



CLIMATE SERVICES USER FORUM

# Climate Services for Agriculture: Agromet Decision Support System

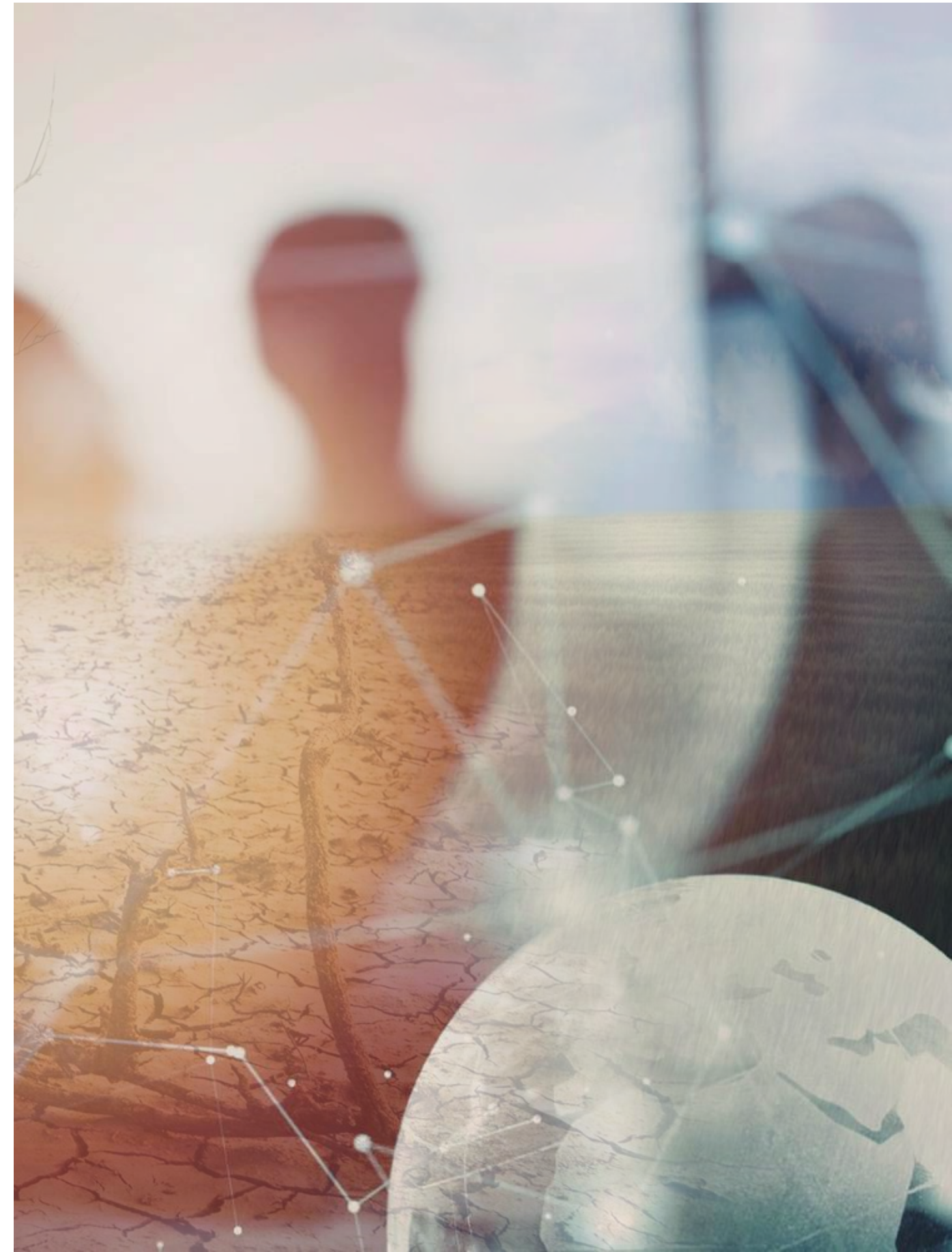
