PROBLEMS AND PROSPECTS AGRICULTURE INSURANCE IN TELANGANA STATE

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ABSTRACT:

The current study scenario looks into the genesis of agricultural insurance in India macroscopically and examines various agricultural schemes operating in the state of Telangana state microscopically. The structures for the study were theoretical research. The look of the review was on the functional agricultural.

Insurance schemes were in Telangana state microscopically and macroscopically in the country. India had been administered crop insurance scheme since 1972 of which all the variants of the scheme introduced from time to time had various deficit. Nevertheless India is not alone where public crop insurance has not been successful. In both developed and developing countries such Insurance schemes have incurred losses without offering an effective

The important role player in the public sector companies offering crop insurance is Agricultural Insurance Company (AIC). The private company role players are IFFCO Tokio General Insurance Company Ltd, ICICI Lombard Insurance Company Ltd. The major insurance running

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in the country is NAIS but was not Telangana state since the paddy crops grown in the state is more risky crop in the wake of assured irrigation and high input agriculture. Weather based insurance products have got a good scope in the state to act as a tool of risk mitigation. The agriculture insurance can act as a motivation for the farmers of Telangana state to go for diversification by setting themselves free from the risks involved and the loss in income which they shall face. Crop insurance needs to be strongly taken up at the policy level; with well defined risk to ducts Telangana state’s for these agriculture risks in present scenario.

**Keywords:** public crop insurance, stakeholders, moisture, diversification, humidity.

**INTRODUCTION:**
Telangana state of in Indian is the major producer of food grain contributing national rice production and more national paddy production currently, in Telangana state rice is grown extensively in the Kharif season. Agroclimatic zone cotton is grown during the same period. Other crops are also grown all across Telangana state but in very small pockets, the diversity being more in the moving up and down very difficult agro-climatic zone of the state. In the Rabi season, the entire state grows major production paddy extensively. Other crops are also interspersed in small pockets all across the state, again with more crop diversity in the sub-mountainous undulating agro-climatic zone. In the summer season, mostly the land is kept fallow, except some part of Telangana state, sugarcane is grown and in the some part vegetables are grown. Though area covered under fruit production in Telangana state This is also above the average yield at India level which is a variation of shurgum is the major fruit produce of the state
which is now occupying about one fourth of the total area under fruit production in Telangana state.

There have been tendencies of more withdrawal of this auspicious resource. As indicated there is absence of any risk in the production of food crops in Telangana state, where as unconventional risks are rising due to climatic changes which impacts the production system. They further elaborate the unconventional risk to Telangana states agriculture the critical periods of crop and increasing incidences of insectpest attacks on the cotton crop due to rise in humidity. So, there lies a good amount of risk to the agriculture in the state which needs to be addressed by all the stakeholders. Here comes the need of insurance to agriculture, which is a highly risky economic activity, on account of its critical dependence on weather conditions. Thus agricultural insurance can be considered as not only as a hedge to protect farm economy from the adverse effect of crop failure but also as an incentive to the farmer to shoulder risk of using new technology and affecting improvement in farming. Agriculture insurance may broadly be defined as an institutional response to risks faced by the farmers. The basic principle of Agricultural Insurance is that the loss incurred by the few farmers is shared by many in an area and losses incurred in bad years are compensated from resources accumulated in good years. Managing agricultural risk is an important ingredient of our development process. The idea is to encourage farmers to adopt improved farming technology and agricultural practices which, though with potential of higher return could be riskier. Thus this present study looks into the genesis of agricultural insurance in India macroscopically and examines various agricultural schemes operating in the state of Telangana state microscopically.
OBJECTIVE OF STUDY:

1. To estimate price and yield risk involved in different crops at national level and at disaggregates level
2. To examine the performance of the existing and earlier national agricultural insurance schemes implemented in India
3. To discuss and explore the problems and prospects of agriculture insurance in the country
4. To look into the role of government in implementing various agricultural insurance schemes
5. To suggest effective agriculture insurance programme in India

METHODOLOGY:

The designs for the study were descriptive research. This study is an attempt to examine and analyse the past, present and the scope of agricultural insurance schemes in Telangana state. The existing literatures on agricultural insurance in India and Telangana state was mapped available in different sources. The focus of the review were on the functional agricultural insurance schemes in the state microscopically and macroscopically in the country. The various features viz. coverage of crops, farmers covered risk covered, sum insured, unit of insurance, levels of indemnity or threshold yield, claim procedure, period of insurance, implementing agencies were analysed under the scope of various operational insurance schemes in the state.

