WATER IN THE WORLD WE WANT

SDG6 PROJECT

Phase 1
2016-2018
Final Report

UNITED NATIONS UNIVERSITY
UNU-INWEH
Institute for Water, Environment and Health

Korea Environment Corporation

Ministry of Environment
Republic of Korea

United Nations Office for Sustainable Development
Incheon - ROK

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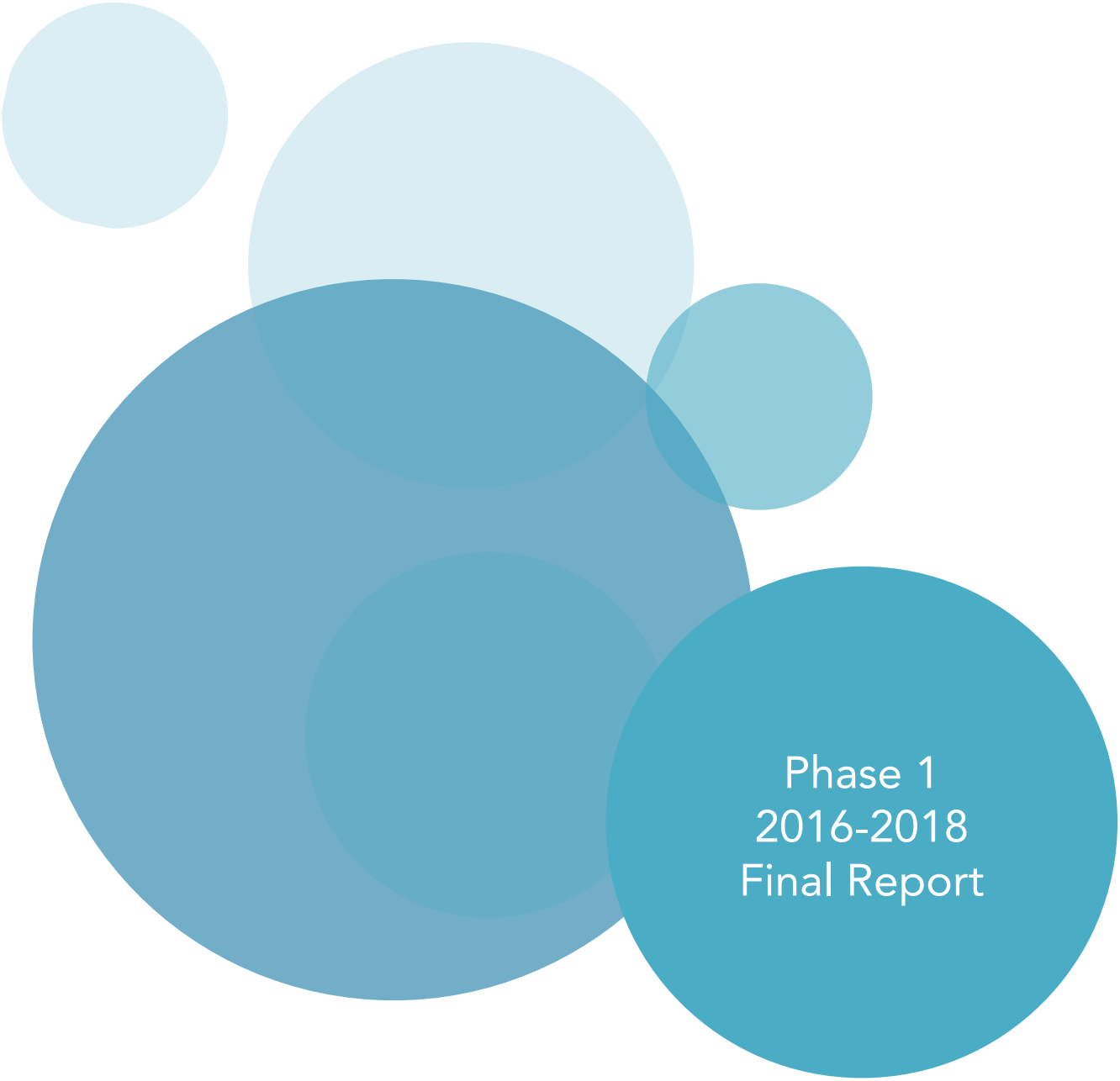
SDG6 PROJECT



