



United Nations
Educational, Scientific and
Cultural Organization

Intergovernmental
Hydrological
Programme



INITIATIVE Development

UNESCO "SEAL OF EXCELLENCE
FOR URBAN WATER MANAGEMENT"

21. 30 Nov

SEOK kwan-soo, (Ph.D. P.E.), K-water



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Hydrological
Programme

Chapter



1. Initiative Background

2. Main Contents

- History and Timeline***
- Introduction of Seal of Excellence Program***
- K-water as Technical Advisor***

3. Future Plan

4. Expected Results

5. Conclusion

1. Initiative Background



(Tuvalu, COP26, 2021)

*** Resilience for Water Security**

(Adequate quantities, Acceptable quality, Access)

*** Threatening Water Security of Vulnerable DMCs including SIDS**

*** Global Climate Change issues : Flood, Draught, Land fire, Heat-wave, Smog, Extreme cold, methane & CO2 re-evaporation (Human oriented)**

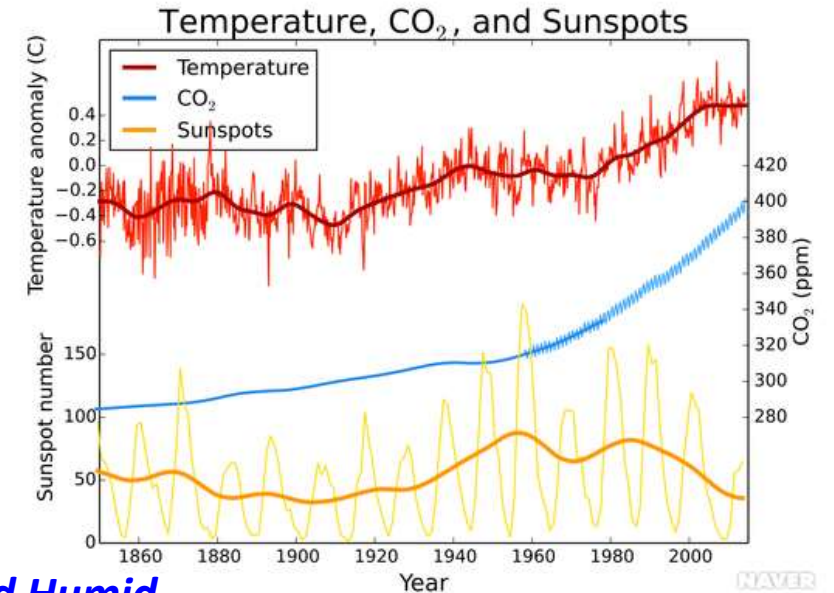
*** Geologically HOC(Holocene Optimum Climate) Era(BC 7,000-3,000) : Hot and Humid (Nature oriented)**

*** Seal of Excellence Initiative since 2017
(UNESCO-IHP and K-water)**



(Fiji, UNESCO Pacific Office, 2017)

*** Global Water Platform for capacity building & International cooperation**



(Source : Leland McInnes)

2-1. History and Timeline

- Kick off meeting between UNESCO and K-water*
Agreed to introduce program initiative (2017)
- UNESCO and K-water agreed with pilot project and K-water got a role of technical advisor*
LoI (Letter of Intend) (2018)
- UNESCO presented cooperation of RoK(K-water) and the detailed project concept*
Presentation session to MSs who made comment on the project with ADG/SC (2018)

- * **UNESCO leading, K-water Technical Advisor**
- * **After Pilot Phase, develop platform and communication**

- * **UNESCO-IHP, MOE of Korea, K-water and Member States (2018)**





2-1. History and Timeline



Item	Decision	Resolution	Annex	Other
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				
61				
62				
63				
64				
65				
66				
67				
68				
69				
70				
71				
72				
73				
74				
75				
76				
77				
78				
79				
80				
81				
82				
83				
84				
85				
86				
87				
88				
89				
90				
91				
92				
93				
94				
95				
96				
97				
98				
99				
100				

