Can group procurement be equitable?

RESULTS FROM A FOOD SECURITY PROGRAM IN RURAL BIHAR

This note is based on the paper The Distributional Consequences of Group Procurement: Evidence from a Randomized Trial of a Food Security Program in Rural India, authored by P. Christian.

CONTEXT

Bihar is the third most populous state in India with 8.1% of the country’s population or 104 million people, 89% of whom live and work in rural areas. Rural Bihar is characterized by suboptimal service delivery, a complex political and social fabric, limited inclusion in institutions, limited economic opportunities, poor development infrastructure and limited availability of financial services for the poor. Bihar lags behind the national average in all indices of nutritional status – 50% children aged five and under are stunted, 21% have muscle atrophy and more than 44% are underweight.

The Public Distribution System (PDS), India’s primary food security program is plagued by inefficiencies, leakages and wastage related to systemic factors of procurement, transportation, storage and targeting. Notably, the costs of the system are higher in administratively weaker states that account for a large share of the poor.

Landless subsistence workers are most at risk since they depend on local markets to purchase seasonally available goods. As a consequence of male out-migration, women headed households are dependent on infrequent and insufficient remittances to purchase food which is typically neither nutritionally diverse nor enough in quantity to meet their nutritional requirements.

In order to avoid these inefficiencies, programs have begun decentralizing procurement.
to allow communities to choose the goods themselves and procure them locally. An important concern in Bihar is whether decentralized procurement will improve or worsen targeting outcomes. If communities choose to buy the lowest cost, but also lowest quality foods available, the intervention could be self-targeting since poor households will find it worthwhile to participate. If communities choose to buy higher cost foods that may be higher quality, the program will not maximize the degree to which benefits accrue to the poor.

**BOX 1: OBJECTIVES (MDGS)**

The stated objectives of this intervention directly supported the following Millennium Development Goals:

(i) Goal 1, Target 1: improving incomes of the poorest - reducing the proportion of the people living on less than $1 a day.

(ii) Goal 3, Target 4: promoting gender equality and empowering women.

(iii) Goal 8, Target 45: development and implementation of strategies for decent and productive work for youth.

**INTERVENTION**

The Bihar Rural Livelihoods Promotion Society (BRLPS, colloquially known as JEEViKA) was established by the GoB to help develop scalable and sustainable models for livelihoods enhancement of rural poor households. The objective was to reduce the Below Poverty Line (BPL) population to 22% by 2015 or about 1.5% per year, in order to achieve the Millennium Development Goals (MDG) target and the GoI's Eleventh Five Year Plan strategy which emphasized investment in women's socio-economic empowerment, enhancing livelihood opportunities, and participation of local level institutions to make service delivery more accountable.

JEEViKA piloted in 6 blocks in 6 districts of Bihar – Gaya, Khagria, Madhubani, Muazzafarpur, Nalanda and Purnea. With the NRLM program it expanded to all 534 blocks in 38 districts by 2011.

The BRLPS's primary role is to organize women into Self-Help Groups (SHGs) that conduct microfinance activities and participate in other BRLPS programs. SHGs are further grouped into Village Organizations (VOs) consisting of 100-150 women, all of whom live within the same village. The project design targets poor rural women by considering their existing social vulnerability and spatial distribution. From 2008-2011 the project mobilized more than 1.8 million poor rural women from rural households into 1,54,626 Self-Help Groups (SHGs) and 10,445 village organizations.

While the BRLPS was not specifically mandated to reduce malnutrition, since most households incurred debts due to health and nutritional expenses, their SHG and VO network became an ideal vehicle for policy makers to deliver targeted public goods in order to combat the issue.

The Food Security Fund (FSF) is a direct livelihoods intervention designed to target the most credit-constrained

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3. These objectives were also attuned to the World Bank’s Country Strategy (CAS-August 2004) for India, which highlighted support for lagging states including Bihar through sustained growth, poverty alleviation and improved access to quality social services.
members of the VOs, without exposing them to high interest rates. In response to the issues of leakage and wastage in existing programs, and to improve community participation in the process, the program incentivizes group procurement in local markets. Although the rice is not directly subsidized, the program encourages bulk purchasing - thereby reducing the cost of rice at the vendor level. Pooling the demands of the entire VO together also improves bargaining power, and calls for more competitive bids. Most importantly, purchases through the food security funds avoids interest costs for (the poorest) households that would otherwise rely on credit to buy rice.

