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Christopher Barrett, Thomas Walker and Robert Osei



Community Involvement in Public Goods Provision

Evidence from a Field Experiment in Ghana



In brief

• In developing countries, where central governments are typically constrained in their capacity to build and maintain rural infrastructure, villagers sometimes raise funds for projects. NGOs and policy makers are harnessing this village-level capacity by designing community-driven development programs. The study seeks to improve the system of financing and targeting public goods in a way that incorporates community members and better reflects their desires and needs.

Key findings:

- Individuals are willing to contribute to local infrastructure projects Inviting community members to co-finance projects serves as a test of their interest in the project and augments the resources provided by government or donors. Therefore, projects are better targeted to community needs and more infrastructure can be provided.
- A broad-based pilot study is necessary to test our findings at the national level This research covered four villages in a small area of southern Ghana.
- Ethnic fractionalization is not in itself a constraint to successful fundraising New migrants and minority ethnic groups actually contributed more in our study. This is an interesting finding given previous evidence that community-driven programs are less successful in ethnically diverse communities. This suggests that the lower success rate in ethnically diverse communities may be due to weaker community leadership.
- Individuals who are more trusted by their peers donated more The link between trustworthiness and donations is strong. Thus, the most trusted community members may be better advocates of public goods projects than community leaders. They should be identified and encouraged to lead the fundraising activities.





In developing countries, where central governments are typically constrained in their capacity to build and maintain rural infrastructure, villagers sometimes raise funds for projects. NGOs and policy makers are harnessing this village-level capacity by designing community-driven development programs. The objective of this study is to improve the system of financing and targeting public goods in a way that incorporates community members into the process and better reflects their desires and needs.

Key Messages

This study shows that individuals are willing to contribute to local infrastructure projects

Individuals should be willing to contribute to the cost of infrastructure that delivers benefits to them. Inviting local community members to co-finance projects serves as a test of their interest in the project and augments the resources provided by government or donors. As a result, projects are better targeted to the needs of communities and more infrastructure can be provided.

"This research addresses a pressing issue in development: the ability of individuals in small communities to interact with each other and their government to achieve improvements in critical infrastructure and services"

A broad-based pilot study is necessary to test our findings at the national level

This research covered only four villages in a small area of southern Ghana. In the paper we discuss how a nationwide pilot program might now proceed to refine the system's design at a national level.

We demonstrate that ethnic fractionalization is not in itself a constraint to successful fundraising

New migrants and individuals from minority ethnic groups actually contributed more in our study. This is an interesting finding given previous evidence that community-driven development programs are less successful in ethnically diverse communities. Our result suggests that lower success rate in ethnically diverse communities may be due to weaker leadership at the community level, rather than a lower level of demand for public goods.

Individuals who are more trusted by their peers donated more

The link between trustworthiness and donations is strong, and suggests that the most trusted community members may be better advocates of public goods projects than community leaders. These individuals should be identified and encouraged to lead the fundraising activities.

Policy Motivation

This research addresses a pressing issue in development: the ability of individuals in small communities to interact with each other and their government to achieve improvements in critical infrastructure and services. In developing countries, where central governments are typically constrained in their capacity to build and maintain rural infrastructure, villagers sometimes take the initiative and raise funds for projects themselves. NGOs and policy makers are increasingly harnessing this ""Individuals should be willing to contribute to the cost of infrastructure that delivers benefits to them" village-level capacity for fundraising and organization by designing communitydriven development programs. Community-driven development has a number of potential benefits: local people have more choice and ownership over the project outcomes, and centralized funding can be augmented by local contributions. However, previous research has shown that ethnic fractionalization within even small communities can undermine the effectiveness of these programs. This project therefore seeks to understand how individuals' willingness to contribute to community-level public goods depends on their characteristics and position in the social network. In addition, two mechanisms designed to boost contributions are tested. The objective of the study is to improve the system of financing and targeting public goods in a way that incorporates community members into the process and better reflects their desires and needs.

