



M/o Water Resources



Stakeholder Consultation Report SDG 6.5.1, Degree of Implementation of IWRM

Pakistan July 30, 2020



Prepared by:

Office of the Chief Engineering Advisor & Chairman Federal Flood Commission, Ministry of Water Resources, Government of Pakistan in collaboration with Pakistan Water Partnership (PWP)

StakeholdersConsultation Report for SDG 6.5.1

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Executive Summary

Office of the Chief Engineering Adviser / Chairman Federal Flood Commission (O/o CEA/CFFC), jointly with Pakistan Water Partnership (PWP) conducted a multi-stakeholder consultation to assess the degree of implementation of Integrated Water Resources Management (IWRM) i.e. Sustainable Development Goal (SDG) Indicator 6.5.1 in Pakistan for reporting cycle 2020. Mr. Ahmed Kamal, Chief Engineering Adviser / Chairman Federal Flood Commission (CEA/CFFC) and National Focal Point for SDG 6.5.1, initiated the process of in March 2020 through sending communications (email and mail) including survey questionnaire to key stakeholders. Stakeholders included federal and provincial government organizations, academic institutes, public and private sector organizations developmental sector and NGOs. Due to Covid-19 crisis, limited feedback on preliminary consultation was received i.e. around 10 of thestakeholders returned backthe completed surveys.

Following this O/o CEA/CFFC and PWP jointly organized a multi-stakeholder workshop in Islamabad on Monday July 20, 2020, which was funded by UNEP-DHI Centre on Water and Environment through Global Water Partnership (GWP). Again invitations were sent to the above mentioned stakeholders along with the survey questionnaire, and this time few participants from remote areas who work for water issues at gross root level were also invited. More than 54 participants attended the workshop during extreme times of COVID-19 pandemic under strict SOPs as defined by the federal government observing social distancing wearing face masks and using hand sanitizer.Mr. Sardar Muhammad Tariq, Chief Executive Officer, Pakistan Water Partnership opened the workshop and explained the participants about SDG Indicator 6.5.1 and efforts of Global Water Partnership (GWP) to include water and sanitation as a separate goal in Sustainable Development Agenda 2030. He further informed the participant about the recent visit of Secretary General United Nations to Pakistan. During the very first session of stakeholders' conference the Secretary General was informed about the plantation of one billion trees as a first step to the green Pakistan project and construction of a number of bodies to recharge the ground water as part of SDGs. The Hon. Secretary General applauded Pakistan's efforts. Mr. Ahmed Kamal, Chief Engineering Adviser/Chairman Federal Flood Commission apprised the participants on the recent developments in the water resources sector for Pakistan. A presentation by Mr. Paul Glennie, Senior Technical Adviser, UNEP-DHI Centre on Water and Environment Australia office was made to apprise the participants on global and regional context of reporting SDG Indicator 6.5.1 through video link. The presentation summarized the global and regional (South Asia) findings of baseline survey conducted in 2017. The workshop facilitator, Mr. Muhammad Ukasha, briefed the participants on the methodology for scoring SDG Indicator 6.5.1. Following this thirty three (33) survey questions covering four (04) dimensions of IWRM were scored in two (02) facilitated discussion sessions.

During facilitated session, detailed discussion was carried out to score each question. Almost all of the questions were scored with the agreement of the participants. <u>The overall score ofSDG Indicator 6.5.1 for Pakistan came out to be 56, which is 6 points better than baseline survey of 2017.</u> The table below compares the section wise scores of baseline survey 2017 and survey 2020.

Section	Average Score for 2017 Baseline	Average Score for 2020
Section 1 Enabling Environment	67	61
Section 2 Institutions and Participation	51	60
Section 3 Management Instruments	41	49
Section 4 Financing	40	53
Indicator 6.5.1 score = Degree of IWRM implementation (0-100)	50	56

The participants discussed in detail the recent interventions in water sector including approval of the first ever National Water Policy (NWP) and its emphasis on IWRM implementation at different levels. The forum shared grave concern on the current conditions of transboundary water management arrangements and recommended measures to improve them. The participants noted that stakeholder consultation for water resources planning, development and management has substantially increased in last few years, e.g. formulation of NWP and its implementation framework faced delays due to extensive multi-stakeholder consultations.Institutional arrangements for implementing IWRM were discussed and it was recommended to strengthen the capacity of Ministry of Water Resourcesand associated departments(PCIW, O/o CEA&CFFC and IRSA)to lead effective IWRM implementation. The forum discussed that monitoring of surface water is satisfactory at most of the levels, however, monitoring of groundwater is unsatisfactory. The participants were concerned about the arrangements of pollution control and water-related ecosystems.

In the concluding remarks,Mr. Sardar Muhammad Tariq, CEO PWP thanked all the participants for making the workshop successful in the challenging times. Mr. AhmedKamal, CEA/CFFC, National Focal Point for SDG 6.5.1 summarized the key findings. His commitment in carrying National survey on SDG.6.5.1 on yearly basis with the help of Pakistan Water Partnership was welcomed by the participants. Mr. Sardar Muhammad Tariq further suggested to the Ministry of Water Resources to play active role in collecting information on efforts and financial support by the government and donor agencies in support of sustainable development goals implementations in Pakistan. The Ministries response was positive and encouraging.

The participants took active part in assigning scores to the survey questions. Completed survey instrument which represents the collective effort of the multi-stakeholder participants can be found in the end of the report as EN_6_5_1_IWRM_Survey_2020_completed.

1. Preface

The United Nations Environment Programme (UNEP) plays a Pivotal &Key Role in tracking the overall progress and supporting UN Member States for achieving 17 SDGs and associated 169 targets through 244 indicators. SDG-6 is a dedicated goal on water and sanitation to ensure availability and sustainable management of water and sanitation for all. It includes 8 targets and associated 11 indicators. Indicator 6.5.1 tracks the degree of Integrated Water Resources Management (IWRM) Implementation in countries and the National SDG 6.5.1 score represents a degree of Implementation of IWRM on a scale of 0 to 100 (Very low to Very high).

Ministry of Water Resources on February-18, 2020 designated the Chief Engineering Advisor for Ministry of Water Resources and Chairman, Federal Flood Commission (the CEA & CFFC) as the National Focal Point to report Pakistan's progress to UNEP on SDG Indicator 6.5.1, as a degree of Integrated Water Resources Management (IWRM) Implementation. To get feedback of the key stakeholders on SDG 6.5.1 Questionnaire, organizing a consultative workshop is an essential requirement set by the UNEP.

Quality progress on Indicator 6.5.1 for Pakistan was collected through a Survey Questionnaire available at http://iwrmdataportal.unepdhi.org/currentdatacollection as 'SDG 6.5.1 Survey Instrument 2020'. A similar Workshop was also successfully organized in Islamabad on 20th December 2017 by the Office of CEA/CFFC, Ministry of Water Resources in collaboration with Pakistan Water Partnership (PWP).

For conducting SDG 6.5.1 Survey for 2020, a communication was made with UNEP on March 16, 2020 seeking collaboration of PWP; a country chapter of Global Water Partnership (GWP) which focuses on supporting countries to achieve the water-related Sustainable Development Goals (SDGs), particularly via SDG 6.5 target on IWRM.

Adopting a proactive approach under prevailing threat of Covid-19, sample response on <u>'SDG 6.5.1 Survey Instrument 2020</u>'alongwith supportive material was shared with all concerned federal and provincial organizations on March 20, 2020 requesting them to prepare their similar institutional inputs later for finalization during the Consultative Workshop. Besides consistent follow up of the case through reminders dated April 07 & 22, 2020 and May 12, 2020, preliminary inputs were received from sizable number of organizations. Main reason for constrained feedback remained the Covid-19 crisis.

In order to obtain cogent feedback from all main stakeholders, in collaboration with Pakistan Water Partnership (PWP), a one-day Consultative Workshop was organized by O/o CEA & CFFC, Ministry of Water Resources on July 20, 2020 at Millennium Hotel Islamabad, PAFSOM Arena, Sector E-9, Main Margalla Road, Islamabad. An NOC from Islamabad District Administration was also arranged for conducting this inevitable international event in Covid-19 crisis with necessary precautions.

The honorable Secretary, Ministry of Water Resources was invited on 16th July 2020 to grace the occasion as Chief Guest and formally inaugurate the Workshop,however, because of his pressing official commitments on other highly important official matters; he could not participate in the consultative conference, however, his message was read to the workshop participants. Key findings of the consultative conference and Way Forward regarding assessment and monitoring of SDG indicator 6.5.1 in future are described in the succeeding sections of this report.

2. Conclusions from facilitated discussionson Section 1: 'Enabling Environment'

The forum was apprised that soon after the baseline reporting in December 2017, the Council of Common Interests (CCI) approved the first ever National Water Policy (NWP) for the country. The approved NWP is entirely based on the evolvement of Integrated Water Resources Management (IWRM) at all levels.Implementation strategy and framework for action has been formulated and provincial governments are preparing their revised water policies/master plans according to the guidelines of NWP with emphasis on IWRM

a) What are the main challenges to progress in the country?

- As far as the enabling environment is concerned, transboundary water management arrangements have worsen over last few years. Groundwater aquifer and environmental flows are not part of transboundary agreement i.e. Indus Basin Treaty (IBS) 1960.
- Country water laws are old and were designed for the conditions of abundant water, however, conditions are much changed now and laws need to address water security situations.

b) How can the main challenges be addressed?

- Re-visiting the transboundary water arrangement as per the current and future scenarios. There is an immediate need to coordinate with Afghanistan on sharing of Kabul river basin.
- Country water laws are required to be re-visited as well, groundwater laws/acts need to be formulated and implemented.
- Groundwater need to be separated from land ownership for better management
- c) At the question level or in general, what is the perceived rate of progress, and what is the likelihood of reaching High or Very high implementation by 2030? Is there a need for national (interim) target setting (which may be taken up in more detail in Stage 2 of the SDG 6 IWRM Support Programme)?

Pakistan has set its National Developmental Goals (NDGs) in line with the SDGs. Thus, after the approval of NWP, the water sector of the country has got clear direction to move towards IWRM for attaining sustainable development. National Water policy implementation strategy and framework for action has been prepared to be followed at the National and sub National level with proper monitoring and reporting mechanism. Furthermore, the government of Pakistan has increased the funding for water sector projects and started the construction of two (02) mega dams to overcome vast variations in seasonal water availability for food security and environment sustainability. In light of this, it is expected thatimplementation of IWRM principles in water resources planning, development and management will increase, however, given the implementation status, it is not likely to achieve High implementation status by 2030 unless specific immediate interventions are under taken with firm commitment.

d) What are the major point's stakeholders do not agree on and why?

The stakeholders' mostly agreed with no major opinion of difference. Some aspects where stakeholders were not satisfied are reflected in the scoring pattern

e) Other interesting points of note from the discussion?

Ministry of Water Resources should lead the effective implementation of IWRM, which necessitates its capacity building.

- Pakistan Indus Water Commissioner (PCIW) responsible for Indus waters treaty should be made proactive with its capacity enhancement and quality leadership
- Pollution of fresh water bodies and over extraction of ground water needs immediate attention of Policy Makers
- Over use of water in agriculture sector needs serious and immediate attention
- Under climate change and global warming, the Policy Makers should also look towards the coastal region for water and food security instead always looking towards Himalaya melting glaciers in the north as water basket
- To cater for rapid growth in the population and urbanizations, coastal areas development with livelihood opportunity needs attention
- Environmental protection act (EPA) needs to be strictly enforced to address water borne diseases and reduce mortality rate
- Water conservation, recycling of water and rain water harvesting should be encouraged to address water security issues

3. Conclusions from facilitated discussions on Section 2: 'Institutions and Participation'

The forum discussed the institutional arrangements at different levels and participation of stakeholders' to support the implementation of IWRM. The forum was of the opinion that there are too many organizations dealing with the water sector under various federal ministries (Ministry of Water Resources, Ministry of Defence, Ministry of Science & Technology and Ministry of National Food security & Research) and requires strong coordination among them to effectively lead the implementation of IWRM. The participants appreciated the process of consultationwith different stakeholder groups for formulation of NWP and its implementation plan.

a) What are the main challenges to progress in the country?

- There are many organizations in the country managing water resources at different levels. As far as operational issues are concerned, these organizations are well coordinated. However, at planning or policy level coordination is limited.
- The capacity of Office of the Pakistan Commissioner for Indus Waters (O/o PCIW), which is looking after implementation of Indus Basin Treaty is grossly inadequate to tackle the current and future transboundary water management challenges and disputes resolution mechanism need improvements.
- Water laws implementation at local levels
- Public and private sector consultations have seen marked increase in all aspects of water sectors including policy formulation and its implementation management

b) How can the main challenges be addressed?

