International Journal of Academic Research
ISSN: 2348-7666; Vol.5, Issue-3, March, 2018
Impact Factor: 6.023; Email: drtvramana@yahoo.co.in

Crop Insurance & Production Credit for Agriculture in A.P. (An Empirical Study on Awareness and Perceptions)

Dr. A.Jagadeesh babu,
Director – Professor, Vestal Academy of I.T.& Management. G.N.T. Road, Vatluru; Eluru. 534 007. West Godavari Dist. Andhra Pradesh. India.

Abstract: Universally agriculture is perceived to be synonymous with risk and uncertainty. Crop insurance is one alternative to manage risk in yield loss by the farmers. It helps in stabilization of farm production and income of the farming community. As such it is a risk management alternative where production risk is transferred to another party at a cost called premium. The on going National Agricultural Insurance Scheme is a good step forward to insure risk of millions of farmers whose livelihood depends on the pattern and distribution of monsoon rain in India. However, the penetration of crop insurance is found to be very less. This study is an attempt to understand the existing scenario of crop insurance in India with a special reference to Andhra Pradesh The study empirically checks upon the awareness level of farmers in A.P districts towards this product. The paper further examines the perception of those who have availed or not availed crop insurance in various villages of Andhra Pradesh districts. The study concludes with various suggestions for increasing the awareness level of the farmers for ensuring better penetration of crop insurance.

Key Words: Agriculture, Crop Insurance, National Agricultural Insurance Scheme, Production Credit for Agriculture, Farmer's Awareness

Introduction

The enterprise of agriculture is subject to many uncertainties. Yet, more people in India earn their livelihood from this sector, than from all other economic sectors put together. According to the report of working group on risk management in Agriculture for the eleventh five year plan (2007-12), 75% of all rural poor, are in households that are dependent on agriculture, in some way or other. Households that were self-employed in agriculture, account for 28% of all rural poor, while households that were primarily dependent on agriculture as labour, account for 47% of all rural poor.

Crop insurance not only stabilizes the farm income but also helps the farmers to initiate production activity after a bad agricultural year. It cushions the shock of crop losses by providing farmers with a minimum amount of protection .

Comprehensive Crop Insurance Scheme (CCIS) for major crops was introduced in 1985, coinciding with the introduction of the Seventh-Five-year Plan and subsequently replaced by National Agricultural Insurance Scheme (NAIS) with effect from 1999-2000. Agriculture Insurance Company of India Limited (AIC) has been formed by the Government of India to serve the needs of farmers better and to move towards a sustainable actuarial regime. AIC has

International Journal of Academic Research
ISSN: 2348-7666; Vol.5, Issue-3, March, 2018
Impact Factor: 6.023; Email: drtvramana@yahoo.co.in

taken over the implementation of NAIS which until FY03 was implemented by General Insurance Corporation of India.

(I)Crop Insurance Schemes

The scheme is available to all States and Union Territories, on an optional basis. A State opting for the scheme will have to continue it, for a minimum period of three years. The scheme is compulsory, for farmers availing crop production loans and voluntary for others. As per the report of working group on risk management in Agriculture for eleventh five year plan (2007-2012), till Rabi 2005-06, NAIS covered 79.16 million farmers for a premium of `2,332.50 crores and finalized claims of `7,255.75 crores. While CCIS was restricted only to loanee farmers, NAIS widened the coverage by envisaging voluntary participation of non-loanee farmers. NAIS has enabled farmers to choose indemnity limits of 60%, 80% or 90% of the threshold yields as indemnity limits. The limit of the sum insured was increased to the value of 150% of average yield against payment of an actuarial based premium. Though NAIS was launched to cover the short falls observed in CCIS,

According to the latest data released by ministry of agriculture, crop insurance claims worth of 22,135 crore have been settled till now for 4.86 crore farmers mostly from Andhra Pradesh, Gujarat, Rajasthan, Maharashtra, Bihar and Karntaka. With an insurance claim settlement of 4099 crore, Andhra Pradesh tops list of states getting maximum benefit of the scheme followed by Gujarat (`3917 crore), Rajasthan (`2621 crore), Maharashtra (`1873 crore), Bihar (`1794 crore) and Karnataka (`1635 crore) (Financial Express, 2012). Regarding the private sector participation in rural insurance, it was observed that companies such as TATA AIG General Insurance, Reliance General Insurance, and HDFC Ergo are involved in selling cattle insurance plans. While for crop insurance, the participation of private players has been very scanty in India. ICICI Lombard pioneered weather insurance space by launching rain fall insurance scheme in 2003 in Andhra Pradesh .