- UNESCO presented a draft of the project document, an evaluation tool-kit and guidelines and decided to establish WG and recommended to propose the project for approval at next session of the IHP and commence discussion with other UN agencies

58th session of the IHP Bureau (2019)

- UNESCO established Working Group recommended by IHP Bureau members (2020)

- Evaluation tool-kit is updating with K-water based on the consideration of eco, green and sustainability of urban water (2021)

- Resolution of the 59th session of the Bureau of the IHP (2021)



2-1. History and Timeline



- Resolution of the 4th Extraordinary session of Intergovernmental Council of the IHP (2021)
- (Resolution 1) A project concept note for “Seal of Excellence for Urban Water Management” has been developed and presented with the participation of K-water, a Republic of Korea public utility as a technical advisor
- (Resolution 2) Seoul and Daegu (Metropolitan City) have been identified as the first ever cities to pilot the project and calibrate the framework prior to launching it officially



IHP/AGC-XTR-IV/3
Paris, 5 September 2021
Original: English

Intergovernmental Hydrological Programme
4th Extraordinary session of the IHP Intergovernmental Council
(Paris, 28 September - October 2021)

PROGRAMME IMPLEMENTATION

Item 4 of the provisional agenda

Summary

This document provides a summary of the implementation of the Programme, in particular pertaining to the following sub-items of the Provisional Agenda:

4.1 A summary of the implementation of the Programme related to Theme's 4 focal areas 4.3 on Institution and leadership for beneficitation and integration, and 4.4 on Opportunities in emerging cities, and in particular of the concept of a UNESCO project for "Seal of Excellence for Urban Water Management".

Decisions proposed:
The Council may wish to discuss and approve the proposed Draft Resolution

IHP/IC-XTR-IV/3
page 1

IMPLEMENTATION OF IHP-VIII (Agenda sub-item 4.1)

Theme 4: Water and human settlements of the future

1. Theme 4 of IHP-VIII: Water and human settlements of the future, aims at supporting cities and rural settlements facing climate change, population growth, deterioration of urban infrastructure systems and other global challenges in understanding the issues and in adopting an approach based on the interdependence of the different water systems.
2. Within the framework of activities that Focal area 4.3 Institution and leadership for beneficitation and Integration Opportunities in emerging cities, a project concept note for "Seal of Excellence for Urban Water Management" (see reference document [IHP/AGC-XTR-IV/Res.1](#), IHP/AGC-XTR-IV Ref.2) has been developed and presented with the participation of K-water, a Republic of Korea public utility as a technical advisor. Seoul and Daegu have been identified as the first ever cities to pilot the project and calibrate the framework prior to launching it officially.
3. The purpose of the project is to contribute to Member States (MS) efforts in achieving their target of SDG6 by ensuring sound water management, promoting excellence in the provision of clean water within cities, through appropriate tools the urban water management process and by developing a platform for member cities to share best practices. Cities receiving the seal of excellence will have to twin with another city of a developing MS and support its capacity to also achieve SDG 6 related targets. Furthermore, the project will contribute in the elimination of plastic waste and its disposal to the oceans and to minimizing their carbon footprint.
4. The IHP Bureau at its 58th session approved the Terms of Reference of the Working Group (see reference document [IHP/Bur-VIII/Ref.4](#)), and representatives of Regional Groups were identified.
5. Ever since the IHP Secretariat coordinated the Working Group's work and initiated consultations for partnership with World Health Organization (WHO) and United Nations Human Settlements Programme (UN-HABITAT), sharing the proposed project document, receiving their comments and incorporating them.
6. The IHP Secretariat continues the work with a view to finalize the document and commence efforts to assess its feasibility utilizing the two identified cities as the first pilot sites. Upon successful implementation of the project in the aforementioned cities a call for expression of interest of cities in various regional groups will be made to further test the feasibility of the project, in order to propose in future sessions of the IHP Council its approval.

