



Government of Nepal  
**Water and Energy Commission Secretariat**

**Workshop Report**  
**Prioritising Root Causes: Climate Resilient Water Resources  
Development and WASH Services**  
(09 December 2022, Friday)



**GWP Nepal/Jalsrot Vikas Sanstha**  
Baluwatar, Kathmandu  
December 2022



## Acronyms

AGWA	Alliance for Global Water Adaptation
DHM	Department of Hydrology and Meteorology
DoWSSM	Department of Water Supply and Sewerage Management
FCDO	UK Foreign, Commonwealth and Development Office
GWL	Global Water Leadership in a Changing Climate Programme
GWP	Global Water Partnership
GWPO	Global Water Partnership Organisation
IWRM	Integrated Water Resources Management
JVS	Jalsrot Vikas Sanstha
MoEWRI	Ministry of Energy, Water Resources and Irrigation
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NDRRMA	National Disaster Risk Reduction and Management Authority
SDE	Senior Divisional Engineer
WASH	Water, Sanitation and Hygiene
WECS	Water and Energy Commission Secretariat
WG	Working Group
WT	Water Tracker

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## **Executive Summary**

*The Water and Energy Commission Secretariat (WECS) in collaboration with the Ministry of Water Supply has led and coordinated the implementation of the Global Water Leadership (GWL) in a Changing Climate Programme. With funding from UK's Foreign, Commonwealth and Development Office, the Global Water Partnership Organisation (GWPO) and UNICEF are supporting its implementation. Keeping in view the prioritised barriers of 1 July 2022 workshop, and working groups (WG) decisions, a workshop was organised to identify and prioritise root causes for each prioritised barrier to advance climate resilient water resources development and WASH services in Nepal. The workshop was attended by 57 participants representing ministries, departments, academia, federations, non-governmental organisations, UNICEF and the World Bank. Welcoming the participants and recalling its launching workshop on 30 March and multi-stakeholder consultation on 1 July 2022, Dr. Kapil Gnawali, GWL focal person expected for extensive and meaningful discussions at WGs to come up with identified and prioritised root causes for each barrier.*

*Under the chair of Dr. Jagadishwor Karmacharya, Joint-Secretary at WECS and in presence of Mr. Kalanidhi Poudyal, Joint-Secretary at WECS and Er. Som Nath Paudyal, Chair, GWP Nepal/Jalsrot Vikas Sanstha, Mr. Batu Uprety shared GWL activities and progress made, and introduced the Water Tracker tool, including its outcome in 14 national climate and water resources policies and plans. Mr. Prakash Gaudel presented mapping of key water resource policies along with relevant policy provisions on climate resilient water resources management. Dr. Yogendra Mishra presented the outcome of the institutional mapping covering the key responsibilities of dedicated government and non-governmental organisations on water resources and WASH services, including responsibilities of the parliamentary committees, national planning commission, WECS, and water sector ministries and departments. Dr. Rojit Ojha presented the nature and availability of data at DoWSSM and urgency for data sharing to support Local level evidence-based planning.*

*WECS encouraged data creators and holders to share the nature of data and its availability and existing sharing mechanisms. Ms. Zinky Bhusal shared data availability at the Department of Hydrology and Meteorology. Mr. Shushil Sharma shared nature of data available, including national climate change impact survey and environmental statistics at the National Statistics Office. Similarly, Ms. Reena Chaudhary updated key data and information available at the bipad (disaster) portal. After presentation, participants worked on pre-determined 3 WGs.*

*Er. Sushil Chandra Tiwari, Secretary at WECS chaired the session on group presentation and it was moderated by Mr. Kalanidhi Poudyal, Joint-Secretary at WECS. Mr. Kabindra Pudasaini presented 20 issue-based root causes of the policy implementation barrier and informed that policies are formulated without any framework, clarity on its revision and modification, indicators and responsibilities within the three-tiers of government. He also informed about non-implementation of policies due to, inter alia, non-priority (for implementation) from all levels of the government, lack of trust and respect for previous government policies, and inadequate readiness capacity for policy implementation.*

*Dr. Yogendra Mishra presented 5 key root causes namely lack of: (i) work detailing report on coordination and linkages; (ii) Climate Change Section to ensure integration of climate change into water sector; (iii) integrated watershed plan to promote integrated activities in river basins; (iv) inadequate institutional capacity due to lack of experts, institutional memory, and finance; and (v) dissemination of information.*

*Participants raised concerns on urgency of promoting IWRM, adopting river basin approaches and bridging institutional gap, including involvement of civil society and private sector.*

*Mr. Rajan Subedi shared root causes on data and capacity building, related to unclear legal mandate on data collection and sharing arrangements, data availability and required at 3-tiers of government and data collection responsibilities and frequencies. Mr. Subedi flagged lack of motivation at Local level for data collection due to expertise, institutional memory and finance, including lack of clear policy on data management, sharing policy and security. Mr. Subedi called for need assessment and funding for capacity building, and launching need- and output-based training at central to Local levels. Participants flagged the need for data use and data control system, minimise perception-based planning and decision-making, and also need for linking with PhD thesis and academic institutions. Mr. Poudyal thanked the WG members for their hard work and welcomed all to continue working effectively.*