INDIAN AGRICULTURE: DEPENDENCE ON RAINFALL:

Indian agricultures are heavily dependencence on rainfall which largely occurs during monsoon season of about two and half months. The abnormal behaviour of monsoon may cause natural disasters such as scarcity conditions or drought, floods, cyclones, etc. Nearly two thirds
of the cropped acreage is vulnerable to drought in different degrees some hectares of crop area is affected annually by these calamities severely impacting the yields and total agricultural production. About two thirds of the cultivated area had no irrigation. Even large part of irrigated area does not get adequate water supply for intensive cropping (double cropping). In rainfed areas sowing of kharif crops commences with the onset of monsoons and the delay in the onset of monsoons delays sowing with its adverse impact on yield. Further the growth of crops and realization of output are determined by the quantum of rainfall and its distribution during the monsoon season. Even sowing of Rabi crops is determined by the soil moisture retained from the rains especially during the later part of the monsoon season. Rainfall pattern affects the irrigated crops also. Rainfall during flowering period washes the pollens adversely affecting the crop yield. Excess rainfall may adversely affect the yield realization. Heavy rains may submerge the growing crops in the early stages and may cause lodging in the later stages of crop growth. In the catchments heavy rains may cause floods in the plains.

The floods disrupt the sowing schedule and damage the standing crops resulting in reduced yield or even total loss of crops and farm income in addition to loss of property. Other weather variables that affect yield include sunlight, temperature, wind, hails. In fact since time immemorial weather has been the major adversary that the farmers are not able to control. It has been established the variations in crop yield is due to variations in rainfall. In any climatic zone crop yield among the farms varies with the soil, topography, tillage operations and use of four complementary inputs, namely, seed, fertilizer, pesticides and irrigation (soil moisture). Seed is the index of productivity which may be realized with the proper tillage practices, irrigation and fertilizer use. Pesticides use avoids the loss in yield because of pests and diseases. Not only
quantum of these inputs but also their quality, and timings and method of use affect the yield realization.

These four dimensions of complementary inputs vary for the individual farms in a year and for a farm over the years. In other words given the soil and topography two sets of factors that affect yield on farms are climatic and managerial. Managerial factors are in the control of farmers climatic factors are not. The loss of crop yield affects the farmer and farming in more than one ways. Their inputs including labour get lost. The low yield of major crops means reduced income and difficulty in arranging the necessities of life as well as inputs for the next season. The repayment of outstanding loans becomes irregular some times resulting in default. Though conversion of loans or their rescheduling helps the farmers for eligibility for fresh loans from formal sources it may not solve their liquidity problems completely. In some cases the farmers are compelled to divest and dispose off some assets created over past years. Some times, they have to resort to costly borrowing from informal sources. The capacity of agriculture to hedge itself from vagaries of nature is considered crucial for development and growth of the sector in particular and economy in general. The natural calamities can slow the pace and process of development by reducing the food supplies and raw materials in the short run. Successive failure of crops results in indebtedness of farmers with its adverse impact on farming and farm economy and consequently the economy in general.

**RISK AND UNCERTAINTY IN AGRICULTURE:**

Uncertainty refers to an event the outcome of which is not certain i.e. the outcome may be one of the many possible outcomes. As such it can not be measured. But certain probability
may be attached to individual outcome. Risk on the other hand refers to the impact of the uncertain outcome on the quantity or value of some economic variable. The value of the economic variable may be on either side of the mean value. Repeated events would result in different outcomes having a range of values. Thus risk refers to the variations in value of an economic variable resulting from the influence of an uncertain event. Since the variations in the value are measurable risk can be measured.

