

Researchers

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Updated: September 2009

Breaking the Cycle: Reproductive Health and Poverty Decline in Rwanda

Despite a high level of economic growth, population growth in Rwanda is still outpacing the rate of poverty reduction. To create the required surplus of capital and labor needed for investments in human capital to arrive at economic development, the cycle of decreasing agricultural productivity, high population growth, and increasing poverty will have to be broken. Reproductive health could be a key mechanism to break this cycle by addressing the high levels of infant and child mortality. The central hypothesis is that reproductive health policies can bring down these levels in the short run and will create the surplus at the household level to invest in the health and education of the children. The feedback effects on the cost-recovery of public services will contribute to the required surplus at the national level, enabling the country to collect the “demographic bonus.”

Country where the research will take place

Rwanda

How does the research describe the impact of population/reproductive health on poverty reduction and/or economic growth?

The central hypothesis in this program is that reproductive health policies and practices can bring down excess fertility in the short run and will create the income surplus at the household level to invest in the health and education of the children. The midterm feedback effects of this private consumption on the cost-recovery of public services will contribute to the required surplus at the national level and will eventually enable the country/countries to collect the “demographic bonus.”

The proposed research will proceed in four steps:

1. Providing insight into the constraints on the use of contraception to bring down the actual fertility to the desired family size and into the effectiveness of family planning programs in removing these constraints within a period of five to ten years.
2. Understanding the time-lag in reducing replacement fertility as a response to mortality and estimating short-term and midterm effects on the stalling of the demographic transition.
3. Estimating the income surplus for the individual households that can be achieved by reducing family size to the desired level and the way this surplus is allocated to raise the quality of life and to improve the health and educational attainment of the children.
4. Modelling the feeding effects of this increased private consumption on the cost-recovery of public services like health

care, education, water supply, waste management, and the nonlinear multiplier effects on private sectors in the economy and on government spending on public services.

How will the research address a policy need, and what kind of policy lesson is expected?

Despite a high level of economic growth, population growth in Rwanda is still outpacing the rate of poverty reduction. Less attention is being paid to reproductive health as additional way to break the cycle. Yet it is plausible that in processes of cumulative causation various points of intervention may exist to reverse the process. The crucial aspect is to identify the conditions under which reproductive health could be a key mechanism to break this cycle in the socio-economic, demographic, and cultural context of Rwanda.

Methods used

Four methodological issues will have to be addressed: the variety of pathways, the issue of context dependency, the issue of reversed causality, and the effects of disturbing events.

1. Although the overall pathway is clear: reproductive health may bring down excess fertility in the short and the long run, which will create an income surplus at the household level and contribute to economic development, the various mechanism are much more complicated. Short-term and long-term effects may be confounded, as may period and cohort fertility. We will apply at least three criteria for causal inference. The first is time order: causes should precede effects. The second is the causal mechanism that may involve a number of intervening links that should be identified and substantiated empirically. The third is that alternative explanations should be ruled out. In elaborating the projects we will evaluate existing knowledge in the

light of these criteria and in setting up our hypotheses and their testing we use the criteria to specify our models. In particular we will pay specific attention to the distinctions between distant and proximate determinants of the phenomena under study, allowing us to further identify the links in the causal mechanisms and multiple causality.

2. Context-dependency is an issue at various levels of analyses. At the national level the phase of the demographic transition the country is in, will have a dominant impact. Also the quality/quantity trade-off depends on the opportunities for schooling and the confidence of survival.
3. The issue of reversed causality is most pertinent in the analyses of the relation between two macro phenomena, as the behavioural mechanism at the individual or community level is ignored. By adopting the macro-micro-meso framework most, but not all, of these issues can be resolved. In our research we break into this cycle by taking the present fertility preferences as a starting point, concentrating on unravelling the discrepancy between wanted and actual fertility. This reduces the problem to identifying the constraints at the level of the context and restrictions at the level of the individual to reduce childbirth to the ideal family size.

4. The effect of disturbing events is not only a methodological but also a substantive problem. In times of crisis and/or mass displacement, behavior will be very different and major disturbances, like the genocide in Rwanda, may have lasting effects.

Data used

Rwanda Demographic and Health Survey (2005), Surveys on Living Conditions (EICV), Social Accounting Matrix from the Ministry of Finance and Economic Planning.

Research product

Nistha Sinha and Joanne Yoong, "Long-Term Financial Incentives and Investments in Daughters: Evidence From Conditional Cash Transfers in India," *World Bank Policy Research Paper*, no. 4860 (March 2009), available at <https://guttmacher.org/pubs/journals/3512209.html>

Notes

This is an overview of a program that encompasses five subprojects.