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ABBREVIATIONS AND ACRONYMS

AyA	Instituto Costarricense de Acueductos y Alcantarillados
BPEH	Bureau de Planification et des Équilibres Hydrauliques
DGEQV	Direction Générale de l'Environnement et de la Qualité de la Vie
DGGREE	Direction Générale du Génie Rural et de L'Exploitation des Eaux
DRR	Disaster Risk Reduction
DSDG	Division for Sustainable Development Goals
GLAAS	Global Analysis and Assessment of Sanitation and Drinking Water
INRGREF	Institut National de Recherche en Génie Rural, Eaux et Forêts
IWRM	Integrated Water Resources Management
K-eco	Korea Environment Corporation
MALE	Ministère des Affaires Locales et de l'Environnement
MARHP	Ministère de l'Agriculture, des Ressources Hydrauliques et de la Pêche
MDGs	Millennium Development Goals
MDICI	Ministère du Développement de l'Investissement et de la Coopération Internationale
MINAE	Ministerio de Ambiente y Energía
MOE	Ministry of Environment, Republic of Korea
MoI	Means of Implementation
NDPC	National Development Planning Commission
PCRWR	Pakistan Council of Research in Water Resources
SDG	Sustainable Development Goals
SDG-PSS	SDG Policy Support System
SWOT	Strengths, Weaknesses, Opportunities, and Threats
UNDESA	United Nations Department of Economic and Social Affairs
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESCO-IHP	United Nations Educational, Scientific and Cultural Organization - International Hydrological Programme
UNOSD	United Nations Office for Sustainable Development[1]
UNU-INWEH	United Nations University Institute for Water, Environment and Health
UNICEF	United Nations International Children's Emergency Fund
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
WRI	Water Research Institute

This report presents the results of the project "Water in the World We Want" that has created the SDG Policy Support System (SDG-PSS) – a platform designed to help countries improve their data analysis, reporting and progress toward achieving Sustainable Development Goal (SDG) 6 and other water-related SDG targets. In this project, SDG-PSS was designed, tested and improved in a hands-on process by five partner countries.

SGD-PSS is a unique system and tool. It gives country water professionals, managers and policy makers a more precise view of the data that is missing in their national processes and guides them in gathering and analyzing the relevant data, information, and trends to deliver on SDG 6 targets. It is a strategic tool to encourage cooperation between agencies and water research community in a joint policy development process. As it progresses, SDG-PSS has the potential to become a powerful knowledge sharing platform for learning between countries – as all data and information are presented in common formats using a common set of indicators.

As Phase 1 of the project concluded in 2018, the partners encourage others to join the SDG-PSS community to improve their path toward meeting SDG 6 targets. SDG-PSS is an open platform. All are welcome to use, develop and customise it to suit their specific needs.

[1] UNOSD is a project office of UNDESA, managed by the Division for Sustainable Development Goals (DSDG).

EXECUTIVE SUMMARY

Achieving Sustainable Development Goal 6 (SDG 6) by 2030 is expected to allow countries to reach an important milestone in their journey towards sustainability, as successful water and sanitation management will be a foundation for the achievement of many other water-related SDGs directly or indirectly. Indeed, "Ensuring availability and sustainable management of water and sanitation for all" – SDG 6 – is a formidable challenge for many countries. Nevertheless, with challenges come also great opportunities.

Lessons learned from the Millennium Development Goals (MDG) era suggest that effective planning, policy and preparation in the early years of the 2030 Agenda for Sustainable Development will be critical to drive success in the water sector. In the language of the 2030 Agenda, strengthening and re-aligning enabling environments to drive successful implementation will become even more critical step for many countries. Yet evidence and pertinent data for policy makers and development actors to make this happen may still be missing, overlapping – or even fragmented as the urgency for actions is set to grow in the initial years of the SDG era. This also applies to achieving SDG 6 and other water-related SDG targets and indicators. In many UN Member States, particularly in low and middle-income countries, there is a lack of data related to water and sanitation that makes it possible to report on SDG 6 targets and indicators.