Two insurance schemes are supported by Government of India in this category: the National Agricultural Insurance Scheme (NAIS) and the Weather Based CropInsurance Scheme (WBCIS). While the NAIS is the major scheme being implemented across the country, WBCIS is being implemented on a pilot basis in selected States. NAIS is implemented exclusively by Agriculture Insurance Company of India (AIC), whereas WBCIS is implemented jointly by AIC and two private insurance companies viz. ICICI Lombard and IFFCO Tokio General Insurance. Both these schemes are administered by the Ministry of Agriculture. In order to widen the scope of NAIS, the GoI has approved the implementation of Modified NAIS on a pilot basis in 50 selected districts of the country from Rabi 2010-11. The scheme is far from breaking even or achieving the desired coverage .

The NAIS is considered to be an improvement over the CCIS, but it has simply replaced one flawed scheme with another slightly less flawed one. The main flaws of the NAIS are the goal of financial viability, its mandatory nature, its failure to address adverse selection, arbitrary premiums, and the area approach.

(a)National Agricultural Insurance Scheme (NAIS)

The National Agricultural Insurance Scheme (NAIS) was initiated in the year 1999-00 by redesigning an existing insurance scheme called the Comprehensive Crop Insurance Scheme of India (CCIS), which operated in the country since 1985. The NAIS provides insurance cover for yield loses of food crops, oilseeds and annual commercial/horticultural crops due to natural calamities, pests and diseases. The scheme is available to all States in the country. The States, however, have the option to choose whether to participate in the scheme or not, and decide on the crops and areas to be covered under the insurance. The scheme is compulsory for all farmers availing seasonal agricultural operations loans (SAO) from financial institutions for the crops covered by the scheme (loanee farmers), but is optional for others (non-loanee farmers). At present, the scheme covers about 35 crops and is being implemented in 25 States and 2 Union territories of India.

The scheme operates on the basis of an area approach, in which a specified area in each State is decided as the unit of insurance. The unit of insurance is crucial for the scheme as the compensation under the insurance is based on the gap between the threshold yield and the estimated yield for the unit area. At present the unit of insurance varies from districts (for specific crops in certain States) to panchayats for others. The decision on what constitutes the insurance unit lies with the State governments and Union territories. It is obvious that given the wide variation in yield, the smaller the unit of insurance, the better would be the insurance protection against risks. In the long run, all States are required to have panchayats as the unit of insurance. At present, the insurance unit in most States and for most crops is block/tehsil Notably, the scheme does not provide insurance against losses faced by individual farmers, but only against widespread losses faced by a large number of farmers in the insurance unit.

The compensation structure of the scheme is based on the shortfall of the actual average yield in a season in a unit from the ‘threshold yield’. The ‘threshold yield’ is the average yield of a crop in a season in the unit area over a specified number of years in the past.3 If the actual yield in the specified insurance unit for a specific crop is lower than the threshold yield in any season, all farmers insured in that insurance unit are eligible for compensation.4 The amount of compensation (indemnity) is determined by a combination of the shortfall of actual yield from the threshold yield and the amount insured by the farmer.

Specifically, the indemnity is calculated as

Indemnity = (Shortfall in Yield/Threshold Yield) * sum insured for the farmer

where, shortfall = ‘threshold yield - actual yield’ for the defined insurance unit.

Adjustments are also made for the extent of risk in determining crop yields in different insurance units while calculating the indemnity levels. At present, insurance units are classified into high, medium and low risk units and the indemnity levels corresponding to these categories are 60 per cent, 80 per cent and 90 per cent respectively. The upper limits of the premium rates charged for food crops and oilseeds under the scheme are fixed by the government. For food crops and oilseeds, premium rates vary between 2.5 to 4.5 per cent of sum insured (SI) or actuarial rate, whichever is less . For annual commercial and horticultural crops, actuarial rates are charged. These limits are however applicable only if the insured amount is equivalent to the value of the threshold yield or less. If the farmer chooses to insure more than 100 per cent of the value of the threshold yield, actuarial rates are charged. For annual commercial and horticultural crops also, actuarial rates are charged.

The NAIS is subsidized to the extent of 75 per cent by the Government (GoI 2004). Bulk of the subsidy is in the form of excess of claims over premiums for food crops and oilseeds. Additionally, a premium subsidy of 10 per cent is provided to small and marginal farmers for food crops and oilseeds. The subsidy provided under NAIS is shared equally by the Centre and States (50:50). The financial liability of Government of India is, therefore, limited to half the amount subsidized by the Government

MODIFIED NATIONAL AGRICULTURAL INSURANCE SCHEMEIN A.P.