*At the closing session, Er. Ratna Lamichhane, Joint-Secretary at DoWSSM believed WG outcomes helpful to advance climate resilient water resources development and expected barriers-based root causes to streamline selecting solutions and defining strategies. He flagged the urgency for prioritising WASH sector and minimise differences between sectoral and national goals. Er. Lamichhane urged to make water resources sector quasi-judiciary to promote IWRM activities and expected GWL programme to make water resources climate resilient.*

*From the chair, Er. Sushil Chandra Tiwari, Secretary of the Government of Nepal thanked all joint-secretaries and participants for their hard work in identifying root causes and highlighted the need for rational use of water resources to improve national economy, provide drinking water and sanitation facilities, increase agricultural productions and produce clean energy - the hydropower. Er. Tiwari appreciated GWL programme and Water Tracker tool to understand the impacts of climate change on water resources and WASH services and thanked FCDO for providing support for their implementation. Er. Tiwari appreciated the involvement of multi-stakeholders - the national government institutions, non-governmental and community-based organisations, Local levels, academia and private sector to identify root causes and hoped for their continued support and active involvement in implementing activities to mitigate them. He expected the use of these outcomes in formulating and reforming integrated water resource policy and legislation. Er. Tiwari called for making institutional coordination effective, bridging capacity gaps, sharing and utilising data and information for making practical policies and strategies. Closing the workshop, Er. Tiwari informed that WECS will continue to coordinate and collaborate and provide guidance in activities of GWL Programme and use of Water Tracker tool to promote water resources and WASH services climate resilient. Mr. Secretary is encouraged to have these programmes in good track and expected for continued and active participation of relevant stakeholders in the the days to come.*

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## INTRODUCTION

### 1.1 Background

The Water and Energy Commission Secretariat (WECS) in collaboration with the Ministry of Water Supply has led and coordinated the implementation of the *Global Water Leadership (GWL) in a Changing Climate Programme*. The Global Water Partnership Organisation (GWPO) and UNICEF has supported in its implementation with funding from UK's Foreign, Commonwealth and Development Office (FCDO). This Programme is under implementation in seven countries of Africa and Asia (Central African Republic, Malawi, Nepal, Palestine, Rwanda, Tanzania and Uganda) to accelerate climate-resilient systemic change by supporting to establish effective, evidence-based policies and strategies and implement inclusive, climate-resilient water policies and strategies.

Nepal launched this Programme with *Inception Workshop* on 30 March 2022 and organised a workshop on *multi-stakeholder change process on integrated water resources management (IWRM) and water, sanitation and health (WASH) services* on 1 July 2022. Participants attending the 1 July workshop identified and prioritised key barriers and showed their interests to participate in future working groups to contribute to develop actions and strategies to the prioritised barriers namely policy implementation, institution coordination, and data & capacity building.

In late July 2022, WECS formed three multi-stakeholder working groups (WG) namely: (i) Policy Implementation WG; (ii) Institutional Coordination WG; and (iii) Data and Capacity Building WG to develop response strategy to each prioritised barrier. Each WG met in third and fourth week of August 2022 and decided to organise quarterly workshop to ensure information sharing between working groups and avoid or minimise duplications. During the WG meetings, participants were informed to follow sequential four phases to develop the response strategy for the prioritised barriers. These phases are to analyse root cause, develop solutions (with actions), develop finance plan, and also develop response strategy (draft). This workshop was designed to share information between WGs with focus on root cause identification, and inform stakeholders about the GWL programme with outcomes of the use of Water Tracker tool on national climate and water resources policies and plans.

### 1.2 Workshop Objective

The main objective of this workshop was to identify and prioritise root causes for each prioritised barrier to advance climate resilient water resources development and WASH services by addressing the barriers.

The workshop will result to identify root causes of prioritised barriers to facilitate the development of solutions with finance plan (part of Response Strategy).

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## SHARING INFORMATION

WECS organised this workshop to share information and identify root causes for each prioritised barrier. It focussed on introducing GWL Programme and Water Tracker tool, sharing WG's focussed areas on policy, institution and data & capacity building and group work to identify and present root causes (Annex 1). The workshop was attended by 57 participants representing ministries, departments, academia, federations, non-governmental organisations, UNICEF and the World Bank (Annex 2). The presentations were made under the chair of Dr. Jagadishwor Karmacharya, Joint-Secretary and Chief, Water Resources Division, WECS and in presence of Er. Som Nath Paudyal, Chair, GWP Nepal/Jalsrot Vikas Sanstha (JVS).