- To improve the coordination among government organizations for water resources planning and management. The Ministry of Water Resources shall take the lead and provide a platform for coordination among the organizations.
- A strong transboundary water management organization needs to be established. The organization shall be research driven and should consist of highly skilled professionals. The envisaged organization shall be competent enough to advise government of Pakistan in resolving transboundary issues/disputes in line with treaty's clauses safeguarding Pakistan's interest and capable of dealing future implications of the Treaty.
- Enhance the capacity of the local level organizations mandated to implement water laws.
- The forum agreed to the Public-Private Partnership (PPP) approach for developing and managing water resources. The same has been stressed upon in the approved NWP as well.

c) At the question level or in general, what is the perceived rate of progress, and what is the likelihood of reaching High or Very high implementation by 2030? Is there a need for national (interim) target setting (which may be taken up in more detail in Stage 2 of the SDG 6 IWRM Support Programme)?

The existing organizations including Ministry of Water Resources have limited capacity to lead the implementation of IWRM. Unless capacity of these critical organizations is significantly enhanced, achieving High status for the "Institutions and Participations" dimension of IWRM implementation is not possible.

d) What are the major points stakeholders do not agree on and why?

Participants had a difference of opinion on the coordination between government authorities on implementing IWRM.

e) Other interesting points of note from the discussion?

Private sector participation in water resources policy, planning and management encouraged in the NWP. As such the National Water Council (NWC), the apex body overseeing the implementation of NWP comprised of four (04) private sector water experts.

4. Conclusions from facilitated discussions on Section 3: 'Management Instruments'

The forum discussed that the capacity of Water and Power Development Authority (WAPDA), and Indus River System Authority (IRSA) in monitoring of water availability. It was agreed that monitoring of surface water is satisfactory; however, groundwater monitoring is limited. It was discussed that implementation of "Management Instruments" for pollution control and protection of water-related ecosystems is lacking. The forum shared serious concern on the non-sharing of the data by India for last two (02) years that is the violation of IBT.Mr. Ahmed Kamal, CEA/CFFC, apprised the forum about the advancements in disaster risk reduction policy, implementation of National Flood Protection Plan-IV (NFPP-IV) and creation of National Disaster Risk Management Fund (NDRMF). He explained that NDRMF can fund only few activities identified in NFPP-IV. He added that a River Law has been prepared and shared with the provinces in order to delineate the river width and mark the encroachment zones.

a) What are the main challenges to progress in the country?

- Irrigation consumes over 90% of the country's water resources. Irrigation practices are highly unsustainable and result in loss of significant amount of water. Water returns in term of unit of land and water are one of the lowest in the world
- Very limited implementation of pollution control laws.
- Limited management of water-related ecosystems.
- Inadequate groundwater management plans.
- Uncertainty in availability of transboundary water data for flood and drought management.
- Water data should be brought into public domain for easy access.

b) How can the main challenges be addressed?

- Introduction of water conservation technology and techniques in irrigation. Training of farmers to enable them to optimally utilize the water resources and to make them aware of their critical role in water resources management. Move towards planting crops that require less water and have more economic value.
- Pakistan is already facing climate change impacts. For sustainable cropping pattern revised agro-climate zoning of whole of Pakistan has to be carried out
- Capacity building of organizations responsible for implementing the National Environmental Quality Standards (NEQS) to effectively control the water quality.
- Establishment of consortium of government organizations, NGOs and private sector to raise the awareness on management and conservation of water-related ecosystems. Encourage practices to protect such ecosystem and recommend implementation framework for legislations pertaining to the protection of water-related ecosystems.
- Provinces need to expedite the process of formulation of groundwater regulatory act and establishment of groundwater regulatory authorities as guided by the NWP.

- Procedures to be placed that ensure automatic sharing of data among the Member States (MS) who have signed the transboundary agreement. A neutral third party shall be made custodian which shall supervise the implementation of the procedure. Pakistan shall make use of global datasets that are available through multiple platforms.
- Although data sharing arrangements among the government authorities are welldefined, however, access to data for other stakeholders' is limited. The forum put a strong emphasis on the creation of unified national dataset that shall be publicly available.
- c) At the question level or in general, what is the perceived rate of progress, and what is the likelihood of reaching High or Very high implementation by 2030? Is there a need for national (interim) target setting (which may be taken up in more detail in Stage 2 of the SDG 6 IWRM Support Programme)?

After the approval of NWP, the federal and provincial governments are actively working on its effective implementation. Management Instruments are one of the main focus, however, in some fronts the progress is slow or stagnant e.g. pollution control and management of water-related ecosystems. There is a dire need to set immediate dedicated targets to improve on these aspects. In addition, transboundary water management is an issue of great concern, which requires due consideration and cooperation of regional and global stakeholders.

d) What are the major points stakeholders do not agree on and why?

Following were the few points on which stakeholders didn't agree:

- Some of the participants were critical on the current state of pollution control and implementation of water laws at local levels. Although this indicator has been scored in as low category(i.e. 20), a few participants were in favour to score even lower.
- Data sharing is limited. A couple of participants were of the view that data sharing procedure even among the government authorities is not straight forward.

e) Other interesting points of note from the discussion?

- Most aspects of "Management Instruments" dimension of IWRM are covered in NWP.
- Efforts would need to be continued to educate grass roots stakeholders in understanding the vital pillars of IWRM process
- In the sub national levels, farmers organizations are playing vital role in enhancing water use efficiency
- Telemetricsystem is important to get real time data for better water management to enhanced water benefits
- Deferred O&M of water infrastructures is resulting in huge water losses

5. Conclusions from facilitated discussions on Section 4: 'Financing'

The forum concluded that "Financing" for water resources activities has been increased in the recent past, which has put the implementation of IWRM on track. Number of interventions such as construction of two (02) mega dams, and implementation of activities identified in NFPP-IV has resulted in increased budget allocation for the water sector in Public Sector Development Programme (PSDP). The forum found it very encouraging that annual allocation for water sector is 9-10% of annual PSDP, which is well in line with the approved NWP. The involvement of Supreme Court of Pakistan has helped a lot in enhancing water sector financing.

a) What are the main challenges to progress in the country?

- Revenue generation and collection from the use of water is inadequate to meet future development and O&M cost
- Thin allocation of financial resources under PSDP, thus delaying completion of projects and enormous increase in the project costs

b) How can the main challenges be addressed?

- Main focus needs to be on realistic water pricing mechanism for each sub sector of water and water revenue collection
- Realistic allocation of funds as planned in approved PC-I
- c) At the question level or in general, what is the perceived rate of progress, and what is the likelihood of reaching High or Very high implementation by 2030? Is there a need for national (interim) target setting (which may be taken up in more detail in Stage 2 of the SDG 6 IWRM Support Programme)?
 - Approved NWP stipulates the gradual increase of water sector allocation to 20% of PSDP in year 2030. In order to fully utilize the envisaged budget in NWP, capacity enhancement of relevant organizations manage and effectively disburse these funds is required.
 - A new water pricing structure has to be introduced in each sub sector of water uses including the river management.

d) What are the major points stakeholders do not agree on and why?

It was an extremely informed discussion and no major point of disagreement among the stakeholderswas noted.

e) Other interesting points of note from the discussion?

- Ministry of Water Resources is financially constrained. Substantial funds are required for its proper functioning to lead IWRM implementation in the country.
- Organizations dealing with water sector need technical professionals in the key positions for better water management

- In house review of SDG 6.5.1 on yearly basis would play major role in achieving satisfactory implementation by 2030. The participants were very careful in using the word high or very high implementationstatus
- Participants raised concerns on implementation commitment due to general economic slowdown as a result of COVID 19

6. Way Forward/ Next Steps

Mr. Sardar Muhammad Tariq, CEO PWP, thanked all the participants in attending the workshop in extreme times and giving their valuable input for the completion of survey.

Mr. Ahmed Kamal, CEA/CFFC, National Focal Point for SDG Indicator 6.5.1, added that water is the life line of the country and poor management of flood waters results in loss of water whose economic value is equal to billions of dollars. Sustainable development of water resources in line with the SDG 6 targets is critical for the wellbeing of upcoming generations. In the light of this, he recommended to carry out the scoring exercise on yearly basis by consulting all the relevant stakeholders so that continuous monitoring of the targets can be carried out.

In the end, Mr Ahmed Kamal thanked the team of PWP and O/o CEA/CFFC who organized this workshop in difficult circumstances prevailing in the country due to COVID 19. He specifically acknowledged the contributions of Engr. Zafar Iqbal, Assistant Engineering Adviser, O/o CEA/CFFC and Mr. Muhammad Awais, Country Coordinator, PWP for successfully organizing the event. He also thanked UNEP-DHI and GWP for their support in organizing the event.

Annexures

- I. List of the participants
- II. Agenda of the Consultative Workshop
- III. Facilitator's Comments
- IV. Snapshots/ Photographs of the Consultative Workshop
- V. EN_6_5_1_IWRM_Survey_2020_Completed

ist of Confirm Participants for the One Day Stakeholders Workshop on Sustainable	Development Indicators 6.5.1 on IWRM in Islamabad- 20 TH July, 2020
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Designation	Chief Executive Officer	Chief Engineer Advisor / Chair FFC	Assistant Engineer Advisor	Department of International Relations, Editor Journal of Contemporary Studies	Professor	Agriculture Economist	Chief Executive Officer	Senior Consultant Human Rights Education, NCHR Govt of Pakistan	Director General
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Annex 1: List of Participants

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46	Ms. Rabail Jawad	Assistant Professor	Air University	E-9, Shaheen Chowk, Islamabad	0332800059	rabail@mail.au.edu.pk
47	Eng. Muhammad Talha Saleem	Mechanical Engineer	Consultant	Almadina State, Near Ghouri Town Phase-I Islamabad	03332525757	talshslm@icloud.com
48	Dr. Shakil Ahmad	Professor	NUST Campus,	Sector H-12, Islamabad	0304-2790172	engrshakilahmad@hotmail.com
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52	Dr. Muhammad Usman Zaheer	Consultant Epidemiologist	FAO	FAO Office NARC, Islamabad Pakistan	03133331038	Muhmmad.zaheer@fao.org
53	Mr.lhsan ulllah Khan	Civil Engineer/Lecturer	Civil Engineering Department	National University of technology, I.J.P Road Islamabad	03142974674	engr.hesan01@gmail.com
54	Mr. Faizan ul Hassan	Director	Pakistan Council of Research in Water Resources (PCRWR)	Khyabane Johar, H-8/1, Islamabad	051-9101285	faizan ul hassan@hotmail.com

Annex 2: Agenda of the Consultative Workshop



10:00-10:30 Hours





Country Stakeholder Workshop for SDG 6.5.1 Millennium Hotel Islamabad PAFSOM Arena, Sector E-9, Main Margalla Road, Islamabad,

Monday July 20, 2020

Programme

09:30 - 10:00 Hours	Registration of Participants (30 min)

Welcome and Introduction (30 min)

 Welcome and Introduction to the meeting by Sardar Muhammad Tariq, Chief Executive Officer Pakistan Water Partnership.

• Official Opening of the meeting by Ministry of Water Resources high-ups.

• Brief presentation of the stakeholders participating by Mr. Ahmed Kamal, Chairman Federal Flood Commission/Focal Point SDG 6.5.1

10:30-11:00 Hours SDG 6.5.1 - Background and overview (30 min)

 Virtual Presentation on "Regional and Global context of national SDG 6.5.1 reporting, UNEP" by Paul Glennie Senior Technical Advisor, UNEP-DHI Australia.

 Background to SDG 6.5.1 and the survey, and an overview of the questionnaire by Dr. Muhammad Ukasha, Facilitator.

11:00-11:15 Hours	Tea Break (15 min)
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11:15-13:15 Hours Facilitated discussions (2 h)

Section 1 and 2: 'Enabling Environment' and 'Institutions and Participation'

Introduction and support to understand the sections

Roundtable discussions







Q1: What is the status of policies, laws and plans to support IWRM at national & other levels?

Q2: What is the status of institutions for IWRM implementation at national and other levels?

• Reporting back and discussion - including agreeing on scores for the questions under section1 and 2 in the questionnaire and capture 3-5 key points from the discussion for the narrative sections to support the rationale or capture divergences

13:15-14:00 Hours	Lunch/Prayer Break (45 min)
14:00-16:30 Hours	Facilitated discussions Continued (2½ h)

Facilitated discussions Continued on Section 3 and 4: 'Management Instruments' and 'Financing'

Introduction and support to understand the section and the questions

Roundtable discussions

Q3: What is the status of management instruments to support IWRM implementation at national level and other levels?

Q4: What is the status of financing for water resources development and management at national level and other levels?

