

# Water Use Master Plan (WUMP) in different ecological zones of Koshi Basin: ICIMOD and HELVETAS collaboration

Nilhari Neupane and Rabin Niraula  
(on behalf of ICIMOD and HELVETAS Swiss Intercooperation  
Nepal Team)

Media Interaction and Field Visit to Koshi River Basin, Nepal  
(5-10 April, 2016)

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**International Centre for Integrated Mountain**

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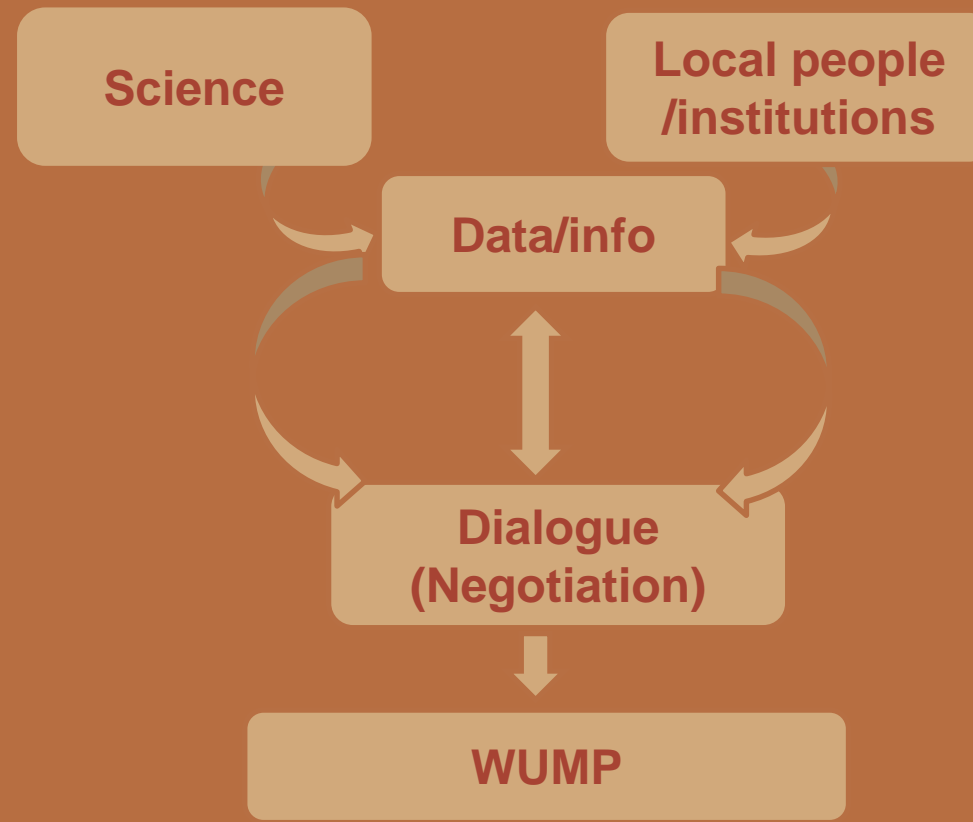
FOR MOUNTAINS AND PEOPLE

