

Filling the Data Gap on Gender in Rural Kenya

WHY GENDER DISAGGREGATED DATA?

Agriculture is one of the most important sectors in Kenya and its performance greatly affects the poor. In addition to its importance as a source of food and income, the sector directly accounts for 24 percent of Kenya's GDP, and for another 25 percent indirectly through linkages with other economic sectors. It provides about 70 percent of rural employment. Kenyan agriculture is dominated by smallholder farmers, pastoralists, and fisher-folk who together comprise around 4 million households. Farms are small, averaging one hectare. The sector faces many challenges including low productivity, poor market access, low levels of commercialization, inadequate infrastructure, and increasing weather variability.

The Government of Kenya (GoK) with financial support from the World Bank is implementing the **Kenya Agricultural Productivity and Agribusiness Program (KAPAP)** which aims to increase agricultural productivity and smallholder income by improving agricultural technology systems, empowering men and women farmers, and promoting agribusinesses. Women farmers in particular operate well below their potential. Improving their capacity to accumulate resources and to retain income are important objectives of the KAPAP. The project also seeks to provide women with a voice in decision-making bodies.

However, a major challenge quickly presented itself – a lack of existing information on gender gaps. Much of the information which is available is out-of-date, and most of it is based on case studies. This made it necessary for KAPAP to collect a unique set of gender-disaggregated baseline data to provide guidance on critical gender gaps. This information will contribute to an evidence-based gender policy dialogue in Kenya's agriculture sector. Although appeals for gender-disaggregated data are frequently heard, the process is complicated and costly, and entails the need to overcome a number of methodological hurdles. This ARD Note describes the process of gender-disaggregated data collection that has been employed by KAPAP, and presents the key lessons learned from the preliminary results of the data analyses.

HOW GENDER DISAGGREGATED DATA?

Because data collection methodologies typically focus on heads of households, and because most household heads are men, women's views on agriculture have been largely underreported. This is a serious drawback because women are often the primary farmers in their households. Failing to capture information from them leads to a distorted understanding of farming operations.

The general constraints women face in agriculture have however been comprehensively documented by the World Bank, FAO and IFAD in the *Gender and Agriculture Sourcebook*, the 2012 World Development Report *Gender Equality and Development*, and the 2010-2011 State of Food and Agriculture: *Closing the Gender Gap for Development*. These publications have affirmed that while women perform a very substantial proportion of agricultural work, they generally have less access than men to a variety of resources.

QUESTIONNAIRE DEVELOPMENT AND SURVEY DESIGN

The questionnaires and survey were designed to align data collection with the needs of the agriculture sector, and to contribute to the development of a sector-wide approach to gender-disaggregated rural diagnostics. They were also intended to inform the



Balancing many responsibilities. Photo: Asa Torkelsson.

agriculture sector gender policy which is being developed by Kenya's thirteen-ministry Agricultural Sector Coordination Unit (ASCU).

Three questionnaires were designed: a *household*, *individual*, and *community* questionnaire. Two respondents were interviewed in each household. The household questionnaire was geared towards the 'primary farmer,' as self-reported by the household, and was used to collect information about activities that all household members engage in. The other key contributor to farming, usually the spouse, would then respond to the individual questionnaire. The household and individual questionnaires were similar in content and partly overlapped.

PRE-TESTING

The questionnaires were finalized using a highly iterative process to ensure relevance across the varied farming conditions that are found in Kenya. The questions themselves were designed to be easy to respond to, effective in capturing the intended information, and easy for coding and inputting the information. A number of duplications and misunderstandings were identified and weeded out.

In collaboration with a capacity building initiative of Gender Focal Points in the water sector, they were pre-tested in peri-urban and rural settings in the Coast Province. A team from KAPAP and the World Bank piloted the questionnaires in the North Eastern and Eastern Provinces. Important challenges were encountered related to specification of measurements, particularly of time and quantities. Pre-testing also helped to refine codes and identify omissions (for instance creating codes for both sweet and food banana in the crop inventory and adding livestock 'lost or stolen,' in addition to those which had died). It also taught the team to be as specific as possible. For example, 'registered groups,' referred to those registered by the Ministry of Gender, Children and Social Development.

SAMPLING STRATEGY

To generate a sample with the necessary statistical power to represent a robust evidence base, sampling was based on a random selection of households representing a proportion of regional households in Project areas. Most of these fell into a set of panel households that had been generated earlier. However, due to the new district set-up, several households previously interviewed as controls now fell within project areas and therefore the newly added households were sampled as controls. Multi-stage sampling methods were used in the non-Project locations, using random selection from a list of all village households identified together with each village elder or area assistant chief. Before data collection began, appointments on interview dates for each of the sampled households was made through area assistant chiefs and village elders to maximize the response rate.

