PhD Thesis

Submitted by: Deo-Gracias Sedjro Oloyede HOUNDOLO

TITLE:

What do we learn from multifaceted and single-sector interventions in the era of the sustainable development goals

ABSTRACT

Addressing poverty remains a shared goal, and notwithstanding recent tendencies, governments around the globe have committed to eradicating it as exemplified in the first Sustainable Development Goal (SDG) which is to end poverty by 2030. While it is relatively easy to set such goals, the promise of the SDG to leave no one behind, hinges on sustained political and economic stability and the ability to design, implement, and evaluate innovative development interventions that are context-sensitive, evidence-based, and scalable. An examination of such poverty reduction initiatives yields two broad types of interventions, that is, single sector development interventions and multifaceted interventions.

This thesis has been undertaken to contribute to the body of knowledge on the dynamics of poverty in rural areas and to feed into the debate on the effectiveness of multifaceted and single sector interventions to tackle poverty. It uses data from two West African nations: Ghana and Benin. The first substantive essay examines the mobility of rural households in Northern Ghana across different states of poverty over a five-year time span (2012 and 2016) in the absence of any major development intervention. The second essay evaluates the impact of the Millennium Village Programme (MVP) implemented in Northern Ghana between 2012 and 2016 - a multifaceted intervention designed to achieve the Sustainable Development Goals. The third essay uses a randomized control trial to evaluate the impact of a single-sector intervention, that is, the Food Production and Resilience of Farmers (PAPVIRE-ABC) project implemented in Benin from 2016 to 2022.

To elaborate, the first essay assesses poverty dynamics, between 2012 and 2016, in Northern Ghana using household-level panel data. The chapter employs household adult-equivalent per capita expenditure and a livelihood weighted asset index to estimate poverty through both one-dimensional and two-dimensional lenses. Applying static and dynamic approaches, the study investigates the correlates of poverty mobility, focusing on chronic poor households. Results show an increase in poverty rates from 44% to 51% (expenditure-based) and from 39% to 52% (asset-based) during the period. Analysis of poverty correlates does not yield clearly distinguishable patterns apart from suggesting that ownership of small ruminants might facilitate poverty alleviation.

The second essay examines the impact of the Millennium Village Project (MVP) which is a multifaceted intervention based on the “big push” theory. The MVP was designed with the intention to break poverty

traps and lift people out of extreme poverty within five years. The essay relies on panel data comprised of baseline (in 2012) and endline (in 2016) information from treatment and control villages in Northern Ghana. Poverty is measured at the household level using adult equivalent expenditure, a livelihood weighted asset index, and individual assets. After matching households on observable characteristics, the paper estimates the impact of the intervention using a difference-in-differences approach and doubly robust identification strategies. The analysis shows that the programme has a positive impact on assets but does not translate into an increase in adult equivalent expenditures.

The third essay evaluates the impact of a single sector intervention, the Food Production and Resilience of Farmers (PAPVIRE-ABC) project in Benin, through a randomized controlled trial. In the treatment group, farmers were provided with intensive agricultural-extension support and a free package of inputs consisting of improved seeds, fertilizers, and pesticides that they used on an experimental plot set-up on their own farmland. In the control group, farmers were provided standard support from agricultural-extensions agents and free access to improved seeds but not to fertilizers and pesticides. Results indicate a 24% increase in maize yield from farmers' experimental plots which may be attributed to the intervention. However, once subsidies and incentives were withdrawn, these effects were not sustained, underscoring challenges related to the sustainability and scalability of such interventions.

Overall, the message emerging from the thesis is not particularly sanguine. While worldwide, there has been a reduction in poverty, in the West African context, the idea of relying on trickle down policies without a specific poverty-focus does not support poverty reduction (Chapter 2). While there are some positive effects of a multi-sector intervention and a single sector intervention, neither are sustained (Chapters 3 and 4). The results presented in the thesis support three implications. First, it is not a question of the effectiveness of multiple versus single-sector interventions. There is considerable evidence of the success and the failure of both multipronged and single sector interventions. Second, while household survey data and modern statistical techniques are very useful, they need to be complemented with alternative approaches, especially when programs fail to work. These include, for instance, comparative analyses of the political economy of development (laws, institutions, norms, power) of marginalized regions to understand and identify how historical and contemporary political decisions have shaped and continue to shape resource allocation and development outcomes in such regions. Finally, given the short-term effects of the intervention analysed in this thesis and more widely, it is important to pay greater attention to other aspects of interventions, and not just impact, such as their longer-term financing, cost-effectiveness, and plans for scaling and sustainability.