

# Knowledge Management and Agriculture Finance

## Market Analysis, Operations Innovation, and Impact Assessment

Knowledge Management (KM) helps to align programming with market conditions and to document the impact of our services on the businesses and clients we serve. In AgFinance, KM has conducted crop market studies, analyzed technology cost-effectiveness, co-designed implementation tools, assessed impact and conducted pilot programs. A few seminal research studies are featured here.

### EQUIPPING STAFF WITH TOOLS TO ALIGN PARTNERSHIPS AND MARKET CONDITIONS

Agricultural finance is risky and expensive for both farmers and banks. Opportunity’s AgFinance model is designed to reduce risks and costs by working with partners that complement Opportunity’s financial services with high-quality inputs, training and market access. KM supported the application of this model by helping staff to understand which kinds of partnerships are more likely to succeed in different agricultural markets. Initially, KM inventoried all of our AgFinance partnerships and all markets for crops grown by our AgFinance clients. Then, KM took a deep dive into our partnerships in Ghana and Uganda, leveraging the hands-on experience of AgFinance staff. Through participatory workshops, we identified four types of partnerships with relevance to different market types. These workshops also revealed that non-partnership financing may be viable in cases where crops are familiar and low risk and also where local markets are functioning well.

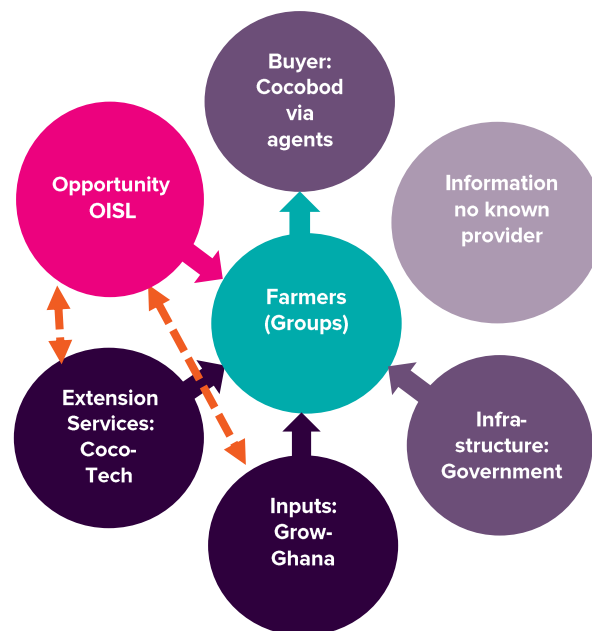
During the research process, KM and AgFinance staff created a user-friendly tool to quickly analyze crop markets and devise appropriate partnerships. The tool is a diagram that illustrates each partner’s role in supporting farmers, and their relationship to each other, as appropriate in their particular crop market (see Figure 1). A large majority of workshop participants (75%) rated the tool “clear and easy to use.” An even higher majority (82%) reported that they are likely to use the tool to identify partners, reduce risk, reach new types of clients and increase efficiency.



Opportunity client Beatrice plants a cocoa tree in Ghana

**Figure 1 : Partnership Diagram Tool – Cocoa in Ghana**

The cocoa market in Ghana is highly structured; the government-associated Cocobod purchases all cocoa. In this market, Opportunity is implementing a “supply side” partnership in which no buyer contract is necessary.



## MEASURING IMPACT ON SMALLHOLDER FARMERS

In Uganda, Malawi and Ghana, KM conducted an impact study to assess whether clients were benefitting as intended from Opportunity AgFinance, which is provided in conjunction with partner-delivered training, inputs, and market access. This rigorous study measured direct farm-level outcomes and indirect household level outcomes, and compared clients with non-clients.

### Rigorous Methodology

This impact data is based on a 200+ question survey that was completed by more than 1,200 farmers. Clients and non-clients self-reported their data about current and past years. Insights also emerged from focus group discussions, bank transactional data, client tracking data and interviews with staff, partners and industry leaders. The study covered three countries and 19 crops.

### Results

For some crops, such as cocoa in Ghana, the number of clients using fertilizer dramatically increased. This resulted in an expansion in production and yields, during a time when non-clients experienced a decline in production and yields (Figure 2 and 3). Although not as dramatic, there were positive results across most crop portfolios, and all results proved useful to the AgFinance team in adjusting their strategy—for example, tightening procedures for ensuring quality in input supply. In terms of indirect impact, results were moderately positive across multiple indicators. For example, more clients than non-clients are better able to afford food, health care and education for their children (Figure 4), and women clients reported some increase in their decision-making power. This impact study validated the AgFinance model as a critical time when Opportunity expanded the program in Africa. The analysis helped to further improve our AgFinance strategy and contributed rare, rigorous evidence for the global community on the impact of agricultural finance.

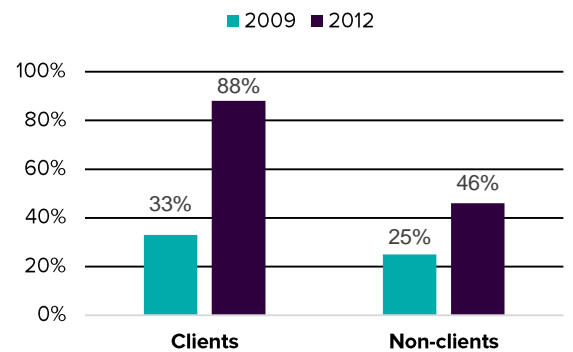
### Future Impact Studies

Opportunity currently has multiple additional impact assessments underway for AgFinance: client impact assessments in Rwanda and Ghana, a gender analysis in Ghana and Mozambique, and an impact assessment in Ghana that meets the highest global standards for statistical rigor.

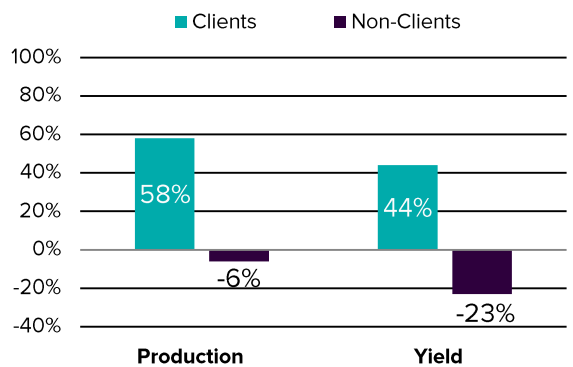
### Gender in AgFinance

This study indicated that a client's level of impact varied based on their gender. This finding has led Opportunity to conduct more in-depth research and innovation support. A subsequent gender analysis in Ghana and Mozambique revealed high satisfaction among women clients, with more than 78% of women clients reporting improvements in decision-making power as a result of their engagement with Opportunity. KM is also currently co-managing a pilot program specifically advancing women's empowerment in AgFinance in Mozambique.

**Figure 2: Percent of Coffee Farmers Using Fertilizer**



**Figure 3: Change in Production – Coffee Farmers**



**Figure 4: % of Respondents Who Can Better Afford Basic Needs**

