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CROP INSURANCE IN INDIA: LOOPHOLES AND CHALLENGES

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ABSTRACT

A more important question that begs answer at this point is that whether the miraculous area-based insurance scheme is offering what India's agriculture is asking for. Today India's agricultural economy is battling the throes of globalisation to support about half the nation's on billion plus population. Even while the economy as a whole has been showing unprecedented performance, agriculture has proved to be a challenge as well as a check on the economy's movement ahead. Livelihood, environment, inclusiveness, food security and comparative advantages are some of the areas of serious concern. The acceptance of the scheme by Indian farmers and its beneficial implications from the social and national points of view would reflect how well the scheme is designed and to what extent it proves useful to the farmers. Even if insurance is accepted, a comparison between the cost and benefits would be important for assessing the economic viability which in turn is determined by the various parameters of the scheme. Since insurance is about reducing risk, the usefulness to the farmers would depend on how adequately the scheme addresses the risk concerns of the farmers even while being economically feasible. Assessment of the insurance scheme on a regular basis would be important for necessary introspection and in seeking suitable directions. Moreover, such reporting would also add to the knowledge bank at a broader scale and possibly prove useful for policy planning in other developing countries.

KEYWORDS:*Area Yield Insurance, Crop-cutting Experiments, Credit Delivery System, Crop Insurance, MNAIS*

INTRODUCTION:

The Government of India (GoI) has introduced several crop insurance schemes over the past three decades. The Comprehensive Crop Insurance Scheme (CCIS), launched in 1985, was the first nation-wide scheme. Previous crop insurance schemes had been operated on experimental and pilot basis, on a small scale and in a scattered manner. CCIS was operated for almost one and a half decades, before being replaced by the National Agricultural Insurance Scheme (NAIS) in 1999.

NAIS was comceptualized to address operational problems experienced during the implementation of CCIS. Since NAIS brought forth its own problems, modified NAIS (MNAIS) was formulated and implemented on a pilot basis in 50 districts from the *Rabi* season of 2010-11. A Committee to examine the loopholes, if any, in the implementation of crop insurance schemes, i.e., National Agricultural Insurance Scheme (NAIS), Modified National Agricultural Insurance Scheme (MNAIS) and Weather Based Crop Insurance Scheme (WBCIS) and suggest measures for their removal was appointed in 2013. In order to identify such loopholes, if any, the Committee decided to interact and consult with some of the stakeholder, experts and organizations associated with the schemes being implemented. The Committee examined the performance of various crop insurance schemes, such as CCIS, NAIS, MNAIS and WBCIS, based on data available with Agriculture Insurance Company of India Ltd. (AIC), and some of the reports of earlier

Committees and study reports. The Committee reviewed, at length and in detail, the performance of the major crop insurance schemes from historical and analytical perspectives, in order to learn from past mistakes and to arrive at recommendations for the future.

A number of issues, challenges and suggestions were put forward by stakeholders and other participants during various meetings with the Committee. Some issues relate to design of crop insurance schemes, some relate to operational aspects and some others relate to governance aspects of the agencies/organizations involved in the implementation of the scheme.

The committee submitted its report to the secretary to the Government of India, Department of Agriculture and Cooperation, Minisry of Agriculture on 15th may, 2014.

The Committee found that the issues needing to be addressed fell under the following categories:

- Discrepancy in area insured
  [e.g., the area insured for a particular crop being more than the crop area sown]

- Crop-cutting experiments (CCEs)
  [e.g., delay in receiving crop-cutting data, and qualityand reliability of such data]

- Weather data, particularly from private automatic weather stations (AWSs)
  [e.g., lack of confidence in AWS data; accreditation, certification and quality control of AWSs]

- Crop loan practices
  [e.g., non-compliance with the provision of compulsory insurance for loanee farmers, multiple loans on the same land, lack of seasonality discipline, etc.]

