NEW AND INNOVATIVE INSTRUMENTS TO MANAGE RURAL RISK

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Risk and uncertainty are pervasive in rural areas. Some risky events are household-related and specific (for example, idiosyncratic risks such as family illness or death, injury or disability, life cycle events) and others spread across households and areas (for example, covariate risks such as drought and flood, commodity price fluctuations or macroeconomic shocks). These events cause losses of natural, physical, human and financial assets, declines in asset values and losses in revenues and incomes in the short and/or longer term. Also inefficient risk management (RM) strategies can incur costs (actual, opportunity and external) to households and communities, and result in losses in social welfare. The aim of the symposium was to look at the latest thinking on risk management and expose it to scrutiny. Some of the relevant material is now available on the Internet (see, for example, <*www.zef.de*> for D. Wiesmann and J. Juetting, *www.worldbank.org/sp* for P.B. Siegel and J. Alwang, and *www.cgiar.org/ifrpi* for J.R. Skees, P. Hazell and M. Miranda).

To some extent, self-insurance (crop and variety diversification, resistant crops, field fragmentation and staggered plantings, precautionary savings with livestock and food stocks, and so on) and informal risk arrangements (for example, social networks, moneylenders) can help poor households manage some idiosyncratic risks. However, for covariate risks (often manifested through fluctuations in commodity prices and/or yields), self-insurance might be insufficient and informal RM arrangements based on social networks tend to break down. Absent or poorly functioning finance and insurance markets, limited asset and risk pools, and poor integration into labour and product markets exacerbate the impacts of risks for many poor households, especially in remote rural communities.

There are several new and innovative RM instruments available for micro (individual, household), meso (community, financial institution, local government) and macro (national) levels. In many cases these instruments have been restructured (as opposed to merely resurrected) to deal better with efficiency and equity issues associated with moral hazard, adverse selection and transactions costs, and to provide coverage for broader segments of the rural population (rather than specific subgroups such as farmers/landowners).

There is a new focus on proactive management such as risk reduction (to prevent risky events) and mitigation (to provide compensation for losses), and in-place rather than ad hoc coping mechanisms (such as work or food programmes that can be scaled up or down as needed). Many of the instruments are 'hybrids' based on public–private sector partnerships, and formal–informal finance and insurance mechanisms.

The various instruments should be considered individually and together in order to identify links, overlaps, gaps (for example, information needs, institutions and delivery mechanisms, and coverage). It is also important to evaluate RM instruments not only for their ability to smooth income and consumption variability, but also for their ability to help households increase their assets and expected income and consumption over time. The types of instrument are listed below.

Commodity price insurance

Use of international commodity markets can provide floor prices for producers and ceiling prices for consumers. There can be delivery to macro, meso and possibly micro levels.

Natural disaster and hazards insurance

Catastrophe bonds and international reinsurance markets are available at the macro level (with indemnities, in turn, used by government to assist affected households). Weather and 'area yield-based index' insurance can replace some traditional crop insurance against yield risk. Delivery can be to meso levels (for example, financial institutions, farmer associations) and micro levels (to farmers and the broader rural population).

Rural financial institutions and micro-finance institutions

Credit–savings–insurance linkages can be provided by finance institutions. These can deal with both idiosyncratic and covariate risk using savings for self-insurance, risk-pooling insurance products and credit for consumption smoothing. Also various types of insurance can be linked to credit to insure a loan or the borrower/saver.

Formal insurance markets (including micro-insurance)

Life, health, disability or property insurance can be linked or unlinked to credit. Potential exists for delivery through rural finance and micro-finance institutions and/or through other meso-level institutions (for example, producer associations).

Interlinked contracts

Contract farming, outsourcing and vertical integration provide means for farm households and/or farmer associations to share risks with others in the marketing/distribution chain. All require contractual arrangements.

Safety nets and community projects

Safety nets take the form of social funds, work programmes, food subsidies and programmes to help the poorest and most vulnerable individuals and households (elderly, disabled, children and so on). There is potential to achieve both consumption smoothing and asset building for longer-term RM.

Off-farm employment and small enterprises

Finding another, or a supplementary, occupation is, in practice, the major means of household self-insurance, allowing for diversification of economic activities to spread risks and/or increase expected income. Policy reforms such as liberalization and privatization, investments in transport and communication infrastructure, legal rights and provision of labour market information can widen opportunities.

Agricultural research and extension

Work is needed on farming systems, resistant varieties, improved water management and better post-harvest technologies. One of the advantages of improved agricultural research and extension is the potential to both raise expected incomes and lower their variability. There is an important role for extension agents to provide information on risks and various RM instruments.

Attention was focused on natural disaster and hazard insurance, notably rainfall-based index contracts, and on health insurance. Both types of insurance can be linked or unlinked to credit – potentially lowering transaction costs. Also the new insurance instruments are designed to diminish moral hazard and adverse selection problems. In both cases the credit institution is only an intermediary for local insurance companies, which, in turn, depend on international reinsurance companies and/or other institutions (such as donors) for reinsurance services.

Notwithstanding the intuitive appeal of these insurance products, they have not achieved widespread popularity. That is due to problems associated with the design of contracts and delivery mechanisms (including 'trigger events' for indemnity payment), basis risk when using index contracts, and limited demand from rural households (owing to the lack of resources to invest in such instruments and/or the lack of appreciation of their potential contribution to household welfare). It was also pointed out that the lack of an insurance 'culture' in many countries is a constraint, as is the lack of trust in institutions to provide future compensation for losses while paying premiums in the present.

An important issue requiring more attention is how public and private sector partnerships can be established and strengthened to provide an enabling environment – with minimal distortions and subsidies – to achieve efficient and equitable management of risk by poor households. The public sector has a critical role to play through policies, regulations, enforcement of contracts and provision of information.

Despite increased interest in providing improved RM instruments for rural households, there are important hurdles to overcome. Not only is there no single 'silver bullet' instrument, but also there seems to be a need for location-specific RM packages. This is due to differences in risks faced by different households, and different economic, political, social and cultural conditions.