CURRENT ISSUES ON CROP INSURANCE IN CAUVERY DELDA REGION-AN OVERVIEW

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ABSTRACT
An evaluation of the crop insurance programme in India through the multi-peril yield based National Agricultural Insurance Scheme (NAIS) reveals that while it has done well on equity grounds, the coverage and indemnity payments are biased towards a few regions and crops, and there are delays in settlement of claims. And while the emergence of weather-based insurance as an alternative has addressed several limitations of traditional insurance, it is faced by challenges of a different kind. Both these forms of insurance must thus be looked upon as complementary to each other in order to evolve an efficient mechanism for dealing with natural disaster risks in agriculture. This article highlights the current issues on crop insurance in cauvery delta region-an overview

KEY WARDS
Crop Insurance, Agricultural Insurance, Risks Covered, Cauvery Delta Region (Nagapattinam, Thanjavur and Thiruvarur), National Agricultural Insurance Scheme (NAIS)

INTRODUCTION
Crop insurance, especially insurance of yield, is a very complicated concept to administer. The reasons are many - the systemic nature of agricultural risks going against the working of the “law of large numbers” on which premium and indemnity calculations are based, the tremendous scope for moral hazard that contravenes the basic “principle of utmost good faith”, the difficulty of curbing adverse selection and, above all, the twin problems of non-viability and unaffordability that result in a see-saw battle of judgment
to continue with the subsidised flat premium rates or to move forward to an actuarial regime. In the case of
crop insurance, the pooling concept needs diversification or spread not only over areas but also over time
periods. A case for compulsory yield insurance for those availing institutional credit, as in India, is made on
the grounds that it eliminates the problem of adverse selection besides taking care of the pooling concept by
ensuring the uninterrupted participation of farmers both in good and bad years. The crop insurance
programme thus also benefits banks by working as a collateral security. However, less than one-third of the
farming community avails of institutional credit in India and for the remaining, insurance continue to be
voluntary. Insurance in Indian agriculture is more challenging than in the developed countries due to its
inherent nature - a large number of small and scattered landholdings, varying climatic and soil conditions,
lack of basic data, and variety of agricultural practices, making it practically impossible to implement the
scheme on an “individual basis” on a wide scale. Further, there is widespread lack of knowledge about the
nature and functions of crop insurance amongst the farmers, a majority of whom are illiterate and poor.

The crop insurance is a potentially more effective risk-shifting mechanism to give protections to all
types of farmers and the use of it as a risk management tool has grown rapidly in recent years. Also the crop
insurance subsidies help the farmer on various grounds. They give protection from different natural
calamities. They encourage the planted acres and also encourage the producer to use large amounts of
chemical fertilizers, pesticides and herbicides. The crop insurance subsidies create important problem,
which increases the probability and size of production loss (moral hazard). Due to the presence of moral
hazard problem the insured farmers reduce input use and average yields. Again many environmentalists
argue that if agricultural chemical input use increases, it becomes harmful to animal and human wealth.

BRIEF HISTORY ABOUT INDIAN CROP INSURANCE SYSTEM

Agriculture is a main stake of the Indian economy and this sector faces diverse types of uncertain
events such as natural calamities (drought, flood etc) and delay monsoon which are beyond the control of
the farmers. Due to the natural calamities the agricultural production, gross national product and also the
income of the farmers decrease. Though before independence both direct and indirect subsidies have been
offered in Indian agriculture but after independence at the time of five years plan India has institutionalized
both direct and indirect subsidies and they have also been increased their scope and amount for the benefit
of the farmers. The agricultural subsidies are price supports, fertilizers subsidies, cheap credit, subsidies
irrigation rates, reduce tariff on electricity, reduce excise duties on diesel fuel, differential freight rates for
agricultural outputs and inputs, free extension services and incentives offered for agro-processing industries
or export of agriculture commodities