- Crop insurance premium
  [e.g., affordability for farmers, especially in case of MNAIS; transparency in determining premium rate]

- Role of banksand AIC in the operation of the schemes
  [e.g., banks simply compile information without due diligence: AIC-having no stake until recently-accepts this data from banks and farmers without adequate scrutiny]

- Settlement of claims
  [e.g., delay in settlement of claims; dissatisfaction with quantity of claims in case of WBCIS]

- Technical skill and capacity building of personnel associated with crop insurance schemes
  [e.g., personnel with government agencies, banks and insurance agencies]

- Allocation of districts to insurance companies
  [e.g., lack of transparency, lack of technical expertise to evaluate insurance products and allocation of area, season to season]

- Awareness of farmers regarding various features of the schemes
  [e.g., farmers do not have information on the schemes and principles of insurance]

- Product design
  [e.g., lack of innovation, poor correlation of product parameters with yield outcomes]

Available literature outlining the working of CCIS in the later half of the 1980s indicaters numerous operational problems that arose during its implementation. Efforts were made to plug loopholes: seasonality

discipline - missing from the original design - was incorporated into the scheme; and a limit was imposed on the sum insured. Area discrepancy-the area insured under a crop being greater than the area sown with that crop-emerged as a chronic problem in some districts of Gujarat, especially in the case of groundnut crop. There were problems relating to CCEs and loan procedures.

The coverage of crop insurance in India is limited, given the number of farmers and value of agricultural GDP. There is tremendous potential for increased coverage and scope for insurance business. Insurance companies should expand their activities with respect to agricultural insurance. There is a need to look beyond subsidized insurance programmes and introduce farmers-specific products and better settlement mechanisms. An area-based approach, with parametric measures, is not fair to individual farmers. It is desirable to move towards plot-based or individual approach-based insurance. In other words, crop insurance for farmers should be at the plot level. To this end, purpose remote sensing technology should be used for estimating crop yield. Past data on crop yield and satellite images can be used to develop the required algorithm, which can then be continuously improved, based on ongoing CCEs.

Organizations such as NRSCA, NIRD, State space application centres and agricultural universities can be associated with this programme of developing the algorithm to assess crop yield through remote sensing technology. Customer service centres can be utilized to market crop insurance products. IRDA and reinsurance companies can provide infrastructure, and technical and financial support to AIC and other insurance companies, for developing crop insurance products, marketing them and improving settlement mechanisms.

Limitations of the Area Yield insurance

Many of the limitations of the area yield scheme are well known. In the near absence of an idea that provides the benefits of multi-peril insurance without the encumbrance of these shortfalls, the AYI has been accepted or under acceptance in some countries. It is however useful not to lose sight of the limitations as intuitively clear or are evident from the experience in order to search for the next generation schemes.

The impractical concept of a Homogeneous area:-

A scheme based on individual assessment was discarded as 'impracticable' in India in favour of the homogeneous areas based formula. The homogeneous 'area' is conceptualised as one in which the 'output of a majority of farmers together move above or below their own normal levels' (Dandekar, 1976) so that premium rates and loss assessments, worked out at the area level also cover the risk of the individuals operating in that area. In the individual based strategy, the assessment of premium rates and losses would require on a regular basis, the measurement of farm level output variability, ascertainment of a normal yield and monitoring of performances. All this would involve nearly an unmanageable burden of expenditure and administration.

But the presupposition of the conformity between the experience of the individual cultivator and that of the area is hardly practical either. In general, it is unlikely that all farmers even within proximity would be similarly exposed to even any specific peril. The varieties of seeds used, the crop calendars followed and the kind of inputs utilised by the different farmers even in a neighbourhood need neither be uniform nor present similar incidences to any risk factor. The preventive actions are generally costly and the better off farmers may be more capable of preventing or reducing a risk than the poorer ones. Individual defaults that are not in tune with losses at the area level will also plague the banks and will infuse a bias against the poor farmers in their lending practices.

Difficult parameters:

If premiums were not charged from farmers, there would be little to distinguish an insurance policy from a disaster relief. Typically, a fair insurance would call for the classification of risk to determine the premium rates. This is not so easy because a risk-exposed individual is not likely to reveal his own profile. The AYI, in practice charges all individual farmers in an area the same rate regardless of their individual risk

profiles. This simplification raises the chances of adverse selection making way for a risky pool in the area in which the less risk prone farmers become disinterested.