### 2.1 Welcome and Highlights of the GWL Programme

Dr. Kapil Gnawali, Senior Divisional Engineer (SDE) and GWL focal person at WECS welcomed the participants and highlighted the impacts of climate change on water resources, key approach of the GWL programme, outcomes of the Programme Launch on 30 March 2022 and multi-stakeholder workshop held on 1 July 2022. Dr. Gnawali briefed the participants about the formation of three working groups (WGS) on policy implementation, institutional coordination, and data & capacity building and outcome of their first meeting. Dr. Gnawali informed that WGs will analyse root causes for each prioritised barrier, select appropriate solutions, develop finance plan, and draft response strategy to address those barriers.



Dr. Gnawali expected that participants through extensive and meaningful discussions at WGs will come up with prioritised root causes for each barrier and it will form a basis for further consultation in WGs meetings. He informed that each WG will present their agreed outcomes from the WG discussions in presence of the Secretary of WECS. Dr. Gnawali expected for continued support of participants in bringing fruitful results of this multi-stakeholder consultation process and GWL Programme to address the adverse impacts of climate change on water resources.

### 2.2 Presentations

#### 2.2.1 GWL updates and Water Tracker Results

Mr. Batu Uprety from GWP Nepal/JVS shared updates of GWL implementation under the guidance and coordination of WECS. Mr. Uprety reiterated GWL outputs related to strengthening leadership and collaboration, developing evidences, norms and standards to

inform climate resilient water and WASH policies and plans, and support the government to identify and address systematic and financial constraints that impede progress on water resource management and WASH services. He also reiterated GWL Programme a government-led process which adopts multi-stakeholder change process, identifies and prioritises bottlenecks, and defines response strategies. Mr. Uprety summarised the outcomes of launching event on 30 March 2022, multi-stakeholder consultation on 1 July 2022, and working group meetings. He reminded the participants about the identified barriers related to the policy implementation, institutional coordination, and data & capacity building on 1 July. He also reminded the 4 phases (root cause analysis, solutions development with actions, development of finance plan and response strategy to address the barriers effectively) to draft the response strategy.



Mr. Uprety introduced the Water Tracker tool developed to self-assess and enhance water resilience, and explore synergies and risks associated with water in national climate plans. He informed Water Tracker in initiative of the Alliance for Global Water Adaptation (AGWA) which is supporting number of countries to help understand the critical role of water to make climate actions effective and meaningful. He highlighted the central role of water to addressing many climate impacts, such as expanded irrigation to address increased climate variability, sponge cities to improve urban flood resilience, and reliable WASH facilities to ensure safe, clean water and waste treatment for vulnerable populations. Highlighting the multi-use of water resources, he opined Water Tracker (WT) a tool and diagnostic guide supporting enhanced water resilience in national climate planning. He informed that WT began with ideas on: (i) best adaptation and resilience are water-based; (ii) NDC (nationally determined contributions) and national climate policies should accord priority on water resources management; (iii) water resilience should be seen as a connective tissue between programmes and projects; and (iv) investments should be ensured to address challenges. WT further recognizes contributions of water in reducing carbon emissions, generating renewable energy, sequestering carbon, and addressing climate change impacts.

Mr. Uprety informed that 119 questions as contained in WT tool were used in 14 climate and water resources policies and plans to see: (i) how is water described in the national plan; (ii) what institutional mechanisms exist for plan implementation around water; (iii) how do sectors acknowledge water in planned mitigation and adaptation actions; and (iv) are links to finance processes and plans implementation established? Mr. Uprety shared the results of the use of WT tool and summarized as follows:

- a. Water is considered as *risk* in many policies & plans and considered a *sector & resource* in a few policies.
- b. Implementation of adaptation actions is prioritised in all policies and plans.
- c. NAP accommodates climate-sensitive all sectors for adaptation as per the Climate Change Policy, 2019.

- d. Water requirements for mitigation targets and adaptation goals are not mentioned.
- e. Water requirements and allocations for different sectors are not recognised.
- f. Need for capacity building at 3-tiers (national, provincial and local levels) of government, NGOs, CBOs & user groups is emphasized to implement policies and plans.
- g. Bilateral & multilateral support is focussed to implement climate and water plans.
- h. Climate and water policies and plans do not consider strategic priorities & investment criteria of Multilateral Development Banks/financing organisations and/or safeguarding of climate vulnerable people by accessing climate finance.

Mr. Uprety informed that water resources policies and plans are not concerned with meeting Nepal's mitigation commitment under the Paris Agreement; climate policies do not realise the critical role of water in meeting water requirements of social and economic sectors (water dependent sectors); and water sector does not consider additional avenues for accessing climate finance and called for enhancing understanding of climate and water communities to make climate policy 'water smart' and water policy 'climate resilient' and ensure investments for their implementation.

Mr. Uprety advised the working group to come up with priority root causes linking with climate inclusive and resilient water resources development and WASH services (Annex 3.A).

