

Kickstart

Do Women Control What They Grow? The Gendered Use of Kickstart's Pumps For Irrigation in Kenya and Tanzania

COUNTRIES: KENYA AND TANZANIA

YEAR(S) OF PROJECT STUDY: 2011-2013

PROJECT CONTACT(S): EPHRAIM NKYONYA (E.NKONYA@CGIAR.ORG)

BACKGROUND

The objective of the Kickstart International project was to increase crop production and productivity through the use of human-powered, low-cost, micro-irrigation pumps. Direct benefits of the project include increased incomes and improved food security for households using pumps. The Gender, Agriculture and Assets Project collaborated with Kickstart to better understand the gender dynamics of who purchases and controls pumps, as well as the intrahousehold effects of pump use on decisionmaking and use of income from irrigated crops.

METHODOLOGY

The study collected qualitative data in three regions of Tanzania and three districts in Central and Western Kenya. These sites were purposively selected based on a number of factors, including areas with high numbers of pump purchases, different degrees of gender stereotyping, and proximity to urban centers. The primary data collection tool used was focus group discussions (FGDs). These FGDs included between 6 and 18 people that were selected from lists of farmers that had already purchased the pumps. Twenty-seven FGDs were facilitated across the two countries (11 women-only, 11 men-only, and 5 mixed-sex).

In addition to the FGDs, a second study with two components was conducted in Kenya. First, in-depth individual interviews were conducted in 9 households (6 male-headed and 3 female-headed) to provide more data on decisionmaking and control over income, which the first survey did not adequately capture. Second, a rapid assessment of the layaway pump purchase program was conducted with 6 men and 6 women to establish the benefits, challenges, and ways to improve the service.

FINDINGS

- *Awareness, purchase and perceptions of Kickstart pumps by gender:*
Sales data showed that only a small percentage of pump sales were made to women between 2005 and 2013: 18 percent in Kenya and 6 percent in Tanzania. Of the different pump varieties, women liked the lightweight hand-operated MoneyMaker Hip Pump, which was easy to use, had no operational cost, and did not require women to use their legs to pump, an activity that was seen as culturally inappropriate in some areas.
- *Ownership and use of Kickstart pumps and other assets:*
Men were more often the owners of both pumps and other large household assets, while women owned smaller household assets. Most participants in Tanzania stated that men and women decide jointly whether to purchase a pump, but in the case of disagreement it was the husband who made the final decision. In some cases men bought the pumps without jointly deciding with their wives, and in other cases women would sometimes buy pumps, especially women from female-headed households.

Women generally knew less about pumps than men, mostly because of lower levels of education, less mobility, and unequal access to information. Men and women also identified different information sources, with men stating that Kickstart leaflets, radio and television were important while women stated that husbands or other farmers were important information sources.

Pumps were used mainly to irrigate owners' land, though some owners lent pumps to friends or neighbors for a fee or in-kind payment, or free of charge. Female respondents from central Kenya noted that men rarely lent their pumps to women because they felt it was culturally inappropriate for women to use the pumps. The irrigation pipes were laid by both men and women, with occasional help from children, but most pedaling was done by men as it was considered difficult work. Women found it difficult to use the pumps, partly because they were viewed as culturally inappropriate, as mentioned previously. Some participants noted that women took longer to irrigate a given piece of land than did men because women had many other responsibilities that required them to take breaks from irrigating.

- *Intra-household decisionmaking on crop choice and use of income:*

Men and women considered several factors when deciding which crops to grow under irrigation, including the crops' potential for home consumption and sale, the availability of a ready market, and the ability to grow with minimal labor and external inputs. In both countries men and women had different preferences for crop choice, with women preferring leafy vegetables. In both countries, spouses discussed what crops to grow and irrigate, but men made the final decision if there was disagreement. Women who had their own plots or whose husbands worked away from home made their own decisions.

Men, women and children jointly weeded and harvested crops, but men usually conducted all sales alone. Money that was earned through sales was handled in one of four ways: 1.) men kept the money but decisions about it were made jointly; 2.) men kept the money and used it on purchases that they and their spouse did not agree upon; 3.) men gave the money to their spouses for safekeeping; and 4.) women who sold their own crops (like leafy vegetables) made their own decisions on how the money was spent. Whether or not a woman owned a pump did not seem to influence which crops would be irrigated or who would control and manage the income generated by those crops.