Ministry of Agriculture, the Government of India issued instructions for implementation of Modified National Agricultural Insurance Scheme (MNAIS) as a pilot in selected districts during Rabi 2012-13 season. Accordingly,the Government of Andhra Pradesh selected Nellore, Prakasam and Warangal districts for implementation of Modified National Agricultural Insurance Scheme (MNAIS) on pilot basis in Rabi 2015-16 season.

All the farmers including sharecroppers, tenant farmers growing the notified crops in the notified areas are eligible for coverage.

It is compulsory for all the loanee farmers and voluntary for non-loanee farmers.

(b) Weather Based Crop Insurance Scheme (WBCIS)

The Weather Based Crop Insurance Scheme (WBCIS) was introduced by the Government of India in 2007-08 on a pilot basis in selected areas of a few States. The introduction of WBCIS was based on the fact that a similar scheme piloted by the Agriculture Insurance Company of India (AIC) since 2004 was argued to have distinct advantages over NAIS. Unlike NAIS, in which the compensation is based on deviation of yield from the threshold yield, WBCIS is based on deviation of weather parameters (such as rainfall, humidity, frost and temperature) from the desired value in a period in the insurance unit. If the deviation of the weather parameter is significantly different from its desired value in the unit area over a period of time, all the farmers insured in the unit area are liable for compensation. WBCIS is implemented on a pilot basis and the number of participating States varies from season to season. In 2009-10, the scheme covered about 30 crops in 13 States during Kharif and 11 States during the Rabi season. In areas and crops where WBCIS is being implemented, NAIS is not available to farmers. Also, as in NAIS, for areas and crops for which the scheme is implemented, participation is compulsory for loanee farmers and is optional for others. As in NAIS, the scheme is based on an area approach, whereby a certain area is defined as the unit area of insurance (reference unit) and all farmers within the unit are treated as homogeneous for the purpose of compensation. Each insurance unit is linked to a reference weather station, where values of weather parameters are recorded.

The premium rates of the scheme are capped and the subsidy provided by the Government is shared by the Central and the State Government in the ratio of 50:50. For food crops and oilseeds, the premium rates vary between 2.5 to 4.5 per cent of the sum insured. The actuarial rate for food crops and oil seeds is capped at 10 per cent for kharif and 8 per cent for rabi season. For annual commercial and horticultural crops, the premium rate varies between 2 per cent and 6 per cent of sum insured while the actuarial rate is capped at 12 per cent. Unlike NAIS, Government support for WBCIS is provided in the form of subsidy in premium, but the claims liability is provided by the implementing insurance company.

Weather Based Crop Insurance Scheme (WBCIS) helps to mitigate the hardships of the farmers against the likelihood of financial losses on account of anticipated crop loss resulting from the incidence of adverse weather conditions of weather parameters like Temperature, Rainfall, Humidity etc. The Government of India is implementing Weather Based Crop Insurance Scheme during Rabi 2015-16 season for Mango, Banana and Cashew nut plantations.

PLANTATIONS/DISTRICTS NOTIFIED IN ANDHRA PRADESH

(a) Mango plantations in all the mandals of Adilabad, Karimnagar, Mahabubnagar, Rangareddy, Nalgonda, Warangal, Medak, Khammam, Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari, Krishna, Chittoor, Kurnool and Kadapa districts;

(b) Banana plantations in selected mandals of the districts of Vizianagaram, East Godavari, Kurnool, Guntur and Kadapa;

(c) Cashew nut plantations in selected mandals of the districts of Vizianagaram and Srikakulam.

The scheme is compulsory for all the loanee applicant cultivators i.e. those who have sanctioned Credit Limit from Financial Institutions (Cooperative Banks, Commercial Banks including private commercial banks, RRBs) for the Notified Crops in a Reference Unit Area.

It is voluntary for non-loanee cultivators who have not availed any loans from any financial institutions.
The APCOB issued guidelines to the DCCBs for implementing all the insurance schemes.

(c) PERSONAL ACCIDENT INSURANCE SCHEME (PAIS):

The General Insurance Companies formulated a Personal Accident Insurance Policy for Kisan Credit Card holders in consultation with

RBI/NABARD. The NABARD requested all the Banks to participate in the scheme. As per the recommendations made by RBI/NABARD, our Board of Directors at their meeting held on 27-3-2012 resolved to implement the Personal Accident Insurance Scheme to Cooperative Kisan Credit Card holders formulated by NABARD under the sharing pattern of premium at 1:2 ratio between the borrower and institutions. The sharing pattern among the institutions i.e., PACS, DCCB & APCOB is at 2:2:1 ratio respectively. The scheme will cover all the CKCC holders against death, permanent disability resulting from accidents with risk coverage upto Rs.3,00,000/- within a period of one year. Accordingly, APCOB has released an amount of Rs.49.91 lakhs and Rs.67.33 lakhs during the years 2014-15 and 2015-16 respectively to DCCBs towards its share of premium under the scheme.