Insurance is a form of risk management, primarily used to hedge against the risk of a contingent loss.
In essence, insurance is simply the equitable transfer of a risk of a loss, from one entity to another, in
exchange for a premium.
In India, the General Insurance Corporation of India (GIC) managed crop insurance, and delivers crop insurance through rural financial institution and the crop insurance tied with crop loan and subsidy shared equally by the central and state governments. The GICI requested the Indian School of Political Economy to prepare a report on the feasibility of introduction of crop insurance in agriculture. The GICI introduced a Pilot Crop Insurance Scheme in 1979-80, in association with the state governments, in 26 areas of Gujrat, 23 areas of West Bengal and 17 8 areas of Tamil Nadu and later the scheme has been extended to more areas of more states. The scheme offered to all borrowing members but on a voluntary basis. It (Pilot Crop Insurance Scheme) covered only about 60,000 (sixty thousand) farmers all over the country (India). Thus the scheme is not yet fully integrated with agricultural credit. This scheme is loss making (Can Crop Insurance Work.

OBJECTIVES OF CROP INSURANCE

The main objectives of the scheme are mentioned below.

- To provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests and diseases so as to restore their credit worthiness for ensuing season.
- To encourage the farmers to adopt progressive farming practices, high value inputs and higher technology in Agriculture.
- To stabilize farm incomes, particular in disaster years.
NEED FOR CROP INSURANCE

Crop insurance is one alternative to manage risk in yield loss by the farmers. It is one of the important tools, which helps in reducing the impact of income loss on the farmer (family and farming). Crop insurance is a means of protecting farmers against the variations in yield resulting from uncertainty of practically all natural factors beyond their control such as rainfall (drought or excess rainfall), flood, hails, other weather variables (temperature, sunlight, wind), pest infestation, etc.

FEATURES OF CROP INSURANCE

The following crops are included under the scheme:

Rabi Crops:
- Boro rice, Wheat, etc.
- Pluses: Musur, Arhar, Mung, Gram, and Maskalai, etc.
- Oil Seeds: Mustard, Linseed, and Til, etc.
- Potato.

Kharif Crops:
- Aman Rice, and
- Aus Rice

AGRICULTURAL INSURANCE SCHEMES

Combined (peril) Insurance:
Combined insurance means a combination of several risks covered (two or more risks, mostly with hail as basic cover). In some countries this type of insurance is also referred to as multi-risk insurance.

Yield insurance:
Yield insurance includes yield guarantee, based on regional average yield or on individual historic yield, where the main risks affecting yield (e.g. drought) are comprised. In some countries (e.g. USA) this type is also called combined or multi-peril insurance.

Revenue Insurance:
Revenue insurance combines yield and price risks coverage in a single insurance product. It can be product-specific or whole-farm.

Income Insurance:
Income insurance covers income, so it covers yield and price risks, but the costs of production are also considered. Usually this type of insurance is not product-specific, but whole-farm income.

Whole-Farm Insurance:
This type consists on a combination of guarantees for the different agricultural productions in a farm. Depending on the coverage of the guarantees, it can be whole-farm yield insurance, or whole-farm revenue insurance or whole farm income insurance.

**Area Yield Index Insurance:**
Indemnities are computed from the decrease of the average yield in an area.

**Area Revenue Index Insurance:**
Indemnities are computed from the decrease on the product of the average yields and prices in an area.

**Indirect Index Insurance:**
Indirect index insurance reports to those indices of yields or vegetation computed from weather based indices, satellite images and others.

**INDIAN FARMERS AND KEY CHALLENGES**

Since this paper is aimed to discuss the implication of FDI in Retail on agriculture, thus only the relevant ones are briefly discussed.

Small farmers constitute 80% of all farmers and contribute to 40% of farm production with 40% of all farmland. However, only 10% of the total agricultural bank credit goes to small agricultural loans.

The Standing Committee on Agriculture in their Report NO 41 dated 22nd July 2008, has stated that the prices of agricultural produce received by the farmers are lower than the prices of the same prevailing in a free market and is often less than the cost of cultivation. Remunerative prices should be fixed for farmers’ produce.

