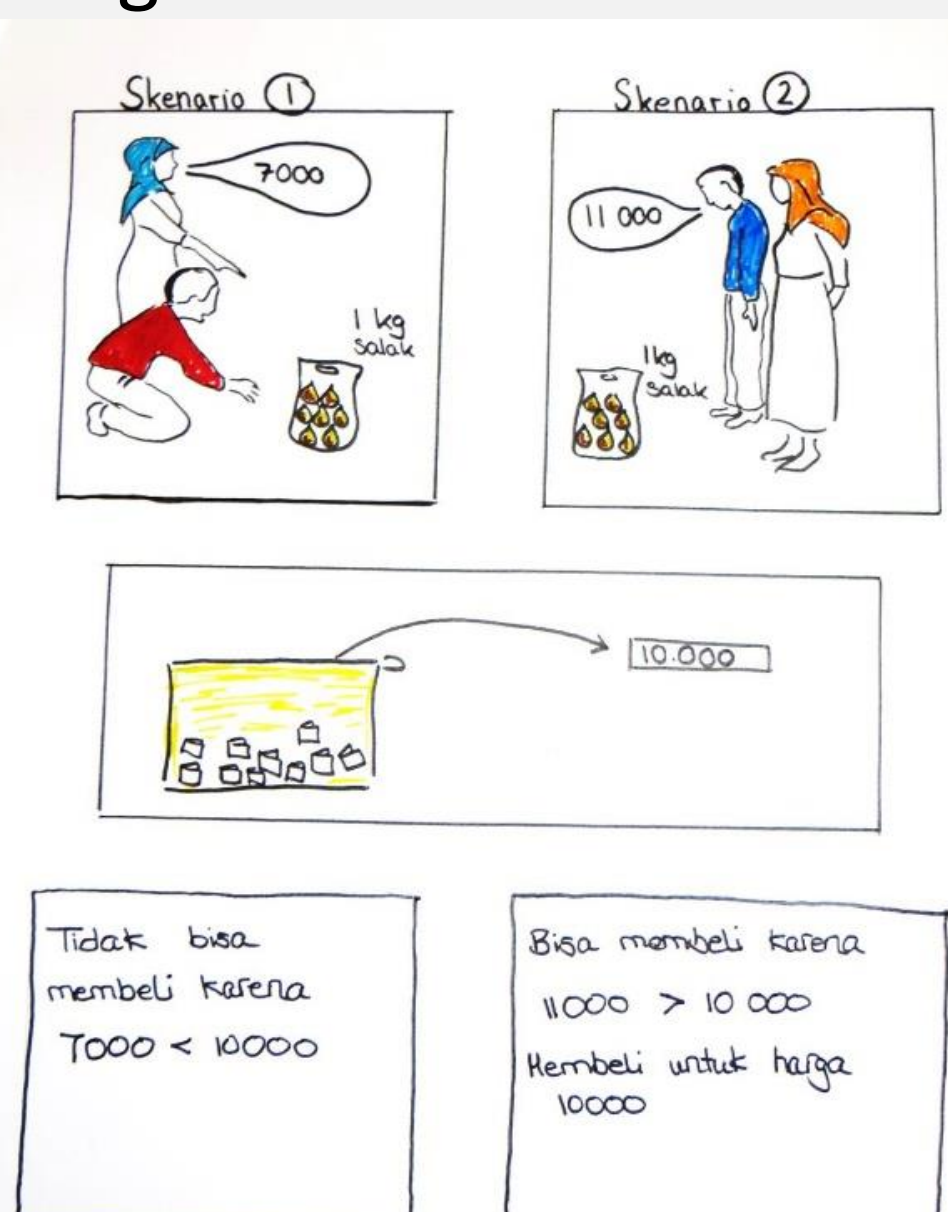
**Study location:** 322 semi-urban and urban households of Yogyakarta

#### Method:

- Variant of the Becker-DeGroot-Marschak approach (auction mechanism)
  - ➔ Respondents submit bids to purchase 1 kg of certified organic rice
  - ➔ Only those respondents whose bid is equal to or higher than a randomly drawn price get the organic rice at the cost of the drawn price
  - ➔ Respondents faced with real purchase decision are less prone to misreport their WTP
- Survey on respondents' and households' sociodemographic and economic characteristics

**Treatment:** Provision of information (short video) about benefits of organic consumption with regards to either health or environmental effects (2 treatment and 1 control group)