IHP/IC-XXIV/5
page 2

Resolution XTR-4

DRAFT RESOLUTION ON THE PREPARATION FOR THE IMPLEMENTATION OF THE "SEAL OF EXCELLENCE FOR URBAN WATER MANAGEMENT"

The Intergovernmental Council of the Intergovernmental Hydrological Programme (IHP) of UNESCO

Noting that lack of access to drinking water of adequate quality and quantity remains one of the largest human health problems globally,

Recalling the UN General Assembly resolution declaring access to clean water and sanitation a human right in July 2010,

Further recalling that the 2030 Agenda for Sustainable Development includes a dedicated goal on water and sanitation (SDG 6) that aims to "ensure availability and sustainable management of water and sanitation for all" as well as targets of other goals related to water" such as 3.6, 5.6, 11.6, 12.4, 15.1 and 15.8,

Further noting that UNESCO has committed along with other UN organizations and specialized agencies in the implementation of the UN SDG 6 Global Acceleration Framework, a new, unifying initiative that involves all sectors of society to speed up progress by improving support to countries, and has been entrusted to co-lead along with UN-DESA its Capacity Development Accelerator,

Considering that water demand continues to increase in the future, an increasing number of cities will face challenges of managing scarce and less reliable water resources in an efficient way,

Also considering one of the objectives of the IHP-VIII Focal area 4.3 "Institution and leadership for beneficitation and integration" and Focal area 4.4 "Opportunities in emerging cities" is to improve and promote the tap water and public water supply system,

Recognising the need for an international platform for balanced improvement of the drinking water supply by sharing best practices and trouble-shooting cases with the aim of helping cities in developing Member States for the achievement of SDG6,

Requests the IHP Secretariat to continue cooperating with other UN agencies, especially WHO and UN-HABITAT, and facilitating the work of the Task Force in reviewing the feasibility and implementation plan of the project;

Further requests the IHP Secretariat to report to the IHP Bureau at its 62nd session the results with a view of initiating pilot activities and to report the results of these pilots to the 60th session of the IHP Council,