Redistribution and Exclusions:-

The crop insurance programme in India seeks to rope in all institutional borrowers by mandating participation. Apart from helping to achieve a more complete pooling, the compulsion also assures banks their dues and minimises cost of operation because banks can handle the operations without significantly adding to their burden. However, the compulsion to pay premiums may be viewed as coercive and resented as a form of taxation. The response to the compulsion can be exclusion of many from insurance and from institutional loans. Restriction of compulsion only to irrigated regions had been suggested since the inception (Priolkar, 1949, Dandekar, 1976) for better pooling. Intutively, this does not seem tenable as the redistribution in favour of drier areas can only be viewed in context of the larger national community that benefits from agriculture without burdening particularly the farming community of endowed areas. Alternatively, the compulsion can be viewed as a tax on rent income if bank loan has greater beneficial effects due to natural advantages. The issue can only call for debate. The compulsion in case of borrowing farmers can be a discouraging factor. As a transitory process, the government has been subsidising the premium payments of small farmers though the rate of subsidisation has come down with time.

The loan linked compulsory insurance in India makes institutional borrowing more costly than otherwise and can discourage many potential but poor borrowers, even defeating the purpose. Moreover, given the added non-monetary cost of documentation and the complexity of the scheme, some borrowers may in fact turn to the friendly neighbourhood moneylender. The more irrigated among the participating states have a low relative rate of participation because farmers have less reason to insure and may be turning to non-institutional sources. The highly irrigated state of Punjab has not even joined the NAIS. The farmers do not take insurance but this does not come in the way of institutional borrowing. The indifference of the irrigated states makes exclusion of a large section of small farmers, many of whom are concentrated in them more probable.

A voluntary component is present in the NAIS, but as a dissuading factor, beyond the threshold yield value (or the loan value if that is higher), the premium rate usually becomes higher. Not surprisingly, over 90 per cent of the insured farmers are also loanees. Voluntary (non-loanee) insurance not only has a minimal presence, the uniformly higher claim to premium ratios recorded for the non-loanees compared to the other group (Ministry of Agriculture, 2004) is a sign of the selective bias that is inherent in NAIS. Thus, NAIS as an insurance is acceptable to farmers only in acute cases of riskiness. While many like to describe the NAIS as merely a banker's insurance, it is perhaps reasonable to note that this indirectly helps the farmers by maintaining the continuity of credit.

Risk, Catastrophe and Disaster Relief: -

With the incomplete association between individual and area interests, at best, the area-based crop insurance is effective enough as a catastrophic insurance to cover against risk that generally affects large areas, an undertaking that is akin to disaster management. In an analogous measure, a disaster management bill has been passed in India's parliament in 2005 providing for prevention and relief against losses due to calamities like 'catastrophe and mishap arising out of natural and man-made causes resulting in substantial losses or suffering. In such a milieu the distinction of crop insurance is not totally obvious. Geographical entities such as districts, agro-climatic regions or states that have suffered from a severe drought or a flood or a natural calamity have been beneficiaries of disaster relief and other such pay-outs and such political and economic compulsions often encroach on the function of a crop insurance scheme and create contradictions.

Adverse Selection: -

This is the first problem of asymmetric information and occurs when the participants differ in their risk exposures, i.e., in the probability of loss and indemnity payable, and these differnces are not reflected in the premium rates charged. As a result more, risky members will purchase insurance in greater proportions than persons with less risky profiles generating an imbalance between the premium revenues and the indemnity payments. If the investor reacts by raising the premium rate, the less risky among the participants will drop out and the financial performance of the company will deteriorate further. Adverse selection can be combated by collecting better and farm level information and risk classification.

Several participants pointed out that the lack of awareness among farmers about the mechanism of crop insurance leads to lower participation, adverse selection and dissatisfaction among those who do participate. The report of an AFC study-"Report on Evaluation and Impact Assessment of Crop Insurance Schemes"-submitted to the Ministry of Agriculture in August 2013 finds that there is widespread ignorance about crop insurance schemes among farmers. It finds that 65.4 per cent of farmers surveyed were not aware that crop insurance is mandatory for loanee farmers who avail of crop loans for a notified crop. Even among those insured, only 10 per cent knew the difference between various crop insurance schemes. Only 28 per cent were aware that insurance premium is deducted from crop loans of loanee farmers. About 57 per cent were aware that insurance premium is deducted from crop loans of loanee farmers. About 57 per cent did not even know the sum for which they were insured.

