

# Agenda

All timings are in Nepal Standard Time

## WEEK 1

### DAY 1: MONDAY, 12 OCTOBER 2020

Opening session and setting up for the virtual meeting

| Time        | Programme   | Responsible person   |
|-------------|---|--|
| 13:30–13:45 | Registration  | Angeli Shrestha and Rajesh Shrestha, ICIMOD                          |
| 13:45–13:55 | Welcome remarks   | Ghulam Rasul, ICIMOD   |
| 13:55–14:05 | Opening remarks   | Joseph Daron, Met Office   |
| 14:05–14:15 | Opening remarks   | Irène Lake, Swedish Meteorological and Hydrological Institute (SMHI) |
| 14:15–14:25 | Climate Services Initiative and institutional capacity building approach in regional climate change projections                   | Mandira Singh Shrestha, ICIMOD                                       |
| 14:25–14:35 | Overview of the training  | Santosh Nepal, ICIMOD  |
| 14:35–14:45 | Introduction and expectations of the participants   | Mandira Singh Shrestha, ICIMOD                                       |
| 14:45–15:00 | <i>Break</i> – Setting up the online environment, and software installation   | Participants only  |
| 15:00–15:35 | Setting up of the Microsoft Teams platform and troubleshooting  | Utsav Maden, ICIMOD  |
| 15:35–16:30 | Setting up the virtual training environments – Ensuring the installation of the required software (R, RStudio, ESGF registration) | Saurav Pradhananga and Kabi Raj Khatiwada, ICIMOD                    |

### DAY 2: TUESDAY, 13 OCTOBER 2020

Climate change science

|             |  |  |
|-------------|--|--|
| 13:45–14:15 | Fundamental concepts of climate change science and prediction                            | Joseph Daron, Met Office                               |
| 14:15–14:45 | Climate modelling and approaches to regional and local downscaling                       | Cathryn Fox, Met Office                                |
| 14:45–15:00 | <i>Break</i>   |  |
| 15:00–15:30 | Climate change and its impact on the Hindu Kush Himalaya region                          | Arun B. Shrestha and Santosh Nepal, ICIMOD             |
| 15:30–16:00 | Climate change scenarios for Nepal: Experience from the National Adaptation Plan process | Saurav Pradhananga and Santosh Nepal, ICIMOD           |
| 16:00–16:30 | Climate change projections in Pakistan   | Burhan Ahmad, Pakistan Meteorological Department (PMD) |
| 16:30–17:00 | Q&A  |  |

### DAY 3: WEDNESDAY, 13 OCTOBER 2020

Introduction to CORDEX data sets and data download

|             |  |   |
|-------------|--|---|
| 09:00–10:30 | Introduction to CORDEX datasets – Data access, data formats, availability and download options, CORDEX data extraction tool        | J. Sanjay, Sandip Ingle and Mahesh Ramadoss, IITM |
| 10:30–12:00 | Log in to climate data portal (registration with ESGF portal)  | J. Sanjay, Sandip Ingle and Mahesh Ramadoss, IITM |
| 14:00–16:00 | Define area of interest (lat–lon boundary)<br>Exercise: Download the selected model historic period (1981–2005) in .nc data format | J. Sanjay, Sandip Ingle and Mahesh Ramadoss, IITM |
| 16:00–16:30 | Q&A  | J. Sanjay, IITM                                   |

NB: Please download all 17 models for future periods during the four-day gap (14–18 October 2020).

## WEEK 2

### DAY 4: MONDAY, 19 OCTOBER 2020

#### Climate change analysis and visualization using CORDEX data sets

| Time        | Programme   | Responsible person   |
|-------------|---|--|
| 09:00–12:00 | Practical exercise: Overview presentation – Application of R for CORDEX data analysis<br>Setting up RStudio for CORDEX data analysis<br>Accessing data sets and setting the required information (time periods, models, and variables)<br>Selecting multiple simulations across scenarios and visualizing outputs for historical and future periods | Saurav Pradhananga, Santosh Nepal and Kabi Raj Khatiwada, ICIMOD |
| 14:00–17:00 | Practical exercise<br>Issues/problem discussions<br>Troubleshooting<br>Practical exercises (continued)  | Saurav Pradhananga, Santosh Nepal and Kabi Raj Khatiwada, ICIMOD |

### DAY 5: TUESDAY, 20 OCTOBER 2020

#### Climate change analysis and visualization using CORDEX data sets

|             |  |  |
|-------------|--|--|
| 09:00–12:00 | Practical exercise: Overview presentation – Climate model outcome and analysis<br>Analysing results for different temporal periods<br>Comparing results from different models<br>Analysing climatic trends for historical periods<br>Comparing future periods with the reference periods for selected models | Santosh Nepal, Saurav Pradhananga and Kabi Raj Khatiwada, ICIMOD |
| 14:00–17:00 | Practical exercises (continued)<br>Troubleshooting issues/problems<br>Result discussion and interpretation   | Santosh Nepal, Saurav Pradhananga and Kabi Raj Khatiwada, ICIMOD |

### DAY 6: WEDNESDAY, 21 OCTOBER 2020

#### Discussion on regional climate data portal

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|-------------|---|--|
| 09:00–12:30 | Consultation on the regional climate data portal and user requirements    | Sudip Pradhan, Mir Matin and Ramesh Silwal, ICIMOD             |
| 13:45–14:15 | Evaluation of training<br>Sharing the results                             | Utsav Maden, ICIMOD  |
| 14:15–15:00 | Breakout session (country-wise)   |  |
| 15:00–15:15 | Break   |  |
| 15:15–16:15 | Road map discussion for future training and on roles and responsibilities | Moderators: Santosh Nepal, ICIMOD, and Cathryn Fox, Met Office |
| 16:15–16:30 | Break   |  |
| 16:30–16:45 | Closing remarks<br>Vote of thanks   | Joseph Daron, Met Office<br>David Corbelli, Met Office         |
| 16:45–17:00 | Closing remarks   | Eklabya Sharma, ICIMOD   |