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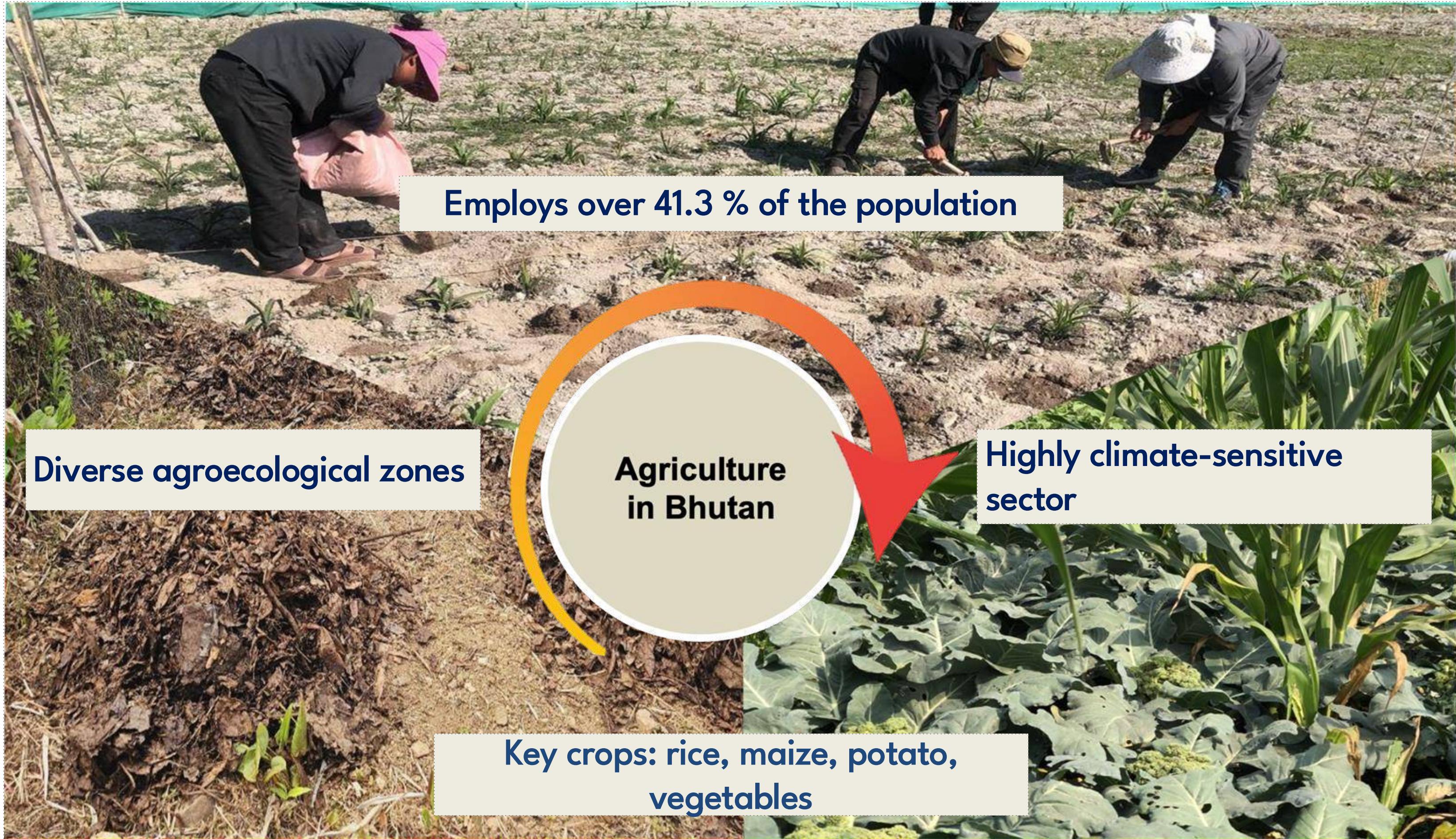
Senior Horticulture Officer

