Perceptions on the quality of services of input dealers
Bjorn Van Campenhout, Leocardia Nabwire

Uncertainty related to the quality of services offered by agro-input dealers – and of the products they sell in particular – have been found to result in under-adoption of improved agricultural inputs, such as improved planting material and inorganic fertilizer, by smallholder farmers (eg. Bold et al). Objective information on the quality of services and products is often difficult to obtain. For instance, the quality of seed can only be assessed completely after harvest and the information available to input dealers may differ substantially from the information that is available to farmers. As a result, economic actors rely on perceptions about services and products offered by agro-input dealers when making decisions.

In Uganda, we are setting up an information clearing house among smallholder maize farmers residing in catchment areas of input dealers. The aim is to collect information from farmers on the services offered by input dealers. In particular, we ask farmers to score input dealers in their vicinity on five dimensions on a scale of 1 (negative) to 5 (positive):

- Location – assesses if the input dealers is in a convenient location that is easily accessible by potential clients.
- Price – assess if input dealer is competitively priced
- Quality of produce – does the agro-input dealer sell genuine products that perform well in the field
- Stock – assesses if products are availability at all times and in the quantities that customers want
- Reputation – inquires about the what others think about the particular input dealer

We asked a sample of about 1,530 farmers to each rate up to three agro-input dealers in their vicinity on these five dimension. This resulted in 1,230 separate ratings, as not all farmers rated input dealers (because they did not interact with any and did not know any). We differentiate between two types of ratings: ratings by customers and ratings based by non-customers. Customers are farmers that, at some point in time, bought something from the agro-input dealers they are rating. Non-customers are farmers that did not directly interact with the agro-input dealer they are rating. It is assumed that when rating these input dealers, farmers rely on information they received from others. Furthermore, we interviewed 80 agro-input dealers in the area, and asked them to assess themselves on the same five dimensions.

We find that, overall, input dealers are appreciated by farmers. Using a simple average of scores given on the five dimensions, input dealers received a score of 3.50. Figure 1 shows that farmers that have at some point interacted with the agro-input dealer are more positive (3.63) than those that do not have direct experience with the input dealers (3.15). This suggests that more positive perceptions of overall quality leads to higher input use (but it may also indicate that experience leads to more positive perceptions). We also see that dealers rate themselves higher than farmers (both customers and non-customers), suggesting information asymmetries.

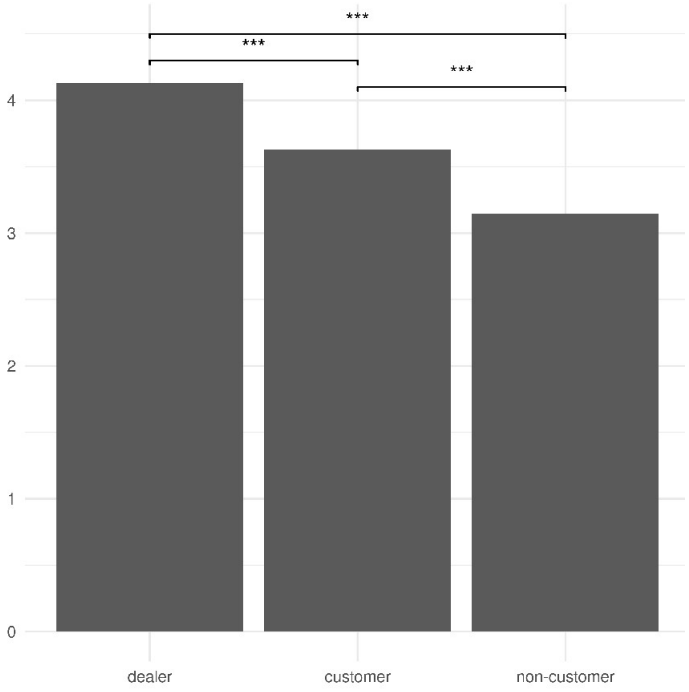

Figure 1: overall ratings

It is also interesting to look at the individual ratings on the components of the overall score. This is presented in figure 2. For each of the dimensions (location, price, quality, stock, and reputation), it shows the share of farmers that gave a particular score (1 to 5) for each of the types of ratings (non-customers, customers, and self-ratings by agro-input dealers). For example, we see that about 19 percent of non-customers rated agro-input dealers in the lowest category on the location dimension (1), while about 29 percent gave the highest rating for ease of reaching the input dealer (5).

Comparing between types of rating, we see that differences in ratings between the three groups are particularly pronounced when quality of produce has to be assessed: among non-customers, more than 20 percent of farmers give a 1 or 2 on this dimension. About 12 percent thinks agro-dealers provide excellent quality products and give a 5. Among customers, the share of farmers that give low scores (1 or 2) reduces to less than 10 percent. More than 20 percent of farmers now give a 5 on quality. Turing to the dealer, more than 60 percent say they provide excellent products. Not a single input dealer scores himself as 1 or 2.