From 2016-2018, the United Nations University Institute for Water, Environment and Health (UNU-INWEH) in partnership with the United Nations Office for Sustainable Development (UNOSD/DSDG/UNDESA), the Korea Environment Corporation (K-eco) and the Ministry of Environment, Republic of Korea and national partners from Ghana, Tunisia, Pakistan and Costa Rica, developed and delivered the project "Water in the World We Want", by investigating options to support policy and decision making under situations with limited data on water and sanitation.

The project team developed a key product; the SDG Policy Support System (SDG-PSS) with the following critical components: Capacity Assessment; Finance Assessment; Policy and Institutional Assessment; Gender Mainstreaming; Disaster Risk Reduction (DRR)/Resilience Mainstreaming; and Integrity. In addition, a component 'Status' was also included as it presents data trends on different targets and indicators of SDG 6.

SDG-PSS is an answer to the challenge of bringing data and information from multiple international and national tools and translating them into a 'fit-for-policy' evidence framework. Its components are built on more than 20 well-established tools, processes and practices used by many countries and programs for water-related management, nationally and internationally. The SDG-PSS development process engaged the partners in a process of critical reflection that created a range of outputs including discussion papers and policy briefs. These resources provide the SDG 6 community with information on the background of SDG-PSS, its functional design, presentation, and reporting functions.

SDG-PSS was initially created as an Excel-based tool; today it has evolved into a user-friendly web-based system. Project planners, water managers and policy makers can use it to easily translate trends, information, and data into collaborative planning to develop, implement and measure the effectiveness of water related policies – while addressing national SDG 6 targets. This refreshed version of SDG-PSS is now online (http://sdgpss.net/en/) and open for use by water professionals and policy makers. It is designed as a collaborative resource, and the SDG-PSS team encourages users to provide feedback which will be included in the refinement of the tool.

The continual development and enrichment of SDG-PSS would require the engagement of more water professionals, managers and policy makers, and countries. The project team aims for 'smart' engagement with new users by creating strong links between the five trial countries – Ghana, Tunisia, Pakistan, Costa Rica and the Republic of Korea – and those expected to join the next project phase. The initial trial countries would be SDG-PSS regional hubs to share expertise and experience with countries facing similar water-related challenges, management practices and policy issues. The next phase of SDG-PSS will put into action this wider cooperation and continuous learning that will be fed back into SDG-PSS development.

The next wave of countries will be selected based on specific criteria, such as regional diversity, geographic location within three major regions – Asia, Africa, and Latin America and the Caribbean; variation in the availability of annual renewable water resources; proportion of population using safely-managed water supplies; the proportion of population using at least basic sanitation facilities; and economic levels. Joint learning and experience sharing with the five trial countries on the use of SDG-PSS will be done in regional workshops. This is expected to improve existing water-related policies and develop new water policies towards the achieving SDG 6. The next phase of the project will also have an e-course – a training hub for potential users of the SDG-PSS to learn more about the tool and its functions. Here, the objective is to engage and support water-focused professionals, practitioners and policy makers in more countries to act on the ground to achieve targets for SDG 6 and other water-related SDGs.

1 INTRODUCTION AND BACKGROUND

The adoption of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) by world leaders in 2015 was a landmark event and a game-changing response to steering sustainable development across the globe. The SDG Framework is organised under 17 goals, 169 targets, and 232 global indicators – among these, SDG 6, which targets water and sanitation. These goals – backed by targets and indicators – form the backbone of the SDG Framework. To make them a reality at a national level, substantial data is required to monitor and evaluate progress.

As water plays a critical role in fully achieving sustainable development at the national, regional and global levels by 2030, there is a risk that different UN and Member State initiatives to build better SDG 6 data and evidence will become fragmented or overlap. A lack of water-related data, evidence and understanding will hinder planning and decision making, and potentially countries' ability to implement policies that support the achievement of SDG 6 and other SDGs with specific water-related targets. Many countries may already be missing the critical evidence needed to support policy and practice, and data might not be available to validate all goals and indicators.

