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Community-Based Risk Management Arrangements: A Review

RUCHIRA BHATTAMISHRA
World Bank, Washington, DC, USA

and

CHRISTOPHER B. BARRETT *
Cornell University, Ithaca, NY, USA

Summary. — Risk and its consequences pose a formidable threat to poverty reduction efforts. This article reviews a plethora of community-based risk management arrangements across the developing world. These types of arrangements are garnering greater interest in light of the growing recognition of the relative prominence of household- or individual-specific idiosyncratic risk as well as the increasing shift towards community-based development funding. The article discusses potential advantages (such as targeting, cost and informational) and disadvantages (such as exclusion and inability to manage correlated risk) of these arrangements, and their implications for the design of community-based social protection programs and policies.

Key words — community institutions, risk management, developing countries

1. INTRODUCTION

Vulnerability to risk is increasingly recognized as one of the defining characteristics of poverty (World Bank, 2000). Over the past decade or so, this has generated a large amount of research on the various aspects of risk in developing countries, including the sources and types of risk, the effects of risk and shocks on poor households, and individual, household and community responses to risk. [1] If risk is salient to understanding poverty dynamics, then an understanding of the strategies the poor employ to cope with shocks is also important for development policy and practice.

Although many previous studies have examined community-based responses to risk in developing countries (most commonly, mutual insurance arrangements) and, in some cases, the extent to which they enable households to cope with shocks, none provide an up-to-date, comprehensive overview of the most commonly-observed arrangements. This article fills this gap by reviewing a broad range of sources in order to provide as extensive a coverage of existing arrangements as possible, including arrangements which have not yet received much scrutiny from researchers, yet are commonly instituted by states or nongovernmental organizations (NGOs). Given the increasing importance of community-based and community-driven development funding (Mansuri & Rao, 2004), as well as the growing recognition of the critical role of social protection policy in risk management and poverty reduction (Barrett, Carter, & Ikegami, 2008), we expect that this review will be of immediate interest to policymakers, practitioners and researchers.

Community-based risk management arrangements (CBRMAs) have the potential to fill the gap between household-level and national-level strategies for risk management. These arrangements have the ability to help households cope with idiosyncratic shocks but are likely to break down in the face of covariate shocks (unless they find ways to transfer risk outside the community). However, there is always some idiosyncratic component in shocks, even largely covariate ones, because of differences among households in their exposure and capacity to respond to shocks. In addition, a growing body of empirical evidence indicates that idiosyncratic risk dominates covariate risk in rural Africa and Asia (Deaton, 1997; Kazianga & Udry, 2006; Lybbert, Barrett, Desta, & Coppock, 2004; Morduch, 2006; Townsend, 1995). This suggests the potential for CBRMAs to address a diverse range of shocks. Given these reasons, a review of existing CBRMAs can facilitate a better understanding of their limitations and advantages and help to devise ways in which to either bolster them or design new programs based on them.

The CBRMAs reviewed in this article primarily offer social insurance, although a few facilities for community-based social assistance are also discussed. The review also emphasizes the limited empirical evidence that exists on the efficacy and role of external intervention. On the one hand, external intervention may be useful for bolstering CBRMAs in the face of covariate shocks and enabling the inclusion of excluded groups through well-targeted social assistance programs. On the other hand, it may also have adverse impacts on existing CBRMAs by disrupting information flow, cooperative decision-making and informal social insurance, among other things.

The rest of the article is organized as follows: in Section 2, we define the main features of CBRMAs. In Section 3, we catalog a range of CBRMAs commonly observed across the developing world. In Section 4, we discuss the strengths and shortcomings of these arrangements. In Section 5, we discuss the policy implications for social protection programs which

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aim to support CBRMAs. Finally, in Section 6, we provide some concluding remarks.

2. COMMUNITY-BASED RISK MANAGEMENT: STYLIZED FEATURES

We adopt a broad definition of CBRMAs to include all coordinated strategies used and managed by social groupings of individuals for the purpose of protection against the adverse effects of different types of risk. These include mutual insurance groups of various sorts which have been extensively documented in previous literature, but also groups that provide facilities for savings and credit and provision of public goods, among other things. We use the word "community" loosely in order to include agents whose relations have an informal and non-market character. This can include persons linked by lineage, ethnicity, religion, occupation, historical ties, proximate residence, etc. The key criteria are that they share a common motivation for risk-pooling and that their strategies are explicitly, if often informally, coordinated. In addition, we use the phrase "community-based arrangements" to mean systems adopted by social groupings of individuals, whether indigenously developed or otherwise, whose management is typically executed by members of the groups themselves.