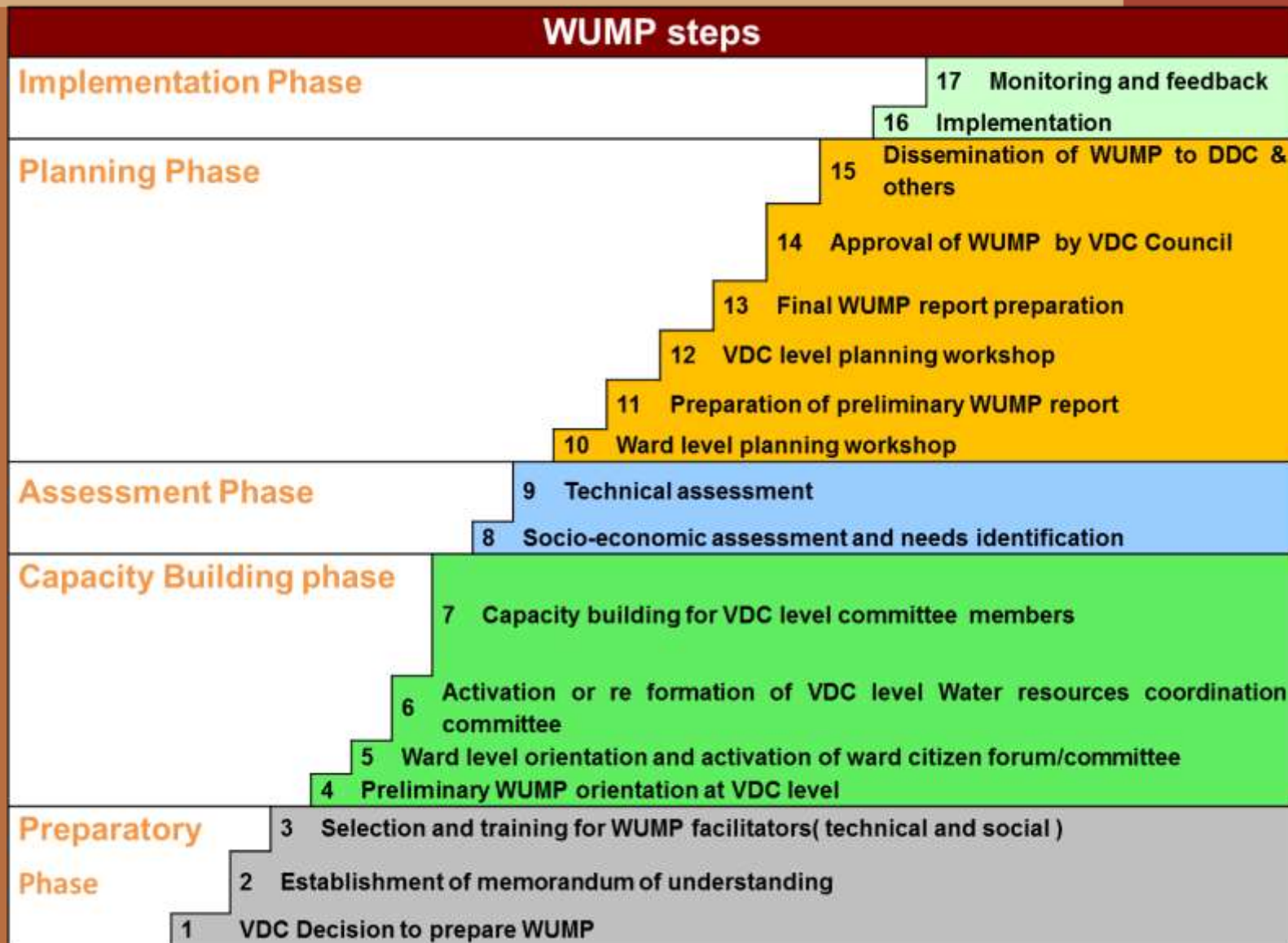
# Outline

- What is water use master plan (WUMP) ?
- Why WUMP in Koshi basin?
- WUMP Progress in Koshi basin
- What next ?
- Media engagement

# What is water use master plan (WUMP)?

- WUMP is a process through which local authorities and communities interact, exchange knowledge, acquire ownership of water management plan and commit roles responsibilities for its implementation and monitoring.
- It is a long-term plan for the local catchment for sanitation and hygiene (domestic use), irrigation (productive use), adaptation, energy.
- Equity, efficiency and sustainability are the pillars of WUMP. Improving the livelihoods of local community, marginal poor, *dalit*, women and children is the central to WUMP.





