

Technology Training, Buyer-Supplier Linkage, and Quality Upgrading in an Agricultural Supply Chain

Sangyoon Park Zhaoneng Yuan Hongsong Zhang*

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Abstract

We conduct a randomized experiment to examine the impact of technology training on quality upgrading in the dragon fruit supply chain in Vietnam. We randomly varied the subjects of each training group across matched farmer-intermediary clusters—only farmers, only exporting intermediaries, or both—and provided training on Good Agricultural Practices (GAP). We find strong causal evidence that technology training to farmers enhances quality upgrading, with much stronger effects when farmers and exporting intermediaries are trained together. We identify two mechanisms that contribute to these effects: knowledge transfer and connection to downstream buyers. Training increased farmers’ knowledge on GAP, relaxing a supply-side constraint to quality upgrading. Participating in joint training also helped farmers establish connections to downstream exporting intermediaries, as evidenced by the increase in contracts and trade within training clusters. This connection cuts off the middleman (local collector) and reduced/mitigated information asymmetry, which strengthens farmers’ incentives to upgrade quality by alleviating a demand-side constraint.

Keywords: Quality upgrading, technology training, buyer connection, agricultural supply chain, food safety

JEL codes: O12, O13, Q12, Q16, L15

*HKU Business School, University of Hong Kong. Corresponding author: Sangyoon Park (email: sangyoon@hku.hk). This study was registered in the AEA RCT registry as AEARCTR-0003237. This work was funded by a research grant from Hong Kong’s Research Grants Council (ECS 27501618) and Seed Fund for Basic Research from the University of Hong Kong. This study was approved for human subjects research from the Human Research Ethics Committee at the University of Hong Kong (EA1703013). We are thankful to Emmanuel Jimenez and Prashant Bharadwaj and seminar participants at KDI-3ie Impact Evaluation Workshop for providing insightful comments and suggestions in the early stage of this project. We are also grateful to seminar participants at Korea University, Monash University, NEUDC, Seoul National University, Sogang University, and Yonsei University. We thank Nguyen Phuong Thanh and Nguyen Vu Anh Tram for excellent research assistance.