Community-based arrangements are characterized by low information and transaction costs since participants typically live in close geographical proximity and their economic circumstances (wealth, income, realizations of shocks) are, for the most part, easily observable. Contracts, generally unwritten, are found to be self-enforcing even in the absence of state policing and judicial courts arising from a combination of effective peer monitoring, fear of social sanctions as well as repeated interactions over time between the same individuals.

In this review, we discuss CBRMAs which are homegrown, completely decentralized, and typically sustained by a system of unwritten rules,[2] as well as CBRMAs that are initiated by an external agent such as a donor, government or NGO and often governed by a system of codified rules (but like the homegrown initiatives, usually managed by members of the community themselves). We refer to the former as "homegrown" CBRMAs and to the latter as "externally-induced" CBRMAs.

There are at least three important differences between homegrown and externally-induced CBRMAs. First, unlike the latter, homegrown arrangements are characterized by very simple transactions and have little or no requirement for accounting and financial management skills. Since the administrative, management and technical requirements of externally-induced arrangements are more onerous, their scalability is inherently limited by the capacity of individuals to track transactions informally. Second, as discussed by Platteau (1997), in homegrown arrangements, transfers to beneficiary households typically take place ex post (i.e., after the realization of a shock). In externally-induced arrangements, however, transfers often take place ex ante (akin to premiums paid under formal insurance contracts) as well as ex post (akin to claims in formal insurance). Third, unlike externally-induced arrangements, premiums and coverage are not well-defined in homegrown arrangements and often state-contingent and implicit, embedded in the cost of establishing and maintaining social ties.

In spite of these differences, we choose not to distinguish CBRMAs on the basis of whether they are indigenous or externally-driven, since they share a more important feature which we define as key to CBRMAs, namely, the use of preexisting interpersonal relations for risk management purposes. In addition, due to the evolving nature of these groups in response to increases in market penetration and the monetization of the economy, many externally-induced institutions are based on traditional, homegrown arrangements.

We instead categorize CBRMAs on the basis of the primary function they are designed to serve, including the provision of mutual insurance, insurance for major life-events, savings and credit facilities, social assistance facilities, and public goods and services. This taxonomy is by no means exhaustive. Rather, it is merely suggestive of the different types of risk-sharing arrangements found in low-income communities. In fact, the diversity of CBRMAs across the developing world is immense, and any attempt to categorize them in a systematic fashion necessarily involves a loss of descriptive richness. In using our taxonomy, we recognize that arrangements for the provision of informal mutual insurance, typically enforced via social mechanisms, can be distinguished from CBRMAs which tend to be more institutionalized and typically involve community-based groups with explicit, often codified, rules. Consequently, in the next section, we describe these informal, typically homegrown, arrangements separately before we proceed to describe more codified, group-based arrangements (which may be either homegrown or externally-induced).

3. A CATALOG OF COMMUNITY-BASED RISK MANAGEMENT ARRANGEMENTS

In this section, we describe the main features of a number of commonly-observed CBRMAs, based on the primary function which they are designed to serve.

(a) *Informal mutual insurance*

A well-developed literature in anthropology, political science and sociology documents the existence of reciprocal gift-giving, which can help in risk management if "gifts" are sensitive to shocks or to the observed income or expenditure level of individuals (see, e.g., Colson, 1962; Popkin, 1979). These observations have been extensively empirically corroborated in the economics literature. For example, Rosenzweig (1988) found that the net transfers received by a household increase when income falls relative to its average value. Lucas and Stark (1985) provided evidence from rural Botswana that the amount of remittances is responsive to the severity of droughts and ownership of drought-sensitive assets, such as cattle. Deininger, Garcia, and Subbarao (2003) documented the dramatic increase in receiving foster children by Ugandan households in the wake of deaths of biological parents due to the HIV/AIDS epidemic.

Mutual insurance is also incorporated into many informal credit arrangements, enhancing the risk management function of the (informal) contract. There are two broad types of credit-based quasi-insurance. The first adjusts the terms of existing loans according to shocks which happen to either borrower or lender. In one of the best known examples of this, Udry (1990) found evidence of informal, state-contingent loans in rural Nigeria that provide insurance against a wide variety of idiosyncratic production and consumption shocks (such as flooding, wind or rain damage, insect infestation, illness). In this arrangement, loans are state-contingent, that is, the borrower pays a lower interest rate or enjoys an extended repayment period if faced by a negative shock after the loan was agreed. Similarly, the lender receives a higher interest rate or earlier repayment if faced by a negative shock after the loan was agreed. Due to the high incidence of idiosyncratic shocks faced by households in this setting, the quasi-insurance