 Reporting back and discussion - including agreeing on scores for the questions under section 3 and 4 in the questionnaire and capture 3-5 key points from the discussion for the narrative sections to support the rationale or capture divergences

16:30-16:45 Hours	Tea Break (15 min)
16:45-17:30 Hours	Wrap up and Closing of the meeting (45 min)

• Follow up on any loose ends from the previous discussions by Mr. Ahmed Kamal, Chairman Federal Flood Commission/Focal Point SDG 6.5.1

 Agree on next steps for follow up and monitoring of the SDG 6.5.1 indicator by Mr. Ahmed Kamal, Chairman Federal Flood Commission/Focal Point SDG 6.5.1

 Wrap up and closing remarks of the workshop by Sardar Muhammad Tariq, Chief Executive Officer Pakistan Water Partnership.

Annex 3: Facilitator's Comments

Given the extreme times of COVID-19, the number and diversity of stakeholder's who participated in the workshop is very encouraging. Representation fromgross root level was ensured by PWP through inviting the members of Area Water Partnerships (AWPs) of remote areas.

The participants actively took partin the scoring process and confidently raised their concerns. Most of the questions were scored after rich discussions and agreement of the present stakeholders.

Support of UNEP-DHI and GWP was instrumental in successfully organizing the workshop. The facilitators' training by Cap-Net prepared the facilitator well for the workshop. Presentation by Mr. Paul Glennie of UNEP-DHI was very interesting, which briefed the participants about the global and regional scores of the Indicator 6.5.1 and prepared them for the workshop objectives.

Many opportunities for supporting stage-2 of the IWRM implementation process can be extracted from the multi-stakeholder consultations.

It may be noted that, the organization of the in-person workshop during extreme times influenced the participants and general environment very positively. The organizers put a lot of effort in organizing the workshop as it required soliciting No Objection Certificate from city government and adhered strictly to the SOPs. This propagated the message that such events can be organized in a controlled environment that would motivate other organizations to follow the footsteps of this workshop. The organizers arranged relevant materials including booklet, brochures etc. distributed among the participants. In addition they also arranged face masks and sanitizers bottles and organized seating arrangements fully observing social distancing requirements of the SOPs.

The facilitator is very much thankful to PWP / GWP, O/o CEA/CFFC and UNEP-DHI for providing this opportunity.

Annex 4: Photosof the Consultative Workshop





NB: Both the photographs taken from an angle do not show but a social distancing to be observed







Country Survey Instrument for SDG Indicator 6.5.1

Degree of integrated water resources management implementation (0 - 100)

Submission Form								
Country	Pakistan							
Date this document was submitted	July 30, 2020							
Date(s) any earlier versions of this	(for initial and revised submissions, as required)							
document were submitted								
National SDG 6.5.1 Focal Point	information							
Name	Ahmed Kamal							
Organisation	Office of Chief Engineering Adviser/Chairman Federal Flood Commission							
Title	Chief Engineering Adviser/Chairman Federal Flood Commission							
Contact email	chairman@ffc.gov.pk							
Contact phone								
Are you the national Focal Point for 6.1.16.2.16.3.16.	any other SDG indicator (apart from 6.5.1)? If yes, please insert 'X' for all that apply: 3.26.4.16.4.26.5.26.6.16.a.16.b.1Other SDG indicator(s) (please specify here):							
SDG 6.5.1 in-country data colle	ction and reporting process overview (Please provide further details on the consultation process in Appendix E)							
Were other institutions/stakeholders inv _X_YesNo	Were other institutions/stakeholders involved and consulted in the reporting process for this indicator? _X_YesNo							
If yes, please indicate the mode(s) of consultation (please provide further details in Appendix E): Phone callsX _Email exchangesIn-person meetingsX _Dedicated stakeholder workshop(s)Other (please specify):								
Contact person regarding further questions/clarifications relating to this submission								
_ X _SDG 6.5.1 Focal Point listed at	_X_SDG 6.5.1 Focal Point listed aboveOther (please specify contact details here):							

Part 1 – Introduction

This is the official survey instrument for country reporting on Sustainable Development Goal (SDG) indicator 6.5.1: "Degree of integrated water resources management implementation (0 - 100)". The indicator measures progress towards target 6.5: "By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate". The target supports the equitable and efficient use of water resources, which is essential for social and economic development, as well as environmental sustainability. The actions to achieve target 6.5 directly underpin the other water-related targets within SDG-6: "Ensure availability and sustainable management of water and sanitation for all". Further guidance on completing this survey instrument is provided in the SDG indicator 6.5.1 monitoring guide. Both this survey instrument and the monitoring guide are available from UN Environment in six UN languages (Arabic, Chinese, English, French, Russian and Spanish), and Portuguese through the Help Desk by emailing iwrmsdg651@un.org.

About the indicator:

Indicator 6.5.1 represents the degree of integrated water resources management (IWRM) implementation, on a scale of 0 - 100. It is calculated based on scores from approximately 30 questions covering different aspects of IWRM.

About the survey instrument

The primary purpose of the survey instrument is global monitoring and reporting on indicator 6.5.1. It has been designed to also be useful as a simple diagnostic tool for countries to identify strengths and weaknesses of different aspects of IWRM implementation. It measures implementation in incremental steps, which allows countries to identify barriers and enablers to furthering IWRM. The completed survey instrument can be used as an input to planning and working towards target 6.5.

The survey contains four sections, each covering a key dimension of IWRM (see definition in Appendix A: Glossary):

1. Enabling environment: Policies, laws and plans to support IWRM implementation.

2. Institutions and participation: The range and roles of political, social, economic and administrative institutions and other stakeholder groups that help to support implementation.

3. Management instruments: The tools and activities that enable decision-makers and users to make rational and informed choices between alternative actions.

4. Financing: Budgeting and financing made available and used for water resources development and management (apart from drinking water supply and sanitation) from various sources.

Each section has two sub-sections covering the "National" and "Other" levels, to address the target 6.5 wording "... at all levels." "Other" levels include sub-national, basin, local and transboundary (see AppendixA - Glossary). Questions relate to these levels depending on their relevance to the particular aspect of IWRM. For most "other level" questions, the score should reflect the situation in most of the basins/aquifers/jurisdictions, unless specified otherwise. For the transboundary level questions, the score should reflect the situation in most of the 'most important' transboundary basins / aquifers, which should be listed in the table in Appendix B. Filling out that table: increases the transparency of the transboundary questions; makes the information more useful for dialogue with neighbouring countries; and enhances coordination with <u>SDG indicator 6.5.2</u> on arrangements for transboundary cooperation. It is recognised that water resources management in federal countries may be more complex due to responsibilities at

different administrative levels. You may further explain any specific circumstances relating to the level of decentralization of water resources management and responsibility in your country (e.g. federal countries and other large countries) in Appendix C.

How to complete the survey

<u>Scoring</u>: For each question, a score between 0 and 100 should be selected, in increments of 10, unless the country judges the question to be 'not applicable (n/a)'. It is not possible to omit questions. The score selection is guided by descriptive text for six thresholds, which are specific to each question. If a country judges the degree of implementation to be between two thresholds, the increment of 10 between the two thresholds may be selected. The potential scores that may be given for each question are: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100.

The thresholds for each question are defined sequentially. This means that the criteria for all lower levels of implementation must be met in order for a country to respond that it has reached a specific level of implementation for each question. Furthermore, if an aspect of IWRM is specified in a lower threshold, it is implicit that this aspect is also addressed in the higher thresholds for that question. **Bold** text in the thresholds helps the reader differentiate between thresholds.

The thresholds are indicative and are meant to guide countries in choosing the most appropriate responses, i.e. selected responses should be a reasonable match, but do not have to be a perfect match, as each country is unique.

Instructions on how to calculate the overall indicator 6.5.1 score are provided in section 5.

<u>Narrative responses:</u> for each question, there are two free-text fields: "Status description" and "Way forward". General guidance on the type of information that countries may find useful to include in each field is as follows:

Status description: e.g. refer to relevant activities/initiatives/laws/policies/plans/strategies or similar; comment on the degree of implementation as it relates to the threshold descriptions; barriers/enablers; and reflect on progress since the first round of reporting on SDG indicator 6.5.1 (baseline in 2017/18). Where possible, provide a brief explanation of why the score is different to the baseline. If reporting was not submitted for the SDG baseline, reflect on recent rates of implementation of relevant activities.

Way forward: e.g. already planned or recommended activities to advance implementation of that aspect of IWRM, including identifying barriers and enablers. Include draft interim target-setting for each question where appropriate (e.g. consider actions or recommendations for making progress). Any actions or recommendations provided in this field are neither binding nor comprehensive, but may be used as inputs to country planning processes.

Specific additional guidance is provided in each field for each question. Experience from baseline reporting shows that the free-text responses to each question are important, as they: increase the robustness, transparency and objectivity of the indicator scores; facilitate stakeholder consensus on each question score; help countries track progress between reporting periods; and help countries to analyse what is required to reach the next threshold. In each field, enter the narrative response by replacing "xxx". It is recommended that the guidance text is left in the free-text fields during the data collection process, but that this guidance text is deleted before final submission.

Progress and differences since baseline reporting

172 countries established a baseline for indicator 6.5.1 in 2017/18. This is the second round of data collection. Where available, countries should refer to the baseline survey responses, available here: <u>http://iwrmdataportal.unepdhi.org/</u>. Countries are encouraged to consider progress, or lack of progress, since the baseline, in the 'Status description' fields, and give reasoning for differences in scores.

The current survey version is highly comparable, though not completely identical, to the baseline survey. Some minor amendments have been made following a review process, and noteworthy changes to the baseline are described in footnotes for relevant questions. A summary of changes is provided in the SDG indicator 6.5.1 monitoring guide.

Data collection and submission

A broad stakeholder engagement process is encouraged to complete the survey instrument. This helps to increase stakeholder participation and ownership of water management and decision-making processes, and makes the completed survey instrument a more robust and useful diagnostic tool for further discussions and planning. Country Focal Points are asked to fill in the Reporting Process Form in Appendix E to increase transparency and increase stakeholder confidence in the results at all levels. The extent and mode of stakeholder engagement is up to each country, and further guidance is provided in the monitoring guide. Coordination with Focal Points for other SDG indicators is encouraged where feasible and relevant.¹

The national IWRM Focal Point is responsible for the Quality Assurance and formal submission of the completed survey instrument to UN Environment. The survey instrument should be emailed to the IWRM Help Desk at UN Environment: <u>iwrmsdg651@un.org</u>.

Upon request, the Help Desk will provide support to the national IWRM focal points on matters such as interpretation of questions and thresholds, the appropriate level of stakeholder engagement in countries, and support to submitting the final indicator scores.

¹Monitoring of 6.5.1 is being done as part of the UN-Water initiative on integrated monitoring of SDG 6.Support is provided in collaboration with UN-Water members and partners. For a list of questions that relate to other SDG indicators (mainly in section 3), please see the monitoring guide.

Part 2 – The survey

1. Enabling Environment	•									
	Degree of implementation (0 – 100)									
	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)				
1.1 What is the status of policies, laws and plans to support Integrated Water Resources Management (IWRM) at the national level?										
a. National water resources policy , or similar.	Development not started or not progressing.	Exists, but not based on IWRM.	Based on IWRM, approved by government and starting to be used by authorities to guide work	Being used by the majority of relevant authorities to guide	Policy objectives consistently achieved.	Objectives consistently achieved, and periodically reviewed and revised.				
Score 60			guide work.	work.						
Status description: Soon a April 2018. Note that the C preparing their water poli Development Authority (W IWRM. Way forward: NWP impl immediate, short, medium a	Status description: Soon after the baseline reporting in December 2017, the long awaited National Water Policy (NWP) was approved by the Council of Common Interest (CCI) in April 2018. Note that the CCI is chaired by the Prime Minister of the country and comprised of provincial Chief Ministers. Since the approval of NWP, all the provinces have been preparing their water policies according to the guidelines stipulated in the NWP. Furthermore, federal organizations working on water resources such as Water and Power Development Authority (WAPDA), incorporate NWP guidelines in their developmental and management plans. Approved NWP is entirely based on evolving and implementation of IWRM.									
h National water	Development not	Exists but not	Based on IWRM approved	Being annlied by the	Alllaws are being	Alllaws are enforced across the				
resources law (s).	started or not progressing.	based on IWRM.	by governmentand starting to be applied by authorities.	majority of relevant authorities.	applied across the country.	country, andall people and organizationsare held accountable.				
Status description: Water serious notice of the cases a River Law which explicit Way forward: Water laws	laws are being follo where water laws hav ly delineates the encr are old that were des	wed for the efficier ve been violated e.g coachment areas alo signed for the condi	nt distribution of water accordin extraction of groundwater. Sin ng the major rivers of the count tions when water was abundant	ng to established water ri ice baseline survey, the O ry and requires the provir . However, there is a need	ghts. In addition, Sup ffice of the Chairmar aces to evacuate these to re-visit these laws	preme Court of the country has taken a Federal Flood Commission prepared a areas on priority. s for the present and future conditions				
of water availability. In ac domestic, and others at diff	ldition, laws pertaini erent levels.	ing to water pricing	g needs to be prepared and im	plement for managing de	emand for water use	ranging from agriculture, industrial,				
c. National integrated water resources management (IWRM) plans, or similar. Score 70	Development not started ornot progressing.	Being prepared, but not approved by government.	Approved by government and starting to be implemented by authorities.	Being implemented by the majority of relevant authorities.	Plan objectives consistently achieved .	Objectives consistently achieved, and periodically reviewed and revised.				
Status description: Approval of NWP in 2018 resulted in the paradigm shift in the water resources planning, development and management practices in the country. The Ministry of Water Resources has prepared the implementation framework of NWP with the consensus of relevant stakeholders'. Given this, the different federal organizations working with water have been judiciously developing and implementing plans (as per their mandate) based on IWRM principles as stipulated in the NWP. Note that, WAPDA, the major water resources planning, development and management organization of the country in its Act of 1958 introduced the concept of unified development of water resources, thus somewhat incorporating the concept of IWRM in its plans for past few decades ago. Way forward: Integration of provincial plans with the NWP implementation framework such that coordinated development of water resources can be achieved.										
1.2 What is the status of p	1.2 What is the status of policies, laws and plans to support IWRM at other levels?									