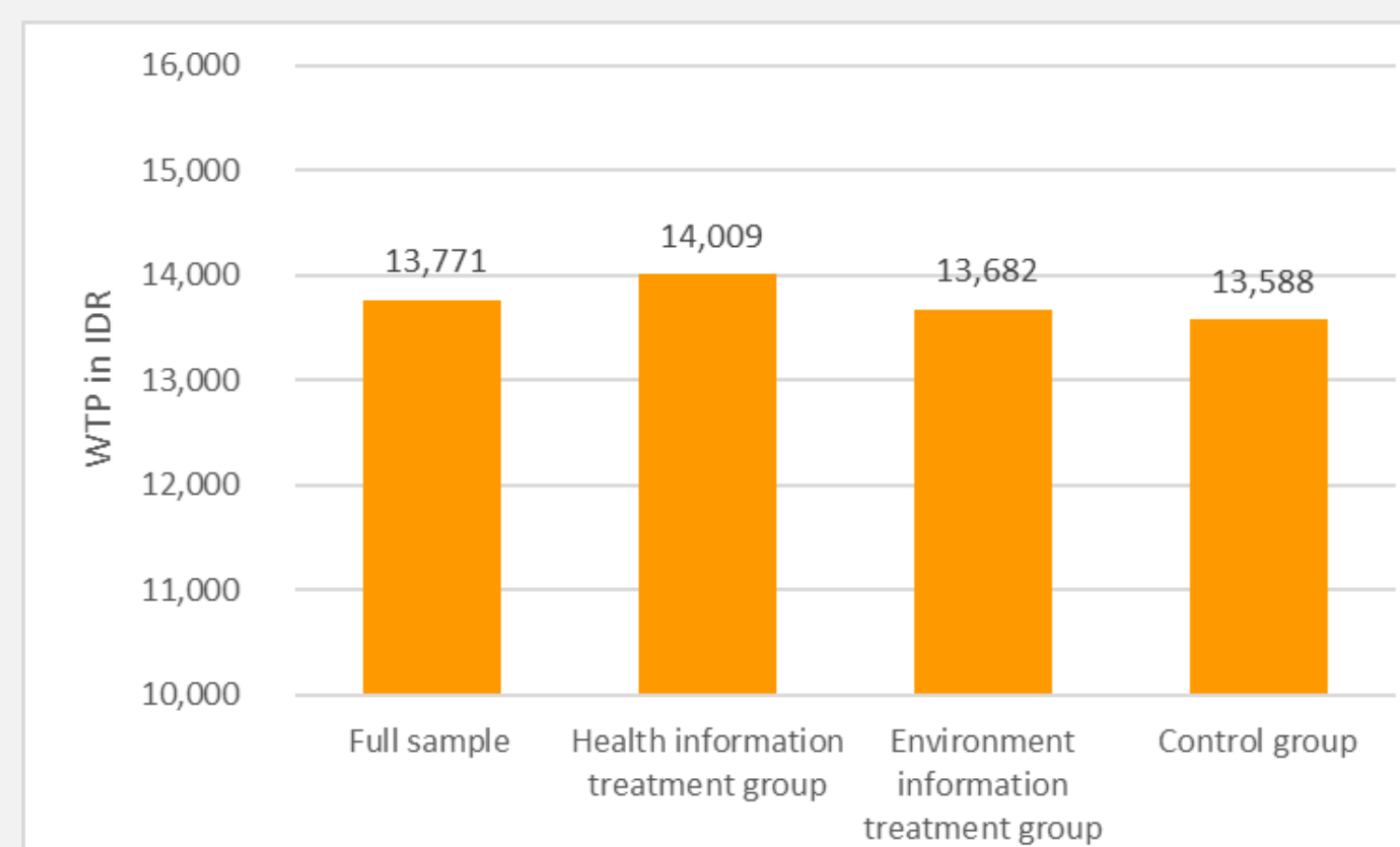
**Data Analysis:** OLS regression with community fixed effects