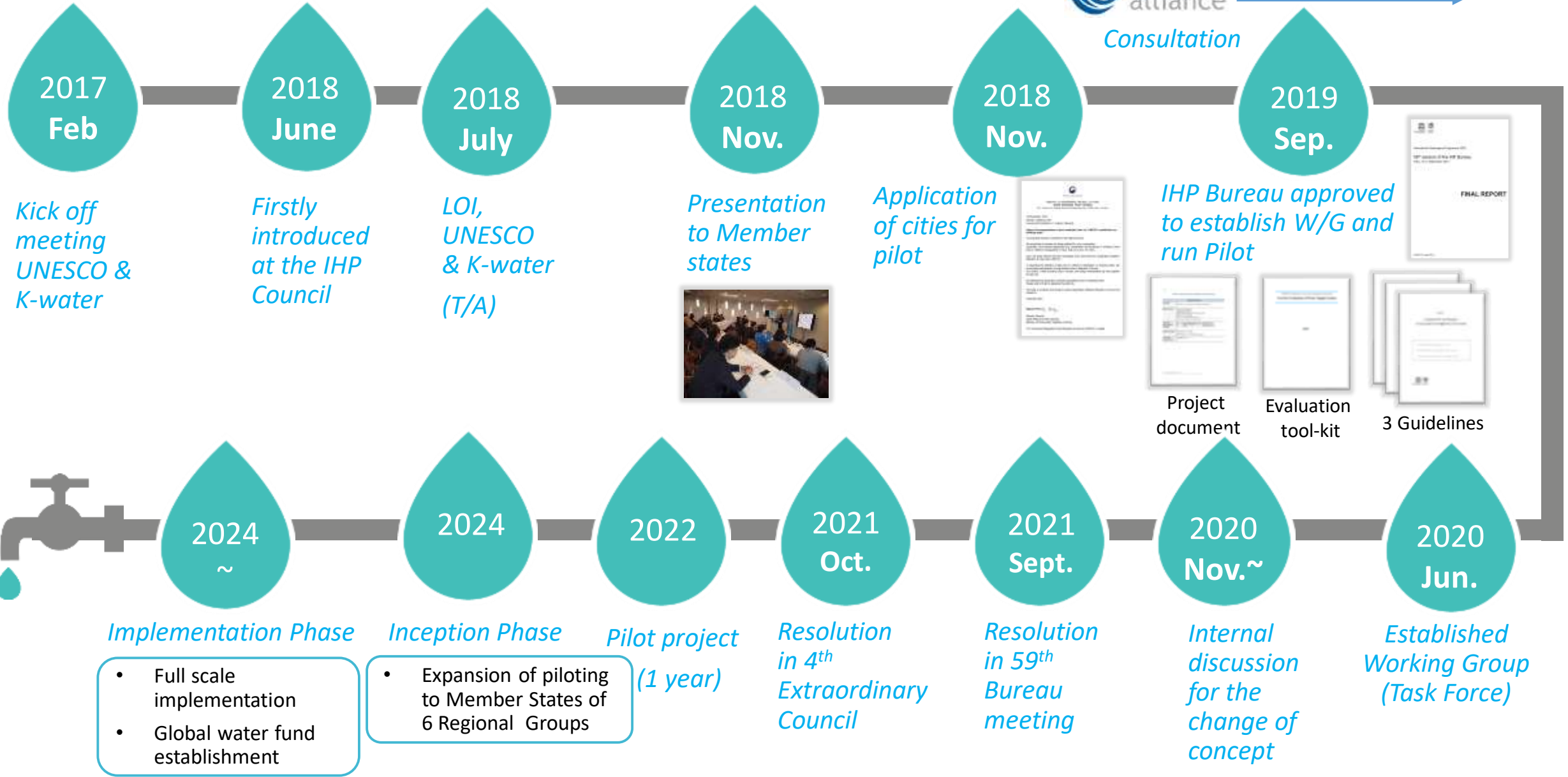
Encourages Member States to actively participate in this initiative.



2-1. History and Timeline



Consultation



2-2. Introduction of Seal of Excellence Initiative



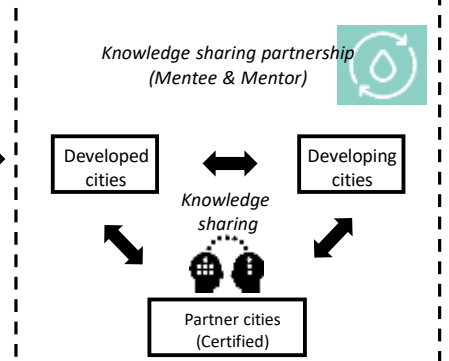
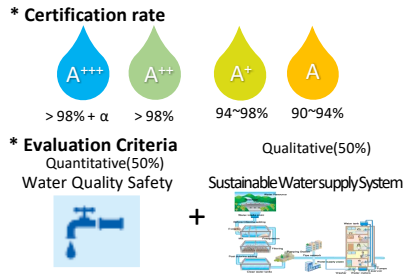
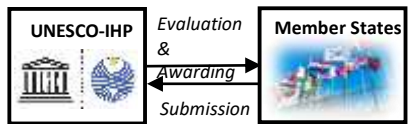
Accelerate achieving SDGs



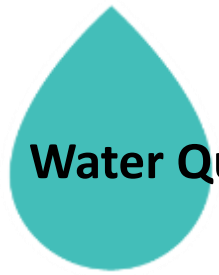
Global Platform
for sharing good practice & human resources

Certification
for good practice (tap water)