Crop-cutting Experiments

State governments should ensure the use of GPRS-enabled and camera-fitted mobile phones/smart phones or hand-held machines in conducting CCEs, so as to transmit data on a real-time basis. The applications developed in Gujarat, and also by pilot studies under technical assistance from the World Bank in Maharashtra and Rajasthan, can be utilized for putting in place appropriate systems in States. Efforts may be made to rationalize the number of CCEs to be conducted, so as to improve timeliness and quality of data. This can be done keeping in view the areas where probability of losses is higher as revealed by remote sensing techniques and satellite images. This will reduce cost and lead to improved quality and timeliness.

There is a need to standardize the procedure for conducting CCEs and monitoring the quality through random checks. The outsourcing agency should be selected in a way that it possesses the required skill and experience. It should be ensured that the outsourcing agency follows the prescribed procedure. The States should maintain a single series of yield data.

Loss assessment for crop insurance requires technical skills that are different from those required for other insurance businesses. Over the medium term, efforts should be made to prepare a specialized cadre of personnel with skills and aptitude in crop insurance. They need not be dedicated and full-time for this purpose. Some of them can be from among the FFs, extension workers and village-level revenue officials. What is important is training and capacity building of these persons.

Historical time series of crop yield need to be established at village/panchayat/block level to support NCIP. Historical crop-yield data is generally available at district/State level while it is needed at a much lower scale for MNAIS. Ministry of Agriculture and other relevant agencies should sponsor projects to support development of such historical time series.

Credit-delivery system

Financial institutions should ensure that loan accounts are related or linked to the land records through the portal to be set up by the relevant State governments. They should verify from time to time, as and when loans are sanctioned and disbursed, whether more than one loan is taken for the same land. There should also be a software interface between banks and insurers, which would allow online transfer of crop insurance data to facilitate coverage and timely payment of claims.

Crop insurance is compulsory for loanee farmers for the notified crops. The extent of compliance of compulsory coverage under crop insurance schemes should be reflected in the audit reports of the banks.

RBI and NABARD should effectively monitor the compliance of their circulars regarding compulsory crop insurance for loanee farmers in respect to notified crops in area units. Financial institutions should work out a mechanism to separate loan amounts utilized for Kharif and Rabi seasons, even if it is through KCC.

The Way Forward

The Committee constituted in 2013 did not confine itself to mere loopholes in the schemes, but looked at various issues and challenges from a broader perspective. It has taken note of the fact that many of the problems and issues have persisted for decades, and that there has been no improvement in spite of various measures suggested by previous committees. Considering all these, the Committee has recommended effective use of technology and prioritization of measures to be taken. The Committee has made, as enumerated below, a number of recommendations. The implementation of the recommendations - with some prioritization and in a time-bound manner-would help plug the loopholes, thereby effectively addressing the issues involved.

CONCLUSION

Agriculture is the main stay of the Indian economy it constitutes the backbone of rural livelihood security system. It is the core planned economic development in India as the tricle down effect of agriculture is significant in the reducing poverty and regional inequality in the country. Growth in agriculture has a maximum cascading impact on other sectors leading to spread of growth, equity and benefits over the entire economy. The total geographical area of the country is 328.7 million hectares of which 141 million hectares is the net sown area, 190 million hectares is the gross cropped area. The agriculture sector constitutes around 20 per cent of the GDP and provides employment to 58 per cent of the workforce. Rapid growth of agriculture is essential not only for self reliance but also for meeting the food and nutritional security of the people and brings about equitable distribution of income and wealth in rural areas, to reduce poverty and improve quality of life.

Despite a high claim ratio to low premium rates and government support to this scheme in the way of subsidy, the coverage of farmers has not been much satisfactory. On an average only 64 lakh farmers are being covered under this insurance scheme in each crop season.

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