# Why WUMP in Koshi basin ?

Ecological zones	# of districts	Average annual ppt (mm)	Issues
Mountain (>3,500 masl)	5	150-200	access to drinking water, spring drying, erosion, landslides, drought
Hill and Siwalik (300-3,500 masal)	11	>3,000	access to drinking water, spring drying, erosion, landslides, drought, flashflood
Terai (<300 masl) Gangetic plain	11	<3,000	Water quality, water logging, drought, flood, sedimentation

**10.8 million** population in Nepal part of Koshi basin

# Why WUMP in Koshi basin ?

## Key socio-economic indicators of selected Koshi basin districts

Districts	Eco active population in agri	Irrigated area (%)	Access to drinking water (%)	% of malnourished children (< 5 yr of age)	%poor living below poverty line
Dolakha <sup>1</sup>	80	22	81	51	30
Sindhupalchow <sup>1</sup>	78	24	81	48	31
Okhaldhunga <sup>2</sup>	84	15	82	46	41
Ramechhap <sup>2</sup>	82	17	79	45	23
Kavre <sup>2</sup>	70	15	82	38	19
Sindhuli <sup>2</sup>	78	32	62	47	31
Saptari <sup>3</sup>	80	52	72	35	40
National	60	47	80	40.5	25



**Cereal yields (1/3<sup>rd</sup> of global yield, big room for improvement)**

**Mountain- hill emerging as vegetable pocket, water is really constraints**

**110 % increase in women headed households at Koshi ( 2001-2011)**

**Future change in socio-economic factors and water availability further deteriorate the situation**

# ICIMOD and HELVETAS Collaboration on WUMPs (2014-16)

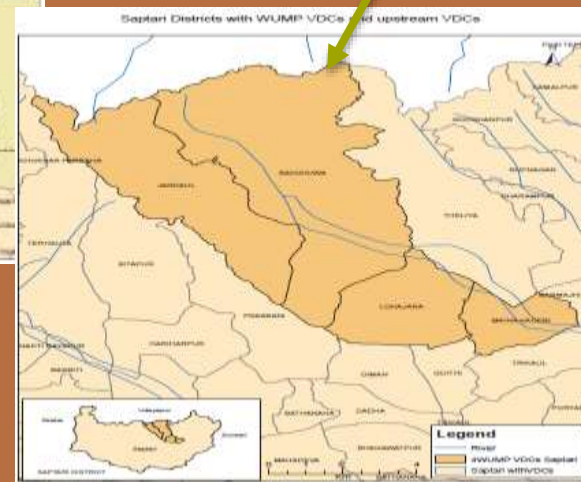
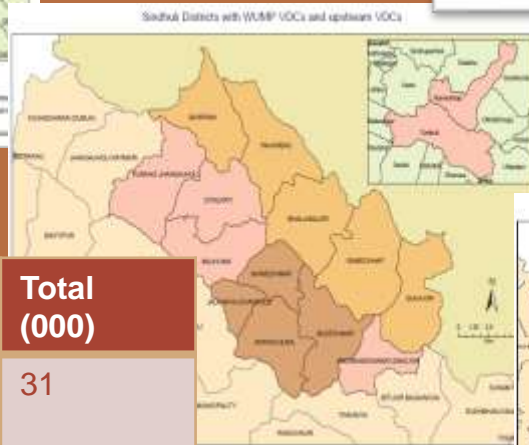
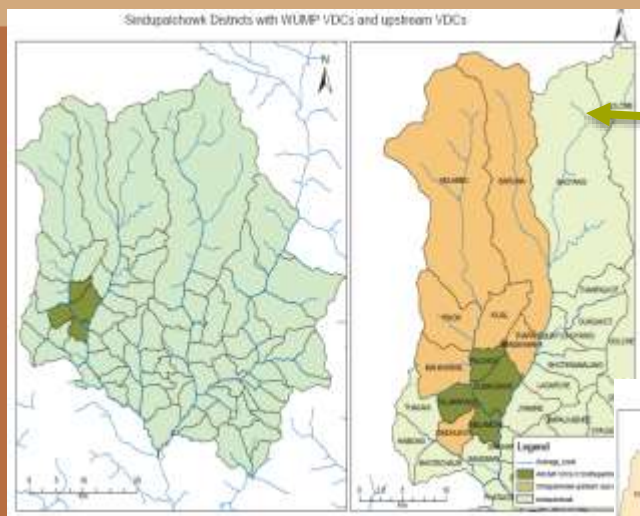
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- First time in basin context
- In the line of WRS (2002), NWP 2005: need of water planning and action at sub-basin or catchment level
- Objectives:
  - understand water issues at local level
  - Scientific information and local information
  - build capacity of the local stakeholders
  - prepare WUMPs at VDC level and up scaling at catchment
  - Upstream and downstream linkage
  - implement water project/schemes prioritized by the WUMPs
  - document the lesson learnt





