



## Product Testing and Certification in Ethiopia

Firms in developing countries face high costs and logistical difficulties when meeting buyer requirements from abroad. Firm capabilities aside, product testing and international accreditation can be difficult in the absence of a national system, which is referred to “national quality infrastructure (NQI)”.

ComPEL is supporting a randomized controlled trial that measures the effects of product testing on firm outcomes, including decisions to export. Two pilot designs are being tested: the first involves discounts and fast-track for product testing for agro-processing firms, and the second involving the same intervention but offered higher up the value chain, to farmers and traders. Both interventions will be implemented along the honey value chain, a target industry for the Ethiopian government.



Photo: A lab run by the Ethiopian Conformity Assessment Enterprise. Credit: Tommv Kim

### Context

Ethiopian honey exemplifies the problems created by a lack of quality infrastructure services on long, disaggregated supply chains. Ethiopia is the world’s tenth largest honey producer, with a long tradition of smallholder beekeeping. Exporting is encouraged by the government of Ethiopia, and some honey processors acquired high-end equipment as demand in Europe boomed. However, recent forays into exporting have been marred by port rejections when shipments failed to meet EU standards.

Currently the World Bank is supporting the government of Ethiopia in the development of its National Quality Infrastructure (NQI), which is the institutional framework that establishes and implements a number of interlinked activities among standardization, accreditation, metrology, and conformity assessment (testing, inspection, and certification). The proposed impact evaluation will be conducted in conjunction with the early developments of

the NQI institutional capacity, analyzing how NQI and associated services can allow firms to both signal product quality to buyers and to upgrade product quality.

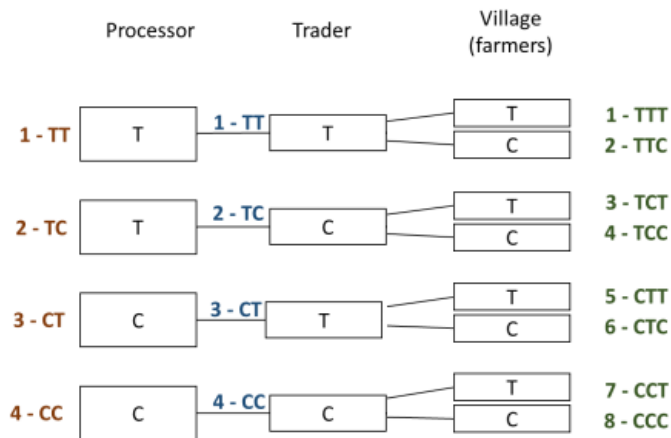
### Intervention

The impact evaluation will approach different levels of the honey value chain:

1. Cooperatives and processing firms - “Export encouragement” through priority access to QI services
2. Collectors and traders – access to testing
3. Farmers who produce material – agricultural extension services and access to testing

## Evaluation Design

Treatment and control groups will be randomized at each level, in total yielding eight groups. The schematic of treatment and control allocation is as follows:



The benefit of this design is that the research team will be able to look at the relationship between the processor- and trader- level interventions with agricultural extension by looking at reallocation of demand toward or away from farmers in treated villages – if treated processors shift disproportionately toward sourcing from treated villages, that is evidence that the export encouragement induced greater demand for quality which was more readily available from farmers who changed their practices in response to the intervention.

## Policy Relevance

Setting up the QI system has been considered an effective tool for development, since a functioning QI helps increase competitiveness in a context of rapid growth of global trade and value chains. This, in turn, increases productivity, helps create employment, and encourages investment. However, the majority of previous QI projects, which were financed by the World Bank and other donor agencies, was focused on the upgrading of the legislative framework and institutional capacity and less on the creation of industry demand for QI services. The associated project of this impact evaluation was designed to address gaps in the supply and demand side of the QI services.

## Preliminary Findings

A pilot study was conducted in August 2019 with beekeepers and honey traders in three woredas in the Oromia and SNNP regions of Ethiopia. The pilot included surveys with 96 beekeepers, 62 traders and 133 follow-ups with those who bought from these farmers or traders.

Buyers and sellers care about quality, with 87% of traders reporting they inspect honey before offering a price. However, traders have limited ability to verify quality and rely on traditional methods that cannot measure quality parameters required for international export. Consequently, price premia are associated almost exclusively with directly observable features such as color. Only 16% of traders indicate using any type of equipment to inspect quality and none send honey to laboratories for testing. Preliminary results also suggest traders face difficulties tracing the source of honey to its origin in the event of quality issues.

## Materials

[Methodology Note](#)

## Researchers

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## Research Funding Partners

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