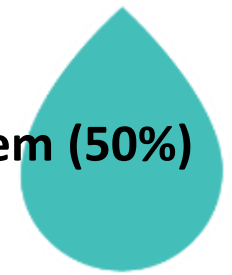
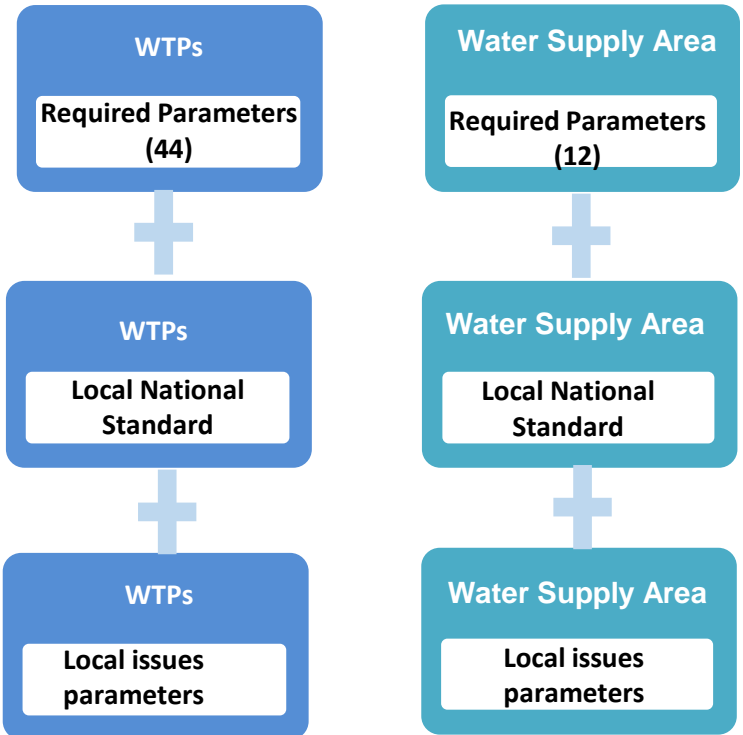
Capacity Strengthening
for Member states



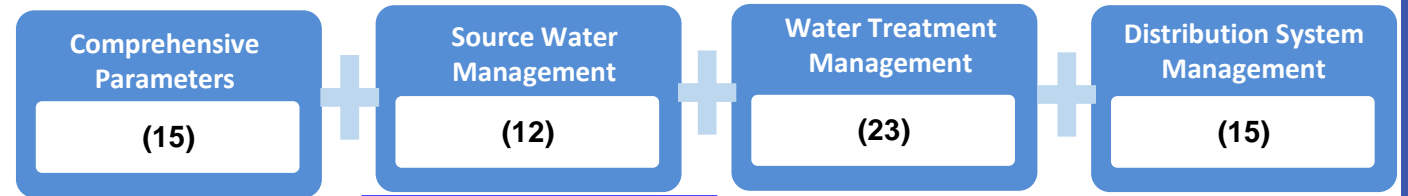
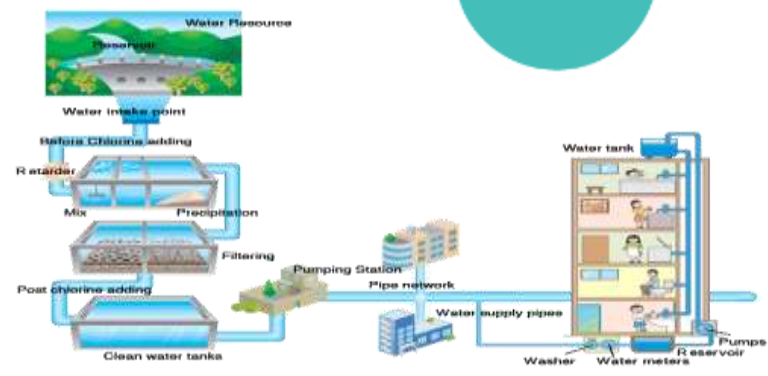
2-2. Introduction of Seal of Excellence Initiative



