Economic Analysis of Community-based Development

Interventions in Rural Pakistan

by

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Executive Summary

This dissertation undertakes the economic analysis of community-based development (CBD) interventions in rural Pakistan, with a focus on empirical analysis of the targeting, matching, and impact of such interventions. "CBD" is a term used in reference to projects that allow for the active participation of its end-users in their design and management. Recently, the approach has become popular as a development strategy in developing countries, because it is expected to improve the targeting performance, efficiency, accountability, and transparency of poverty-reduction interventions.

Pakistan lags behind other South-Asian nations in implementing CBD projects; one of the reasons for this could be the male dominance inherent in its society. Participation by women in the labor market and in citizens' activities outside the home is low, making it difficult to pursue there a CBD approach that involves women. Reflecting the lack of CBD activities in Pakistan, the number of academic studies on them is also small.

In this dissertation, I attempt to fill these research gaps by investigating the case of a women-driven and women-focused nongovernmental organization (NGO); such an organization

is rare in the Pakistani context. Research on the CBD approach that involves econometric analysis, within such a unique context, is therefore a valuable contribution to the existing literature.

I address two general research questions: (1) whether CBD interventions are well targeted towards the poor, and if yes, under what conditions; (2) whether CBD interventions result in improvements in the welfare of participants, and if yes, under what conditions.

To answer these questions, I conduct in-depth analysis, covering all the major steps of the CBD process, that is, targeting performance; within the community organization (CO) dynamics, through analysis of the preference-matching process; and impact assessment. In each step, I pay sufficient attention to clean identification, using microeconometric tools. Owing to the lack of such evidence in the case of Pakistan, the analysis in this dissertation is expected to contribute significantly to the literature.

For the empirical analysis, I conducted original surveys to compile a comprehensive dataset. I conducted six surveys that were implemented in collaboration with the NGO. As the main data source, I use a two-year panel dataset of villages and sample households, comprising the

baseline and follow-up surveys. I also collected detailed information on COs on a census basis. The panel dataset of sample households also contains information on an intervention conducted as a randomized controlled trial (RCT) to mitigate crop income losses stemming from wild boar attacks (WBAs). This is one of the rare attempts in Pakistan to apply RCTs to the assessment of CBD activities.

The empirical results are summarized in terms of targeting performance, preference-matching, the impact of community-based organization (CBO) participation on welfare indicators, and the impact of RCT intervention, in that order.

I first assess targeting-performance by testing the following two hypotheses: (1) whether CO villages are systematically poorer and more vulnerable than non-CO villages; (2) whether CO members (T-group) are systematically poorer and more vulnerable than non-members (C_1 -group) in CO villages. I test the hypotheses by using baseline village and household level surveys. Results vis-à-vis targeting performance is well in place. The NGO has been able to reach out to poorer villages with lower levels of adult literacy and access to basic amenities, and higher susceptibility to natural disasters; it has also reached out to households with lower access to basic amenities and greater vulnerability to natural disasters.

In the next stage, I conduct the preference matching analysis in two ways: (1) match between preferences of CO members, CO-proposals, and PHKN interventions, and (2) identify correlates of the preference matching of CO members, CO-proposals, and PHKN interventions To cover all the mentioned dimensions of performance-matching process, I use a comprehensive dataset compiled from CO survey, baseline and follow-up surveys of sample households, and CO meeting records. I find the overall matching of 70 percent between CO members' preferences and CO-proposals and 52 percent between CO-proposals and PHKN interventions. At the same time, I show that CBD interventions were free from the elite capture and no difference between female and male COs as far as the preference matching is concerned. Moreover, NGO facilitator influence was weak.

In the last stage, I conduct two types of impact assessment. In the first assessment, which involves a conventional methodology that employs household surveys, I compare welfare indicators of CO (*T*-group) and non-CO (C_1 -group and C_2 -group) households. I use a two-year panel dataset of villages and sample households. The analysis shows that CO membership has improved the welfare of member households in terms of women's empowerment, credit access, *Zakat* payment, and the resilience to withstand micro-shocks; nonetheless, membership was also

found to have a minimal impact on the consumption growth of members.

In the second impact assessment, I examine the impact of RCT intervention on crop losses due to WBAs and consumption measures. I apply the difference-in-difference (DID) econometric technique to a two-year panel dataset of the households eligible to be included in RCT. I find a significant reduction in the crop-income losses of the treated households. . Nevertheless, the impact of the intervention on consumption measures is insignificant.

I speculate that these empirical findings suggest that the active involvement of women at the NGO's management and end-user level upon embracing CBD approaches leads to better targeting performance and positive impacts, as well as the absence of elite capture. As this dissertation investigates only one NGO, the provision of empirical evidence with regard to this speculation is left to future research.

With regard to empirical findings, future research can take several directions in supporting and strengthening the evidence offered by this dissertation. Expanding the database by the use of social experiments is one direction, and this is especially useful in cleanly identifying the influence of facilitators in the preference-matching process. There is a need for further investigations regarding the opportunity costs incurred with participation in CBD activities and other factors that may possibly dilute the welfare impact of CBD activities.