Department of Agriculture, Ministry of Agriculture and Livestock

# Outline of Presentation

- Agriculture in Bhutan
- Climate in Bhutan
- Climate services in Bhutan
- Agromet Decision Support System
- Issues and way forward





**Employs over 41.3 % of the population**

**Diverse agroecological zones**

**Agriculture  
in Bhutan**

**Highly climate-sensitive  
sector**

**Key crops: rice, maize, potato,  
vegetables**

# Climate in Bhutan

## Seasons



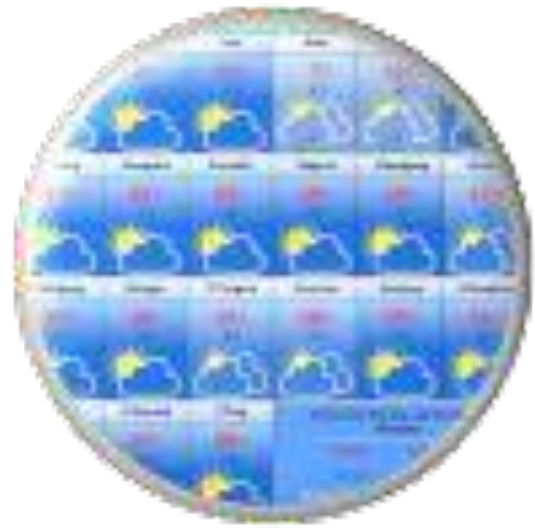
## Climatic characteristics

- Strong altitudinal variation
- Monsoon-dominated rainfall
- Increasing variability
- Frequent extreme events

## Climate risks

- Erratic rainfall
- Dry spells and droughts
- Pests and diseases
- Floods and landslides

# Climate Services in Bhutan



Weather forecasts



Seasonal outlooks



Decision support tools

# Agromet Decision Support System

## 1 Web Agromet Decision Support System (ADSS)

BHUTAN ADSS

Dashboard
Forecast
Alert
Crops
Bulletins & Outlook
Dissemination

**AGRO-METEOROLOGY ADVISORY BULLETIN**  
ISSUED FOR WANGDUEPHODRANG (THEDTSHO)

Issued by: DEPARTMENT OF AGRICULTURE, MoAL  
Prepared based on weather forecast received from NCHM

Bulletin Name: ARDC-Bajo-AAS-25-106      Date of issue: 17/10/2025

**Strong Wind Alert**

Extreme: 0 Locations  
Heavy: 0 Locations

**Heavy Rain Alert**

Extreme: 0 Locations  
Heavy: 3 Locations

**Heat Alert**

Very Hot: 0 Locations  
Hot: 1 Location

**Frost Alert**

Very Cold: 1 Location  
Cold: 10 Locations

**Pest, Disease Alert**

- Apple
- Apple
- Fruit Set
- Paro
- ★ Apple scab (*Venturia inaequalis*)
- 2025-12-01
- Potato
- Desiree, Yusi maap, Yusi Maap-2, Yusi Chip-1, Khangma kaap
- Vegetative stage
- Paro
- ★ Early Blight
- 2026-03-01
- Apple
- Apple

Observation Data
5 Days Forecast
10 Days Forecast
Monthly Forecast
Seasonal Forecast

Day-1: 27-Apr to 28-Apr

Weather observed for the period (13/10/2025 to 17/10/2025)

Parameter	Day 1	Day 2	Day 3	Day 4	Day 5
Rainfall(mm)					
Max temp(°C)	28.5	28.5	28.5		
Min temp(°C)	18.5	15.0	16.0	14.5	
RH(%)	66.0	74.0	70.0	68.0	
Wind Speed(m/sec)					

Weather forecast for the period (17/10/2025 to 21/10/2025)

Parameter	Day 1	Day 2	Day 3	Day 4	Day 5
Rainfall(mm)	0.0	0.0	0.0	0.0	0.0
Max temp(°C)	29.5	28.5	28.0	20.6	20.9
Min temp(°C)	18.2	18.2	16.8	6.3	6.7
RH(%)	62.78	68.48	70.27	61.85	57.75
Wind Speed(m/sec)	3.5	2.78	3.19	2.43	2.55