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)			
a. Sub-national ² water resources policies or similar.	Development not started or delayed in most sub- national	Exist in most jurisdictions, but not necessarily	Based on IWRM, approved by the majority of authorities and starting to be used to guide work.	Being used by the majority of relevantauthorities to guide work.	Policy objectives consistently achieved by a majority of outborities	Objectives consistently achieved byall authorities, and periodically reviewed and revised.			
Score 80	jurisaictions.	IWRM.			aumonnes.				
Status description: Provi provincial water resources Way forward: Coordinati	nces have revised the on among provinces	eir water policies in	h light of approved NWP. The s	same are being implement	ed in the planning, de	evelopment, and management of water			
b . Basin/aquifer management plans ³ or similar, based on IWRM.	Development not started or delayed in most basins/aquifers of	Being prepared for most basins/aquifers.	Approved in the majority of basins/aquifers and starting to be used by authorities.	Being implemented in the majority of basins/aquifers.	Plan objectives consistently achieved in majority of	Objectives consistently achieved in all basins/aquifers, and periodically reviewed and revised.			
Score 50	national importance.				basins/aquifers.				
Status description: WAP	Status description: WAPDA and Federal Flood Commission prepares and implement the plans at the basin level. However, aquifer level plans are limited.								
Way forward: Developme	ent an integrated basi	n & aquifer manage	ement plan.						

²Sub-national includes jurisdictions <u>not</u> at national level, such as: states, provinces, prefectures, counties, councils, regions, or departments. In cases where there are no explicit subnational policies, please answer this question by considering how national policies are being implemented at sub-national levels. Responses should consider the highest, non-national level(s) as appropriate to the country. In the status description, please explain which level(s) are included in the response.

³ At the basin/aquifer level, please include only the most important river basins, lake basins and aquifers for water supply or other reasons. This question only refers to these basins/aquifers. These basins/aquifersare likely to cross administrative borders, including state/provincial borders for federal countries. The basins may also cross national borders, but this question refers to management of the portions of basins within each country. Question 1.2c refers specifically to transboundary arrangements for basins/aquifers shared by countries.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)		
c. Arrangements for	Development not	Being prepared	Arrangementsare adopted.	Arrangements' provisi	Arrangements' provi	The arrangements'		
transboundary water	started or not	or negotiated.		ons are	sions are	provisions are fully		
management. ⁴	progressing.			partlyimplemented.	mostlyimplemente	implemented.		
Score 60					d.			
Status description: Indus	Basin Treaty (IBT) between	n Pakistan and India	a governs the transboundary wa	ter distribution. Recently	, under the current gov	ernment in India, the IBT has		
not been fully followed by	India. For example, there have	as been no data shar	ing for last 2 years.					
Way forward: IBT was si	gned in 1960 and distribution	on of only surface wa	ater was included in IBT. Howe	ever, there has been signif	ficant over pumping of	groundwater in India from the		
transboundary Indus Aqui	fer. As well as provision of	of environmental flo	ows in the Pakistani rivers (given by the second seco	ven to India as IBT and	now dried up) is an i	ssue of great concern. These		
developments require re-vi	siting IBT.							
d.Sub-national water	Development not	Exist in most	Based on IWRM, approved	Some regulations	All regulations	All regulations being		
resources	started or delayedin	jurisdictions, but	in most jurisdictions and	being applied in the	beingapplied in the	applied and enforced in all		
regulations ⁵ (laws,	most sub-national	not necessarily	starting to be applied by	majority of	majority of	jurisdictions, and all		
decrees, ordinances or	jurisdictions.	based on IWRM.	authorities in some	jurisdictions.	jurisdictions.	people and		
similar). ⁶			jurisdictions.			organizationsare held		
Score 50						accountable.		
Status description: Provincial Irrigation and Drainage Acts 1980 / 2006 exist and being followed to some extent. However, after the approval of NWP (which is based on IWRM),								
provinces have revised the	ir policies and preparing imp	plementation plans i	n coordination with the federal	government.				
Way forward: Provinces	working to go beyond the ca	nal distributions and	l also including groundwater ac	ts in their implementation	n strategy.			

⁴For 'transboundary' definition and guidance on how to fill out all transboundary level questions, see Appendices A and B. All transboundary level questions should reflect the situation in most of the 'most important' transboundary basins/aquifers, as listed in Appendix B. An 'arrangement' should be a formalcommitment, and may be referred to as a bilateral or multilateral agreement, treaty, convention, protocol, joint declaration, memorandum of understanding, or other arrangement between riparian countries on the management of a transboundary basin/aquifer. Refers to international basins/aquifers only. Arrangements may be interstate, intergovernmental, inter-ministerial, interagency or between regional authorities. They may also be entered into by sub-national entities.

⁵Sub-national includes jurisdictions <u>not</u> at national level, such as: states, provinces, prefectures, counties, councils, regions, or departments. In cases where there are no explicit subnational regulations, please answer this question by considering how national regulations are being implemented at sub-national levels. Responses should consider the highest, nonnational level(s) as appropriate to the country. In the status description, please explain which level(s) are included in the response.

⁶ This question has replaced question 1.2d from the baseline survey instrument, which was for federal countries only.

2. Institutions and Participation										
		Degree of implementation $(0 - 100)$								
	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)				
2.1 What is the status of instit	2.1 What is the status of institutions for IWRM implementation at the national level?									
a. National government	No dedicated	Authorities exist,	Authorities have clear	Authorities have	Authorities have the	Authorities have the				
authorities ⁷ for leading	government	with clear	mandate to lead IWRM	the capacity to	capacity to effectively lead	capacity to effectively				
IWRM implementation.	authoritiesfor water	mandate to lead	implementation, and the	effectively lead	periodic monitoring and	lead periodic IWRM				
	resources	water resources	capacity ⁸ to effectively lead	IWRM plan	evaluation of the IWRM	plan revision .				
Score 60	management.	management.	IWRM plan formulation.	implementation.	plan(s).					
Status description: There are	too many institution at	t federal level. Among	g them, WAPDA has the require	d capacity to lead IWR	M plan implementation.					
Way forward: Ministry of V	Water Resources shoul	d be on the lead for	implementing IWRM plans. C	Coordination among fe	deral organizations needs to	be improved for effective				
implementation of an integrate	ed approach of water re	sources management	at national level.							
Establishment of a transbound	lary water managemen	t organization which	not only oversee the implement	t of IBT, but also look	after other transboundary ma	tters such as groundwater,				
Kabul river basin, transbounda	ary coastal region.									
b. Coordination between	No information	Information on	Communication:	Consultation:	Collaboration: Formal	Co-decisions and co-				
nationalgovernment	sharedbetween	water resources,	Information, experiences	Opportunities for	arrangements between	production:				
authorities representing	different	policy, planning	and opinions are shared	different sectors to	different government	Shared power between				
different sectors ⁹ on water	government sectors	and management	between different sectors.	take part in policy,	sectors with the objective	different sectors on				
resources, policy, planning	on policy, planning	is made available		planning and	of agreeing on collective	joint policy, planning				
and management.	and management.	between different		management	decisions on important	and management				
Score 60		sectors.		processes.	issues and activities.	activities.				
Status description: Active co	nsultation among vario	ous relevant federal go	overnment authorities take place	s on matters related to	the water resources manageme	ent at operational level e.g.				
while preparing management plans of water resources, the input of Ministry of Food & Agriculture. Ministry of Energy, and other relevant authorities are solicited and incorporated.										
In addition, the approved NV	VP was prepared through	ugh extensive consul	tation with the stakeholders'. 7	The National Water C	ouncil (NWC) which is the a	pex body supervising the				
implementation of NWP inclu	des representative of re	elevant federal govern	ment authorities as members.		· · · ·					
Way forward: Build-on the c	oordination at operatio	nal level to develop a	mechanism to collaborate at pla	nning and policy level						

⁷'Government authorities' could be a ministry or ministries, or other organizations/institutions/agencies/bodies with a mandate and funding from government.

⁸'Capacity' in this context is that the responsible authorities should be adapted to the complexity of water challenges to be met and have the required knowledge and technical skills, including planning, rule-making, project management, finance, budgeting, data collection and monitoring, risk/conflict management and evaluation. Beyond having the technical capacity, authorities should also have the financial capacity to actually be leading the implementation of these activities.

⁹Relates to coordination between the government authorities responsible for water management and those responsible for other sectors (such as agriculture, energy, climate, environment etc.) that are dependent on water, or impact on water.Coordination between groundwater and surface water development/management should also be optimised. The relevant sectors should be considered according to their importance for the country.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)			
c.Public	No information	Information on water	Communication:	Consultation:	Collaboration:	Representation: Formal			
participation ¹⁰ inw	sharedbetween	resources, policy,	Government	Government	Mechanisms ¹¹ established,	representation of the			
ater resources,	government and the	planning and	authorities request	authoritiesregularly use	and regularly used, for the	public in government			
policy, planning	public on policy,	management is made	information,	information, experiences	public to take partin	processes contributing to			
and management at	planning and	available to the public.	experiences and	and opinions of the	relevantpolicy, planning	decision making on			
national level.	management.		opinions of the public.	public.	and management	important issues and			
Score 60					processes.	activities, as appropriate.			
Status description:	Public participation in w	vater resources planning,	policy and management	during last 3-5 years inc	reased substantially. This is	evident from the fact that			
implementation plans	s are being delayed as put	olic consultation takes time	e. An example is of the	preparation of National Flo	od Protection Plan - IV (NFF	PP-IV), during which on the			
directions of CCI, dis	trict level committees were	e formulated to carry out the	ne consultations across the	e country for input of genera	al public, NGOs and Civil Soci	iety organizations.			
Preparation of NWP	involved extensive consult	ation of NGOs, developme	ental sector, academia and	general public.					
Way forward: Increa	ase the participation level	to improve diversity of par	rticipants as well as enha	nce the participation level to	o collaboration stage where pu	blic participation support in			
preparation of plans a	and policies.								
d.Private sector ¹²	No information	Information made	Communication	Consultation:	Collaboration:	Representation:			
participation	sharedbetween	available between	between government	Government authorities	Mechanisms ¹³ established,	Effective private sector			
inwater resources	government and private	government and private	and private sector	regularly involve the	and regularly used, for	involvement established			
development,	sector about water	sector about water	about water resources	private sector in water	private sector involvement	for water resources			
management and	resources development,	resources development,	development,	resources development,	and partnership.	development,			
use.	management and use.	management and use.	management and use.	management and use		management and use			
Score 60				activities.		activities.			
Status description:	NWC, headed by the cou	ntry's Prime Minister, has	s four (04) members from	n the private sector. NWC	supervises the implementatio	n of NWP. Note that NWP			
suggest public-private	suggest public-private partnership approach to water resources development.								
Private sector organiz	ation "Hashoo Group" sup	ported the government aut	thorities in organizing con	nsultations regarding prepara	ation of NWP implementation	plans.			
An active collaboration	on of private sector on-farr	n water management orgar	nizations with governmen	t authorities.	-				
Water scarce areas in	the country has private or	ganizations actively working	ng in improving the condi	tions.					
Way forward: Public	c-private partnership appro	bach as stipulated in NWP	needs to be adopted.						

¹⁰'The public'includes all interested parties who may be affected by any water resources issue or intervention. They include organizations, institutions, academia, civil society and individuals. They do not include government organizations. The private sector is addressed separately in the next question.

¹¹ Mechanisms can include policies, laws, strategies, plans, or other formal operational procedures for public participation.

¹²Private sectorincludes for-profit businesses and groups. It does not include government or civil society. While this question is mainly focused at the national level, please respond at the level that is most relevant in the country context. Please explain this, including differences between implementation at different levels, in the 'Status description' field.