Project Summary

In developing countries, where central governments are typically constrained in their capacity to build and maintain rural infrastructure, villagers sometimes raise funds for projects. NGOs and policy makers are harnessing this village-level capacity by designing community-driven development programs. The objective of this study is to improve the system of financing and targeting public goods in a way that incorporates community members into the process and better reflects their desires and needs. The project's findings broaden our understanding of the individual decisions underlying community-level resource mobilization for public goods in Ghana. We illustrate some ways in which policy makers could partially finance community-level public goods with individual voluntary contributions. Conditioning the delivery of public goods on partial fundraising by community members serves as a test of their interest in and demand for the project. Unpopular projects that do not garner enough support to reach the fundraising threshold would not go ahead, saving donors' money and ensuring that scarce funds flow instead towards more desirable projects. By partially funding projects with community contributions, limited aid budgets can be stretched further.

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Implementation

This study shows that community-level fundraising can be an effective tool in augmenting existing funds for public goods, and identifies ways of increasing the funds raised. Various ways in which the findings of the paper could improve the design of infrastructure projects are discussed in the penultimate section of the working paper. However, the results relate to a small and geographically concentrated area in Ghana. A nationally representative pilot study is needed to test the model before implementing it as policy. The pilot would cover a random sample of communities from across the country. Community members would decide by ballot which of a shortlist of standardized public goods projects to pursue. Funds would then be solicited from community members and organizations. Projects would go ahead only if community donations met or exceeded a defined threshold. Results from the pilot study could be used to design a national infrastructure program. This research will be of interest to governments and policy makers (both national and local, including Members of Parliament and District Assemblies), and donor agencies and NGOs seeking to improve the targeting and financing of community-level public goods such as water and sanitation, roads and electricity. It will also interest local groups, such as churches and farmers' co-operatives, looking to improve the effectiveness of their community fundraising activities.

Further Readings

For a good summary of the work to date on community-driven development, see Mansuri and Rao (2004). Kleemeier (2000) provides an interesting account of the ways in which community involvement influenced the success of rural piped water schemes in Malawi. Finally, List (2007) summarizes the vast body of research done recently using field experiments.

Kleemeier, E. (2000), 'The impact of participation on sustainability: An analysis of the Malawi rural piped scheme program.' World Development, Vol. 28, No. 5, pp. 929–944.

List, J. A. (2007), 'Field experiments: A bridge between lab and naturally-occurring data.' NBER Working Paper 12992, March.

Mansuri, G. and V. Rao (2004), 'Community-based and -driven development: A critical review.' World Bank Research Observer, Vol. 19, Spring, 1–39.

About the authors

Christopher Barrett is the Stephen B. and Janice G. Ashley Professor of Applied Economics and Management and International Professor of Agriculture at Cornell University where he also serves as the Cornell Center for a Sustainable Future's Associate Director for Economic Development Programs and the Director of the Cornell Institute for International Food, Agriculture and Development's initiative on Stimulating Agricultural and Rural Transformation. He holds degrees from Princeton, Oxford and the University of Wisconsin-Madison, and worked as a staff economist with the Institute for International Finance in Washington, DC in the latter half of the 1980s. Professor Barrett has been principal investigator (PI) or co-PI on more than \$18 million in extramural research grants.

Robert Darko Osei is a researcher at the Institute of Statistical, Social and Economic Research at the University of Ghana and is interested in capital flows (FDI and aid) and growth, growth and poverty, and macroeconomics. Dr Osei received his PhD from the University of Nottingham, and examined aid, trade and growth in rural Ghana.

Thomas Walker is an economist in the Middle East and North Africa Poverty and Gender group at the World Bank. He is currently advising the Government of Tunisia on poverty methodology and the economic and social impacts of policy reform. He has previously worked at the Reserve Bank of Australia and obtained his Ph.D. in Economics from Cornell University. The International Growth Centre (IGC) aims to promote sustainable growth in developing countries by providing demand-led policy advice based on frontier research.

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For media or communications enquiries, please contact mail@theigc.org

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International Growth Centre, London School of Economic and Political Science, Houghton Street, London WC2A 2AE