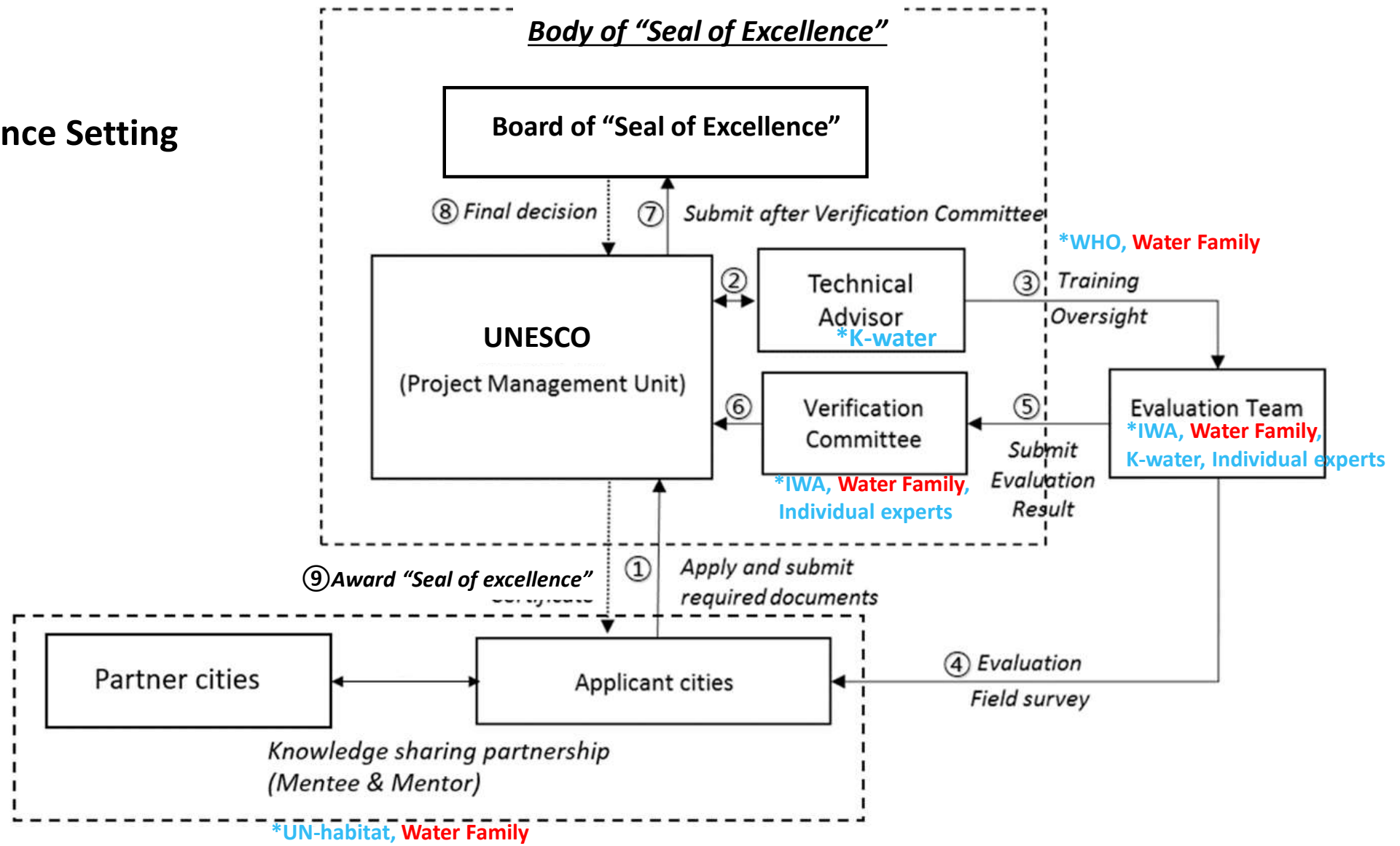
Water Quality Safety (50%)



Water Supply System (50%)



2-2. Introduction of Seal of Excellence Initiative





2-2. Introduction of Seal of Excellence Initiative



Cooperation among UN agencies



World Health Organization

(Water quality standard, Water safety plan)