¹³ Mechanisms can include policies, laws, strategies, plans, or other formal operational procedures for private sector participation.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)			
e. Developing IWRM	No capacity	Occasional capacity	Some long-term capacity	Long-term capacity	Long-term capacity	Long-term capacity			
capacity. ¹⁴	development	development,	development initiatives are	development	development initiatives	development initiatives are			
	specific to water	generally limited to	being implemented, but	initiatives are being	are being implemented,	being implemented with			
	resources	short-term / ad-hoc	geographic and stakeholder	implemented, and	with effective outcomes,	highly effective outcomes,			
	management.	activities.	coverage is limited .	geographic and	and geographic and	and geographic and			
				stakeholder coverage	stakeholder coverage is	stakeholder coverage is			
Score 50				is adequate.	very good.	excellent.			
Status description:Capacit	ty development init	tiatives are being imple	mented and geographic and sta	keholder coverage is be	eing extended. NWP specifie	cally stressed the continuous			
enhancement of organization	onal capacity to dev	elop, revise, implement,	and monitor IWRM plans.						
Way forward: Civil socie	ty and private secto	or has contributed signific	cantly to the capacity building o	f the water sector. Streng	gthen coordination/relationsh	ip of these organizations with			
government authorities is r	equired to further th	he initiatives. In this rega	rd, streamlining the process of s	election/nomination of g	overnment officials is require	ed.			
2.2 What is the status of in	stitutions for IWR	RM implementation at o	ther levels?						
a.Basin/aquifer	No dedicated	Authorities exist,	Authorities have clear	Authorities have the	Authorities have the	Authorities have the			
level ¹⁵ organizations ¹⁶	basin authorities	with clear mandate to	mandate to lead IWRM	capacity to	capacity to effectively lead	capacity to effectively			
for leading	for water	lead water resources	implementation, and the	effectively lead	periodic monitoring and	lead periodic IWRM plan			
implementation of	resources	management.	capacity ¹⁷ to effectively lead	IWRM plan	evaluation of the IWRM	revision.			
IWRM.	management.		IWRM plan formulation.	implementation.	plan(s).				
Score 60									
Status description: WAPI	DA, Indus River Sy	stem Authority (IRSA) a	nd Federal Flood Commission (FFC) under the umbrella	of Ministry of Water Resour	ces has the capacity and			
mandate to lead IWRM at	mandate to lead IWRM at basin level. WAPDAs' mandate is development and management of water resources within Indus Basin, IRSA supervises the distribution of water among								
provinces as per the Water	Accord of 1991. W	hereas FFC prepares and	l implements flood protection pl	ans across the Indus Bas	in.				
Way forward: Aquifer lev	vel situation needs to	o be improved.							

¹⁴ IWRM capacity development: refers to the enhancement of skills, instruments, resources and incentives for people and institutions at all levels, to improve IWRM implementation. Capacity needs assessments are essential for effective and cost-effective capacity development. Capacity development programs should consider gender balance and disadvantaged/minority groups in terms of participation and awareness. Capacity development is relevant for many groups, including: local and central government, water professionals in all areas - both public and private water organisations, civil society, and in regulatory organisations. In this instance, capacity development may also include primary, secondary and tertiary education, and academic research concerning IWRM.

¹⁵ At the basin/aquifer level, please include only the most important river basins, lake basins and aquifers for water supply or for other reasons. This question only refers to these basins/aquifers. These basins/aquifers likely cross-administrative borders, including state/provincial borders for federal countries. The basins may also cross national borders, but this question refers to management of the portions of basins within each country. Question 2.2e refers specifically to transboundary management of basins/aquifers shared by countries. ¹⁶Could be organization, committee, inter-ministerial mechanism or other means of collaboration for managing water resources at the basin level.

¹⁷ For the definition of 'capacity' in this context, see footnote 12. Beyond having the capacity, authorities must also actually be leading the implementation of these activities.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)		
b.Public participation ¹⁸	No information	Information on	Communication:	Consultation:	Collaboration:	Representation: Formal		
inwater resources, policy,	sharedbetween	water resources,	Government	Government	Mechanisms ²⁰ established,	representation of the		
planning and	government and the	policy, planning	authorities request	authoritiesregularly use	and regularly used, for the	public in local authority		
managementat the	public on policy,	and management is	information,	local level information,	public to take partin	processes contributing to		
locallevel. ¹⁹	planning and	made availabletothe	experiences and	experiences and opinions	relevantpolicy, planning	decision making on		
	management.	public.	opinions of the	of the public.	and management	important issues and		
Score 60			public.		processes.	activities, as appropriate.		
Status description: An a	ctive level of particip	ation by public at all	levels during consultat	ions for NWP and its imp	lementation plan formulation	. In addition, on-farm water		
management organizations	works in close coordin	ation with district gove	ernments in most of the c	ountry.				
Way forward: Develop m	ore synergy between p	ublic and government a	at local level to address s	pecific water related issues of	of an area. Local universities a	nd NGOs collaborate to study		
and highlight issues, develo	op solutions, propose le	egislations (if required)	and coordinate with the	local government authorities	to implement the solutions.			
c.Participation	Participation of	Vulnerable groups	Some procedures in	Procedures in place, with	Regular participation of	Meaningful ²³ and		
ofvulnerable groups in	vulnerable groups	partially	place, but limited	moderate participation	vulnerable groups	regular participation of		
water resources planning	not explicitly	addressed, butno	budget and human	of vulnerable groups	(sufficient budget and	vulnerable groups, as		
and management. ²¹	addressed in laws,	explicit	capacity for	(moderate budget and	human capacity, and	appropriate.		
Score 60	policies, or plans.	proceduresin	implementation.	human capacity).	participation is monitored).			
		place. ²²						
Status description: Much	awareness has been g	generated among the v	ulnerable groups in rec	ent years. Vulnerable group	s are specifically actively pa	rticipates in disaster related		
interventions such as Flood	l of 2010. In addition, t	these communities are	taking active part in cons	sultation regarding small dar	n activities. Pakistan Water Pa	rtnership (PWP) established		
Area Water Partnerships (A	Area Water Partnerships (AWPs) across the country and in vulnerable regions. As per PWP experience, vulnerable groups through their AWPs participates in the consultation process							
regarding water resources p	lanning and manageme	ent for their region. It is	s very encouraging that n	nale to female ratio in these of	consultations is 1:1.			
Way forward: Governmen	t shall fund NGOs to e	nable them to reach ou	t the vulnerable groups.	On the other hand, vulnerable	e groups can work on self-help	model to improve the water		
resources and related condi	tions in their region. Fo	or example, in Khyber l	Pakhtunkhwa province, t	he local population has insta	lled 360 micro hydel stations o	on self-help basis.		

¹⁸'The public'includes all interested parties who may be affected by any water resources issue or intervention. They include organizations, institutions, academia, civil society and individuals. They do not include government organizations. The private sector is dealt with separately in question 2.1d.

¹⁹ Examples of 'local level' include municipal level (e.g. cities, towns and villages), community level, basin/tributary/aquifer/delta level, and water user associations.

²⁰ Mechanisms can include policies, laws, strategies, plans, or other formal operational procedures for public participation.

²¹Vulnerable groups: groups of people that face economic, political, or social exclusion or marginalisation. They can include, but are not limited to: indigenous groups, ethnic minorities, migrants (refugees, internally displaced people, asylum seekers), remote communities, subsistence farmers, people living in poverty, people living in slums and informal settlements. Also referred to as 'marginalised' or 'disadvantaged' groups. While women are often included in definitions of 'vulnerable groups', in this survey gender issues are addressed separately in question 2.2d. The score given for this question should reflect the situation for the majority of the vulnerable groups. This question has been added since the baseline to capture an element of stakeholder participation which is important in the context of 'leave no-one behind' – one of the key principles of Agenda 2030.

²² 'Procedures' can include operational processes to, for example, raise awareness, reduce language barriers, and facilitate interaction with specific vulnerable groups.

²³, Meaningful' implies voices of vulnerable groups are heard, contribute to decision-making, and influence outcomes. It follows the UN Statement of Common Understanding on Human Rights-Based Approaches to Development Cooperation which provides for "Participation and Inclusion: ... all peoples are entitled to active, free and meaningful participation in, contribution to, and enjoyment of civil, economic, social, cultural and political development in which human rights and fundamental freedoms can be realized."

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)		
d.Gender included in	Gender	Gender	Gender considerations	Gender objectives ²⁵	Gender objectives	Gender objectives		
laws/plans or similar within	considerations not	considerations	included (but limited	partly achieved	mostly achieved	consistently achieved and		
water resources	explicitly included in	partially	implementation, budget	(activities partially	(activitiesadequately	effectively address gender		
management. ²⁴	national/ subnational	included in	or monitoring).	monitored and	monitored and funded).	issues (activities and		
	laws/plans or similar.	laws/plans or		funded).		outcomesreviewed and		
Score 50		similar.				revised).		
Status description: Female are t	he key stakeholder in wat	er resources managen	nent specifically at househol	d level. They travel mile	es to collect water in water	scarce areas and are responsible		
for optimal management of this co	ollected water. Female pop	ulation played active r	ole in the formulation of NV	VP and its implementation	on plan at different levels. F	emale population participated in		
equal numbers as of male participation	ants during the consultatio	ns and awareness cam	paigns run by PWP through	its AWPs, especially in	water scarce areas.			
Way forward: It is required to	realize that genders hav	ve specific roles and	responsibilities when it ca	ame to water resources	s policy, planning, develop	pment and management. Each		
gender group must be made awa	re of its roles and response	sibilities and of the fac	t that water resources managed	gement is a shared respo	nsibility. In addition, young	generation may be taught water		
management right from beginning	in the educational institut	es, as young generatio	n positively influences their	elders.				
e. Organizational	No organizational	Organizational	Organizational	Organizational	Organizational	Organizational		
framework for	framework(s).	framework(s)	framework(s)	framework(s)'	framework(s)' mandate	framework(s)' mandate is		
transboundary water		being developed.	established.	mandate is partly	is mostly fulfilled .	fully fulfilled.		
management. ²⁶				fulfilled.				
Score 60								
Status description: Office of th	ne Pakistan Commissione	er for Indus Waters (O/o PCIW) is mandated to	supervise the impleme	ntation of Indus Basin Tre	aty (IBT) signed between India		
and Pakistan. Under the current	regime in India, the O/	o PCIW is not able t	o fully implement its man	date. The Indian side is	s not sharing data as per the	he clauses of IBT, furthermore,		
continuously threatening to stop every drop of water following into Pakistan. In addition, the flow conditions have significantly changed since the signing of the treaty, extensive over								
pumping of groundwater from t	pumping of groundwater from transboundary in the Indian side in last few years, and environmental flow requirements of rivers have emerged as a matter of serious concern. With this							
Kabul river shared with Afghan	nistan is also becoming	an important avenue	of transboundary water n	nanagement for which	unfortunately no law/trea	ty exists between Pakistan and		
Afghanistan. At another front, tr	ansboundary water mana	agement issues are lik	ely to be developed betwee	en Iran and Pakistan reg	garding the use of coastal r	egion in Gwadar marine area.		

²⁴ See gender discussion at beginning of section 2. Gender-responsive mechanisms can include laws, policies, plans, strategies or other frameworks or procedures aimed at achieving gender objectives related to women's participation, voice and influence. Gender-responsive mechanisms may originate within the water sector or at a higher level, but if they are primarily addressed at a higher level, then there should be evidence of gender mainstreaming within the water sector to achieve scores in this question. In the baseline survey, national, sub-national, and transboundary levels were addressed in three separate questions. These questions have been merged into a single question, allowing countries to answer the question at the level which is most relevant in the national context. The situation at different levels can be explained in the 'Status description' cell, as appropriate.
²⁵ Gender objectives ultimately refer to equal participation and influence in water resources management at all levels. Ways of monitoring this include (please identify any of these or similar in the 'Status description' field): 1) Presence of Gender Focal Point responsible for gender policy and gender concerns in authorities that deal with water resources; 2) Gender parity in decision-making processes at all levels (e.g. in meetings or board members/committee members); 3) Presence of gender-specific objectives and commitments in strategies, plans and laws related water policy; 4) Presence and role of local women's groups/organizations receiving technical and/or financial support from government/non-government organizations involved in water resources management activities; 5) Budget allocation, and procedures for collection and analysis of sex-disaggregated data of local populations, when planning for water-related programmes / projects, including infrastructure; 6) Presence of measures for improving gender parity and equity in human resources (HR) policies of

authorities. Source: adapted from UNESCO WWAP Toolkit on Sex-disaggregated Water Data, 2019.