Indeed, despite the urgent problems that countries face – two years into the SDG era and faced with 17 Goals – the 2017 round of Voluntary National Reports to the SDG process reveals that many countries are struggling to put together substantive action plans. It is now widely recognised that a 'business as usual' approach means that SDG 6 will be missed in 2030. The initial assessment of the progress towards achieving SDG 6 suggests that the world is generally not on track toward achieving SDG 6 (UN, 2018a). So, it is unlikely that using enabling environments developed before these SDGs were formulated will lead the countries to successfully deliver on SDG 6. In the language of the 2030 Agenda: strengthening and re-aligning enabling environments as a means of implementation (MoI) are critical actions for many countries.

As they strive to achieve water-related sustainable development, national governments and development actors are also faced with competing priorities and limited budgets. Too often, water-related development falls behind other priorities and national governments need to demonstrate to their citizens and funders that they are doing more than just trying to 'tick off' SDG 6 indicator boxes – and that their effort goes beyond measuring and assessing the status of SDG 6.

If countries are to achieve SDG 6 by 2030, they need to assess their current national situations effectively now. This means defining gaps and weaknesses, and addressing them with workable policies, frameworks and action plans to foster strong enabling policy environments for improved water resource management. Countries also need to define their own national baselines, targets and priorities in the general SDG process, and focus on the ones that can be realistically achieved by 2030, reporting regularly on the progress.

Against this background, credible evidence provides a strong foundation for countries to advocate for a rational, rigorous and systematic approach to inform their policy processes and support decisions to meet their SDGs. This is not to say that making the right policy decisions in the SDG era is simple. It can be quite complex, requiring policy makers and development actors to assess and combine many pieces of evidence from different agencies and sectors. In the process, questions arise needing mid-course corrections to established plans. Deciding on exactly which piece of evidence is 'fit-for-purpose' to inform a specific policy process can be contentious, especially as there may be different or specific situations, or conflicting evidence.

1.1 The Project and its Partners

The two-year project "Water in the World We Want" began in September 2016 with the goal to enable cross-sectorial evidence-based collaboration between experts and decision makers, and to promote commitment to strengthening the enabling environment around national water and sanitation management, with the final goal of successfully achieving SDG 6. The project was implemented by five countries in a 'champion system', in which one policy maker and one expert or scientist in each country was responsible for promoting the project and providing coordination for the key product of the project – the SDG Policy Support System (SDG-PSS). The project partners are (see Appendix 1 for complete list of representatives from partner countries and institutions):

1. United Nations University Institute for Water, Environment and Health (UNU-INWEH)
2. United Nations Office for Sustainable Development (UNOSD/DSDG/UNDESA)
3. Korea Environment Corporation (K-eco), Republic of Korea
4. Ministry of Environment (MOE), Republic of Korea
5. Instituto Costarricense de Acueductos y Alcantarillados (AyA), Costa Rica
6. Ministerio de Ambiente y Energía (MINAE), Costa Rica
7. National Development Planning Commission (NDPC), Ghana
8. Water Research Institute (WRI), Ghana

9. Pakistan Council of Research in Water Resources (PCRWR), Pakistan
10. Ministry of Planning, Development and Reforms, Pakistan
11. National Research Institute for Rural Engineering, Water, and Forestry (INRGREF), Tunisia
12. Bureau de Planification et des Équilibres Hydrauliques (BPEH), Ministère de l'Agriculture, des Ressources Hydrauliques et de la Pêche (MARHP), Tunisia.

The criteria for choosing the five trial countries included: regional diversity, geographic location with countries representing three major regions – Asia, Africa, and Latin America and the Caribbean; variation in the availability of annual renewable water resources per capita; proportion of population using safely-managed water supplies; and the proportion of population using at least basic sanitation facilities.