**AGRO- ADVISORIES**

CROP	AGRO-ADVISORIES

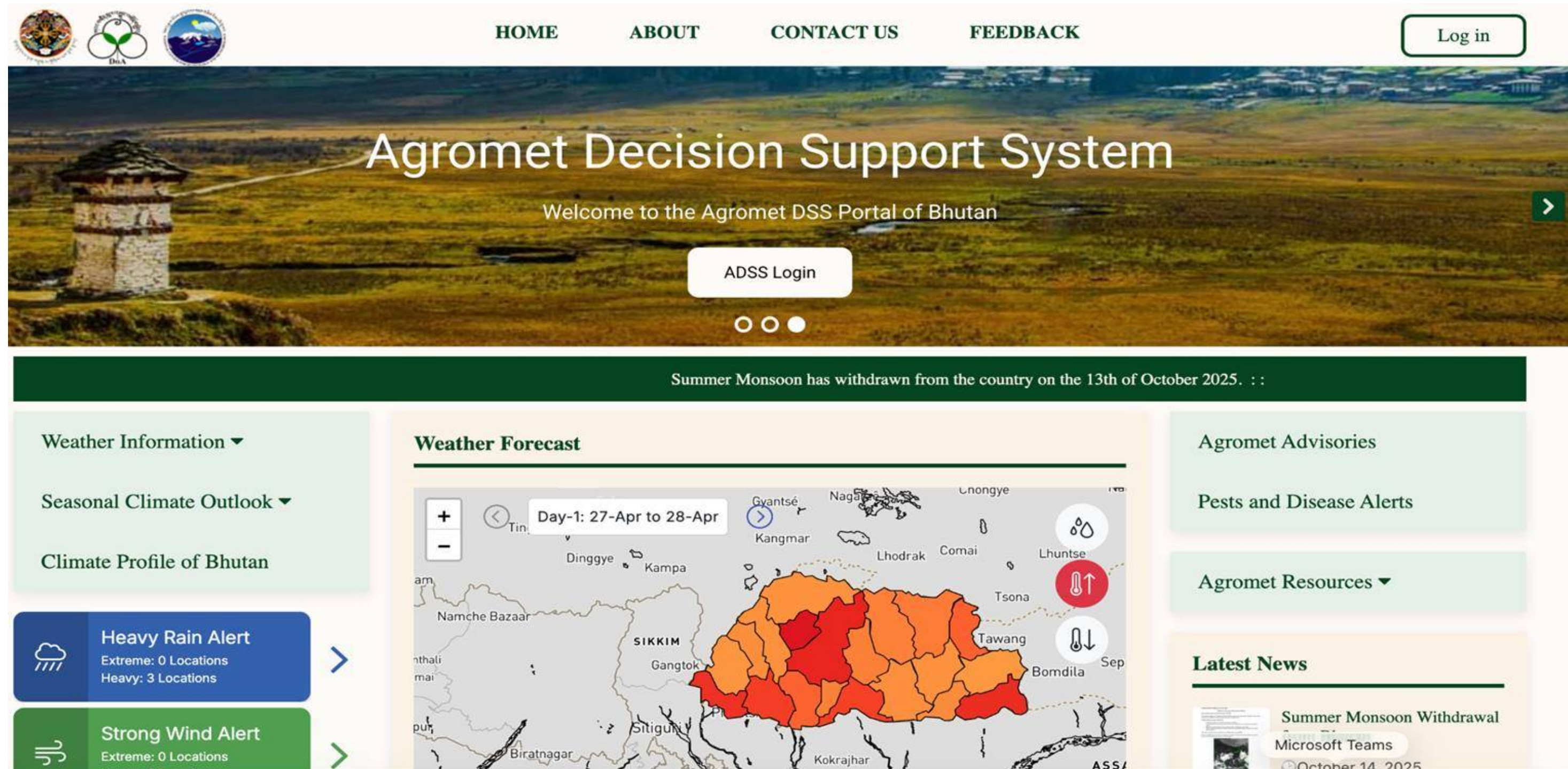
SPECIAL ADVISORY

Farmers are advised to harvest their crops as no rainfall is forecasted for the coming week. The dry weather will provide favorable conditions for harvesting, drying, and threshing operations.

[adss.systems.gov.bt](http://adss.systems.gov.bt)

# Agromet Decision Support System

## 2 ADSS Landing Page



HOME ABOUT CONTACT US FEEDBACK Log in

# Agromet Decision Support System

Welcome to the Agromet DSS Portal of Bhutan

ADSS Login

Summer Monsoon has withdrawn from the country on the 13th of October 2025. : :