²⁶An organizational framework can include a joint body, mechanism, authority, committee, commission or other institutional arrangement. Refers to international basins/aquifers

Way forward: O/o PCIW required to be re-vitalized as a transboundary water management organization with a mandate and capacity to handle not only the supervision of implementation of IBT but which can also effectively lead other transboundary water management as discussed above in the status description. It is envisaged that this re-vitalized organization may be more research driven having highly skilled manpower in water management and related fields specifically in context of transboundary waters.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)			
f.Sub-national ²⁷	No dedicated sub-	Authorities exist,	Authorities have clear	Authorities have	Authorities have the	Sub-national			
authorities for leading	national	with clear mandateto	mandate to lead IWRM	the capacity to	capacity to effectively	authorities have the			
IWRM implementation. ²⁸	authoritiesfor water	lead water resources	implementation, and the	effectively lead	lead periodic monitoring	capacity to effectively			
	resources	management.	capacity ²⁹ to effectively	IWRM plan	and evaluation of the	lead periodic IWRM			
Score 80	management.		leadIWRM plan	implementation.	IWRM plan(s).	plan revision .			
			formulation.						
Status description: Provincial Authorities (e.g. Provincial Irrigation Departments) have the capacity to effectively lead periodic monitoring and evaluation of the IWRM plan and									
undertaking it effectively.									
Way forward: Provinces are	e preparing new IWRM	I implementation plans a	s per their respective new water	policies which are deve	loped on the guidelines of a	pproved NWP.			

²⁷Sub-national can include, but not limited to: provincial, state, county, local government areas, council. In this case, sub-national should not include basin/aquifer levels as this is dealt with in question 2.2a. Answer this question for the highest sub-national level(s) that are relevant in the country, and specify what these are.

²⁸ This question has replaced question 2.2f from the baseline survey, which was for federal countries only. This is in recognition of the fact that many countries have sub-national authorities for water resources management, even if they are not federal countries.

²⁹For the definition of 'capacity' in this context, see footnote 12. Beyond having the capacity, authorities must also actually be leading the implementation of these activities.

3. Management Instruments										
	Degree of implementation $(0 - 100)$									
	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)				
3.1 What is the status of management instruments to support IWRM implementation at the national level?										
a.National monitoring	No national	Monitoring systems	Long-term national	Long-term national	Long-term national	Long-term national				
ofwater availability ³⁰	monitoring	established for a	monitoring is carried out	monitoring is carried out	monitoring is carried	monitoring is carried out				
(includes surface and/or	systems in	limited number	but with limited coverage	with adequate coverage	outwith very good	with excellent coverage				
groundwater, as relevant	place.	of short-term / ad-hoc	and limited useby	but limited useby	coverage and adequate	and excellent useby				
to the country).		projects or similar.	stakeholders.	stakeholders.	useby stakeholders.	stakeholders.				
Score 60										
Status description: WAP	DA is responsible	e for monitoring surface w	ater and groundwater condition	ons for many parts of the o	country. WAPDA has a wea	llth of data available with it,				
which can be used for mak	ting informed and	l rational decisions. IRSA	also monitors and manages th	e flow data, in order to ma	ke decisions on water distri	bution among provinces and				
prepare water accounts acc	ordingly. FFC col	llects data on river flows a	nd reservoir levels from differ	ent sources during the flood	l season to prepare daily floo	od situation reports for entire				
length of river Indus.					1 11					
Way forward: Unified da	itasets/products n	eeds to be prepared and p	placed in a national database	to which every stakeholde	r and public can refer. This	will develop confidence of				
stakeholders on decisions n	nade for water res	ources development and n	nanagement. The improvement	of national planning databas	e has been duly emphasized b	y the approved NWP as well.				
Installation of telemetry sy	stem by IRSA is	in progress, this system v	vill enhance IRSAs' capability	y to monitor near real-time	water flows at headworks (on major rivers and in major				
canals. The installation of	system will lead	to the preparation of impr	oved water accounts for the I	ndus Basin Irrigation Syste	em (IBIS) and thus, will lea	d to more informed decision				
making process ensuring ed	juitable water dis		ces as per the water Accord o	1 1991.						
b. Sustainable and	No	Use of management	Some management	Management	Management instruments	Management instruments				
efficient water	management	instruments is limited	instruments implemented	instruments are	are implemented on a	are implemented on a				
usemanagement from	instruments	and only through	on a more long-term basis,	implemented on a	long-term basis, with	long-term basis, with				
the national level,	being	short-term / ad-hoc	but with limited	long-term basis, with	very good coverage	excellent coverage across				
(includes surface and/or	implemented.	projects or similar.	coverageacross different	adequate coverage	across different water	different water users and				
groundwater, as relevant			water users and the	across different water	users and the country, and	the country, and are				
to the country).			country.	users and the country.	are effective.	linging effective.				
Score 50			haina adianta minad thema			and in a surprise of a sthem				
Status description: Awar	up 05% of total	water use and conservance	on being actively raised through	ign different measures suc	n as workshops/seminars, i	media campaigns and other.				
actively working in properi	up 95% of total	water conservation in agric	ultural fields	autionnes, developmenta	sector organizations, acade	and institutes and indos are				
Way forward Developm	ant of improved	mechanisms for monitor	ing and allocating sector wis	a water use and identified	ation of water losses in the	system at different loyals				
Formulation and implement	tation of water pr	icing policy is strongly rec	commended to effectively man	age water demand	aton of water losses in the	system at unrerent levels.				

³⁰ See definition of monitoring in Terminology. ³¹Management instruments include demand management measures (e.g. technical measures, financial incentives, education and awareness raising to reduce water use and/or improve water-use efficiency, conservation, recycling and re-use), monitoring water use (including the ability to disaggregate by sector), mechanisms for allocating water between sectors (including environmental considerations).

Very low (0) Low (20) M		Medium-low (40)	Medium-high (60)	High (80)	Very high (100)					
c.Pollution	No	Use of management	Some management	Management instruments	Management instruments	Management instruments				
control ³² from the	management	instruments is	instruments implemented	are implemented on a long-	are implemented on a	are implemented on a long-				
national level.	instruments	limited and only	on a more long-term	term basis, with adequate	long-term basis, with very	term basis, with excellent				
	being	through short-term /	basis, but with limited	coverage across sectors and	good coverage across	coverage across sectors and				
	implemented.	ad-hoc projects or	coverageacross sectors	the country.	sectors and the country,	the country, and are highly				
Score 20		similar.	and the country.		and are effective.	effective.				
Status description: 1	National Environn	nental Quality Standards	(NEQS) for water quality h	as been defined by the federal	government. And there are la	ws at different levels to protect				
water quality, howeve	er, their implemen	tation is very limited.		-	-	_				
Way forward: Capac	city building of org	ganizations responsible f	for the implementation of wat	er quality laws.						
d.Management of	No	Use of management	Some management	Management instruments	Management instruments	Management instruments				
water-related	management	instruments is	instruments implemented	are implemented on a long-	are implemented on a	are implemented on a long-				
ecosystems ³³ from	instruments	limited and only	on a more long-term	term basis, with adequate	long-term basis, with very	term basis, with excellent				
the national level.	being	through short-term /	basis, but with limited	coverage across different	good coverage across	coverage across different				
	implemented.	ad-hoc projects or	coverageacross different	ecosystem types and the	different ecosystem types	ecosystem types and the				
		similar.	ecosystem types and the	country. Environmental	and the country, and are	country, and are highly				
			country.	Water Requirements (EWR)	effective. EWR analysed	effective. EWR analysed				
Score 30	Score 30 for most of country. for whole country.									
Status description: A	Status description: A large-scale forestation activity by the current government is underway.									
Creation of number of large wetlands along Indus river is proposed to store the flood water and recharge groundwater under the project "Recharge Pakistan". At the moment, 8 sites are										
under consideration for the project.										
Way forward: Colla	boration of gover	mment authorities and c	vivil society organizations w	orking for environment/ecosys	tems needs to be strengthen i	in order to generate awareness				
among the masses regarding management and conservation of water-related ecosystems.										

³²Includes regulations, water quality guidelines, water quality monitoring, economic tools (e.g. taxes and fees), water quality trading programs, education, consideration of point and non-point (e.g. agricultural) pollution sources, construction and operation of wastewater treatment plants, watershed management.

³³Water-related ecosystems include rivers, lakes and aquifers, as well as wetlands, forests and mountains. Management of these systems includes tools such as management plans, the assessment of Environmental Water Requirements (EWR), and protection of areas and species. Monitoring includes measuring extent and quality of the ecosystems over time.

Very low (0) Low (20) Medium-		Medium-low (40)	Medium-high (60)	H1gh (80)	Very high (100)	
e.Management	No	Use of management	Some management	Management instruments	Management instruments	Management instruments
instruments to reduce	management	instruments is limited	instruments implemented	are implemented on a	are implemented on a long-	are implemented on a
impacts of water-	instruments	and only through	on a more long-term	long-term basis, with	term basis, with very good	long-term basis, with
related disasters ³⁴ from	being	short-term / ad-hoc	basis, but with limited	adequate coverage of at-	coverage of at-risk areas,	excellent coverage of at-
the national level.	implemented.	projects or similar.	coverageof at-risk areas.	risk areas.	and are effective .	risk areas, and are highly
Score 70						effective.
Status description: A con	nsiderable work ha	as been done on this from	nt at the national level. FFC	is responsible for preparing	decade long National Flood H	Protection Plans (NFPPs) and
implement them. NFPP-IV	/ has been approve	ed by the Council of Cor	nmon Interests (CCI) few ye	ears back. Based on NFPP-I	V, a River Law has been form	ulated that specifies the river
channel of all the major ri	vers and restrict er	ncroachments in these are	eas. In addition, NFPP-IV id	entified the short to long-terr	m structural and non-structural	measures required to reduce
the impacts of floods acros	ss the country.					
Disaster Risk Reduction (DRR) policy has a	lready been approved and	d accordingly Disaster Mana	gement Plans are being forn	nulated. National Disaster Mar	agement Authority (NDMA)
and Provincial Disaster M	anagement Author	ities (PDMAs) are in plac	ce for more than a decade no	w and are responsible for car	rying out preparedness, relief	work and rehabilitation.
National Disaster Risk Ma of NFPP-IV.	nagement Fund (N	IDRMF) has been created	d with the assistance of inter	national donors. One of the r	nain project NDRMF planned	to fund is related to activities
Pakistan Meteorological D	Department (PMD)	has developed an early w	varning system for flood con	dition forecasting. Also, PM	D has installed climate observ	atories for glacier studies and
have done Glacial Lake O	utburst Flood (GLC	OF) mapping. Currently I	PMD is planning to revamp t	he somewhat stagnant GLOF	-2 project.	C
Way forward: Develop m	nore sophisticated i	ntegrated tools to improv	e the early warning systems.	Accordingly, enhance train	the relevant professionals.	
3.2 What is the status of	management instr	ruments to support IWF	RM implementation at othe	r levels?		
a.Basin management	No basin level	Use of basin level	Some basin level	Basin level management	Basin level management	Basin level management
instruments. ³⁵	management	management	management instruments	instruments implemented	instruments implemented	instruments implemented
instruments instruments is limited impl		implemented on a more	on a more long-term	on a more long-termbasis,	on a more long-termbasis,	
	being and only through long-term basis,		long-term basis, but with	basis, with adequate	with effective	with highly effective
	implemented. short-term / ad-hoc limited geographic and		limited geographic and	geographic and	outcomesand very good	outcomesand excellent
	projects. stakeholder coverage. st		stakeholder coverage.	geographic and stakeholder	geographic and	
Score <u>6</u> 0					coverage.	stakeholder coverage.
Status description: Same	as national level n	nanagement instruments a	as stipulated in question 3.1a	. (Given that the Indus Basin	is the only major river basin in	n the country)

Way forward: Same as national level management instruments as stipulated in question 3.1a.

³⁴ 'Management instruments' can cover: understanding disaster risk; strengthening disaster risk governance; investing in disaster risk reduction; and enhancing disaster preparedness. 'Impacts' include social impacts (such as deaths, missing persons, and number of people affected) and economic impacts (such as economic losses in relation to GDP). 'Water-related disasters' include disasters that can be classified under the following: Hydrological (flood, landslide, wave action); Meteorological (convective storm, extra tropical storm, extreme temperature, fog, tropical cyclone); and Climatological (drought, glacial lake outburst, wildfire).

³⁵Basin and aquifer management: involves managing water at the appropriate hydrological scale, using the surface water basin or aquifer as the unit of management. This may involve basin and aquifer development, use and protection plans. It should also promote multi-level cooperation, and address potential conflict among users, stakeholders and levels of government. To achieve 'Very high (100)' basin and aquifer management scores, surface and groundwater management should be integrated.