Agricultural production is an outcome of biological activity which is highly sensitive to changes in weather. Important weather variables such as temperature, humidity, rainfall, wind etc. influence the biological process directly or indirectly. For instance, low soil moisture due to poor precipitation in the pre-sowing period adversely affects seed germination resulting in reduced plant population. The poor precipitation during growth period results in stunted plant growth. Heavy rainfall during early growth period causes

**NAIS:**

NAIS started in 1999-00 Rabi season followed the patterns of CCIS. It is a scheme that is offered to all the states and union territories and has a wider coverage in terms of crops and beneficiaries. Although linked to credit as in the case of CCIS, NAIS goes beyond the credit linkage. The insurance is open for non-loanees and is voluntary to that extent. The scheme has moved but only marginally towards the acturial regime. The formula for threshold yield has seen some modification. On the whole the differences are not very significant while many of the problems persist.
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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 & diseases, stabilise the income of farmers to ensure their continuance in farming, encourage farmers to adopt innovative and modern agricultural practices, and ensure flow of credit to the agriculture sector.

NEED FOR RURAL AND AGRICULTURE INSURANCE:

Indian Case Indian agricultural sector still depended mostly on monsoons. The unexpected changes and uneven distribution of monsoon rains perpetuated yield and price volatility and hence farmers exposure to risk and uncertainty. In this scenario of high risk and uncertainty of rain-fed agriculture, allocating risk is an important aspect of decision making to farmers. This indicates a need for contingent plans that will help to improve the handling of risky outcomes across individuals. The design and implementation of contingent contracts is thus an integral part of development process in Indian agricultural sector. In India, traditionally risk would be managed either privately or through implicit contracts within the family or network; such contracts can be quite useful to handle noncovariant risks. However, yield risks are often locally covariant, implying that these traditional contracts within village and families would not perform well to insurance against yield risks. Another form of risk coping strategy among farmers is income diversification and crop diversification that will reduce variance of their income. If benefits of reduced risk exposure from such crop diversification are large, then farmers may be willing to forego some of the possible gains from trade and specialisation; that is they would diversify crop rather than specialize in the activities in which they have a comparative advantage. This strategy is may seem optimal from individual point of view, but it may undermine the
competitive advantage of a nation through specialization that hinders national development. Productivity labour would likely increase under specialisation. Also, agricultural research could be focus on fewer products and thereby increase its effectiveness in developing new technologies. Moreover, transportation costs and other market transaction costs would be lowered, thus stimulating trade and increasing the gains from trade. This regional specialization helps in development of infrastructure relating to the production activity. By reducing the need for farm diversification, these contracts can stimulate specialization. The specializing in competitively advantageous crops and products by regions will increase efficiency of farms as well as helps in easy implementation of research and development and other crop based government programs through scale economies. The specialization helps in growing of off-farm and non-farm employment opportunities to a large section of rural population. Hence a development policy which includes explicit insurance arrangements for both farm as well as non-farm activities and workers helps in economic development of the country through specialization and also helps in increase and stabilise income of the farmers and non-farm workers.

CONCLUSION:

The on going National Agricultural Insurance Scheme is a good step far ward to insure risk of millions of farmers whose livelihood depends on the pattern and distribution of monsoon rain in India. However, it suffers from some of the major problems inherent in crop insurance programs throughout the world. It exclusively insures farmer’s yields against the average yield of the area. However, most of the agricultural labourer, rural off-farm and non-farm workers are not covered under the scheme even though they are equally if not more affected by the failure of agricultural crops. The existing scheme is wholly government scheme with no intensives to private finance
players, which hinders competitiveness of the scheme. The average yield of a region and locality
is not many times accurately measurable which is basis for calculation of indemnities. To
overcome the above problems in insurance this paper studied the advantages of weather
insurance against crop insurance, which overcomes most of the problems mentioned above. In
addition to that it is more compatible with reinsurance practices world wide, which make
primary insurers to cover their local and regional risks by reinsuring them selves with
international reinsures. But the post green revolution era of the state has many challenges to be
addressed. Since the last decade the need of diversification has been in fade. The receding
ground water table, the stagnation of paddy rotation, the climatic variability poses many risks to
the economy of the state which has been in plateau since long. At this juncture it can be well said
that crop insurance can be a mechanism to motivate the farmers to go for high value agriculture.

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