

ICAR - Central Coastal Agricultural Research Institute

Old Goa, North Goa - 403402, Goa



WEATHER FORECAST BASED AGROADVISORIES

CCARI/Success Story/2022-8

WEATHER BASED AGROMET ADVISORIES TO ENHANCE THE PRODUCTION AND INCOME OF THE FARMERS

Authors: Dr. Gopal Ramdas Mahajan, Sr. Scientist (Soil Science)

Dr. Bappa Das, Scientist (Agricultural Meteorology)

Ms. Navyashree S., Subject Matter Specialist (Agricultural Meteorology)

Mr. Dayesh Murgaokar, Agromet Observer

Committee for preparation of the weather based agro-advisories

Shri. H. R. C. Prabhu, Senior Scientist (Plant Protection) and Head In-charge, ICAR-KVK, North Goa; Dr. A. R. Desai, Principal Scientist (Fruit Science); Dr. V. Arunachalam, Principal Scientist (Spices, Plantation and Medicinal & Aromatic Crops); Dr. R. Ramesh, Principal Scientist (Plant Pathology); Dr. Maruthadurai. R, Scientist (Agricultural Entomology); Dr. Shivasharanappa Nayakvadi, Scientist (Veterinary Pathology); Dr. Sreekanth G. B., Scientist (Fisheries Resource Management); Dr. Paramesha V., Scientist (Agronomy); Dr. Nibedita Nayak, Scientist (Poultry Science)

PROBLEMS/CONSTRAINTS

The weather-related risks like cyclones, abberant weather conditions, floods, dry spells, pests and diseases have a profound influence on agricultural production and productivity. In the past, unavailability of the timely information on the weather forecast led to crop losses to the farmers of the district of North Goa. Further, limited knowledge on how to cope with the advers weather aggravated the the losses and ultimately led to poor crop yield and income to the farmers.



Taukte cyclone affected paddy field at Maem, Bicholim block of Goa



Damage to the cashew crop at Poroscodem, Pernem block affected due to cyclone

INTERVENTIONS

Through the District Agro-Met Unit (DAMU), ICAR-CCARI, Old Goa, weather-based agro-advisories were prepared and disseminated for the benefits of the farmers of the North Goa district. The advisories were disseminated in the form of bulletins twice a week (every Tuesday and Friday) both in English and Konkani languages (local language). Around 104 such bulletins were issued from October 2020 to September 2021. The advisories were disseminated every Tuesday and Friday of every week. A framework of reaching out of advisories to farmers at village and block level was achieved through hosting the weather forecast and advisories on websites of Institute, Directorate of Animal Husbandry and Veterinary Services and Directorate of Fisheries, IMD Panjim, Krishi Vigyan Kendra, North Goa and other line departments. Further, dissemination is done through linkages with the District Agriculture Officers, Zonal Agricultural Officer, etc of the line departments and preparation of the groups. Awareness and capacity building programmes were also conducted traps.

IMPACT

The weather forecast and agroadvisories were disseminated to farmers by using social media platforms. A total of 130 WhatsApp groups were created to disseminate the AAS bulletins to farmers which covered 195 villages of North Goa. The advisories were disseminated to more than 7000 farmers every Tuesday and Friday of every week. Through systematic feedback collection and impact assessment, the weather forecast based agroadvisories generated an additional income of Rs. 9.0 crores by enabling farmers to save the crops from abberant weather and plan timely agricultural operations. The timely weather warning alerts /contingency measures issued before/during extreme events like 'Tauktae' cyclone (2021) were widely acclaimed by local farmers.









Capacity building of the farmers on using the weather forecast based advisories

Website: ccari.icar.gov.in Ph: 0832-2993097 E-mail: director.ccari@icar.gov.in