

Agenda

Training workshop on Multiscale Integrated River Basin Management (IRBM) from the Hindu Kush Himalayan perspective

Initiative: Strengthening Water Resource Management in Afghanistan (SWaRMA)

Programme: River Basins and Cryosphere (RP3)

Training coordinator: Santosh Nepal

Module	Contributors (Module Lead in Bold)
Module 1	Santosh Nepal , Arun B Shrestha, Ramesh Ananda Vaidya, Philippus Wester, Kabi Raj Khatiwada, Neera Shrestha Pradhan, Aditya Bastola Madhav Belbase (WECS, Nepal), Jalal Naser Faqiryar, Ministry of Energy and Water, Afghanistan
Module 2	Arun B Shrestha , Santosh Nepal, Nisha Wagle, Sudip Pradhan, Faisal Mueen Qamar, Saurav Pradhananga, Rishi Ram Sharma (WECS), Dilip Gautam (External resource person) Shahriar Wahid and Susan Cuddy (CSIRO) Andrew Johnson (ICEWaRM)
Module 3	Chanda Gurung Goodrich , Pranita Bhushan Udas, Aditya Bastola
Module 4	Arabinda Mishra , Avash Pandey, Omaid Nazmuddhin
Module 5	Anjal Prakash , Avash Pandey
Module 6	Sanjeev Bhuchar , Finu Shrestha, Sharad Joshi, Anna Sinisalo, Vijay Khadgi, Neera Shrestha Pradhan, Mandira Shrestha, Dipankar Shakya, Madhav Dhakal, Gunanidhi Pokhrel, Karishma Khadka, Keshar Man Sthapit (External Resource Person), Philippus Wester, Samden Sherpa
Module 7	Vijay Khadgi , Neera Shrestha Pradhan, Arun Shrestha, Santosh Nepal, Kabi Raj Khatiwada, Dipankar Shakya, Sanjeev Bhuchar, Aditya Bastola, Debabrat Sukla
Module 8	Laurie Ann Vasily , Udayan Mishra, Debabrat Sukla, Nargis Mansoor, Samuel Thomas

Module 1: Conceptual understanding of river basin's drivers and impact for IRBM

Contributors (Module Lead in Bold): **Santosh Nepal**, Arun B Shrestha, Ramesh Ananda Vaidya, Philippus Wester, Kabi Raj Khatiwada, Neera Shrestha Pradhan Aditya Bastola,

Madhav Belbase, (WECS, Nepal)

Jalal Naser Faqiryar, Ministry of Energy and Water, Afghanistan

DAY 1, – 28-JAN 2019

Start time	(mins)	Presentation topics	Resource persons
9:00	45	Principles of IWRM and IRBM : Challenges for the Himalayan river basins	Ramesh and Flip, ICIMOD
9:45	30	River basin management: approach and challenges	Ramesh and Flip, ICIMOD
10:15	45	Upstream-downstream linkages and Multi-scale IRBM	Santosh Nepal, ICIMOD
11:00	30	Tea\Coffee break	
11:30	30	Challenges of water resources management in Afghanistan	Jalal Naser Faqiryar, MEW
12:00	30	IRBM implementation in Nepal: challenges and way forward	Madhav. Belbase, WECS
12:30	15	Experiences of IWRM implementation from Australia	Andrew Johnson, ICEWaRM
12:45	60	Lunch break	
13:45	30	Climate change impact on hydrological regime using DPSIR framework	Arun B Shrestha, ICIMOD
14:15	120	Interactive Group work: Conceptualizing the impact of climate change on a river basin • Participants perception on climate change impact on biophysical components • Participants discuss climate change impacts in a group, organize the ideas in flip card and discuss the impacts)	Santosh Nepal, ICIMOD
15:00	30	Tea\Coffee break	
15:30		Group work continue... By imagining specific examples of their river basins, participants will come up with conceptual framework for CC impacts on different components	