STEPS IN GENDER-DISAGGREGATED DATA COLLECTION AND ANALYSIS

Number of interviews: 4,100
Approximate cost: US\$500,000
Time frame: April 2010-May 2012

1. **Development of survey instruments** (April 2010) and first round of **pre-testing** (June-August 2010)
2. **Recruitment of Firm** to undertake data collection (January 2011)
3. **Data collection:**
 - Sampling of households (one week)
 - Preparation of list of target and control households to be interviewed (one week)
 - Appointments for interviews (one week)
 - Enumerator recruitment, shortlisting and interviewing (one week)
 - Enumerator training (ten days)
 - Questionnaire training and re-cap (four days)
 - Field data collection (eight weeks, May-June 2011)
4. Data entry, cleaning and database creation (August-October 2011)
5. Descriptive analysis (October-November)
6. Analysis of material, including development of Gender Policy Note (January-May 2012)

ENUMERATOR RECRUITMENT AND TRAINING

Call for applicants was placed in the daily newspaper, and 54 enumerators with bachelor's degree in agriculture-related disciplines were selected for a two-week training which involved going through the questionnaires question by question, clarifying the meaning of each question and the information sought, and using practical exercises on how to ask questions, probe for and record the responses. A team of 45 enumerators—32 men and 13 women—was finally selected for the data collection. Commitments were made to have a balanced representation but it was difficult to fully meet such a target, since especially young mothers would find it difficult to be out of home for such a long stretch of time. Asymmetry in the gender of enumerators and that of respondents could be a problem in some areas of Kenya, but did not impact data collection areas according to the longstanding experience of the firm.

DATA COLLECTION

Data collection was carried out between 1 May 2011-25 June 2011 by nine teams, each comprising five enumerators, one supervisor and a driver. Supervisors managed activities and made spot checks to ensure data quality. In the first week of data collection, researchers visited the teams to provide technical backstopping.



Overall, 4,141 interviews were conducted, comprising 2,529 households (1,799 target and 730 control), 1,523 individuals, and 89 community interviews. A majority (54%) of all respondents in the household survey were women suggesting they are primarily responsible for farming. Around 31% of women respondents headed their households while nearly 93% of the male respondents headed their households.

The individual questionnaire was collected from 566 men and 957 women. In spite of great effort to locate the two partners for the individual interviews, many households were managed by one primary farmer alone, and in most cases this was a woman. The reasons for failing to interview an additional household member even after repeated visits was primarily due to the fact that the additional household member could not be found (45.3% of the cases), followed by there not being another qualified member to respond (36.8% percent of the cases) and the household being run by a single person (13.4% of the cases).

DATA ENTRY, CLEANING AND ANALYSIS

Data entry, cleaning and analysis was done in the Statistical Package for the Social Sciences (SPSS). Preparation of data entry templates began immediately upon start of field work and data entry began in the second week of data collection, and continued until mid August, 2011, engaging a team of four clerks. Data cleaning took a period of two months, and involved a team of ten research assistants and three enumerators who checked for and corrected errors and/or omissions in the entered data.

SURVEY CHALLENGES AND LESSONS LEARNED

“For the eight years I have been a research analyst, I thought I had learned it all but now I am learning again”

Research Coordinator, Consulting firm.

Several challenges were faced during the design and data collection. First, the survey instruments were revised several times to ensure they captured relevant information and for the interviews to not be longer than 1.5 hours. This called for patience, technical inputs and experience to get the right balance and the solid experience of the consulting firm came in handy. The determination of the sample size to generate statistical robustness within a tight budget was another major challenge.

Secondly, the timing of fieldwork coincided in some areas with the long rains which contributed to logistical challenges such as vehicle breakdown and fuel shortages, and in others it coincided with the peak season in farming, and some interviews had to begin later than scheduled to allow respondents to finish their farm work.

Interviewing two members in a household was a useful in-

novation, but it was challenging to identify two respondents for simultaneous interviews in a household, despite the appointments made prior to the visit. This resulted in frequent call-backs and more intensive fieldwork.