(Mentor-Mentee Program)

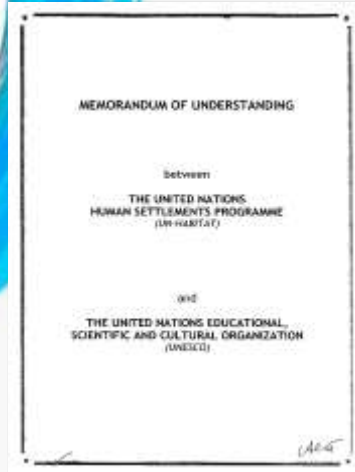


United Nations Educational, Scientific and Cultural Organization

(Open water science platform)



MoU (Apr. 2017)



MoU (Mar. 2005)

*** Meetings & Consultation**

- Dec. 2019 : Virtual conference with WHO
- Mar. 2020 : Virtual conference with UN-Habitat
- June. 2020 : Virtual conference with WHO and UN-Habitat
- July~Aug. 2020 : Consultation by WHO WSP Experts Group
- Nov. 2020 : Virtual conference with WHO and UN-Habitat
- Participation and support for pilot project



2-3. Technical Advisor, K-water



MOE of Korea

UNESCO-IHP

UNESCO Seal of Excellence Initiative (K-water=T.A)

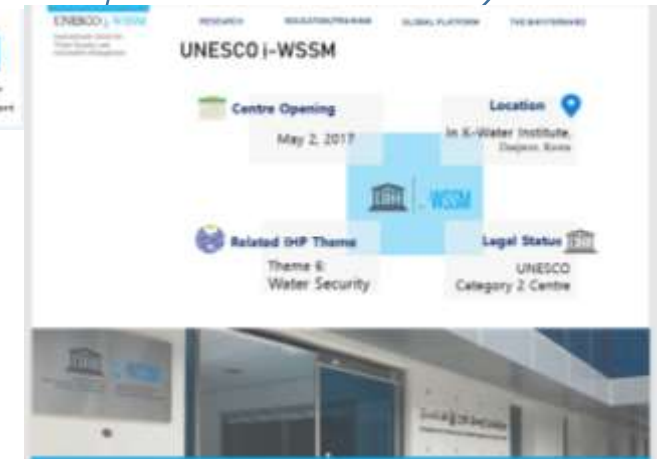


K-water



**UNESCO i-WSSM Center in K-water('18.May)
To develop Water Security for DMC**

AWC(Asis Water Council)



Mission

Asia's Sustainable Development with Smart Water

Vision

Raise Asia's water issues at the top of global agendas
Promote Asia's sustainable growth by solving water problems

Set Asia Water Issues at the Top of Global Agendas

Solve water issues through practical Water Projects

Solidify the foundation as a leading water platform

2-3. Technical Advisor, K-water



Paradig Shift in Korea

Korea and K-water have experienced past, present and future in a short time

60~70's
(Sanitary water)



80~90's
(Safe water)



00 ~ 10's
(Tasty water)



10 ~ Present
(Healthy water)



Palatable water Standard ('06)

- (Residual chlorine) 0.2~0.4 mg/ℓ
- (Geosmin&2-MIB) less than 10ng/ℓ
- (Taste & Odor) : less than 1 TON
- (Aluminum) less than 0.1 mg/ℓ
- (Turbidity) less than 0.1 NTU

Efficient and effective support to DMSS for Water issues available



2-3. Technical Advisor, K-water



Water Safety Plan in K-water

- Water Safety Plan was introduced by WHO recommendation to reduce the risk of water supply system and K-water in 2010
- Pilot test for K-water's WTP in 2011
- Implementation for all K-water's WTPs
- Report output to WHO, IWA and MOE of Korea in 2013



