



Asia Regional Resilience to a Changing Climate (ARRCC) Met Office Partnership newsletter

June 2022



Welcome

Welcome to the latest edition of our ARRCC Met Office Partnership newsletter. This edition covers the period from March to June 2022, highlighting some of our key activities and events during this time. We hope you will find the articles informative.

If you have been forwarded this email and would like to receive ARRCC newsletters direct in future, please **email us** with your details and consent.

The Met Office ARRCC team

Impact-based forecasting (IBF) - work package 1

Impact Based Forecasting pilot service for the agricultural sector



Since the inception of ARRCC, the Met Office have been working with the Pakistan Meteorological Department (PMD) to bring the benefits of Impact Based Forecasting to their stakeholders. Following a baseline survey of 300 households across the Potohar Plateau, conducted by in-country partners The International Centre for Integrated Mountain Development (ICIMOD), a lack of actionable weather information was identified and attributed to failing or low yielding crops.

Through a series of training events and stakeholder workshops, a pilot service has been developed which aims to address this need and provide useable and useful weather information to farmers across two districts of the Potohar Plateau: Attock and Chakwal. Communication channels are a critical element in the whole process and as such, focal points have been appointed within the Agricultural Extension Service across each Teshil (11 Teshils make up the two pilot districts), as well as several Agricultural Research Institutes. Communication is two-way between PMD and their stakeholders, split between WhatsApp, a dedicated IBF website (pictured left, available to access here), Google Forms and local radio.

<u>Strengthening Climate Information Partnerships South Asia (SCIPSA) -</u> work package 2

SCIPSA team attend India workshop for agromet advisories:



In June, some of the SCIPSA team travelled to Pune, India to attend a workshop on 'Operational Procedures for Preparation of Agromet Advisories'. Jointly organised by the Regional Integrated Multi-Hazard Warning System for Africa and Asia (RIMES) and the India Meteorological Department (IMD), the workshop brought together delegates from national hydro-met services and agricultural departments from India, Bangladesh and Nepal to share knowledge and experience of producing national advisories. The workshop also involved a field visit to Aurangabad to a Krishi Vigyan Kendra (KVK) agricultural research centre where we spoke to local farmers about their experiences of using agromet advisories to improve their farming practices.

<u>Climate Analysis for Risk Information & Services in South Asia (CARISSA) - work package 3</u>

Training on spatial and temporal analysis of climate change indices

The International Centre for Integrated Mountain Development (ICIMOD), in collaboration with the Met Office, the World Climate Research Programme (WCRP)/Coordinated Regional Climate Downscaling Experiment (CORDEX), the Swedish Meteorological and Hydrological Institute (SMHI) and the Indian Institute of Tropical Meteorology (IITM) – Pune, organised a four-day regional training on spatial and temporal analysis of climate change indices in June 2022.



Sven Kralisch, University of Jena interacts with participants at the training. (Photo: ICIMOD/Rajesh Shrestha)

The training focussed on using the Climate Data Indices Tool to calculate select indices for different sectors – agriculture, health, and water resources – using selected representative models for a defined area of interest. Colleagues from ICIMOD and the University of Jena, guided participants on calculating and analysing climate indices using the Climate Data Indices Tool, R software and CORDEX regional climate model simulations. Joining remotely, colleagues from IITM–Pune and SMHI presented on CORDEX South Asia-based climate indices used in the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) report, and bias correction methods respectively.

The training brought together 16 participants – five of them women – from national meteorological and hydrological services (Bangladesh Meteorological Department, Nepal's Department of Hydrology and Meteorology and Pakistan Meteorological Department) and research institutions in Bangladesh, Nepal and Pakistan. The regional training is the fifth training session in a series organised by ICIMOD, the Met Office and partners in 2020–2022. These are part of ARRCC's institutional capacity-building approach to strengthen the knowledge and capabilities of staff working at key national and regional institutions, delivering climate services to provide information needs for informed climate change responses in South Asia.

Read more about the event

More photos from the event

Hydropower focused workshop planned for July

ICIMOD and the Met Office are planning an in-person workshop focused on increasing the resilience of the hydropower sector in Nepal to extreme rainfall events. The workshop, which will be held at ICIMOD headquarters in Kathmandu in July, will bring together stakeholders from the hydropower sector with

scientists from ICIMOD and the Met Office. Through interactive exercises, the two groups will determine how climate information can be integrated into decisions to help increase the resilience of this sector to future climate change.

World Climate Research Programme (WCRP) Sea-level Conference

A small team from the Met Office will be attending the WCRP Sea-level Conference in-person in Singapore mid-July. They will be presenting posters in the session 'Regional Sea-Level Change and Coastal Impacts' on coastal climate services outputs from the CARISSA project. This includes local sea-level projections for South Asia and how they compare to the latest Intergovernmental Panel on Climate Change (IPCC) local sea-level projections. The conference will be a chance to share this work with partners in the region, to connect with sea-level scientists and stakeholders across the region and take part in discussions on applying sea-level science for adaptation and stakeholder needs.

The ARRCC programme

The UK aid-funded ARRCC programme is being led by the Met Office and the World Bank and aims to strengthen weather forecasting systems across Asia. The programme is delivering new technologies and innovative approaches to help vulnerable communities use weather warnings and forecasts to better prepare for climate-related shocks.

Asia is highly vulnerable to natural disasters and this vulnerability is expected to increase. The ARRCC Met Office Partnership (MOP) programme is targeting the most vulnerable countries in the region, primarily Bangladesh, Pakistan, Nepal and Afghanistan, and will support:

- 1. enhancing regional collaboration and capability for provision of weather and climate services;
- 2. development of regional and sub-regional forecasting and early warning systems;
- 3. improving capacity in focus countries to develop and disseminate impact based forecasting (across multiple timescales) to climate sensitive sectors and vulnerable communities;
- 4. development of new technologies to deliver climate information to vulnerable groups; and
- 5. the mobilisation of additional resources for building climate and environmental resilience.

The Met Office is working closely with a number of key partner organisations in the region to support delivery of ARRCC, including:

- UN bodies such as the World Meteorological Organization (WMO), the World Food Programme (WFP) and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP);
- existing regionally mandated organisations involved in development of weather and climate services, including the International Centre for Integrated Mountain Development (ICIMOD) and Regional Integrated Multi-Hazard Early Warning Systems (RIMES) and research organisations such as the International Maize and Wheat Improvement Center (CIMMYT);
- NGOs such as the Red Cross Climate Centre (RCCC); and
- National Meteorological and Hydrological Services (NMHS) and related agencies with responsibility for disaster risk management.

Find out more on the **ARRCC Met Office Partnership webpages**.

Meet the Met Office ARRCC team



Daniel RyanProgramme Manager



George GibsonDeputy Programme Manager



Tamara JanesWork package 2 - SCIPSA - lead



Marta Bruno Soares (University of Leeds) Work package 4 - VALUE - lead



David Corbelli Programme Director



Catrina Johnson Work package 1 - IBF -lead



Joseph DaronWork package 3 - CARISSA - lead



Hayley Jones Strategic Communications Manager

Contact us

Email: arrcc@metoffice.gov.uk Web: ARRCC Met Office Partnership webpages Twitter: ometofficeww #UKaidAsiaClimate © Crown Copyright 2022 | Please click here to unsubscribe