



What Values Motivate Farmers to Adopt Climate-Smart Practices?

Empirical Evidence from a Means-End Chain Analysis in Kenya

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FARMERS IN KENYA ARE VULNERABLE TO CLIMATE VARIABILITY AND EXTREME WEATHER EVENTS SUCH AS droughts and floods. The resilience of farming households and communities is thus dependent on their ability to adopt climate-smart agricultural practices, which sustain agricultural productivity and incomes, enable climate change adaptation, and reduce greenhouse gas emissions. Previous studies on adaptation to climate change have mostly focused on biophysical, socioeconomic, political, institutional, and governance factors. Only more recently has the role of cognitive processes—such as attitudes, belief systems, and perceptions about environmental shocks and climate change—begun to receive attention. Farmers' values and motivations are important to consider because they influence decisions concerning adaptation strategies in ways that can present opportunities as well as obstacles to sustainable adaptation. Additionally, because climate shocks can affect assets of male and female farmers differently, a gender perspective is important.

This brief presents the main insights from a study that assessed how the values and motivations of Kenyan farmers influence their adaptation of climate-smart practices in crop and livestock management. Through in-depth individual interviews using the “laddering” technique and a method known as “means-end-chain analysis” (see Figure 1), the study examined farmers' decisionmaking processes and goals as well as the values underpinning these decisions. It also considered gender-specific differences in motivation and underlying core values.

MOTIVATIONS FOR ADAPTING CLIMATE-SMART PRACTICES IN CROP AND LIVESTOCK MANAGEMENT

The study found that farmers pursue several climate-smart practices related to crop production: water and soil conservation practices, changes in crop variety, crop diversification, agroforestry, early planting, and changes in animal breeds and animal feed management. In choosing strategies that improved farm productivity, food security, and household income, farmers were motivated by intrinsic values, which

include the desire to be independent as well as to lead a healthy, happy, comfortable, and secure life.

Divergence in male and female farmers' motivations for adopting strategies derives from differences in gender roles and responsibilities, as elaborated by women's predilection for practices that reduce their labor burden in livestock management. Female farmers also showed preferences for promoting food security and early planting, which stems from their role as main food provider. Men, in contrast, favored strategies for the development of agroforestry systems, a typically male domain. Notable as well, a higher percentage of men than women preferred to keep genetically improved cattle as an adaptation strategy. Early planting is also an important adaptation strategy, but the belief that only male household members should initiate planting at the beginning of the season demonstrates how cultural values can hinder female farmers' uptake of adaptation practices.

POLICY IMPLICATIONS

In order to achieve increased food security, the design of climate change policies and the adaptation of interventions

should take into account farmers' fundamental values and their gendered preferences. It is also critical to understand that, although culture may limit efforts to adapt to climate change, traditions are also malleable over time.

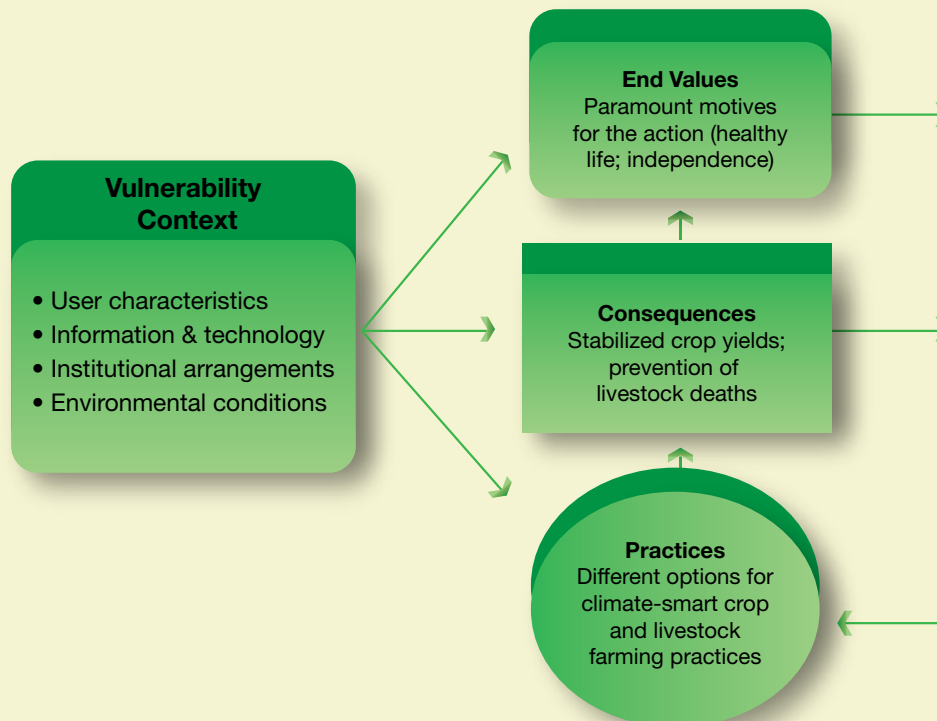
How can gender norms that often have asymmetric effects on different groups be transformed into equitable institutions? In Kenya, gender relations presenting obstacles to adaptation could be addressed through the support of traditional leaders for the empowerment of women at the household and community level. The establishment of public fora for discussion and dissemination of gender-specific adaptive strategies would encourage reflection on gender roles and climate-smart agricultural practices.

Since farmers' uptake of climate-smart practices is focused on the broader developmental goal of poverty reduction, complementary pro-poor policies that improve socioeconomic conditions are vital for sustainability. What is needed are policies that promote livelihood diversification through collective action, such as village savings groups or credit associations. Group-based approaches that promote sustainable natural resource management can play an important role in encouraging pro-environmental behavior in line with the sustainable development agenda.



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FIGURE 1 The means-end chain framework in climate change adaption



Source: Author.

FOR FURTHER READING

Ngigi, M. W., R. Birner, and U. Müller. 2014. "Farmers' Intrinsic Values for Adopting Climate-Smart Practices in Kenya: Empirical Evidence from a Means-End Chain Analysis." Unpublished, University of Hohenheim, Stuttgart, Germany.

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