AWWA '5 Star' Certification

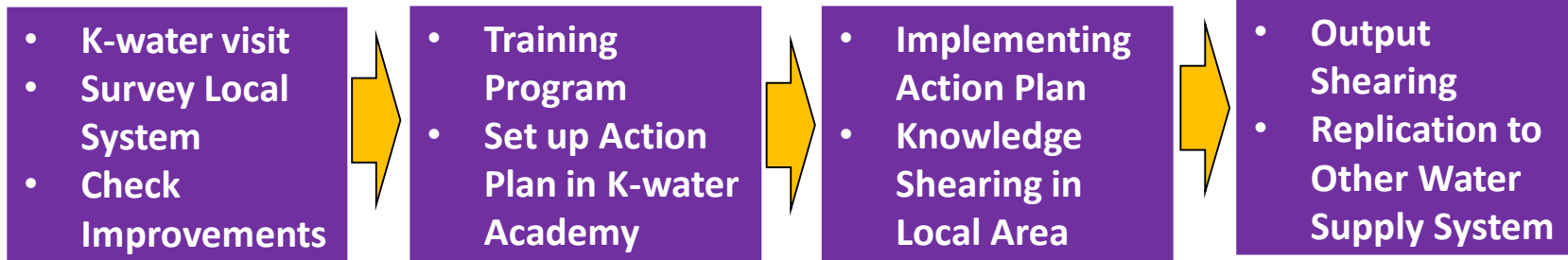


- ① **(Turbidity Control)** with less than 0.1NTU annually
(Maximum less than 0.3 NTU)
- ② **(Disinfection Capacity)** to inactivate for pathogenic micro-organism including virus 99.99% and giardia 99.9%

2-3. Technical Advisor, K-water

Capacity Building Project for DMCs

- * *Capacity building to improve water supply system and sanitation*
- * *Partner countries : Bangladesh, India, Bhutan, Laos, Thailand, Philippine, Indonesia (programmed and Funded with ADB, USAID)*



(USAID Asia, K-water & Thailand(PWA))



(WaterLinks Award, 2011)



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Hydrological
Programme

3. Future Plan (interim)



- *LOI(Letter of Intend) : UNESCO, MOE of Korea, K-water, SEOUL Metropolitan city, DAEGU Metropolitan city ('22.May)*
- *Pilot Project for 2 Cities ('22.July – '23.July)*
- *Certification Committee & approval ('23. Dec)*
- *Report to UNESCO-IHP Council ('24~)*
- *Extension Pilot Project to Intercontinental level('24~)*
- *Launching seal of excellence program officially to cities all over the world*



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Hydrological
Programme

4. Expected Results



- Water sources and supply system evaluated [*SDG 3, 6, 17]
- Water services evaluated (Tap water) [*SDG 3, 6, 17]
- City carbon footprint reduced (used plastic bottles) [*SDG 12]
- Plastic waste and ocean pollution reduced [*SDG 12, 14]
- Awareness raised on SDG 6 (city officials + citizens and tourists) [*SDG 6]
- SDG 6 global acceleration framework implemented at city level [*SDG 6]
- X Number of cities in developing countries capacitated (SDG 6.a + 6.1) [*SDG 6]
- Open water science implemented (data, information, and case studies) [*SDG 6]
- South-south and north-south cooperation reinforced [*SDG 17]



Conclusion



Open Water Science platform



Award to CLEAN WATER CITY

* Evaluation Criteria

① Clean water service



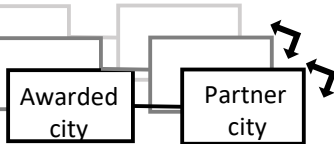
Sustainable Water management

② Knowledge sharing partnership for clean water service



Mentor & Mentee

Knowledge sharing



Impacts

6 CLEAN WATER AND SANITATION

Improving Water Management

17 PARTNERSHIPS FOR THE GOALS

Enhancement of capacity of MS via Mentor & Mentee



Increase population for access to tap water



3 GOOD HEALTH AND WELL-BEING



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Reduce plastic bottle waste after use

14 LIFE BELOW WATER





United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Hydrological
Programme



Let's Go Together for Better Water Security.

Thank you for your attention.