**DELDA FARMERS’ SUICIDES IN TAMIL NADU**

I have been to Tamil Nadu's delta districts of Tiruvarur and Nagappattnam recently with Mr.Jayaram who is an independent researcher. We have visited the families where farmers committed suicide. Four farmers committed suicide due to agrarian crisis and two farmers died of heart attack mainly due to the worries of crop loss in the two districts. We have published a detailed report and released the same to the media in Chennai press club on 25th Jan, 2013. The media was not much interested in such reports. The Hindu, Dinakaran and Dina Malar news papers reported our findings. There was no impartiatempt to meet the agriculture secretary was unsuccessful, however a copy of report was sent to him.

I am wondering why the government is not accepting the fact that few farmers committed suicide due to agrarian crisis. Tamil Nadu has been claiming that there is zero farmers’ suicide due to agrarian crisis. In 2006, the previous Dravida Munnetra Kazhagam(DMK) government l news in the media except The Hindu, before we published our report. We sent our report to the chief secretary of Tamil Nadu and expressed our interest to work with the government of Tamil Nadu to deal with the issues in whatever the ways possible to help the farming community. An atwaived agriculture loans of around 7000 crores borrowed by the farmers from cooperative banks. Interest free crop loans are available for crop loans if repaid in time. Free electricity for pump sets are provided in Tamil Nadu. Uzhavar Pathukapputhittam (farmers’ social security scheme) protects farmers to certain extent.

**RISKS COVERED AND EXCLUSIONS**
- Natural Fire and Thunderbolt,
- Strom, Hailstorm, Cyclone, Typhoon, Tempest,
- Hurricane, Tornado,
- Flood, Inundation, and Landslide,
- Draught, Dry spells,
- Insects, pests/Diseases etc.

But the losses due to war, nuclear risk, malicious damage and other preventable risk shall not be included.

The scheme covers all the natural risk as follows.
- Failure of seed crop either in full or in part due to natural risk;
- Loss in expected raw seed yields;
- Loss of seed crop after harvest; and
- Loss at seed certification stage.

**BANK WISE ACHIEVEMENT OF NAIS**

The NAIS in Tamil Nadu is being implemented by three major types of banks viz., the commercial banks, co-operative banks and regional rural banks (Table.1). Of the three types of banks, the co-operative banks play a key role in implementing the NAIS in the state. The farmers covered by different banks indicate that the commercial banks covered 4.0 lakh farmers, whereas the co-operative banks covered around 30 lakhs farmers and a negligible 0.3 lakhs covered by RRBs.

The banking sector wise performance of NAIS shows that the co-operative banks account more than 80 percent in terms of farmers covered, area covered, and so on. For instance, of the total number of farmers covered by different banks, the co-operative banks account for 87.3 per cent followed by commercial banks (11.7 per cent) and RRBs (0.9 per cent). RRBs role in crop insurance is very negligible. Hence, in addition to the co-operatives, the commercial banks and RRBs should show much interest in covering the crop insurance.

**Table.1: Bank wise Achievement of NAIS from 2000-01 to 2010-11**

(In Lakhs)

<table>
<thead>
<tr>
<th>Bank Sector wise</th>
<th>Farmers covered</th>
<th>Area covered (ha)</th>
<th>Sum insured (Rs.)</th>
<th>Premium (100%) Rs.</th>
<th>Subsidy total</th>
<th>Farmers premium total</th>
<th>Total claims</th>
<th>Farmers benefited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Banks</td>
<td>4.0</td>
<td>7.5</td>
<td>121062.4</td>
<td>2840.6</td>
<td>1066.7</td>
<td>1773.9</td>
<td>19411.4</td>
<td>1.5</td>
</tr>
<tr>
<td>District Co-Op Bank</td>
<td>29.9</td>
<td>39.0</td>
<td>639935.1</td>
<td>14829.5</td>
<td>6724.6</td>
<td>8105.0</td>
<td>119363.8</td>
<td>11.7</td>
</tr>
<tr>
<td>Regional Rural Bank</td>
<td>0.3</td>
<td>0.4</td>
<td>8814.6</td>
<td>221.5</td>
<td>114.5</td>
<td>107.1</td>
<td>2218.2</td>
<td>0.2</td>
</tr>
<tr>
<td>All Banks total</td>
<td>34.2</td>
<td>46.9</td>
<td>769812.1</td>
<td>17891.6</td>
<td>7905.7</td>
<td>9985.9</td>
<td>140993.4</td>
<td>13.4</td>
</tr>
</tbody>
</table>