Weather Information ▾

Seasonal Climate Outlook ▾

Climate Profile of Bhutan

Heavy Rain Alert  
Extreme: 0 Locations  
Heavy: 3 Locations

Strong Wind Alert  
Extreme: 0 Locations

### Weather Forecast

Day-1: 27-Apr to 28-Apr

Agromet Advisories

Pests and Disease Alerts

Agromet Resources ▾

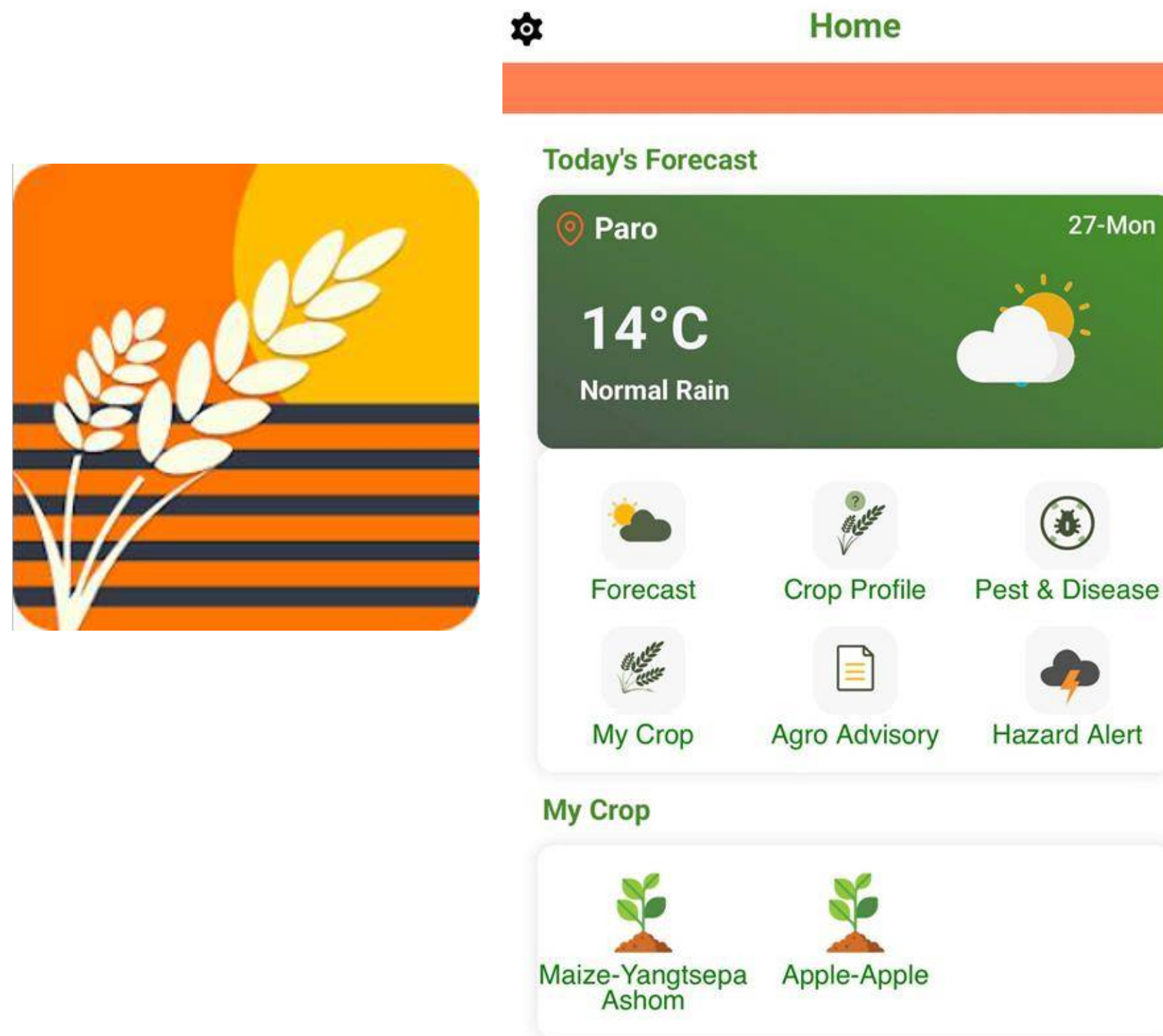
#### Latest News

Summer Monsoon Withdrawal  
Microsoft Teams  
October 14, 2025

[agromet.systems.gov.bt](http://agromet.systems.gov.bt)

# Agromet Decision Support System

## 3 Mobile Application: Sanam Jabchor App



## Issues and Challenges

- Data limitations
- High reliance on traditional knowledge
- Forecast uncertainty
- Capacity gaps
- Coordination needs

## Way forward

- Upscale the agromet services
- Enhancement of ADSS
- Strengthen engagements with NCHM, farmers and other stakeholders
- Capacity building in agrometeorology



THANK  
YOU

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