

## Adoption of agromet advisory services (AAS) for improving livelihood of rural farmers

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### ABSTRACT

Study was conducted during 2005-06 to 2006-07 at Bangalore rural district of Eastern dry zone of Karnataka to quantify economic benefits through adopting the agromet advisory in their day to day agricultural operations. For this purpose, two groups of farmers were selected namely, a group adopting the agro met advisories regularly in their operation (AAS farmers) and other group of farmers not aware of agromet advisories (Non-AAS farmers). 80 farmers (both AAS and Non AAS) from 4 villages have been identified and AAS information issued for only 40 farmers in two villages during *Kharif* season and care was taken to implement the advisories by this group. Crop situation of these farmers was compared with near by fields having the same crops where forecast is not adopted in non AAS farmers. Further Expenditure incurred by the farmers from land preparation till the harvest at every stage has been worked out and crop growth and yields were monitored regularly in the farmer's field belonging to both the groups. The crop growth and yield was observed to be good and high in case of farmers who have adopted the AAS information regularly compared to the farmers who have not adopted the AAS information. The net income of AAS farmer's was about Rs. 3990 in case of finger millet (ragi) and Rs. 10579 in case of redgram crops over non AAS farmers of Rs.2865 and Rs.8619, respectively. The farmers who have adopted the Agromet Advisories in their day to day operation have realized an additional benefit of 28.18 %, and 18.5 %, in finger millet and red gram crops, respectively.

**Key words :** Weather forecasting, AAS bulletin, Finger millet, Redgram and economics

### INTRODUCTION

Agriculture in India is a gambling with monsoon. Under such circumstances, the farmers are unaware of the future behavior of monsoon for making decisions in their day to day agricultural operations. Farming community needs to be advised in time by producing custom-tailored weather forecasts to initiate suitable measures to increase the production and to minimize the impact of unfavorable weather on agriculture. A reliable system of medium range weather forecasting for farm level decisions was established under National Centre for Medium Range Weather Forecasting (NCMRWF) at Delhi by Government of India for the application of weather forecasts in agriculture through Agro meteorological Advisory Services (AAS). The major objective of AAS is to help the farmers in capitalizing prevailing weather conditions in order to optimize the resource use and to minimize the loss due to harsh / aberrant weather conditions (Venkataraman, 2004).

Agro met Advisory Services is a vital tool which provides the valuable information about all agricultural operations from land preparation sowing to harvest based on weather forecasting. In this, weather is a key element which controls the success or failure of agricultural crop productivity. The main aim of Agro met Advisory Services is to conserve the natural resources effectively and call

for minimizing the weather hazards. It is fact that AAS can be modified or may be the agricultural operations can be reoriented to the forth coming weeks (3-10 days forecast). Accurate and timely forecast of rainfall patterns and other weather variables continued to be a major challenge for scientific community. The emerging ability to provide timely, skillful weather forecasts offers the potential to reduce human vulnerability to weather vagaries (Hansen, 2002). Therefore, any forecast on weather would have tremendous benefits in terms of *ex ante* management of the negative impacts of vagaries of weather.

### MATERIALS AND METHODS

#### Location of site:

The experiment station is located between 11<sup>0</sup>30' N and 13<sup>0</sup>05' N latitudes and between 76<sup>0</sup>05' and 77<sup>0</sup>45' E longitude. The elevation varies between 600 m to 900 m above mean sea level in eastern dry zone of Karnataka state (Rajegowda, 1999). The state comprises of ten agro climatic zones. The geographical location of the study area lies in the Eastern Dry zone with an altitude ranging from 800 to 900 m above mean sea level having annual rainfall ranging from 679 mm to 889 mm. This region includes four districts such as Bangalore urban, Bangalore rural, Kolar and parts of Tumkur district which represents

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