

HOW DO RAINFALL SHOCKS AFFECT RURAL HOUSEHOLD WELFARE, LABOR SUPPLY AND MIGRATION DECISIONS?

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Summary

This study examines the effect of extreme weather events on rural households in a developing country. Such events pose a threat to the livelihood of farmers and have wider ramifications for food security which may not necessarily be confined to the rural areas. In that light, such a study of extreme weather-related disasters and their impact on economies is essential for the formulation of effective government policy response.

This dissertation consists of mainly two parts. First part examines the relationship between rainfall shock and household welfare outcomes, that is, per capita income and per capita consumption by exploiting a three-year panel data with the help of fixed effect model. This study finds that extraordinary rainfall reduces per capita income of the rural households mainly because of the reduction in crop income. Evidence of consumption smoothing is also observed which is mainly channelized through liquid assets such as savings, selling of livestock, and lastly through borrowing – which is mostly from informal sources. Heterogeneous analysis also found that the impact of disasters for the households living in communities having better access to physical or financial infrastructure seem to be at an advantage and show resilience in the event of shocks.

The second part deals with the impact of rainfall shocks on labor supply and temporary migration decisions. The results of estimating the logit fixed effects model and linear probability model suggest that the extraordinary shocks diminish non-farm work opportunities, thereby decreasing farm wages and creating excess supply of labor. As a coping strategy, adult males are found to temporarily migrate for remittances, particularly in areas without direct access to urban areas. This

implies that those individuals whose daily commuting costs out of disaster hit area in search of non-farm wages are greater are more likely to migrate.

Key Words: Rainfall disasters, Household welfare, Consumption smoothing, Temporary migration, Labor supply, Remittances