(II) Production Credit for Agriculture

The multiple response analysis of the actions taken by the farmers who were not insured, in case of yield loss, suggested that they borrow from friends and family (34%), take a bank loan (28%), sale their livestock (14%), borrow from money lender (11%), seek government relief (10%) and sale the gold (3%) in this order. Borrowing money to square the loss is risky affair. Selling assets is like parting with the accumulated wealth which is equally dangerous. Thus, it could be inferred that crop insurance will assist farmers to minimize the risk.

APCOB is one of the major Banks which meets the Short Term Production credit requirements of the farming community in the state through its network of 13 District Cooperative Central Banks (DCCBs) and 2428 Primary Agriculture Cooperative Credit Societies (PACS) particularly the small and marginal farmers. The share of cooperatives among all the Commercial, Rural and Cooperative Banks is 22.76%

The Short Term Agriculture Credit is given for the following purposes:

1. National Oilseeds Development Programme (NODP or OPP)

2. Development of Tribal Population (DTP)

3. Other Crops (Seasonal Agriculture Crops)(SAO)

APCOB obtains refinance from the NABARD for on lending to the DCCBs based on its policy guidelines issued every year. The crop loans are provided to the farmers based on Scales of Finance/Individual Maximum Borrowing Power. The Scales of Finance for various agriculture and horticulture crops will be finalized by the State Level Technical Committee (SLTC), the convener of which is APCOB. The SLTC before finalization, takes into consideration the recommendations of the District Level Technical Committees (DLTCs) convened by the DCCBs in each district. In the post implementation of Vydyanathan Committee recommendations the DCCBS are permitted to fix the Individual Maximum Borrowing Power, which was hither to fixed by the State Government.

The crop loans are provided through the Cooperative Kissan Credit Cards (CKCC) issued to each borrowing member of the PACS. The Farmer has to pay a share capital of 10% on the loan drawn by him and become the borrowing member of the PACS. The CKCC acts as pass book to the farmer. Investment credit is also provided through these cards. As per revised guidelines the credit limit to a farmer is fixed once in 5 years taking into consideration the incremental growth in the cost of cultivation each year, the consumption requirements of the farmer and the need for asset acquisition/replacement etc. The farmer is at liberty to draw and repay into his CKCC account any number of times. The credit balance in the CKCC account carries interest equivalent to Savings Bank account. The CKCC also facilitates the farmer to operate upon his loan account at PACS either at PACS or at the branch concerned. Thus CKCC facilitates hassle free loans to the farmers.

As per the new CKCC guidelines the lending institutions may prescribe the due date for the amount drawn based on the seasonality of the crops raised by the farmer. Focus is given to financing of small and marginal farmers and other weaker sections of the farming community in providing production credit for agriculture

As per the initiatives taken by the Government of India the farmer is provided crop loan at 7% p.a. upto a loan of Rs.3.00 lakhs. Further the State Government has announced 0% interest to the farmers with effect from Rabi season 2015-16 up to crop loan of Rs. 1.00 lakh. Above Rs.1.00 lakh and upto

Margin Money

The borrowers have to meet 25% of the cost by way of margin money/down payment in respect of Farm Mechanisation and Two-Wheeler loans.

Rs. 3.00 lakh the State Government stipulated "Pavala Vaddi" under which the farmer need to pay interest only at 3% p.a.. The Government of India shares 3% Interest (Incentive) Subvention in both the cases.

INVESTMENT CREDIT IN A.P.

APCOB through its affiliate DCCBs and PACS, is the single largest provider of investment credit in Andhra Pradesh.

Purposes

Loans under investment credit are provided for Minor Irrigation, Farm Mechanisation, Dairy, Poultry, Sheep, Goat and Piggery, Plantation and Horticulture,Fisheries, Land Development Two Wheelers and Agro-Forestry and a host of other agricultural investment purposes.

Period of Loan

The duration of Loan under this portfolio range from 5 to 15 years depending on the purpose and are scheduled for repayment on equated annual instalments with suitable grace periods as per the scheme requirements.

Security

Long Term loans issued to the Borrowers against mortgage of Agricultural lands.

