Reconciling India's Insurance System and the Organic Paradigm

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India, Insurance and Agriculture

Agricultural practices are highly exposed to risk. In India the main risks to a farmer's livelihood are events of flooding and drought. The effects of such events can be devastating to a farmer's welfare, the communities around them and the supply chains to which they are linked. India and Nepal experienced some of the worst flooding in their history this summer, as a result 1,200 people died, 300,000 hectares of crop (mainly paddy) were destroyed[1]. Insurance is an absolute requirement for hedging against such events and stabilising income.

India is an agrarian economy; private insurers have ample opportunity to exploit profit from this market. Many forms of insurance are available, offering services such as rainfall insurance to cyclone insurance[2]. A key issue with private insurance is the lack of trust between purchaser (the farmer) and supplier (the insurance company). Unfortunately, often the consumer will pay regular instalments to the supplier, yet when an event such as a flood or drought occurs, the insurer refuses to pay due to legalities the purchaser failed to pick up on in the contract. This distrust in the market leads to insurance underconsumption, resulting in negative externalities when an aggregate supply shock occurs, such as disproportionate damage to GDP and agricultural communities.

India and Organic Agriculture

Simultaneously India is driving to be a pioneer of organic agriculture. Organic Supply Chains (OSC) cultivate the land in such a way that keeps the soil alive through organic waste and bio-fertilisers, which leads to a sustainable eco-friendly production system[3]. The conversion of agriculture to organic systems is an exciting prospect as it would also tackle global climate change head-on. Moreover, the success of such production methods would have a profound impact for those on the lowest incomes in India. If organic agricultural policy can be implemented responsibly, OSC could distribute income to the poor through their bottom-up nature.

Despite earlier hurdles to organic farming methodologies, the country's agricultural sector is making real progress towards an organic transition, with Sikkim being the first state to become 'one-hundred per cent' organic last year, and the ambition for the whole country to follow suit[4]. This is a starting point, yet without doubt more can be done for India's future as an organic world leader. Globally, the amount of organic produce only totals one per cent[5].

Reconciling the Agendas: Public Insurance in India

These two dilemmas are not strictly dichotomous. As with all market systems, incentives can be manipulated to reach a more socially optimal outcome. If one is willing to drop the assumption of mutual exclusivity between the two problems, then both farmer welfare and the organic agenda can be advanced. In other words, if insurance can be used as a tool to incentivise organic farming, a more socially optimal outcome in both markets can be reached.

Under conventional economic theory when a private market underproduces a good, the government should implement policies to correct the issue. As seen in the context of India's private insurance system, there is a lack of trust between insurers and the farmer, leading to apathy and under insurance, hence there is a need for the Indian government to intervene.

There have been multiple attempts of government intervention in the insurance market.

Farm Income Insurance Scheme (FIIS)

During 2003-04, Atal Bihari Vajpayee, the 10th Prime Minister of India, implemented the FIIS. The concept of this system was to ensure that farmers would have a minimum guaranteed income for their crop, protecting them from market risk. The framework operates in such a way that compensation would be given out if the real income is less than the compensation income. This public programme was rolled out in 12 states and insured wheat and paddy fields. Insurance premiums brought in a revenue of Rs 14.1 crore and total value of Rs 239 crore was covered, claims amounted to Rs 1.5 crore, in the first season it was rolled out[6].

National Agriculture Insurance Scheme (NAIS)

An alternative scheme is the NAIS. This scheme is designed to insure all farmers, and deals with shock on an individual basis, for events such as localised storms, and on a national basis, for example, national droughts. In the Rabi season of 1999-2000, when it was implemented, the total premium revenue was Rs 5.4 crore, the total amount insured was Rs 356.4 crore and the total number of claims was Rs 7.7 crore. The scheme was run by the Agriculture Insurance Corporation.

Prime Minister Crop Insurance Scheme

The Prime Minister Crop Insurance Scheme is the most recent scheme, and will replace the NAIS. The scheme involves a uniform premium of 2 per cent to be paid on all Kharif Crops and a premium of 1.5 per cent to be paid on all Rabi crops[7]. The insurance covers yield losses due to preventable risks, for example, natural fire and lightning; storm; hailstorm and pests/diseases. It will also cover post-harvest losses, and certain localised problems. Despite the obvious effort to implement systems to make up for the short fall in the free market, none of these policies induce farmers to switch to organic methods; more needs to be done in this regard.

Conclusion: Towards Further Segmentation of Premiums

The biggest issue with current policies is that there is a 'uniform' or 'homogeneous' premium rate for all styles of agricultural farming. Therefore, with the current objective in mind, one possible policy adjustment to the current system could be to offer a different premium rate to the farmer provided they have used organic methodology to cultivate the land. Offering different rates would encourage farmers who currently use conventional farming techniques to switch to organic production in search of lower premiums.

Due to the better quality of land under organic production methods, the fundamental risk for the insurer is lower as there is less chance for degraded soil to cause issues. This lower risk allows for the premium for organic farmers to be reduced. Moreover, if the lesser risk of organic farming compared to conventional is not deemed to be sufficient to justify a fall in the premium, then the reduction could be compensated by a rise in the premium for conventional farming.

The effectiveness of this policy depends on how many farmers buy into insurance in the first place. Insurance needs to be seen as a worthwhile cost in order for sufficient engagement, hence this service should also be provided by the public sector. As discussed in the first section one key issue that underpins the under consumption of insurance in India, and much of the developing world, is the lack of trust between producers and consumers of insurance, therefore this policy should be implemented as an iteration of the Prime Minister Crop Insurance Scheme. This could go some way to build trust between the insurance system and consumers. Thus, India could see an increase in demand for organic produce and enjoy the effects of the positive externalities it brings.

References

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