- *Impacts of Kickstart pumps on household and individual well-being:*

Respondents listed a variety of positive impacts from owning a Kickstart pump, including improved yields (thus leading to cultivation of larger plots), general improvements in household well-being (such as more income, better food security, improved health status of household members), a decrease in women's time spent fetching water, the increased ability of women to access social capital because the income from sold crops allowed them to join women's groups, and an increase in positive perceptions and self-perceptions of women. Tradeoffs were discussed as well. Respondents noted that women had less time for social activities like group meeting and church activities, leisure time, and time spent playing with their children. While few negative impacts were mentioned, women did report that men misused money on extramarital relationships and alcohol.

FEEDBACK ON THE STUDY BASED ON AN INTERVIEW WITH EPHRAIM NKONYA

- Asset-gender dynamics are heterogeneous, complex, and rooted in social, economic and institutional factors – are there any background factors that relate strongly to gender-asset dynamics that you either collected or wish you had collected?
 - Going into this project, we did not think that there would be problems with marketing pumps to women. The pumps are low-cost and don't require gas or other inputs, which we thought would make them quite attractive to very poor people generally, and women in particular. However, we saw very low sales of pumps to women, and we discovered that this was partly due to cultural norms in the area. Women did not want to use the pumps because the physical movement necessary for using the pumps was seen as inappropriate for women in the area. This is something we did not anticipate, but shows the value of research. In addition, we found that there were credit constraints that kept women from purchasing the pumps. Thus, a layaway program was developed to facilitate women's ability to buy pumps.

- What kinds of tools did you use for data collection? Had you ever used these tools before? Was training the enumerators in these tools easy or challenging?
 - The Kickstart project focused on qualitative methods, in particular focus group discussions and in-depth interviews. The focus group discussions were both single sex (male only and female only) as well as mixed sex. The in-depth interviews were added near the end-term review of the project to provide more data on questions on decisionmaking and control over income.
 - While the tools were not new (we had used focus group discussions and in-depth interviews before), the focus on assets was new for us, and thus required us to review the instruments we were using. We decided not to hire enumerators for the focus group discussions but instead conduct them ourselves because, as researchers, we hoped that this would allow us to capture all the information we desired for our research. We also hired two consultants, one from each country, to advise on the particular gender issues relevant to that context. The focus groups involved a lot of dialogue with respondents and yielded rich information. We also decided to ask a somewhat creative set of questions regarding the unintended consequences of the pumps in their villages. As researchers, we sometimes ignore the unintended consequences of our research, and it was important to our project team that we capture these effects from the point of view of the respondents.

- What are the unique gender-asset questions/indicators you either collected in your survey instrument that you would have implemented differently or you were not able to collect, but which you would have liked to collect and why?
 - In retrospect, it would have been nice if we had collected more information on what kinds of marketing strategies could have been used to market the pumps and, in particular, which strategies would have specifically been effective for targeting women. We could have also looked at different methods of marketing, like mobile phones, for example. In addition, it would have also been nice to ask more questions about social capital as that seems to be very important among women and could have yielded some interesting information about how social networks and groups might play a role in using these technologies.

- Anything else you would like to share about GAAP, your involvement with it, or gender and assets research in general?
 - Being involved in this project has convinced me that gender and assets data is really something that far more projects should collect. It is something that really should be collected all the time, and rather than just a specific project it should be a cross-cutting program. Developing a shorter, more standardized module on gender and assets, would be a great idea because then it would be easier for it to be incorporated into larger surveys. If a module on gender and assets could be routinely included in large, nationally-representative household surveys, and national statistical bureaus could be convinced to get on board, a huge difference could be made.

For more information about the Kickstart project please see Njuki, J., Waithanji, E., Sakwa, B., Kariuki, J., Mukewa, E., Ngige, J. 2014. Can Market-Based Approaches to Technology Development and Dissemination Benefit Women Smallholder Farmers? A Qualitative Assessment of Gender Dynamics in the Ownership, Purchase, and Use of Irrigation Pumps in Kenya and Tanzania. IFPRI Discussion Paper 01357. Washington, DC: International Food Policy Research Institute.
<http://www.ifpri.org/sites/default/files/publications/ifpridp01357.pdf>

For questionnaire(s) and survey instrument(s), please visit: <http://gaap.ifpri.info/tools-used-by-gaap/kickstart-tools/>

For more information about GAAP, please visit: <http://gaap.ifpri.info/>

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

2033 K Street, NW, Washington, DC 20006-1002 USA | T. +1.202.862.5600 | F. +1.202.467.4439 | ifpri@cgiar.org | www.ifpri.org

This working paper has been prepared as an output for GAAP (led by IFPRI and ILRI) and has not been peer reviewed. Any opinions stated herein are those of the authors and are not necessarily endorsed by or representative of the International Food Policy Research Institute or its partners. Copyright © 2014 International Food Policy Research Institute. All rights reserved. For permission to republish, contact ifpri-copyright@cgiar.org.