## Results

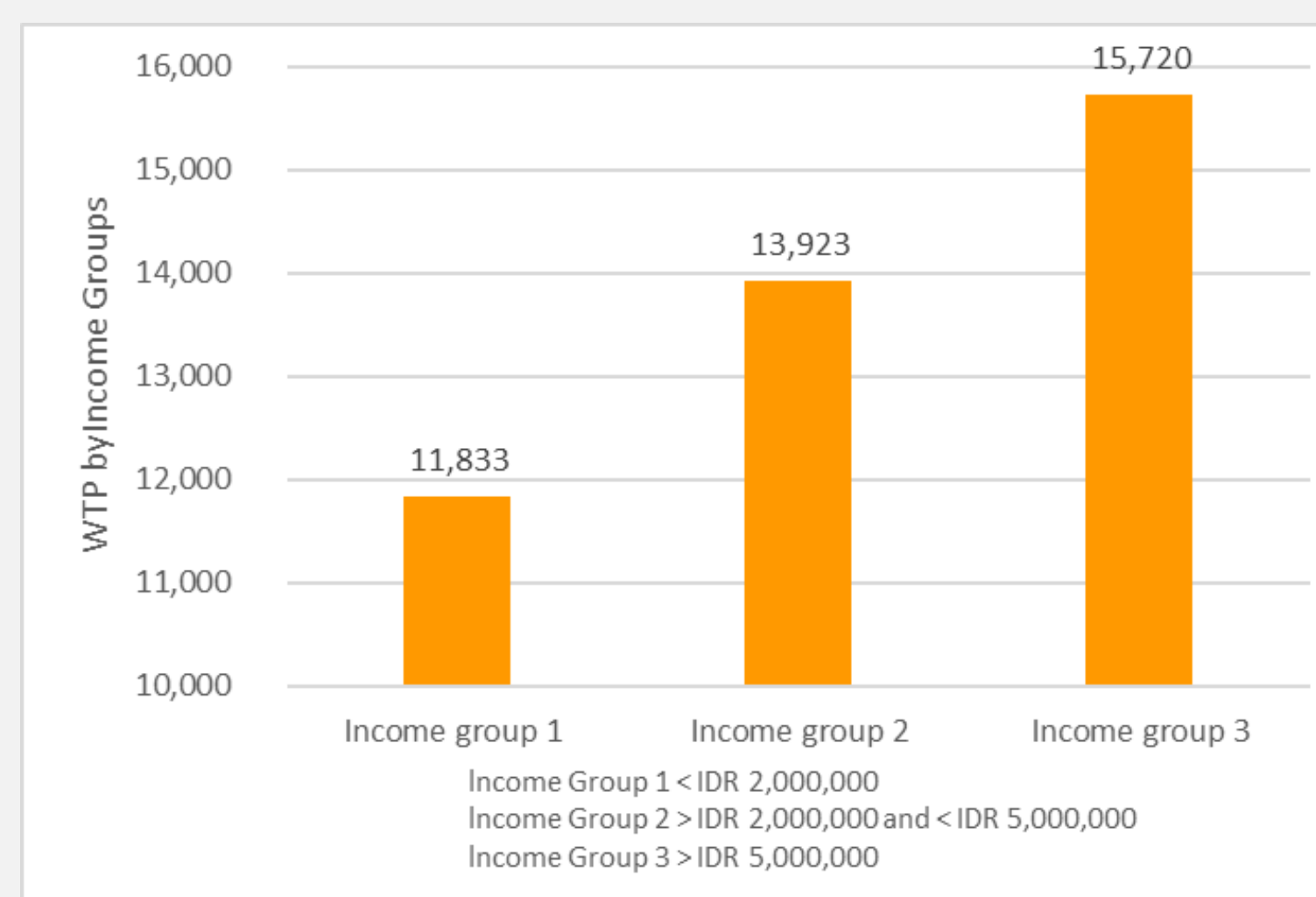
### Willingness to Pay for Organic Rice

WTP by Treatment Groups