**Source:** Office Records-2010-11

**WHAT CROPS COVERED UNDER NAIS?**

The NAIS cover totally 18 crops such as paddy, ragi, sorghum, bajra, maize, black gram, green gram, groundnut, gingelly, cotton, sugarcane, potato, onion, chillies, turmeric, tapioca, ginger and banana (Table.2). Of the 18 crops, paddy assumes major crop covered under NAIS which accounts for 88.43 % in terms of farmers covered and 88 % in terms of area covered. The total number of farmers benefitted in paddy cultivation is worked out to 12.46 lakhs over ten years and which accounted 93.06 per cent. Of the total paddy, the second season paddy (August-December) account major share in terms of area covered, farmers covered and so on. As the north-east monsoon is critical in Tamil Nadu, most of the paddy fields in
Nagapattinam, Thiruvarur and other coastal districts are affected by floods and cyclone. Hence, farmers prefer to insure their paddy in particularly the second season. The second major crop covered is groundnut, followed by sugarcane, cotton and other crops.

**Table 2:**

Crop-wise Performance of NAIS from 2000-01 to 2010-11

(All figures are in lakhs of rupees)

<table>
<thead>
<tr>
<th>Bank Sector wise</th>
<th>Farmers covered (ha)</th>
<th>Area covered (ha)</th>
<th>Sum insured (Rs.)</th>
<th>Premium (100% Rs.)</th>
<th>Subsidy total (Rs.)</th>
<th>Farmers premium total (Rs.)</th>
<th>Total claims (Rs.)</th>
<th>Farmers benefited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paddy I</td>
<td>2.54</td>
<td>3.95</td>
<td>59699.70</td>
<td>1462.02</td>
<td>510.88</td>
<td>951.15</td>
<td>2873.44</td>
<td>0.63</td>
</tr>
<tr>
<td>Paddy II</td>
<td>26.16</td>
<td>35.37</td>
<td>590845.98</td>
<td>12151.81</td>
<td>5582.51</td>
<td>6569.30</td>
<td>132110.84</td>
<td>11.51</td>
</tr>
<tr>
<td>Paddy III</td>
<td>1.56</td>
<td>2.02</td>
<td>30044.41</td>
<td>580.42</td>
<td>185.69</td>
<td>394.72</td>
<td>706.42</td>
<td>0.32</td>
</tr>
<tr>
<td>Total Paddy</td>
<td>30.26</td>
<td>41.34</td>
<td>680590.08</td>
<td>14194.25</td>
<td>6279.08</td>
<td>7915.17</td>
<td>135690.70</td>
<td>12.46</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>1.06</td>
<td>1.23</td>
<td>36138.61</td>
<td>1390.25</td>
<td>679.72</td>
<td>710.52</td>
<td>642.46</td>
<td>0.10</td>
</tr>
<tr>
<td>Groundnut</td>
<td>1.24</td>
<td>2.00</td>
<td>17235.43</td>
<td>384.67</td>
<td>93.82</td>
<td>290.85</td>
<td>505.43</td>
<td>0.23</td>
</tr>
<tr>
<td>Cotton</td>
<td>0.06</td>
<td>0.09</td>
<td>1035.14</td>
<td>92.55</td>
<td>40.33</td>
<td>52.22</td>
<td>97.24</td>
<td>0.01</td>
</tr>
<tr>
<td>Other crops</td>
<td>1.59</td>
<td>2.27</td>
<td>34812.83</td>
<td>829.93</td>
<td>1017.13</td>
<td>4057.60</td>
<td>140993.42</td>
<td>0.59</td>
</tr>
<tr>
<td>All Crops</td>
<td>34.22</td>
<td>46.94</td>
<td>769812.09</td>
<td>17891.64</td>
<td>7905.75</td>
<td>9985.90</td>
<td>140993.42</td>
<td>13.39</td>
</tr>
</tbody>
</table>