Eligible amount

The eligibility of the member is calculated @ 150% of the basic value register maintained at SRA subject to the following ceiling limits.

Rate of Interest : The rates of interest to be charged at various levels with effect from 23.08.2013 as approved by the Board of Management of APCOB are as follows:

The Interest rates are subject to change based on revision by NABARD from time to time.

Interest Rebate

An Interest Rebate of 6% will be provided to the borrowers under Investment Credit provided if the loan instalment is repaid within the due date.

Capital Subsidy Schemes

Govt. of India through NABARD allowing capital subsidy to the borrowers under Investment Credit for the loans viz., Sheep, Goat and Pig Rearing, Small Dairy units, Poultry dressing, Salvaging & Rearing of male baffalo calves, Rearing of heifer calves, Dairy marketing outlets, construction of godowns etc.,

Conclusion

Weather conditions are beyond the control of farmers and as such crop insurance is a catalytic
tool to manage the production risk of crop. The study addressing the penetration of crop insurance in A.P districts highlighted the fact that this product is not very familiar in respondents surveyed. Only two out of 55 farmers covered under the study, were having crop insurance. The composition of the sample reflected that all the farmers were male, having an average age of 49 years. The literacy level was found to be quite less. Apart from farming they were also involved in other activity such as cattle rearing and trading of goods.

The average frequency of crop failure was observed to be 1 to 2 times in a year due to climatic condition, economic reasons and quality of raw material. For protecting themselves against any loss including the failure of crop, they preferred having cash reserves and savings as compared to taking insurance. Further, they knew more about cattle insurance than crop insurance as far as agricultural insurance is concerned. As per them, NAIS, Kisan Sabha, and TV Programmes would be more effective in spreading the awareness of crop insurance. Apart from less awareness, the other reasons as surfaced for not availing crop insurance were: this insurance being non institutional source of loan, lack of co-operation from banks and fear on their part to
undertake the procedure involved. The fact that merely 4% of the sample were having crop insurance, represent a huge opportunity (96%) for penetration of crop insurance at A.P districts. For this product to be successful, farmers should be convinced that taking this insurance is in their own interest. The actual penetration of crop insurance would depend on how and to what extent the farmers perceive it as beneficial to them. Farmers should believe that the terms of the insurance are reasonable, and have the confidence that there would be timely settlement of claims. Communication with farmers may be undertaken through kisan sabha, mass media, education programs and group interactions as reflected in data analysis.

Reference:

1.Mahajan, S. and Bobade, A. (2012) Growth of NAIS: A Study of Crop Insurance in India.
Bauddhik, 3(1), pp 1-15, Retrieved December 22, 2012 from http://www.chimc.in/volume3

No1/ResearchPaper-1.pdf

2.Pal, D. and Mondal, T. (2010) Agricultural Insurance in India: Approaches and Challenges. *International Journal of Rural Studies (IJRS),* 17(1). April, Retrieved December 10, 2012 from http://www.vri-online.org.uk/ijrs/April2010/agricultural-insurance-in-india.pdf

3.Quiggin, J., Karagiannis, G. and Stanton, J. (1986). Crop Insurance and Crop Production: An Empirical Study Of Moral Hazard And Adverse Selection. *Australian Journal of Agricultural Economics,* 37(2), pp 95–113. Retrieved December 15, 2012 from http://www.uq.edu.au/ economics/johnquiggin/JournalArticles93/ Cropins93.pdf

4.Raju, S. and Chand, R. (2008) Agricultural Insurance in India: Problems and Prospects. NCAP Working Paper No. 8. Retrieved December 12, 2012 from http://www.ncap.res.in/ Upload files/others/oth_15.pdf

5.Reddy, A. (2004) Agricultural Insurance in India: A Perspective. Retrieved December 12, 2012 from http://www.actuariesindia.org/downloads/ gcadata/6th%0GCA/pdf/agricul-tural%20 Insurance %20In%20India%20_A%20Perspective.pdf

6.Report of Working Group on Risk Management in Agriculture for Eleventh Five Year Plan (2007-2012), Retrieved December 20, 2012 from http://planningcommission.nic.in/aboutus/ committee/wrkgrp11/wg11_risk.pdf

7.GoI (2004) Report of Joint Group on Crop Insurance, Dept. of Agriculture & Cooperation, Ministry of Agriculture, Government of India.

8.GoI (1994) Report of the Committee on Reforms in the Insurance Sector (January 1994): Ministry of Finance, Govt. of India.

9.GoI (2006) Rreport of the Working Group on Risk Management in Agriculture (2007- 12), XI th Five Year Plan. .