### **2.2.2 Policy Mapping**

Mr. Prakash Gaudel, Director at Nepal Electricity Authority and Co-Chair of the Policy Implementation WG presented policy mapping and listed number of policies, strategies and plans, including regulatory instruments on water resources and WASH services. Mr. Gaudel mentioned 15<sup>th</sup> Plan, Water Resources Policy (2020), Water-induced Disaster Management Policy (2015), Irrigation Policy (2013) and Irrigation Master Plan (2019) which open avenues to advance inclusive water security and build climate resilience. However, Hydropower Development Policy (2001), Water Resources Strategy (2002) and Nepal Water Plan (2005), including national drinking water, sanitation and cleanliness draft policy (2022), urban water supply and sanitation sector policy (2009), national sanitation and hygiene master plan do not provide necessary guidance in ensuring inclusive water security and building climate resilience. Furthermore, policies such as national wetland policy (2012), agriculture policy (2004) and national land use policy (2015) do not provide necessary provisions to promote climate resilient water resources development (Annex 3.B).



### **2.2.3 Institutional Mapping**

Dr. Yogendra Mishra, Senior Divisional Engineer at the Ministry of Energy, Water Resources and Irrigation (MoEWRI) and Chair of the Institutional Coordination WG shared a list of water-related institutions such as parliamentary committees, advisory bodies, ministries and departments, authority, centre, boards and corporation. Dr. Mishra also outlined number of other organisations working on water resources and WASH services such as

federations, associations and non-governmental organisations, academic and research organisations, and private sector organisations.

Dr. Mishra shared key responsibilities of parliamentary committees, national planning commission, WECS, and water sector ministries departments. He informed that parliamentary committees issue directives and suggestions to ensure conservation, development, management and sustainable use of water resources and provide inputs to integrate water security and climate resilient provisions in the legislation. WECS is mandated to developing water and energy resources in an integrated and accelerated manner; formulate river basin plans, and contribute to implement National Water Resources Policy, 2020; and integrate elements to promote water security. MoEWRI is responsible to formulate, implement, monitor and regulate policy, law and standard in water resources sector; promote hydro-power generation, year-round irrigation supply, and watershed conservation, and forecast reliable and quality weather and water flow; and advance sustainable development, conservation, utilisation, and water sharing. Similarly other water sector organisations have defined roles to manage water and ensure WASH services (Annex 3.C).



Dr. Mishra shared key responsibilities of parliamentary committees, national planning commission, WECS, and water sector ministries departments. He informed that parliamentary committees issue directives and suggestions to ensure conservation, development, management and sustainable use of water resources and provide inputs to integrate water security and climate resilient provisions in the legislation. WECS is mandated to developing water and energy resources in an integrated and accelerated manner; formulate river basin plans, and contribute to implement National Water Resources Policy, 2020; and integrate elements to promote water security. MoEWRI is responsible to formulate, implement, monitor and regulate policy, law and standard in water resources sector; promote hydro-power generation, year-round irrigation supply, and watershed conservation, and forecast reliable and quality weather and water flow; and advance sustainable development, conservation, utilisation, and water sharing. Similarly other water sector organisations have defined roles to manage water and ensure WASH services (Annex 3.C).

#### **2.2.4 Data and Capacity Building**

Dr. Rajit Ojha, Senior Divisional Engineer at the Department of Water Supply and Sewerage Management (DoWSSM), and Chair of the Data and Capacity Building Working Group highlighted the constitutional responsibilities of three tiers of government on WASH services and big gap in capacity to provide data services. Dr. Ojha informed the DoWSSM's N-WASH open access data portal, and involvement of water users associations in generating and managing good quality data. He also informed importance of analysed data for local level planning to achieve SDG 6 and localising SDGs as well. Dr. Ojha called for adequate investment to build and/or strengthen institutional capacity for data generation, storage, analysis and dissemination.



To promote inclusive and climate resilient WASH services, Dr. Ojha opined the need for looking data from climate lens and promote e-billing to reduce carbon footprint. He advised to collect, update and use local level data and ensure their use for municipal WASH planning. Dr. Ojha called for simply providing a link for nature of data availability in different organisations. Citing an example of having data on land use, rainfall and precipitation and population to select and protect drinking water sources, Dr. Ojha urged for promoting data sharing for multiple use and advance data validation mechanisms.

#### **2.2.5 Data and its Sharing Mechanisms in other organisations**

Ms. Zinky Bhusal, Hydrologist Engineer at the Department of Hydrology and Meteorology (DHM) informed the main objective



of DHM to collect, process, publish and disseminate hydrological and meteorological data, and DHM's engagement in monitoring river hydrology, water quality, sediment, limnology, snow hydrology, glaciology, weather, climate, agro-meteorology, air quality and solar energy through its network of around 200 manual gauging stations, 24 sediment monitoring stations, 140 RLS (Radder Level Station for real time water level), and around 500 manual rainfall stations, including 240 automatic rainfall stations (Annex 3.D). Ms. Bhusal shared the nature of data related to hydrology and meteorology which can be accessed by visiting office or via email or through website. She informed data purchase with discount or free of cost as per government decision.

Mr. Sushil Sharma, Director at National Statistics Office, Office of the Prime Minister and Council of Ministers informed to release population census by the end of December 2022 that also contains information on drinking water sources of each household. Mr. Sharma also informed regular publication of environmental statistics, and start of the second round of survey to prepare a national climate change impact survey report, previously published in 2016 with around 250 indicators. He opined data gap on environment and climate change and need for developing a separate portal and data bank. Regarding sharing mechanism, Mr. Sharma informed free of cost to almost all data, except for micro-data which is available upon payment as per government decision.