Source: Office Records-2010-11

CURRENT ISSUES ON CROP INSURANCE IN CAUVERY DALDA REGION

In case of Nagapattinam District Farmers in the Cauvery delta region have urged the Government to extend the time limit for paying crop insurance premium to November 30 to those farmers, who had not secured loans from cooperatives and commercial banks. Thanjavur District Farmers Association said farmers were entitled to have their crops insured by paying a premium of 2 per cent of the total cost of cultivation. As per the national agricultural insurance scheme, the premium would be deducted from loans of farmers, who got loans from primary agricultural cooperative banks and commercial banks on or before November 30 every year. But farmers, who could not get loans or avail themselves of loans from commercial banks or cooperatives, should have paid the premium before September 30 directly through the respective PACBs with all particulars including the total extent of the land and expenses incurred towards cost of cultivation and also large number of farmers did not pay the premium before September 30 since they anticipated that they would get crop loan in time.

The Cauvery Delta farmers, in an appeal to the State Government, have sought extension of time limit in paying crop insurance premium to November 30. Thanjavur and Thiruvarur District Farmers Association, farmers are entitled to avail themselves of crop insurance by paying a premium of 2 per cent of the total cost of cultivation. As per the scheme in vogue, the premium could be deducted from the loans obtained from primary agricultural co-operative banks and the commercial banks on or before November 30 every year.

Crop insurance scheme is gaining popularity among farmers in the State. There had been a gradual increase in the number of farmers covered under the scheme. About 5.5 lakh farmers had been covered in the last financial year compared to one lakh farmers in 2005, and about three lakh farmers in 2006. Premium rates for different crops per hectare has been fixed by the Agricultural Insurance Company of India and...
paddy, dhal, groundnut, cotton, sugarcane, turmeric and oilseeds are some of the crops covered. The State Government is meeting 50 per cent subsidy on premium and for this the State has allocated Rs. 3 crore in 2006-07, Rs. 15 crore in 2007-08 and Rs. 40 crore in the current financial year.

SUGGESTIONS AND RECOMMENDATIONS

The following suggestions and recommendations offered were as follows:

- Ensure effective network amongst bank and other credit institutions in farm insurance for maximum coverage and reach.
- Introduce broad based schemes that cover varied sectors such as crops, livestock and cover other risks specific to rural localities in an integrated manner.
- Introduce the concept of price support to cover all primary production including agriculture crops, fruits, non-timber production etc. which are all subject to annual variation of prices and yield.
- Promote group insurance mechanism, linking premium with bank loans, and proper monitoring to improve effective operation of insurance schemes.
- Strengthen rural insurance development funds, scientific actuarial techniques, and insurance regulatory mechanisms.

CONCLUSION

This present article concluded that, the various schemes launched from time to time in the country agriculture insurance have served very limited purpose. The coverage in terms of area, number of farmers and value of agricultural output is very small, payment of indemnity based on area approach miss affected farmers outside the compensated area, and most of the schemes are not viable. Expanding the coverage of crop insurance would therefore increase government costs considerably.

The committees set up by the government to suggest measures to reform the scheme have put forth comprehensive recommendations broadly including steps like lowering the insurance unit to village panchayat, provision for mid-season on account payment of claims, coverage to perennial crops, covers for pre-sowing and postharvest losses, more appealing guaranteed yields, transition to actuarial regime with varying levels of premium subsidy, etc. A restructuring of the yield insurance scheme on these lines is likely to improve its prospects and meet the reasonable aspirations of the farmers.

REFERENCES