For attributes that are more easy to observe than quality, such as location or, to some extent, price, the difference between non-customers and customers seem smaller. Dealers are more sensitive to stock: they seem to think they do worse on this dimension than how customers perceive them. Interestingly, assessment of stock by dealers corresponds closely to that of non-customers. Some element of selection bias may be playing here, as customers are likely to have obtained what they wanted to buy.

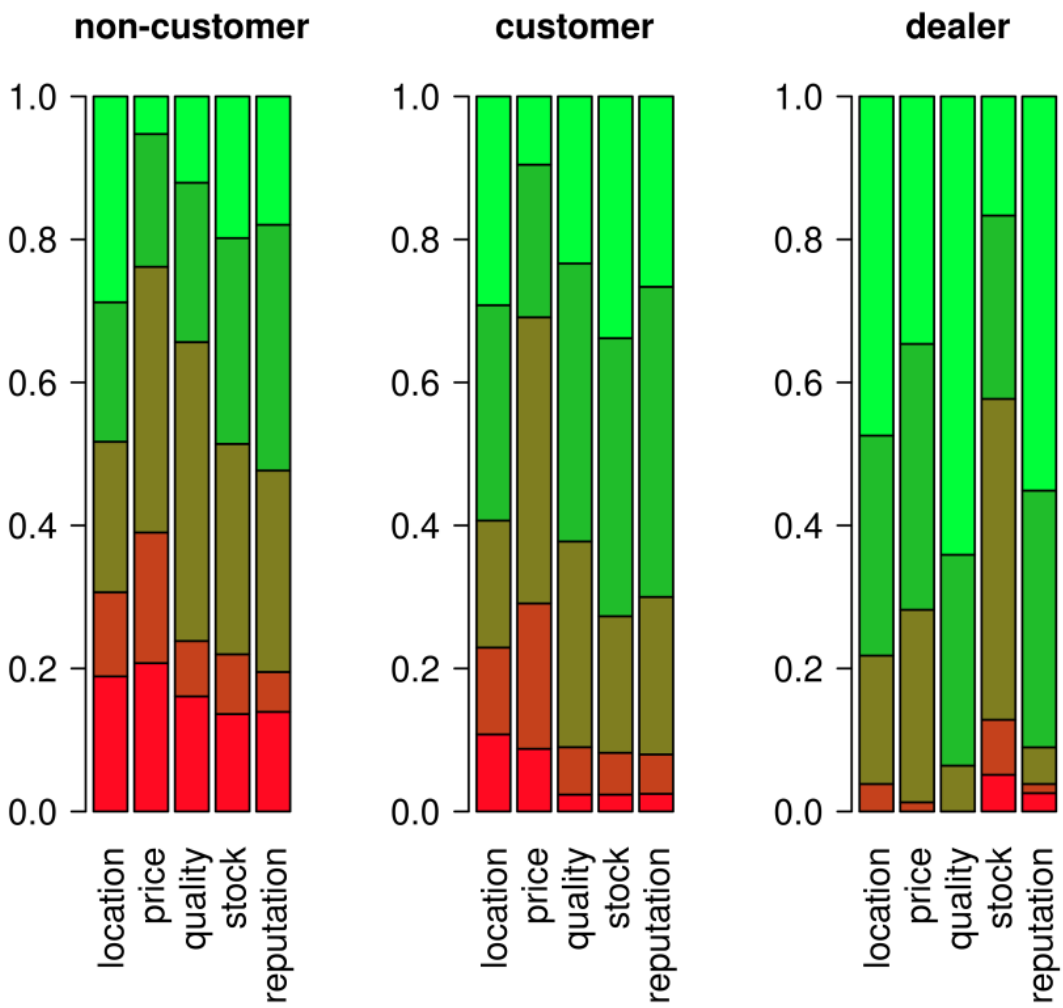

Figure 2: ratings on different dimensions

Key outcomes in our study are input adoption at the level of the farmers and sales of inputs at the level of the input dealer. We wonder if there is a correlation between the use of inputs and how farmers rate input dealers. There are different ways in which this can be done:

To determine if a farmer is an adopter, we randomly sample a maize plot and check if the seed that was used on that plot is of an improved (non-landraces) variety (a hybrid or and Open Pollinated Variety) and was obtained from an agro-input dealer. Using this definition, we find that about 28 percent of farmers in our sample are adopters.

a. are farmers that rate input dealers higher more likely use improved seed?
b. are farmers that buy from input dealers that rate themselves higher more likely to use improved seed?

c. do input dealers that score themselves higher sell more improved seed?
d. to input dealers that get higher scores from farmers (customers?) sell more improved seed?