Ms. Reena Chaudhary, Environment Officer at National Disaster Risk Reduction and Management Authority (NDRRMA) informed about open access bipad (disaster) portal which contains data about incidents of flood and landslides, rainfall and temperature, forest fire and loss of life and property, and damage to crops and infrastructures. Ms. Chaudhary named Nepal Police as the main source of data and information and NDRRMA publishes national disaster bulletin, and weather-related disaster report.

Participants flagged issues about the need for designating and empowering a nodal agency to implement National Water Resources Policy (2020), specify DHM data stations to avoid the words of 'around, about, slightly over or less than' etc and consider water conservation (along with water resources requirements and allocations for different sectors) that the Ministry of Forests and Environment is involved from the last nearly five decades.

After presentations on data availability, access and sharing mechanisms, participants worked on groups to identify and prioritise root causes for each prioritised barriers. In WG discussions, previous participants participated in the same group. New participants were encouraged to join any of the previously formed three WGs (policy implementation, institutional coordination, and data & capacity building) based on their institutional

responsibilities and professional interest. Participants continued focussed discussion for over one and half-hours in each working group and prepared presentation materials.



**Participants asking questions**



**Participants in Group Work**



**MC of the Programme**

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## IDENTIFYING BARRIER-BASED ROOT CAUSES AND GUIDANCE

Er. Sushil Chandra Tiwari, Secretary at WECS chaired the session on group presentation. Mr. Kalanidhi Poudyal, Joint-Secretary at WECS moderated the presentations of each Working Group (WG). Outcomes of each WG are summarised below:

**3.1 Policy Implementation:** Mr. Kabindra Pudasaini, Senior Manager at Water Aid presented the outcomes of the policy group. Mr. Pudasaini shared issue-based root causes which indicates different stages of policy formulation and implementation. He summarised 20 issues with corresponding root causes. Mr. Pudasaini informed that policies are formulated without any framework or basis and are political party focus, without clarity on its revision



and modification, with unclear indicators and responsibilities within the three-tiers of government. He also informed about non-implemented policies due to non-priority (for implementation) from all levels of the government, lack of trust and respect for previous government policy, and inadequate readiness capacity for policy implementation (Annex 4.A). Furthermore, he informed increased gaps in understanding on IWRM, fresh starting by the new government (frequent changes in government), reactive policies, non-preparation and implementation of master plans at local level and non-involvement of local level in policy formulation processes. The WG is expected to revisit the root causes and prioritise them in its next meeting.

**3.2 Institutional Coordination:** Dr. Yogendra Mishra, Senior Divisional Engineer at MoEWRI and chair of this WG presented the group outcomes. This WG grouped all root causes into five . They are on: (i) non-focus of work detailing report (it contains works of 3-tiers of the government) on coordination and linkages, including with Province Coordination Division; (ii) non-establishment of Climate Change Section to ensure integration of climate change into water sector and see water resources policies and plans from climate lens and climate resilient perspectives; (iii) integrated watershed plan to promote integrated activities in the river and its basin and avoid/minimise on-going isolated works constructing irrigation facility and electricity generation; (iv) inadequate institutional capacity due to lack of experts, institutional memory, and finance and need for capacity at systemic, institutional and individual levels; and (v) dissemination of information (Annex 4.B) .

Participants raised concerns on urgency of promoting IWRM and difficulty in its implementation due to administrative boundaries of municipalities, lack of river basin approaches and institutional gap. In addition, roles and responsibilities of the civil society and private sector should be considered to promote participation of all stakeholders.

**3.3 Data and Capacity Building:** Mr. Rajan Subedi, River Basin Manager at OXFAM shared root causes, identified by the WG, which are related to unclarity mandate on data collection and sharing arrangements in the legislation, and nature of data available and required at 3-tiers of government and data collection responsibilities and frequencies (Annex 3.C). Mr. Subedi opined that there is no motivation at Local level for data collection which might be related to the lack of expertise, institutional memory and finance, unclear mandate and data sharing, and devaluation of research data. He shared group outcomes on data management which is related to the lack of central data management system, open access, expertise, finance, coordination between and among data creators and poor institutional memory. Regarding data sharing, Mr. Subedi reiterated the lack of data sharing policy, unclarity of data sharing amongst three-tiers of government and data security. He flagged the need for data to advance evidence-based decision-making, and proper mechanisms for data collection (Annex 4.C).

Mr. Subedi called for need assessment for capacity building, funding for capacity building, and launch need-based and output-based training at central to Local levels.

Mr. Kalanidhi Poudyal opened the floor for discussion. Participants flagged root causes related to data use and need for data control system, evidence-based planning to minimise perception-based planning and decision-making, and also need for linking with PhD thesis and academic institutions, with data creators and data depository organisations. Mr. Poudyal thanked the WG members for their hard work and welcomed all to continue working in an integrated manner.