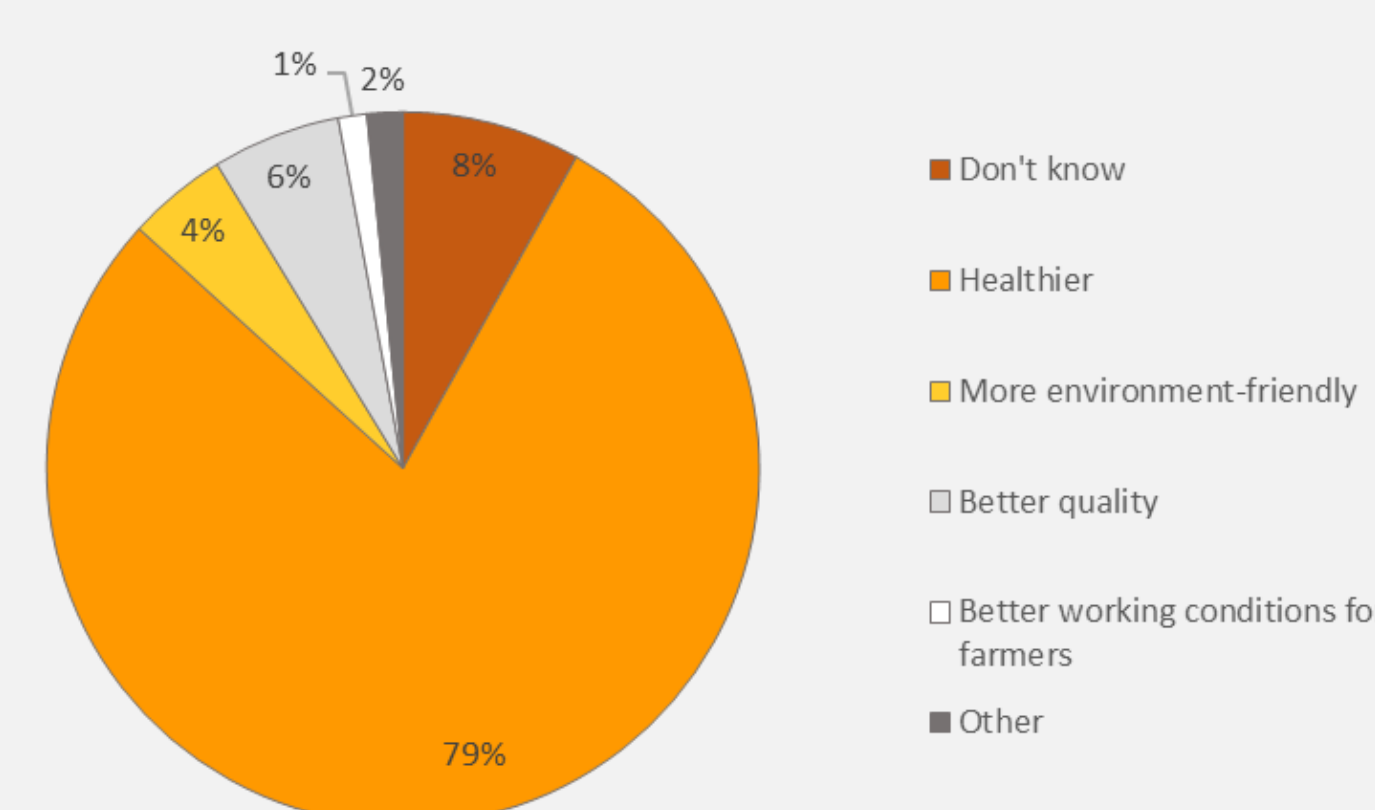
Higher WTP for both treatment groups but no statistically significant difference among treatment and control groups.