# WUMP's pilot districts



Districts	hhs	Male (000)	Female (000)	Total (000)
Sindhupal (8 VDCs)	7	15	16	31
Sindhuli (4 VDCs)	5	5	5	10
Saptari (4 VDCs)	10	10	11	21
<b>Total</b>	<b>22</b>	<b>30</b>	<b>32</b>	<b>62</b>

# How the catchments were selected ?



- Found 100s of such catchments during the process of site selection
- Zooming up catchment based on available bio-physical and socio-economic indicators
- Field visit and stakeholders consultations
- DoI, DoA, DADO, drinking water division, soil water conservation, DDC and VDCs
- CA members
- Received demand from VDCs



नेपाल सरकार  
Government of Nepal  
संघीय मामिला तथा स्थानीय विकास मन्त्रालय  
Ministry of Federal Affairs & Local Development

**गाउँ विकास समितिको कार्यालय**  
Office of Village Development Committee

पत्र संख्या :- **सप्तरी**  
चलानी नं.(Ref No.)- **०७७/७५ (B/Saptari)** मिति(Date): **०७/१/२०१८**  
विषय (Subject) :- **सप्तरी जिल्लाको विकास कार्यको लागि**

श्री ICIMOD/HELVETAS swiss.int: Nepal.

उपरोक्त सन्वन्धमा ICIMOD/HELVETAS swiss.int नेपालको संयुक्त कार्यक्रमको लागि वैश्वीय जल उपयोजन सुसंयोजित योजनाको अन्तर्गतमा सप्तरी जिल्लाको विकास कार्यको लागि सहयोग प्रदान गर्ने।

# Progress

- Capacity development to local stakeholders
- Technical and socio-economic survey
- 8 Draft WUPs ( Sindhuli and Saptari)
- Sindhupalchowk progressing
- Next: endorsement from local authority, implementation, upscaling





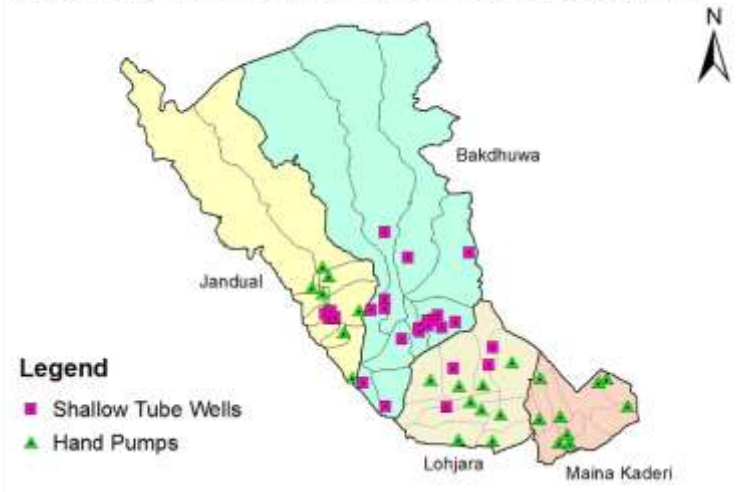
## Possibility in Sindhuli and Sindhupalchok

- Irrigation
- Fisheries



# WUMP in Terai – Ground water for domestic, irrigation, fisheries

Shallow Tube Wells and Hand Pumps in WUMP VDCs-Saptari



# Media engagement

- During preparation phase-wider participation of the community, stakeholders
- Upscaling (62 thousand- 10 million), 1000 of catchments, long way to move



# Thank you

# ICIMOD