Baseline, 1,518 households were re-surveyed in at least one of the two follow-up rounds with balanced attrition (p=0.76). Importantly, in all the clusters being evaluated, rice was the food item on which the FSF subsidy was targeted. The empirical data thus collected was correlated with a pre-existing model to evaluate the impact of the program.

KEY FINDINGS

Since rice is a non-homogenous grain with several different qualities available in the same shop, it is problematic to target the subsidy at the desired beneficiaries. The poorest households that are typically most at risk from food insecurity benefit the most when the VOs choose the lowest quality of rice for procurement. Empirical results show significant increases in consumption for the wealthiest in the average community. Impacts for the poorest households are sensitive to which variety of rice is procured by the community. Increase in consumption for the poor can be seen when enough villages choose to opt for the lowest quality grain. Moderately poor households, who may typically consume better quality rice, adjusted their preferences to select into the program when the lowest quality of rice is procured. However, higher income households chose to opt out of the program in this scenario.

Figure 1: Correlation between household wealth and FSF participation

EVALUATION DESIGN

A cluster-randomized control trial was conducted in six administrative blocks, which had a significant numbers of VOs and had not yet availed of the FSF. The blocks were divided into three clusters each, the program was implemented in 18 clusters comprising 90 VOs, with 45 VOs each designated as treatment and control. Baseline data was collected from five VOs in each of the 18 evaluation clusters in July 2012 prior to initiation of the lending program. The lending program began in September 2012 and a post-intervention survey was completed in February-March 2013 covering detailed food expenditure, weekly consumption, experiences of food insecurity, agricultural production, income and child health indices. Out of the original 1,529 households surveyed at baseline, 1,518 households were re-surveyed in at least one of the two follow-up rounds with balanced attrition (p=0.76).

In Bihar rice is one of the three staple food, others being wheat or maize, which together account for 33% of the food expenditure of the households surveyed. Including home produced goods, rice alone accounts for 25% of all expenditures of food in the state.

The quality and price of rice are positively correlated, with better quality rice costing more.
When better or the best quality of rice is chosen, take up is concentrated amongst the wealthier households. The poorest households may still take up the program to increase the quality of rice they consume, but it leads to a reduction in their consumption, because they shift to purchasing higher cost food than they did in absence of the program. This reduction of food grain consumption among the poor and moderately poor was an unintended effect of the program.

POLICY LESSONS

Understanding the processes by which some of the VOOs successfully selected the lowest quality and price of rice could reveal mechanisms that make the group procurement approach of the program better targeted towards the poorest households. Decentralizing the choice of good(s) to subsidize may seem like a good way to incorporate local preferences, but in the absence of adequate controls, the process may exacerbate local inequalities. The quality of rice selected reflects the VO committee members’ desirability for that rice, and not necessarily the needs of the poorest households in the cluster.

An analysis of VO committees reveals that wealthier members are disproportionately represented therein and are more likely to participate in the program than non-committee members. To reinforce the potential for program participation to be well targeted, the program design should be adjusted to ensure that the choices of the poorest households are given more influence in procurement decisions.

CONCLUSIONS

Besides the well-documented challenges of elite capture, limited information about markets and preferences continue to plague even the most well-intentioned development efforts. Improving both efficiency and equity in programs involving group procurement will require policies that combine in-kind transfers with mechanisms that address beneficiary preferences, including for the poorest sections of society.

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This note was prepared by Deepti Kakkar (Consultant, World Bank) and published by the Food & Agriculture Global Practice at The World Bank, 1818 H Street, NW Washington, DC 20433 USA. Website: www.worldbank.org. For further information or copies please email: galex2@worldbank.org.

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REFERENCES