### **3.4 Guidance**

During the closing session, Er. Ratna Lamichhane, Joint-Secretary at DoWSSM recalled his active participation during the identification and prioritisation of key barriers on 1 July 2022 and appreciated the intensive discussions of the Working Groups and their outcomes to advance climate resilient water resources development in Nepal. Er. Lamichhane expected that these barriers-based root causes will further streamline our future works in selecting solutions and defining strategies.

Er. Lamichhane flagged the urgency for prioritising WASH sector and minimise differences between sectoral and national goals. Citing an example of pine plantation linked with drying-up of drinking water sources and existing difficulties to construct water storage facilities at such sources - the forest area, he called for including a provision in future policies for easy access to forest area for water source protection, and construction of such facilities. He also urged to make water resources sector quasi-judiciary like forestry to promote IWRM activities. Er. Lamichhane expected to advance climate resilient water sector development from this programme.



From the chair, Er. Sushil Chandra Tiwari, Secretary of the Government of Nepal, currently at WECS, thanked all joint-secretaries (Dr. Jagadish Karmacharya, Mr. Kalanidhi Poudyal and Er. Ratna Lamichhane) and participants for their hard work in agreeing root causes of standard quality for each prioritised barrier. Er. Tiwari highlighted the need for rational use of water resources to contribute to the national economy, provide drinking water and sanitation facilities, increase agricultural productions through sustained supply of water from irrigation facilities, and produce clean energy - the hydropower. Er. Tiwari appreciated the implementation of this very relevant GWL programme and using Water Tracker tool to understand the impacts of climate change on water resources and WASH services, and identify policy gaps. On behalf of the Government of Nepal, Mr. Secretary thanked the FCDO for providing support to implement the programme.



Er. Tiwari appreciated the involvement of multi-stakeholders - the national government institutions, non-governmental and community-based organisations, Local levels, academia and private sector to identify root causes and hoped for their continued support and active involvement in implementing activities to mitigate root causes.

Er. Tiwari expected that these outcomes will be valuable while formulating and reforming integrated water resources policy to overcome the existing practice of developing and implementing policies in isolation. He called for making institutional coordination effective, bridging capacity gaps, sharing and utilising data and information for making practical policies and strategies. Er. Tiwari informed to continue working (WECS) as apex body on water resources, and this multi-stakeholder approach will further streamline and make effective the coordination mechanism. Closing the workshop, Er. Tiwari also informed that WECS will continue to coordinate and collaborate and provide guidance in its all activities, including of GWL Programme and use of Water Tracker tool to promote water resources and WASH services climate resilient. Mr. Secretary is encouraged to have these programmes in good track and expected for continued and active participation of relevant stakeholders in the the days to come. This marks the end of the workshop.

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## Workshop on *Prioritising Root Causes: Climate Resilient Water Resources Development and WASH Services*

Venue: Radisson Hotel, Lazimpat, Kathmandu

Date: 09 December 2022 (23 Mangsir 2079), Friday

Time: 13:00 – 17:20 hours

### Programme

Time	Particulars
12:45-13:00	Registration of participants
13:00 - 13:10	Tea/Coffee
<b>Session I: Mapping and Data Sharing</b>	
Chair: Dr. Jagadishwor Karmacharya, Joint Secretary, Water Resources Division, WECS	
13:10 - 13:15	Introduction of the participants
13:15 - 13:20	Welcome: Dr. Kapil Gnawali, Senior Divisional Hydrologist, Water Resources Division, WECS
13:20 - 13:35	a. GWL Programme: Barriers Prioritisation to the development of Response Strategies b. Water and climate concerns in climate and water resources policies (Water Tracker): Mr. Batu Uprety, GWP Nepal/Jalsrot Vikas Sanstha (JVS)
13:35 - 13:45	Brief introduction on Policy Mapping: Mr. Prakash Gaudel, Nepal Electricity Authority and Co-Chair, Policy Implementation Working Group
13:45 - 13:55	Institutional mapping: Dr. Yogendra Mishra, Senior Divisional Engineer, Ministry of Energy, Water Resources and Irrigation and Chair, Institutional Coordination Working Group
13:55 - 14:05	Data and Capacity Building Mapping: Dr. Rajit Ojha, Senior Divisional Engineer, Department of Water Supply and Sewerage Management and Chair, Data and Capacity Building Working Group
14:05 – 14:25	Data and Information Sharing (nature of data, availability, access, use and sharing mechanism) Ms. Zinky Bhusal, Department of Hydrology and Meteorology Mr. Sushil Sharma, Office of the National Statistics, Office of the Prime Minister and Council of Ministers Ms. Reena Chaudhary, National Disaster Risk Reduction and Management Authority
14:25 - 14:30	Questions/Answers
<b>Session II: Prioritising Root Causes</b>	
(Facilitated by: Kalanidhi Poudyal, Joint Secretary, WECS)	
14:30 - 16:00	Group Work (3 parallel group works)