Module 2: Tools and approaches for understanding biophysical changes

Contributors (Module Lead in Bold): **Arun B Shrestha**, Santosh Nepal, Nisha Wagle, Sudip Pradhan, Faisal Mueen Qamar

Rishi Ram Sharma (WECS)

Dilip Gautam (External resource person), Shahriar Wahid and Susan Cuddy (CSIRO), Andrew Johnson (ICE WaRM)

DAY 2 – 29 JANUARY 2019

Start Time	(mins)	Presentation topics	Resource persons
9:00	30	Introduction of the module <ul style="list-style-type: none"> • How analytical tools help in IRBM • What are the ranges of available tools • Relevance of those tools and limiting factors 	Arun B. Shrestha, ICIMOD
9:30	30	Opportunities and challenges in implementing analytical tools for IRBM in Afghanistan	Afghan resource person
10:00	30	Information management in IRBM (Presentation and demonstration of HI-CHAP and RDS)	Sudip Pradhan, Saurav Pradhananga, ICIMOD
10:30	30	Tea\Coffee break	
11 :00	60	Water availability assessment using hydrological models	Santosh, Saurav, ICIMOD
12:00	30	Drought Monitoring (Presentation and demo)	Faisal Mueen Oamar, ICIMOD
13:30	60	Lunch break	
1:30	30	Water ecosystem interaction	Susan Cuddy, CSIRO
14:00	45	Role of hydrometeorological monitoring for IRBM in Nepal	Rishi Ram Sharma, WECS
14:45	45	Flood management in Nepal	Dilip Gautam
15:30	30	Tea\Coffee break	
16:00	45	Basin planning experience from Australia (interactive seminar)	Andrew Johnson, ICEWaRM
16:45	15	Wrap-up discussion	Arun B. Shrestha, ICIMOD

DAY 3 – 30 JAN 2019

Start Time	(mins)	Presentation topics	Resource persons
9:00	120	J2000 model as a tool to analyse water availability scenarios <ul style="list-style-type: none"> • Basic structure of the model and input requirements • Outputs of the model • Hands-on on what-if scenarios • How can the results be used 	Santosh Nepal, Saurav Pradhananga, Kabi Raj Khatiwada ICIMOD
11:00	15	Tea\Coffee break	
11:15	75	Scenario planning in IRBM (interactive seminar)	Shahriar Wahid, CSIRO
12:30	15	Wrap-up and concluding remarks	Arun B. Shrestha, ICIMOD
12:45		Lunch (12:45 - 1 :30)	

Module 3: Understanding gendered vulnerabilities and the socioeconomic drivers of change

Contributors (Module Lead in Bold): **Chanda Gurung Goodrich**, Pranita Bhushan Udas, Aditya Bastola

DAY 3 – 30 JAN 2019

Start Time	(mins)	Presentation topics	Resource persons
12:30	60	Lunch break	
13:30	10	Expectation of the participants (Interaction)	Chanda Gurung Goodrich and Aditya Bastola, ICIMO
13:40	5	Objectives of the module	Chanda Gurung Goodrich and Aditya Bastola, ICIMOD
13:45		Session: 1 Gender and Identity	
	30	Society, gender and river basin system Interactive presentation/Game (self-reflection)	Chanda Gurung Goodrich, ICIMOD
14:15	60	a. Understanding gender and identity (gender/sex, social exclusion/inclusion, equality and equity, identity, diversity) b. Gender concepts	Game(s)/presentation/ quiz Chanda Gurung Goodrich and Aditya Bastola, ICIMOD
15:15	30	Tea/Coffee break	
15:45	60	Continue .. Understanding gender and.....	
16:45	15	Gender and Social Dynamics in Afghanistan	Afghanitan Resource person/ Interactive presentation

