

Roving Seminars on Weather, Climate and Farmers A Concept Note

World Meteorological Organization

1. Introduction

Weather and climate are some of the biggest risk factors impacting on farming performance and management. Extreme weather and climate events such as severe droughts, floods, or temperature shocks often strongly impede sustainable farming development, particularly in the tropics and sub-tropics. Factors such as climate variability and change contribute to the vulnerability of individual farms, as well as on whole rural communities. This also particularly impacts on regional and world food security. Recent weather and climate research efforts have demonstrated the importance of targeted forecasting and scenario analyses in increasing overall preparedness of farmers and farm business managers, leading to substantially better outcomes overall.

Farmers and farming communities throughout the world have, in most instances, survived and developed by mastering the ability to adapt to widely varying weather and climatic conditions. However, the dramatic growth in human population is imposing enormous pressure on existing farming production systems. In addition, farmers are expected to manage the more insidious effects of long-term climate change that may now be occurring at an unprecedented rate. Against the very unfavorable economic scenarios of the last decades, farmers have been struggling to maintain their income by continuously trying to increase yields in their production systems. Such increased productivity may be associated with increased economic and environmental risk as the farming system becomes more vulnerable to climate variability and climate change. These existing pressures will demand the development and implementation of appropriate methods to address issues of vulnerability to weather and climate. These will be needed to assist farmers to further develop their adaptive capacity with improved planning and better management decisions.

More targeted weather and climate information can increase preparedness and lead to better economic, social, and environmental outcomes for farmers. However, weather and climate forecasting is just one of many risk management tools that play an important role in farming decision-making. More effective approaches to the delivery of climate and weather information to farmers may need the incorporation of a more participatory, cross-disciplinary approach that brings together research and development institutions, relevant disciplines, and farmers as equal partners to reap the benefits from weather and climate knowledge. Given the current concerns with climate change and its impacts on crop productivity, especially in the developing countries of the semi-arid regions, there is an urgent need to sensitize the farmers about the projected climate change in their regions and the different adaptation strategies that can be considered to cope with the projected change. Examples of more general decisions that can be aided by targeted weather and climate information include strategic and tactical crop management options, agricultural commodity marketing, and policy decisions about future agricultural land use.

It is with this background that the World Meteorological Organization (WMO) is promoting the organization of a series of one-day Roving Seminars on Weather, Climate and Farmers in

different regions of the world to sensitize them about the weather and climate information and its applications in operational farm management. Also, these seminars will increase the interaction between the local farming communities and the local staff of the National Meteorological and Hydrological Services (NMHSs). This feedback is crucial for the NMHSs in providing better services for the agricultural community.

2. Objective of the Seminars:

The objective of these seminars is to make farmers become more self-reliant in dealing with weather and climate issues that affect agricultural production on their farms and to increase the interaction between the farmers and the NMHSs.

3. Overall goal of the Seminars

The overall goal of these seminars is "to secure farmer self reliance, through helping them better informed about effective weather and climate risk management by sustainable use of natural resources for agricultural production".

4. Planned Activities

Typically the Roving Seminars are of one-day duration and bring together farmers from a group of villages to a centralized location in any given region. The programme for the Seminars consists of two parts:

Part I – Weather and Climate of the Farming Region, Climate Change and Farming Risks

The first half of the day is devoted to providing information in local language on the following aspects weather and climate in the region:

a) Weather

- Short term weather forecasts
- Clouds
- Weather maps
- Weather forecasting terms

b) Climate

- Seasonal climate patterns
- forecasting
- drought alerts
- using rainfall records

c) Future climate change in their region and implications

d) Climatic risk in production of different crops in their region

e) Better risk management

Presentation on the above topics are interactive and promote a good dialogue with farmers.

Part II – Farmer Perception of Weather and Climate Information Provision and Feedback

The second half of the day, following lunch, is devoted to obtaining feedback from the farmers on the weather and climate issues in their farming operations and the nature of assistance they need.

Primary emphasis here is placed on free and frank exchange of ideas and information. This part of the Seminar will be designed in such a way as to engage all the participants in discussions and obtain full information from the farmers on their needs for weather and climate information and the ways and means to improve future communication of weather and climate information to them to facilitate effective operational decision making.

5. Partners in the organization of the Seminars

The Roving Seminars will be organized in full cooperation with the NMHSs, local agricultural extension services, and with the active involvement of the agricultural research personnel from a Regional Research Station or University in the Region.

6. Expected outcomes of the Roving Seminars

- a) The Roving Seminars will help raise the awareness of the farming community of the current advances in the provision of weather and climate information for facilitating operational decisions on farm.
- b) Feedback obtained from the farmers will help the personnel from the Meteorological Services and the Agricultural Extension Agencies to design more improved products for use by farmers and to improve the channels of communication to provide information to the farmers.
- c) Summary reports that will be produced at the end of Phase I will help understand the current methods of weather and climate risk management at the farm level in different parts of the world and help introduce improved risk management tools for the farming community.
