

### **3ie-IFPRI Joint Seminar**

#### **The Role of Price Information in Agricultural Markets: Experimental Evidence from Rural Peru**

**October 23, 2014**

[Eduardo Nakasone](#), Senior Research Analyst at IFPRI, presented his paper “The Role of Price Information in Agricultural Markets: Experimental Evidence from Rural Peru” at the [3ie-IFPRI joint seminar series](#) on October 23, 2014. Nakasone’s paper evaluates the impact of providing current crop price information through mobile phones on marketing outcomes for farmers in the Mantaro Valley in the central highlands of Peru.

The study sample was randomly assigned into 26 treatment and 32 control villages. Of the treatment villages, 111 out of 410 households received mobile phones. The intervention collected average crop prices from four regional wholesalers and sent out daily price information to farmers through text messaging. The outcomes of interest included changes in market participation, farmers’ sale prices and sales volumes. The author also evaluated spillover effects in treatment villages by studying the impact of the intervention on control farmers within the same village. A Difference-in-Difference estimation strategy was used to calculate the impact of the treatment on each outcome of interest.

Price information had a large and statistically significant impact on the outcomes of interest. The author found that the provision of price information resulted in a 13 to 14% increase in farmers’ prices for their crops. The probability of engaging in commercial transactions also increased by 12% for participating households. Interestingly, the author found no spillover effect for households within the same village, and explained that this is likely due to small-holder farmer status with minimal collaboration, as well as diversity in crop selection between farmers. Finally, end line survey data show that farmers experienced longer and more fruitful negotiations with intermediary buyers. Nakasone concluded that these findings point to the importance of constructing appropriate price dissemination programs for farmers, particularly those growing perishable crops.

Maja Andjelkovic, from the Digital Entrepreneurship Program at the World Bank, and discussant for this seminar, praised the paper’s impressive methodology, ability to isolate the impact of mobile phones, and the possibilities for replication in the future. Andjelkovic posed several important questions concerning the sustainability of using mobile technology including costs, network coverage, and the farmers’ familiarity with mobile phones. Audience feedback focused on crop price collection and changes in net income after incorporating additional expenses related to agricultural sales. Questions were posed concerning the intervention’s longer term impact on market prices and farmer decision making within a general equilibrium framework, as well as the policy implications of these findings.