DAY 4 – 31-JAN 2019

9:00		Session 2: Gendered Vulnerabilities	
	15	Understanding vulnerabilities and paradigm shifts	Chanda Gurung Goodrich, ICIMOD
9:15	45	Conditions and Drivers of gendered vulnerability	Chanda Gurung Goodrich, ICIMOD
10:00	30	Tea/Coffee break	
10:30		Session 3: Gender mainstreaming and analysis	
	15	Gender, social inclusion and governance at scales in river basin	Aditya Bastola, ICIMOD
10:45	20	Interactive session on brief gender analysis:	Chanda Gurung Goodrich, ICIMOD
		Identifying gender vulnerabilities and socioeconomic drivers of change in Afghanistan - at scales in Afghanistan - 3 groups working at individual/households, community, basin scales	Video/ Group work/ Presentation Chanda Gurung Goodrich and Aditya Bastola, ICIMOD
11:05	50		
12:00	15	Gender mainstreaming and analysis tools	Aditya Bastola, ICIMOD
12:10	15	Session 4: Closing session Feedback & Evaluation (Feedback tools)	Chanda Gurung Goodrich and Aditya Bastola, ICIMOD
12:30		Lunch break	

Module 4: Governance, Policy and institutional framework

Contributors (Module Lead in Bold): **Arabinda Mishra**, Avash Pandey, Omaid Nazmuddhin

DAY 4 – 31 JAN 2019

Start time	(mins)	Presentation topics	Resource persons
13:30	60	Introduction to river basin governance need and challenges; different approaches to river basin governance; the concept of adaptive governance, its relevance	Arabinda Mishra, ICIMOD
14:30	30	Tea\Coffee break	
15:00	60	Principles of adaptive governance and their match with IRBM objectives	Arabinda Mishra
16:00	60	Putting theory to practice - examples of adaptive governance from select case studies and participantgs experiences	Arabinda Mishra, Avash Pandey, ICIMOD

DAY 5 – 01 FEB 2019

9:00	60	Relevance and role of traditional community level institutional arrangements (case discussion; case from Afghanistan)	Arabinda Mishra, Avash Pandey and Omaid Nazmuddhin
10:00	30	Tea\Coffee break	
10:30	120	Group work on tools and techniques of putting adaptive governance principles to practice	Arabinda Mishra, Avash Pandey
12:30		Lunch break	
Free time after lunch			

Module 5: Water diplomacy and regional cooperation

Contributors (Module Lead in Bold): **Anjal Prakash**, Avash Pandey

DAY 6 – 2-FEB 2019

Start time	(mins)	Presentation topics	Resource persons
9:00	60	Water diplomacy and regional cooperation: key principles and challenges	Anjal Prakash
10:00	60	Key principles of international water laws and International negotiations in transboundary river basins	Ram Babu Dhakal, MoFA
11:00	30	Tea\Coffee break	
11:30	30	Transboundary cooperation in HKH basins: Overview of issues and opportunities	Arun B Shrestha, ICIMOD
12:00	30	Why Eastern Himalayan countries should cooperate in transboundary water resource management	Golom Rasul
12:30	60	Lunch break	
13:30	90	Roleplay: Musing River Hydro-Electric Project on a Large River Basin in South Asia	Anjal Prakash and Avash Pandey, ICIMOD
15:00	15	Tea\Coffee break	
15:15	90	Nile River Basin Management: Identifying challenges for river basin (40 min documentary plus discussions)	Anjal Prakash
16:45	15	What did I learn today?	Anjal Prakash

Module 6: Operational aspects of water and land management

Contributors (Module Lead in Bold): **Sanjeev Bhuchar**, Finu Shrestha, Sarad Joshi, Anna Sinisalo, Vijay Khadgi, Neera Shrestha Pradhan, Mandira Shrestha, Dipankar Shakya, Madhav Dhakal, Gunanidhi Pokhrel, Karisha Khadka, Keshar Man Sthapit (External Resource Person), Philippus Wester, Samden Sherp