	Very low (0)Low (20)Medium-low (40)		Medium-high (60)	High (80)	Very high (100)		
b.Aquifermanageme	No aquifer	Use of aquifer level	Some aquifer level	Aquifer level management	Aquifer level management	Aquifer level management	
nt instruments. ³⁶	level	management	management instruments	instruments implemented	instruments implemented	instruments implemented on	
	management	instruments is	implemented on a more	on a more long-term basis,	on a more long-term basis,	a more long-term basis,	
	instruments	limited and only	long-term basis, but with	with adequate geographic	with effective	with highly effective	
	being	through short-term	limited geographic and	and stakeholder coverage.	outcomesand very good	outcomesand excellent	
	implemented.	/ ad-hoc projects.	stakeholder coverage.		geographic and stakeholder	geographic and stakeholder	
Score 40					coverage.	coverage.	
Status description: W	APDA is monitori	ng groundwater conditi	ons (level and quality parame	eters) across the Indus River P	lain Aquifer, however, covera	ge of the monitoring is limited.	
Groundwater managem	ent is mainly cond	lucted by the provinces,	, for which NWP requires to e	establish Groundwater Authori	ty in each province. NWP has	laid down clear guidelines vis-	
à-vis groundwater mana	igement.						
Way forward: Awarer	ness need to be created	eated among the masse	s regarding groundwater use	for sustainable development of	of aquifer. In addition, ground	lwater management plans must	
incorporate the climate	change impacts.						
c.Data and	No data and	Limited data and	Data and information	Data and information	Data and information	All relevant data and	
information sharing	information	information	sharingarrangements exist	sharingarrangements	sharingarrangementsimple	information are online and	
within countries at	sharing.	sharingon an ad-	on a more long-term basis	implemented on a more	mentedon a more long-	freely accessible to all.	
all levels. ³⁷		hoc basis.	between major data	long-term basis, with	term basis, with very good		
			providers and users.	adequate coverageacross	coverageacross sectors and		
Score 60 sectors and the country. the country.							
Status description: Wa	ater resources mor	itoring is conducted at	national (by WAPDA, IRSA	and FFC) and provincial (Prov	vincial Irrigation Departments) levels. There are well-defined	
procedures of data shari	ng among governi	ment authorities. The da	ata may also be made availabl	e to public, private, developme	ental, and other organizations of	on request.	
Way forward: Dhaka	model (data inform	nation Centre; https://g	eodash.gov.bd/) like mechani	sm of data sharing shall be in	plemented. All the data colle	cted by government authorities	
must be in public doma	in and accessible t	o all.					
d.Transboundary	No data and	Limited data and	Data and information	Data and information	Data and information	All relevant data and	
data and	information	information	sharingarrangements exist,	sharingarrangements	sharingarrangements	information are online and	
information sharing	ation sharing sharing. sharingon an ad- but sharing is limited.		but sharing is limited.	implemented adequately.	implemented effectively. ³⁸	accessible between	
between countries.		hoc or informal				countries.	
Score 50		basis.					
Status description: Inc	lus Basin Treaty (I	(BT) governs the data a	nd information sharing procee	dures between India and Pakist	tan. However, India has not sh	ared any data with Pakistan for	
last two (02) years. Furt	hermore, no arran	gements exist between	Pakistan and Afghanistan rega	arding sharing of data of Kabu	l river.		
Way forward: An auto	mated system of d	ata collection and trans	mission may be established a	nd kept under the supervision of	of a neutral international body.		

³⁶See previous footnote on basin management instruments, which also applies to aquifers. ³⁷Includes more formal data and information sharing arrangements between users, as well as accessibility for the general public, where appropriate.

³⁸E.g. institutional and technical mechanisms in place that allow for exchanging data as agreed upon in agreements between riparians (e.g. regional database or information exchange platform with a river basin organization including technical requirements for data submission, institutionalized mechanisms for QA and for analysing the data, etc.).

4. Financing									
			Degree of imple	ementation $(0 - 100)$					
	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)			
4.1 What is the status of	4.1 What is the status of financing for water resources development and management at the national level?								
a.National budget ³⁹	No budget allocated	Some budget	Sufficient budget allocated	Sufficient budget	Sufficientfunds disbursed	Budget fully utilised for			
for water resources	in national	allocated but only	for planned investments but	allocated and funds	for investment and	investment and recurrent			
infrastructure ⁴⁰ (invest	investment plans.	partly covers	insufficient funds disbursed	disbursed formost	recurrent costs, and being	costs, post-project			
ment and recurrent		planned	or made available.	planned	utilized in allplanned	evaluation carried out,			
costs).		investments.		programmes or	projects.	budgets reviewed and			
Score 60				projects.		revised.			
Status description: Sup	reme Court of Pakistan g	got involved in the w	ater resources development of t	he country and created	a Dam Fund, which has rec	eived some contributions from			
the public. In the meanw	hile, the construction of t	wo (02) mega dams l	has been started recently that wi	ll result in disbursemen	t of significant funds for wat	er sector.			
Allocation of budget for	water sector in Public Se	ctor Development Pr	ogramme (PSDP) financed by t	he government of Paki	stan has been significantly in	creased recently. Furthermore,			
approved NWP stipulates	a gradual increase of an	nual water sector bud	get to 20% of annual PSDP ove	r the course next ten (1	0) years (i.e. by 2030).				
WAPDA has prepared a	financial model for recer	tly started Diamer B	asha, the financial model has co	onvinced the internation	nal donors to lend funding to	WAPDA without requiring to			
have any sovereign guara	intee, and this achieveme	nt of WAPDA is a b	ig breakthrough. This also result	ts in increased confider	nce of international donors in	making investments in overall			
water sector of the countr	у.								
Way forward: Initiation	of some activities identi	fied in NFPP-IV is pl	anned through funding of NDR	MF.	1				
b.National budget for	No budget	Allocations made	Allocations made for at	Allocations for	Allocations include all	Planned budget allocations			
IWRM elements ⁴¹	allocations made for	for some of the	least half of the elements	most of the	elements and	for all elements of the			
(investments and	investments and	elements and	but insufficient for others.	elements and some	implementation regularly	IWRM approach fully			
recurrent costs).	recurrent costs of the	implementation at		implementation	carried out (investments	utilised, budgets reviewed			
	IWRM elements.	an early stage.		under way.	and recurrent costs).	and revised.			
Score 60									
Status description: Wat	er sector allocation kept	at 9-10% of PSDP as	per the guidelines of approved	NWP.					
Way forward: Governm	nent must ensure allocation	on for water sector as	per NWP for the coming decad	e. That requires a grad	ual increase of annual water	sector budget to 20% of annual			
PSDP in year 2030.									

³⁹Allocations of funding for water resources may be included in several budget categories or in different investment documents. Respondents are thus encouraged to examine different sources for this information. When assessing the allocations respondents should take account of funds from government budgets and any co-funding (loans or grants) from other sources such as banks or donors.

⁴⁰Infrastructure includes 'hard' structures such as dams, canals, pumping stations, flood control, treatment works etc., as well as 'soft' infrastructure and environmental measures such as catchment management, sustainable drainage systems etc. For this survey do not include infrastructure for drinking water supply or sanitation services. Budgets should cover initial investments and recurrent costs of operation and maintenance.

⁴¹ 'IWRM elements' refers to all the activities described in sections 1, 2 and 3 of this survey that require funding, e.g. policy, law making and planning, institutional strengthening, coordination, stakeholder participation, capacity building, and management instruments such as research and studies, gender and environmental assessments, data collection, monitoring etc.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)			
4.2 What is the status of financing for water resources development and management at other levels?									
a.Sub-national or basin budgets for water resources infrastructure ⁴² (investment and recurrent costs).	No budget allocated in sub-national or basin investment plans.	Some budget allocated but only partly covers planned investments.	Sufficient budget allocated for planned investments but insufficient funds disbursed or made available.	Sufficient budget allocated and funds disbursed for most planned programmes or projects.	Sufficient funds disbursed, for investment and recurrent costs,and being utilised in all planned projects.	Budget fully utilised , for investment and recurrent costs, post-project evaluation carried out, budgets reviewed and revised.			
Status description: WAPDA, IRSA and FFC are basin level (national level) organizations. Sufficient funding has been allocated for some for the planned projects of these organizations through PSDP and donors arrangement. For example, as per the NWP water sector allocation has to 9-10% of PSDP for current year, which despite of COVID-19 emergency is kept at the level indicated by NWP (i.e. 9-10%) Provinces are responsible for developing, operating and maintaining their irrigation systems. Number of donor funded projects are being implemented in provinces at the moment.									
b.Revenuesraised for IWRM elements. ⁴³ No revenuesraised for IWRM elements. Processes in place to raise revenue but not yet implemented. Some revenue raised, but generally not used for IWRM activities. Revenues raised cover cover some IWRM activities. Revenues raised cover most IWRM activities. Revenues raised fully cover costs of IWRM activities.									
Status description: IRSA (at level of Indus Basin Irrigation System) raises revenue by collecting water cess from the provinces, which is being planned to be utilized for installation of telemetry system required for accurate water accounting and equitable water distribution as per the Water Accord of 1991. Way forward: Water cess needs to be increased.									

⁴²Infrastructure includes 'hard' structures such as dams, canals, pumping stations, flood control, treatment works etc., as well as 'soft' infrastructure and environmental measures such as catchment management, sustainable drainage systems etc. For this survey do not include infrastructure for drinking water supply or sanitation services. Budgets should cover initial investments and recurrent costs of operation and maintenance.

⁴³For 'IWRM elements', see above footnote. **Level**: revenues are likely to be raised from users at the local, basin, or aquifer levels, though may also be raised at other sub-national or national levels (please indicate which level(s) in the status description). **Revenue raising** can occur through public authorities or private sector, e.g. through fees, charges, levies, taxes and 'blended financing' approaches. E.g.dedicated charges/levies on water users (including household level *if* revenues are spent on IWRM elements); abstraction & bulk water charges; discharge fees; environmental fees such as pollution charges, Payment for Ecosystem Services (PES) schemes; and the sale of secondary products and services.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)	
c.Financing for transboundary cooperation. ⁴⁴ Score 20	No specific funding allocated from the Member State (MS) budgets nor from other regular sources.	MS agreement on country share of contributions in place and in-kind support for the cooperation organisation/arrangement.	Funding less than 50% of that expected as contributions and by regulation.	Funding less than 75% of that expected as contributions and by regulation.	Funding more than 75% of that expected as contributions and by regulation.	Full funding of that expected as contributions and by regulation.	
Status description: O/o	PCIW looks after the impl	ementation of IBT. This office i	is entirely funded by the	e government of Pakistan			
Way forward: The offic	e may be re-vitalized as tra	insboundary water management	organization which ma	ay be driven by research.	That requires significant	allocation of funds.	
d.Sub-national or basin budgets for IWRM elementsNo budget allocations at sub-national or basin level for investments and recurrent costs).Allocations made for some for the elements and implementation at an early stage.Allocations made for some for at least half of insufficient for others.Allocations for most of the elements and implementationAllocations include all elements and implementationPlanned budget allocations for all allocations for all allocations for mostScore60For budget allocations implementationAllocations made for some of the elements and implementation at an early others.Allocations for most of the elements and insufficient for others.Allocations for most of the elements and implementationAllocations include all elements and implementationPlanned budget allocations for all allocations for all allocations for all implementation							
Status description: Sam	e as 4.1a and 4.2a for basin	n level budgets. Provincial budg	ets for Kachi and Rain	ee canals being allocated	and disbursed.		
Way forward: Same as 4	4.1a and 4.2a						

⁴⁴In this question "Member States (MS)" refers to riparian countries that are parties to the arrangement. "Contributions" refers to the annual share of funds agreed from MS national budgets to support the agreed TB cooperation arrangement. Regular funds obtained from for example, water user fees (e.g. hydropower charges) and polluter-pays fees based on existing regulation are also considered as sustainable funding. As variable and unsustainable, donor support should not be considered in the scoring, but may be referred to in the 'Status description' and 'Way forward' fields.

⁴⁵ 'IWRM elements' refers to all the activities described in sections 1, 2 and 3 of this survey that require funding, e.g. policy, law making and planning, institutional strengthening, coordination, stakeholder participation, capacity building, and management instruments such as research and studies, gender and environmental assessments, data collection, monitoring etc. This question has been added since the baseline survey, acknowledging the importance of funding being available at more 'operational' levels.

Indicator 6.5.1 score

Section	Average Scores (all values rounded to nearest whole
Section 1 Enabling environment	61
Section 2 Institutions and participation	60
Section 3 Management instruments	49
Section 4 Financing	53
Indicator 6.5.1 score	56
= Degree of IWRM implementation (0-	

* Use rounded section average scores (to the nearest whole number), to calculate the indicator score, and round this to the nearest whole number.

Interpretation of the score

The score indicates the 'degree of implementation of integrated water resources management', on a scale of 0 to 100, with 0 signifying 'very low' implementation, and 100 signifying 'very high' implementation. However, the true value of the survey to countries lies within the scores, 'status description' and 'way forward' for each question, as this helps to identify which actions need to be taken to move towards a greater degree of implementation of IWRM. See the monitoring guide for further information on interpretation of scores and target setting.