	<i>Identify and prioritise root causes for each barrier prioritised (working group)</i>
	a. Policy implementation group
	b. Institutional coordination group
	c. Data and capacity building group
	Tea/Coffee
16:00 - 16:15	Preparation of Group's presentation materials
<b>Session III: Group Presentation and Closing Session</b>	
16:15 - 17:00	Chair: Er. Sushil Chandra Tiwari, Secretary, WECS
16:15 - 16:45	Group Work Presentations <ul style="list-style-type: none"> <li>- Policy Implementation Working Group – Mr. Kabindra Pudasaini, Senior Manager, Water Aid</li> <li>- Institutional Coordination Working Group – Dr. Yogendra Mishra, SDE, Ministry of Energy, Water Resources and Irrigation</li> <li>- Data and Capacity Building Working Group – Mr. Rajan Subedi, River Basin Manager, OXFAM</li> </ul>
16:45 - 17:00	Discussion
<b>Closing Statements</b>	
17:00 – 17:10	Remarks: Er. Ratna Lamichhane, Joint-Secretary and Project Director, Department of Water Supply and Sewerage Management
17:10 – 17:20	Closing Remarks: Er. Sushil Chandra Tiwari, Secretary, Water and Energy Commission Secretariat
17:20 ~ onwards	Dinner

*End of the Workshop*

## Annex 2

**List of Participants**

<b>SN</b>	<b>Name</b>	<b>Designation</b>	<b>Organisations</b>
1	Abhishek Yadhav	In-Country Facilitator	NDC Partnership
2	Anjil Adhikari (Ms)	Water Governance Lead	OXFAM
3	Bal Bahadur Gharti	Sociologist	Department of Water Supply and SM
4	Bal Krishna Gamarkattel	CEED Consultant	UNICEF Nepal
5	Batu Uprety	CPM	Global Water Leadership Programme
6	Bir Bahadur Bohara	Senior Divisional Engineer	Department of Electricity Development
7	Bishnu Prasad Joshi	Division Chief	DMD, Kathmandu Metropolitan City Office
8	Chetman Budathapa		Farmers Managed Irrigation Scheme Trust
9	Dhaka Ram Kunwar	Coordinator	National Federation of Irrigation & WUA
10	Dinakar Khanal	Senior Divisional Engineer	WEC Secretariat
11	Gayatri Joshi (Ms)	Engineer	WEC Secretariat
12	Giri Raj Khatiwada	NG Class I	Ministry of Forests and Environment
13	Guru Prasad Adhikari	Senior Divisional Engineer	Ministry of Physical Infrastr. & Transport
14	Gyanendra Karki	National Project Manager	NAP Project/GoN/UNEP
15	Hari Bahadur Thapa	Senior Divisional Engineer	WEC Secretariat
16	Hemant Joshi	Correspondent	National News Agency
17	Jagadishwor Karmacharya, PhD	Joint-Secretary and Head	Water Resources Division, WECS
18	Janak Kuman Jha	Economist	WEC Secretariat
19	Kabindra Pudasaini	Senior Manager	Water Aid
20	Kala Nidhi Paudyal	Joint-Secretary	WEC Secretariat
21	Kamala K.C. (Ms)	WASH Advisor	British Embassy
22	Kapil Gnawali, PhD	Senior Divisional Engineer	WEC Secretariat
23	Karuna Onta (Ms)	Member	Jalsrot Vikas Sanstha
24	Madhav Kuman Shrestha	Health Edn. Administrator	Ministry of Health and Population
25	Madhu Sudhan Khanal	Senior Divisional Engineer	Department of Water Supply and SM
26	Naresh Sharma	Under-Secretary (Tech)	CCMD, Ministry of Forests & Environment
27	Naveen M. Joshi	Member	Farmers Managed Irrigation Schemes
28	Nirman Shrestha	Researcher	Internat. Water Management Institute
29	Pawan Chand	Senior Divisional Engineer	WEC Secretariat
30	Pragyan Regmi	Manager Sustainable Banking	NMB Bank Limited
31	Prakash Gaudel	Director	Nepal Electricity Authority
32	Rajan Khanal	Officer	National DRR & Management Authority
33	Rajan Subedi	River Basin Manager	OXFAM Nepal Office
34	Rajit Ojha	Senior Divisional Engineer	Department of Water Supply and SM
35	Ratna Lamichhane	Joint-Secretary (Technical)	Department of Water Supply and SM
36	Reena Chaudhary (Ms)	Environment Officer	National DRR & Management Authority
37	Rubika Shrestha		The World Bank
38	Sabina Kharbuja	Senior Divisional Engineer	WEC Secretariat
39	Sabitri Tripathi (Ms)	Professor	Nepal Engineering College
40	Sangita Maharjan (Ms)	Member	Jalsrot Vikas Sanstha
41	Sanjiv Kumar Thapa	Director	Nepal Water for Health
42	Shaligram Bhandari	Senior Divisional Engineer	Ministry of Energy, WR and Irrigation
43	Shisir Bhattarai	NG Class I	Ministry of Home Affairs
44	Shree Ram Ghimire, PhD	Agri-Economist	CMS
45	Som Nath Paudyal	Chairman	GWP Nepal/Jalsrot Vikas Sanstha