WTP by Income Groups



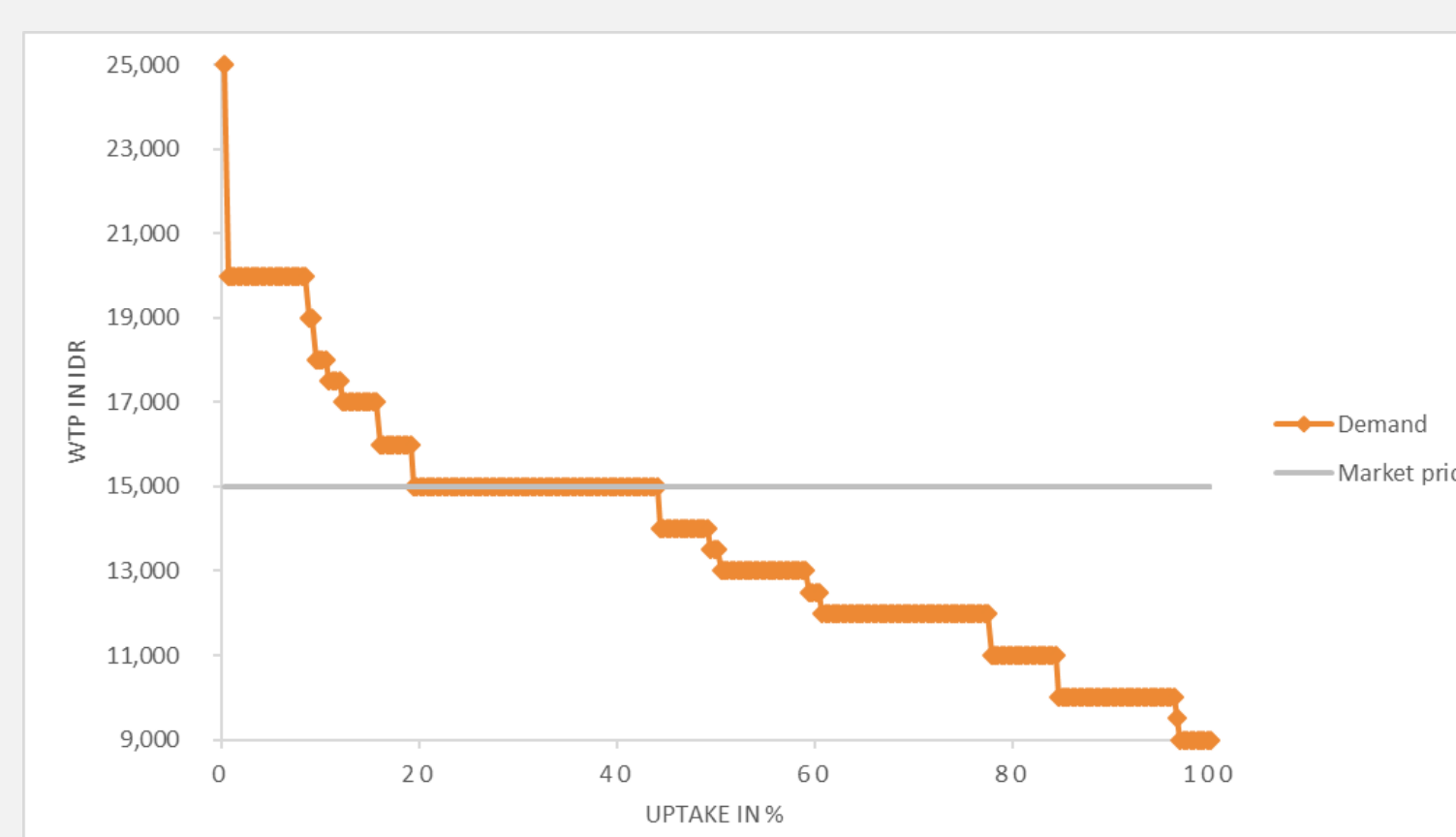
A higher household income is associated with a higher WTP for organic rice.

### Respondents' Perceived Benefits of Organic Food



Almost 80% of respondents state that they perceive organic food to be healthier, regardless of their treatment.

### Demand Curve



A market price of IDR 15,000 would result in an uptake rate of 44% among respondents of this study. An uptake rate of 80% would require the price of organic rice to fall below IDR 11,000.

## Key Messages

- ➔ People are willing to pay an average premium of 20% for certified organic rice compared to the price they usually pay for conventional rice
- ➔ The estimated WTP is relatively low compared to the actual market price of organic rice. Not even half of the respondents would be willing to purchase organic rice at the actual market price (IDR 15,000)
- ➔ The uptake rate decreases further for higher market prices, which are for example prevailing in supermarkets

## Discussion

- More detailed and better conceptualized information might be more efficient in order to increase WTP of consumers
- Most respondents value organic food since they perceive it to be healthier
  - ➔ How to further raise awareness for other benefits (i.e. more environment-friendly) of organic food?
- Revealed WTP might also be influenced by perceived general quality of rice regardless of the cultivation method
- Remaining question whether high WTP also stands for a willingness to purchase higher quantity and to incorporate organic food into daily life

## IndORGANIC

IndORGANIC is a German Indonesian interdisciplinary research project that aims to investigate the potential of organic farming in Indonesia in general and in Java more specifically. The project is funded by the German Federal Ministry of Education and Research and based at the University of Passau, Germany. IndORGANIC cooperates with three institutions in Indonesia, the Universitas Atma Jaya in Yogyakarta (UAJY), the Institut Pertanian Bogor (IPB) and Alliance Organic Indonesia (AOI). AOI is an umbrella organization for organic agriculture in Indonesia.