Quick QA checklist for the Focal Point

To ensure robustness of the final submission, and to avoid further revisions, you may use this QA checklist to avoid common mistakes in the submission.

(The checklist is provided to assist Focal Points in the QA process only and does not affect the submission scores in any way).

The submission cover page contains up to date contact information of the Focal Point (or alternative contact)	
All questions have been answered (either with a score or n/a) in the yellow cells immediately below each question.	
The individual survey questions are scored in increments of 10 or as n/aonly. I.e. possible scores are 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100 or n/a.	
Explanatory information is provided for all questions in the fields called 'Status description' and 'Way forward'.	
Section 5 of the survey has been filled and final score for indicator 6.5.1 has been calculated from the four section average scores, rounded to the nearest whole number (E.g. score 55.5 would be rounded to 56).	
Annex B (Transboundary level) has been completed.	
Annex C (Barriers, enablers and next steps) has been completed.	
Annex D (Priority challenges) has been completed.	
Annex E (Reporting process) has been completed.	

Appendix-A to Annex-5: Glossary

- Authorities: could beministry or ministries, or other organizations/institutions/departments/agencies/bodies with a mandate and funding from government.
- Basins: includes Rivers, lakes and aquifers, unless otherwise specified. For surface water, the term is interchangeable with 'catchments' and 'watersheds'.
- Federal countries: Refers to countries made up of federated states, provinces, territories or similar terms.
- **IWRM:** Integrated Water Resources Management (IWRM) is a process that promotes the coordinated development and management of water, land and related resources in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. IWRM is not an end in itself but a means of achieving three key strategic objectives:
 - efficiency to use water resources in the best way possible;
 - o equity in the allocation of water across social and economic groups;
 - o environmental sustainability, to protect the water resource base, as well as associated ecosystems.
- National (level): Refers to the highest level of administration in a country.
- Sub-national / state (level): refers to levels of administration other than national. For federal countries, these are likely to be provinces or states. Non-federal countries may still have sub-national jurisdictions with some responsibility for water resources management, e.g. regions, counties, departments.
- **Programs:** Nation-wide plans of action with long-term objectives, for example to strengthen monitoring, knowledge sharing and capacity development, with details on what work is to be done, by whom, when, and what means or resources will be used.
- Transboundary: Refers to surface and groundwater basins that cross one or more national borders (see Appendix B).
- Stakeholders: In this survey, stakeholders are the main groups important for water resources management, development and use.Examples of stakeholders in each group are given in footnotes as they appear in the survey.
- Water Resources Management is the activity of planning, developing, distributing and managing the optimum use of water resources. Ideally, water resource management planning considers all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands. An integrated approach (see IWRM) is needed to ensure water resources management is not isolated within sector silos resulting to inefficiencies, conflicts and unsustainable resource use.

Appendix-B to Annex-5: Transboundary level

The transboundary questions for indicator 6.5.1 focus on the degree of implementation of IWRM at the transboundary level, as relevant to implementation of IWRM 'at all levels', as specified in target 6.5. Countries sharing basins of transboundary waters (rivers, lakes or aquifers) should answer the questionson transboundary issues. This information is complemented by indicator 6.5.2 'Proportion of transboundary basin area with an operational arrangement for water cooperation'.

To enable tracking of progress over time and for transparency, in the table below please list the transboundary (or 'international') basins or aquifers that are included in this survey. The 6.5.1 baseline reporting may be used as a starting point. Only the most important transboundary basins or aquifers that are regarded as significant, in terms of economic, social or environmental value to the country (or neighboring countries), need to be included in this survey. It is up to countries to decide which ones these are. Where feasible, basins/aquifers listed in this table, and the scores given, should be cross-referenced with tables and scores in the 6.5.2 reporting template (www.sdg6monitoring.org/indicators/target-65/indicators652/), and the focal point for 6.5.2 should be consulted in this process. In the absence of 6.5.2 data or national databases, global databases on transboundary river basins (http://twap-rivers.org/indicators/), and transboundary aquifers (https://www.un-igrac.org/ggis/explore-all-transboundary-groundwaters), may be referred to. If you include a national (sub-basin) as part of a larger transboundary basin, please ensure to also include the name of the larger basin. When answering transboundary questions, the majority of the basins below must meet the criteria described in each threshold to achieve the score for that threshold.

The columns on the right of the table are optional though recommended. Filling them out would: provide countries with valuable information and a quick diagnostic tool for the status in each basin/aquifer; increase the transparency of the transboundary level responses in this survey for stakeholders both within and between countries; help countries reach consensus on scores for the transboundary questions; and provide a valuable cross-reference for indicator 6.5.2. For each basin/aquifer, a score should be given for each of the four transboundary questions in the survey, following the guidance and thresholds in the survey questions. To supplement this data, you are encouraged to provide a summary of the situation for the transboundary basins/aquifers in the 'Status description' and 'Way forward' fields to transboundary questions within Part 2 of this survey, to the extent feasible.

		OPTIONAL THOUGH RECOMMENDED*				
	Important transboundary basins	Arrangements	Institutions	Data sharing	Financing	
		(1.2c)	(2.2e)	(3.2d)	(4.2c)	
1.	Indus Basin					
2.	Jhelum River					
3.	Chenab River					
4.	Kabul River					
	Important transboundary aquifers					
1.	Indus Basin Aquifer					

* These columns may be useful to countries in determining the approximate status for each transboundary basin/aquifer, and thereby be useful in discussions on the respective question scores in Part 2 of this survey instrument.

Appendix-C to Annex-5: Barriers, enablers and next steps for furthering IWRM implementation

This section is not used in calculating indicator 6.5.1, but is designed to be useful for countries to identify the main challenges and next steps to further IWRM implementation. It builds on the free text fields for each question – "Status description" and "Way forward" – to identify the key issues.

The third question below aims to improve transparency by documenting the main differences in opinion between stakeholders. You may amend the structure to make it more useful to the planning process in the national context. For each question, you may consider aspects under each of the four IWRM dimensions in the survey, or you may identify aspects/issues that cut-across questions and IWRM dimensions. Some issues not addressed by the questions may also be brought up here.

- 1) What are the main challenges/barriers to progress of IWRM implementation in the country?
 - a. Transboundary water management arrangements are inadequate under the present scenario. Groundwater and environmental flows not included in the treaty. Furthermore, no agreement with Afghanistan.
 - b. Too many organizations with overlapping mandates for IWRM implementation.
 - c. Old water laws, which are not representative for current and future scenarios of water availability.
 - d. Limited implementation of water laws and regulations especially at local levels.
 - e. Insufficient management instruments for pollution control and management of water-related ecosystems.
 - f. Limited aquifer management plans.

2) What are the main next steps to overcome challenges and further IWRM implementation?

- a. Re-vitalization of Office of the Pakistan Commissioner for Indus Waters into a vibrant, research driven and highly skilled transboundary water management organization, which can prepare revised transboundary water arrangements (considering current and future scenarios of climate change, water demand and use, groundwater management, environmental flow requirements and other), and negotiate it on behalf of government of Pakistan.
- b. Ministry of Water Resources shall be strengthen and given the lead in implementing IWRM plans.
- c. Old water laws are required to be re-visited by taking all the stake-holders on board.
- d. Capacity building of the organizations which are mandated to implement water laws and regulations.
- e. Capacity building of the organizations and improved coordination with NGOs to create awareness on water pollution and management of water-related ecosystems.
- f. Ensure strict compliance with the NWP guidelines regarding the groundwater management and establishment of groundwater authorities in each province.
- 3) What were the main points of difference in stakeholder opinion in answering the survey questions?
 - a. Few participants were not if favour of including the forestation process in scoring the question on management of water-related ecosystems.
 - b. Some of the participants were critical on the current state of pollution control and implementation of water laws at local levels.
 - c. Data sharing arrangements are limited.
- 4) Additional comments

Appendix-D to Annex-5: Priority water resource challenges

Please indicate the challenge level for each of the water resource issues below. This information will not affect the overall indicator score.

This checklist may be useful to countries in stakeholder discussions and planning. Over time, it can also help countries to evaluate whether the implementation of IWRM can help to reduce the challenge level relating to different water resources issues. The information will also help to develop regional and global oversight of key water resources challenges, and track progress of how challenge levels may change over time.

Note that 'challenge level' in this case refers to the level of difficulty associated with addressing each issue. For example, if effective and financed systems are in place for providing water for domestic use, then this may be assigned a 'low' challenge level, even though this issue would likely be classified as high priority / importance in most countries. 'Low', 'Medium'

and 'High' are intentionally broad and intuitive categories.

	Leve	Level of difficulty associated with			
	addressing the challenge				
Water resource challenges	Low	Mediu m	High	Not relevant	
Water uses				T cre vuite	
Water for agriculture			\boxtimes		
Water for domestic use			\boxtimes		
Water for industry			\boxtimes		
Water for energy			\boxtimes		
Water for ecosystems/environment			\boxtimes		
Water for growing cities			\boxtimes		
Threats to the resource				-	
Water scarcity / over-abstraction (surface)			\boxtimes		
Water scarcity / over-abstraction (groundwater)			\boxtimes		
Water quality / pollution (surface)			\boxtimes		
Water quality / pollution (groundwater)			\square		
Water-related ecosystem degradation			\square		
Water-related ecosystem loss			\boxtimes		
Threats to people and economic activity	1	1	1		
Floods			\boxtimes		
Droughts					
Coastal vulnerability			\boxtimes		
Conflicts over water resources			\boxtimes		

Appendix-E to Annex-5: 6.5.1 country reporting process form

A common query received after the baseline data collection period was on the reporting process and which stakeholders were involved in reporting.

To improve transparency and increase confidence in results, you are invited to provide a brief overview of the reporting process. e.g. main actors involved; meetings/workshops held; other means of gathering inputs from stakeholders; and finalisation/approval processes. Also note the main challenges/strengths of the process. Use as much space as needed.

Focal Point affiliation Mr. Ahmed Kamal, Chief Engineering Adviser / Chairman Federal Flood Commission

Brief process overview: National Focal Point for Indicator 6.5.1 initiated the process of reporting on SDG Indicator 6.5.1 in March 2020. Communications (emails and postal mails) were sent to different federal and provincial organizations dealing with water resources policy, planning, development and management, civil society organizations, NGOs, academic institutes, developmental sector organizations and other stakeholders. Few of the organizations reported back by submitting the duly completed survey. Following this, the National Focal Point jointly with Pakistan Water Partnership (PWP) organized a multi-stakeholder workshop on Monday, July 20, 2020. The workshop was funded by UNEP-DHI Center on Water and Environment through Global Water Partnership. The workshop was attended by diverse stakeholders including federal and provincial government representatives from different departments, academia personnel, media personnel, grass root level people working on water issues, developmental sector experts (from UNDP and WHO), private sector experts and civil society/NGOs personnel. Given the COVID-19 situation, it was a very challenging task to bring the stakeholders under one roof and ensure adherence to the SOPs. The workshop was facilitated by a water sector expert hired by PWP, who obtained the mandatory online training organized by UNDP Cap-Net. One the conclusion of the workshop, the facilitator completed the survey questionnaire as per the agreed scoring and discussions that took place in the workshop and prepared a draft workshop report. The completed survey and report was submitted to the National Focal Point for SDG Indicator 6.5.1 through PWP. The Focal Point finalized the survey and report and submitted them to UNEP-DHI.

	Level of enga	agement (mark w	rith 'X')	Additional information
Stakeholder groups	Low (given opportunity	Medium	High (discussion/	Additional information $(e \sigma, which stakeholder organisations were involved)$
	to contribute)	(some input)	negotiation)	(cig. which successed organisations were involved)
National water agencies			Х	Ministry of Water Resources
Other public sector agencies		Х		Pakistan Meteorological Department
Sub-national water agencies	Х			Provincial Irrigation Department
Basin/Aquifer agencies		Х		WAPDA, FFC
Water User Associations	Х			
Civil society	Х			
Private sector		Х		Hashoo Group
Vulnerable groups		Х		Individuals from extremely remote desert areas of the country
Gender expertise		Х		Active contribution of female during the workshop
Research/academia		Х		Faculty members of different universities
Transboundary expertise	Х			
Other SDG focal points	X			
Please add rows if required				









STAKEHOLDERS WORKSHOP

Sustainable Development Goal Indicator on IWRM (6.5.1) Monday, July 20th, 2020

Millennium Hotel PAFSOM Arena, Sector E-9, Main Margalla Road, Islamabad

Organized Jointly By

Pakistan Water Partnership & Office of Chief Engineering Adviser/Chairman Federal Flood Commission, Ministry of Water Resources, Government of Pakistan

Supported By

United Nations Environmental Programme-DHI Centre on Water and Environment Through Global Water Partnership