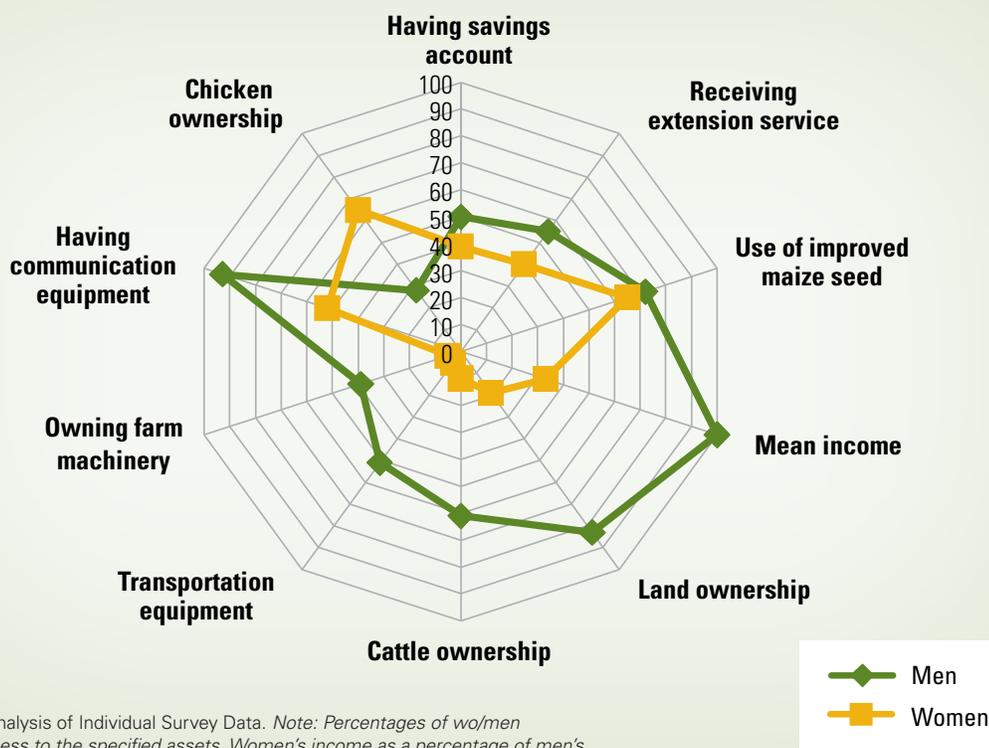
In some areas, notably in the North-Eastern Province, it was a challenge to identify translators for the interviews and translation also prolonged interviews when respondents did not understand Swahili or English.

PRELIMINARY RESULTS

A majority of the communities reported a declining trend in many of the aspects of community welfare during the last five years, except for input availability and revenues generated from raising livestock. Drought, increases in farm input prices and food prices were cited to have adversely affected the livelihoods of smallholder farmers. The average age of the respondents of 48 years—with men being four years older than women on average—suggests a rather aging farming population. A higher proportion of women (30%) than men (12%) had no formal education and could not read nor write and gender gaps were accentuated at the higher educational levels. The following key findings are singled out from the survey report:

- A higher percentage of men (81%) compared to women (19%) owned land individually. Areas of land owned by men were about four times larger than those owned by women, and men also farmed larger parcels.
- The majority of women concentrated mainly in the production of food crops and farmed smaller land holdings than men who grew the same crops. Women had higher yields for selected crops (Irish potatoes, bananas and tea) but men registered higher yield for all other crops. A higher percentage of men than women owned all types of livestock except chicken.
- A higher percentage of men than women sold crops. Men decided on the use of revenue from the sale of most crops. Regarding livestock, women made decisions regarding chicken only.
- Few men (27%) and women (13%) actually sought extension advice. Half of the men and 36 percent of the women who sought extension actually received. The main reason given was that it was time consuming or that extension agents were not available. Most respondents were satisfied with the extension advice they had received, and most had applied the advice. For those who did not, the main reason given was that putting the advice into place was costly.
- Although the proportions of women and men who were members in groups were similar, larger proportions of men than women held leadership functions in groups.
- The rural gender resource gap was validated, as shown in the graph below.

ACCESS TO RESOURCES OF RURAL WOMEN AND MEN IN KENYA



- Mean income for men was three times higher than for women. A higher percentage of men was engaged in off-farm activities compared to women and they earned twice as much income as women earned from these activities. Over half of the men had a savings account, whereas a smaller proportion of women had an account. About a third of men and a fourth of women had applied for credit, with a high success rate for both. Men's credit volumes were however larger.

CONCLUSION

This note has summarized the lessons learned from a gender-disaggregated survey in Kenya. The distinction between a 'primary farmer' and a 'head of household' proved to be relevant and useful because women in most cases were the primary farmers in their households, but seldom headed their households.

Often when implementing surveys we are cautious to avoid respondent fatigue. This time, the team actually learned that participating as a respondent in a survey can actually have an empowerment function as well. Feedback suggested for example that respondents, through the interview, said they

had actually learnt a lot regarding the costs and benefits of their farming enterprise.

We also learned that partnership and collaboration to collect gender-disaggregated data is a great way to overcome the increased costs involved in a quantitative survey approach.

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