DAY 7 – 03-FEB 2019

Start time	(mins)	Presentation topics	Resource persons
9:00	60	GLOF risk reduction	Finu Shrestha, Sarad Joshi, Anna Sinisalo, ICIMOD
10:00	30	Tea\Coffee break	
10:30	60	Integrated Flood Risk Management	Vijay Khadgi, Neera Pradhan Shrestha, Mandira Shrestha, ICIMOD
11:30	60	Groundwater and springshed management	Madhav Dhakal, Gunanidhi Pokhrel, Karishma Khadka, ICIMOD
12:30	60	Lunch break	
1330	60	Sediment management including landslide treatment rivers bank stabilization	Keshar M. Sthapit (External), Sanjeev Bhuchar, ICIMOD
14:30	30	Sharing of solutions by participants	Participants
15:00	30	Tea\Coffee break	
15:30	45	World Cafe on ope rationalizing water and land management	Sanjeev Bhuchar, Karishma Khadha, Keshar M. Sthapit, Madhav Dhakal, Finu Shrestha
16:15	45	Institutional perspective	Sanjeev Bhuchar, Philipus Webster, Karishma Khadka, ICIMOD

DAY 8 – 04-FEB 2019

9:00	180	<ul style="list-style-type: none"> Godavari vist to observe IWRM technologies 	Sanjeev Bhuchar, Madhav Dhakal, Samden Sherpa, Karishma Khadka, Gunanidhi Pokhrel, Dipankar Shakya, ICIMOD
12:30	60	Lunch break	
13:30	90	Brief on the exposure visit by the Module 7 team Free time after the briefing	

Module 7: Exposure visit

Contributors (Module Lead in Bold): **Viiay Khadgi**, Neera Shrestha Pradhan, Arun Shrestha, Santosh Nepal, Kabi Raj Khatiwada, Dipankar Shakya, Sanjeev Bhuchar, Aditya Bastola, Debabrat Sukla

DAY 9 – 05-FEB 2019

Start time	(mins)	Presentation topics	Resource persons
7:00	Whole day	Visit to: <ul style="list-style-type: none"> • Bhotekoshi Power Plant • The Last Resort • Barahbise Hydro-met Station • Jure Landslide site • Balefi Confluence • Water diversion and IRBM at O kilo • Panchkhel 	ICIMOD
19:00-20:00		Group interactions at Hotel in Dhulikhel	

DAY 10 – 06-FEB 2019

7:00	Whole day	Visit to: <ul style="list-style-type: none"> • Upstream downstream Water management at Khurkot • Community water management site of Bahun Mara village • CBFEWS station in Bardibas 	ICIMOD
19:00-20:00		Group Interactions at Hotel in Lahan	

DAY 11 – 07-FEB2019

7:00		Visit to: <ul style="list-style-type: none"> • Solar Power Irrigation Pumps at Kalyanpur • Water Users Master Plan At Mahuli Community Development Center • Koshi Barrage • Koshi embankment breach site • Lunch at Koshi Tappu 	ICIMOD
14:00		To Biratnagar	
16:00		Flight back to Kathmandu	

Module 8: Knowledge Management and Communication

Contributors (Module Lead in Bold): **Laurie Ann Vasily**, Udayan Mishra, Debabrat Sukla, Nargis Mansoor, Samuel Thomas

DAY 12 – 08-FEB 2019

Start time	(mins}	Presentation topics	Resource persons
9:00	60	Session I: Overview of knowledge management principles	Laurie Vasily/ Udayan Mishra, ICIMOD
10:00	60	Session 11: Knowledge sources, platforms and sharing	Laurie Vasily/ Udayan Mishra, ICIMOD
11 :00	30	Tea\Coffee break	
11 :30	60	Session 111: Knowledge management challenges and opportunities in IRBM	Laurie Vasily/ Udayan Mishra, ICIMOD
12:30	60	Lunch break	
13:30	120	Session IV: Key principles of science communication and new/ digital/social media	Laurie Vasily, Deb Sukla, Bindu Bhandari, ICIMOD
15:30	30	Tea\Coffee break	
16:00	60	Reflection of the overall training workshop on Multiscale Integrated River Basin Management (IRBM) from the Hindu Kush Himalayan perspective	ICIMOD