

## Research Statement

I am a development economist interested in studying, from a microeconomic perspective, household strategies to exit poverty, invest and improve their wellbeing. My work has focused on the interactions between poverty, risk and social protection, especially in rural Sub-Saharan Africa. I try to identify the main constraints faced by households and the most efficient programs to alleviate poverty, promote livelihoods and improve long-term wellbeing. By conducting qualitative and quantitative analyses based on careful data collection, I assess the expected or actual impact of development interventions to better understand both the economics mechanisms at play and the available policy options to support households.

In the last fifteen years, poverty alleviation has gained critical momentum among global leaders, with a shift from a growth-oriented development agenda towards a focus on global poverty and inequality. That shift has been characterized by an increased focus on individual-level poverty, and a wide recognition of the importance of risk for poor household. In that context, a new set of policy and research interventions have emerged, related to the barriers and opportunities for improving households' current and future wellbeing. In particular, asset accumulation has started to appear as both critical and severely constrained for the billions of rural households who face multiple risks and whose livelihoods depend on livestock and agriculture. I found this new policy and research environment particularly rich in that it explicitly links the two major development objectives of addressing current poverty and vulnerability, and fostering long-term economic improvement through investments in human and productive assets.

My past research has largely consisted in assessing development interventions ex-ante and ex-post, with a double objective. First, I intend to measure the quality of the public and private protection offered to vulnerable households, by considering the design and the impact of particular programs such as insurance and cash transfers. Second, I explore the potential of social safety nets for fostering household productive investments and promoting their wellbeing. In doing so, my work investigates core social sciences questions related to poverty mechanisms and dynamics, with acute policy relevance in Africa. I found that experimental methods helped us learn greatly about causal mechanisms and interventions effectiveness, but I also use other appropriate methods to answer specific questions such as targeting or insurance value. In addition, part of my research is normative, as it contributes to question poverty and vulnerability measurement and definitions, and to show their implications in terms of concrete policy responses. As policy relevance is crucial to my research, I conceive my future work as involved in development projects on the ground and in constant dialogues with policy makers, practitioners and local communities. This link to the field also provides me with critical research input, as quantitative and qualitative fieldwork and careful data collection are the backbone of my empirical research agenda.

During my doctoral work, I focused on three key steps of the poverty alleviation agenda: defining and measuring poverty, targeting poor households, and evaluating the impact of anti-poverty interventions. My first article, forthcoming in the *Journal of Development Studies*, contributes to filling the need for appropriate measures to adequately track poverty dynamics in times of crisis. Building on the last developments of the multidimensional poverty literature, I used three national datasets to show how multiple dimensions of deprivation have been affected by the crisis and subsequent recovery in Zimbabwe.

The second and third articles of my dissertation build on the data I collected for two evaluations of cash transfer programs piloted by the World Bank and national governments. One of these articles, recently re-submitted to *World Development*, develops and applies novel ex-post targeting evaluation methods to assess whether different mechanisms efficiently reach poor households in Cameroon. The last article, to be submitted shortly to the *Journal of Development Economics*, evaluates the long-term impact of the cash transfers project on household investments in rural Niger. Employing quasi-experimental econometric

methods eighteen months after transfers have stopped, I show a sustained impact on livestock and agricultural production of the transfers. The articles answer concrete policy-relevant questions to improve programs and prepare their scale-up, while also contributing to debates in the Social Protection sector regarding poverty definition, targeting and alleviation. I remain involved in these programs to support national governments and local staff, and continue to explore further key research questions related to targeting, household resilience, and productive assets in the Sahel Adaptive Social Protection program.

My current research projects at UC Davis allowed me to explore further key issues related to risk and poverty dynamics by focusing on another type of social protection interventions: index-based insurance. As part of a network of researchers, insurers and policy makers, I assess index-insurance projects which protect vulnerable households against covariate (group-level) risk. A first part of this work consists in measuring, through a randomized evaluation in Burkina Faso, the actual impact of an area-yield insurance product on cotton farmers' investments and wellbeing, in collaboration with multiple local and international stakeholders. The second aspect of this work is more conceptual: I developed a method to assess ex-ante the quality of an insurance product, and I am applying this method to the data I collected in Burkina Faso. In addition, in collaboration with an interdisciplinary network of colleagues, I aim at measuring the quality of satellite-based insurance products offered to Kenyan and Ethiopian pastoralists, using existing longitudinal data. This methodology and its application will, I hope, help explain both farmers' decision regarding index-insurance adoption and the impact of insurance programs on farmers.

This previous work on cash transfers and index-insurance has shown a promising role for social protection as a way to foster household investments. However, question remains regarding the precise mechanism at play: do social safety nets alleviate the saving and credit constraint faced by households, or do they help households take more risk by providing protection? Do households with differentiated levels of wealth face the same constraints, or does the mechanism vary depending on household status? My future work will build on my past projects, explicitly link my different areas of expertise, and try to answer these questions, with important implications in terms of appropriate policy response. I am currently planning with our partners the launch of an RCT in Kenya which will assess an integrated social protection system composed of scalable cash transfers and satellite-based targeted livestock insurance. This project will shed light on critical poverty dynamics encountered by rural households, and on the different types of interventions which can best support their livelihood strategies at different stages of asset accumulation.

While designing this long-term research program in Kenya, I have also initiated side-projects to explore different, related questions and alternative methodologies, such as targeting exercises in Burkina Faso to better understand communities' perceptions of poverty. One of my recent, promising projects regards adolescent girls' aspirations and educational investment in India, in collaboration with researchers from various institutions and disciplines. This research employs a mixed-method design to unpack the quantitative findings from the randomized evaluation of an innovative "soft-skills" intervention for peer-elected girls. Using a rigorous qualitative design, we try to better understand the mechanisms and constraints explaining an overall absence of positive impact, and negative spillovers on non-treated girls.

Overall, my past research has shed light on crucial issues for poverty alleviation related to poverty measurement, targeting of the poor, and anti-poverty impact. My encouraging findings on the sustained impact of cash transfers on productive investments in Sub-Saharan Africa have constituted a unique contribution to the social protection literature. On the other hand, my research on household and risk targeting has suggested that greater attention has to be paid to targeting and insurance quality for efficient poverty alleviation. While many outstanding questions remain, I hope that my future work will continue to fill knowledge gaps and help practitioners, policy makers, and academics find positive future pathways of poverty alleviation efforts by understanding better poor households' behavior.