46	Sukdev Chaudhary	Senior Divisional Engineer	WEC Secretariat
47	Sumana Devkota (Ms)	Under Secretary (Technical)	Depart. of Forests & Soil Conservation
48	Sundar Kumar Thapa	Engineer	WEC Secretariat
49	Surya Dev Gupta	Under-Secretary	WEC Secretariat
50	Surya Nath Upadhyay	Secretary General	GWP Nepal/Jalsrot Vikas Sanstha
51	Sushil Chandra Tiwari	Secretary, GoN	WEC Secretariat
52	Sushil Sharma	Director	National Statistics Office
53	Tejendra G.C.	Country Coordinator	Global Water Leadership Programme
54	Ugan Manandhar	Climate & Env. Advisor	British Embassy
55	Upendra Gautam	Director	CMS
56	Upendra Pokhrel		SAWBN
57	Zinky Bhusal	Hydrologist Engineer	Department of Hydrology & Meteorology

**Note:** WEC – Water and Energy Commission; NDC – Nationally Determined Contribution; DRR – Disaster Risk Reduction; DMD – Disaster Management Department; and WUA – Water Users Association

Annex 3

Presentations materials in power point

Annex 4

## List of Root Causes Presented by Working Groups

Three Working Groups discussed separately, prepared a list of root causes for each barrier prioritized on 1 July 2022, and presented the agreed outcomes.

### A. Policy Implementation Working Group

The Policy Group has identified issues with corresponding root causes. On behalf of the group, Mr. Kabindra Pudasaini presented the following:

Issues	Root Causes
a. Formulation	Without any framework or basis
b. Policy formulation approach	Top-down but not bottom-up
c. Initiation (how?)	Donor driven
d. Participation in formulation	No involvement of local
e. Modification	Not timely
f. Readiness for policy implementation	Capacity
g. Indicators	Vague or unclear
h. Strategy	Reactive rather than proactive
i. Master plan for local level	Not prepared
j. Coordination	Poor
k. Unclear policy/harmonization at three tiers	Duplication and controversy
l. Data	Reliability
m. Regulation	No or inefficient institutional arrangement
n. Duplication or confusing	Election manifesto
o. Policy not implemented	Not priority from all levels of government
p. Political commitment on policy	Loose
q. Fresh start/branding	Lack of trust and respect
r. Flow of policy	Lack of trust and respect
s. Attitude for implementation/not mandatory	No link to performance
t. Understanding of policy such as IWRM	Gap on priority

The Policy Implementation Working Group was moderated by Mr. Prakash Gaudel and its Co-Chair. This group was participated by Messrs Ugan Manandhar, Kabindra Pudasaini, Shisir Bhattarai, Naveen Mangal Joshi, Guru Prasad Adhikari, Chetman Budathapa, Bishnu Prasad Joshi, Bal Krishna Jamarkattel, Hari Bahadur Thapa, Diankar Khanal, Shree Ram Ghimire and Rubika Shrestha

### B. Institutional Coordination Working Group

Dr. Yogendra Mishra, chair of the Institutional Coordination Working Group moderated the group work. There is a very thin line between barrier and root cause. Dr. Mishra presented the following five root causes as identified by the group:

- a. Work detailing (details of work of three-tiers of government) report
- b. Climate Change Section
- c. Integrated water management
- d. Institutional capacity
- e. Dissemination of information

Participants from MoEWRI, WECS, Department of Forests and Soil Conservation, DWRI, NMB Bank, MoFAGA, DoED and MoHP attended this group.

### **C. Data and Capacity Building Working Group**

Er. Madhusudan Khanal moderated the working group session. Outcome of the working group was presented by Mr. Rajan Subedi which are as follows:

- a. Unclarity on mandate on data collection and sharing arrangements in the Act.
- b. Data identification – unclarity on which data, at what level (3 tiers of government) of collection, who should collect and at what frequency
- c. Data generation
  - No motivation for local government for data collection
  - Lack of expertise
  - No mandate clarity
  - Institutional memory
  - Devaluation of research data (securities, activity)
  - Lack of finance at three tiers of government - clarity on coordination and data sharing
- d. Data management
  - Minimum willingness to share data (policy issue)
  - No central data management system or central repository location
  - Lack of open access
  - Lack of expertise
  - Poor institutional memory
  - Lack of finance
  - Lack of coordination among institutions/CBS
  - Unclarity on central data management
- e. Data sharing
  - Lack of data sharing policy
  - Unclarity of power sharing between federal/provincial/local governments on data
  - Unclarity on data security
- f. Data use (for)
  - Evidence-based decision-making
  - No proper mechanism on data collection
- g. Capacity building
  - No need assessment
  - Lack of fund/resource (human resources, technology and funds)
  - Culture of general decision-making rather evidence
  - Lack of need-based and output-based training/people

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19 December 2022, Monday