1.2 The Project Approach – Developing SDG-PSS

Given the fact that many countries lack water related data to report on different targets and indicators of SDG 6, project partners investigated options to support policy and decision making in data-poor conditions. They initiated the creation of a tool to help navigate limited data conditions, relying on trends, information and broader estimates. The tool is SDG-PSS. It was designed to provide a supportive system to the participating government officials and stakeholders – allowing them to exchange knowledge, promote evidence-based policy and contribute to achieving SDG 6. It was planned to enable policy-makers, researchers and professionals to better collaborate to create one authoritative, national-level evidence base.

The SDG-PSS consists of the following components: Capacity Assessment; Finance; Policy and Institutional Assessment; Gender Mainstreaming; Disaster Risk Reduction (DRR)/Resilience Mainstreaming; and Integrity. These components were chosen as they allow a better understanding of the enabling environment where water and sanitation policies are developed and implemented, and the conditions for achieving the SDG 6. SDG-PSS also monitors and evaluates another component of SDG 6, 'Status' – which refers to data and trends for targets and indicators of the goal. Through this system, policy makers, scientists and development actors are empowered to gather the critical information, evidence and data (where available) needed to define and develop national policies and policy action to address water-related issues.

The SDG-PSS builds on the several years of work on water and sanitation issues and the contributions of different organizations. It draws entirely on the already well-established tools, processes and practices commonly used for national and international scale water-related management. This means that countries used to reporting data using international tools will be able to easily adopt and adapt the SDG-PSS for their national reporting systems on SDG 6.

Since the project began, partners have worked together to build this evidence framework that fits the challenge of limited data in the SDG era. These professionals, researchers and policy makers shared their experiences, suggestions and knowledge in meetings, workshops and ongoing bilateral communication. Out of these interactions grew the SDG-PSS, which is now available online in English, French, and Spanish.

The SDG-PSS was first developed as an Excel tool. It is currently being transitioned and improved as a web-based resource. By the end of the project, the SDG-PSS is expected to translate all the complexities of the evidence framework and its critical components for SDG 6 into a comprehensive, user-friendly web-based resource.

1.3 National Contextualization of the SDG-PSS

Between November 2017 and August 2018, SDG-PSS was revised to include feedback from project countries. The result is today's version, a product that can be customised to a country's specific requirements. National SDG-PSS versions are built on the generic (international) version. Until August 2018, four national SDG-PSS versions have been created, by Republic of Korea, Tunisia, Costa Rica, and Ghana. Pakistan continues to use the international version.

As the SDG-PSS was built using national and international tools, processes and practices it allowed to access a range of questions and draw recommendations based on the feedback and contributions from the project countries. Country contributions were classified in three categories: Translation and Syntax; Design and Usability; and Concept. In total 237 contributions were received from project countries (Table 1).

The contributions for 'Translation and Syntax' included all the recommendations on the style and form of the questions for SDG-PSS users. Most requests for changes made because translations from English to French or Spanish led to misunderstandings; and because the choice of words used by the translator was not ideal and the wording of the questions needed changing. While some contributions on translations were very straightforward (i.e., change a term or a phrase), others required deeper analysis. For the latter, the project team referred to original English resources to see if some information was lost and made a judgment on

Table 1 Contributions from project countries suggesting improvement in the content, presentation, translation, design, usability, and concept of SDG-PSS

Category	Costa Rica	Tunisia	Korea	Ghana	Pakistan
Translation and Syntax	49	69	1	5	14
Design and Usability	3	3	3	1	8
Concept	24	33	20	2	2
Total	76	105	24	8	24

what should be changed. In these cases, the concepts behind the original questions, taken directly from an authoritative tool(s), were kept as intact as possible. The changes in one or two terms sparked detailed discussions on the importance of the contributions and highlighted to partners why accurate and precise questions were critical to produce better results and more reliable data.

The "Design and Usability" category covered all contributions related to the design and user experience of the SDG-PSS. The Excel-based version had many limitations as it did not allow country feedback to be translated into better presentation and features. The web version gives the team more flexibility to include suggestions for design improvement. This feedback and improvement will continue as SDG-PSS goes online in the public domain.

Input to the "Concept" category addressed national needs for SDG-PSS, including requests to delete or hide questions judged unnecessary by the countries. Questions were deleted, often due to syntax or translation issues – for example, changing the options of available answers to better portray the reality that the country faces.

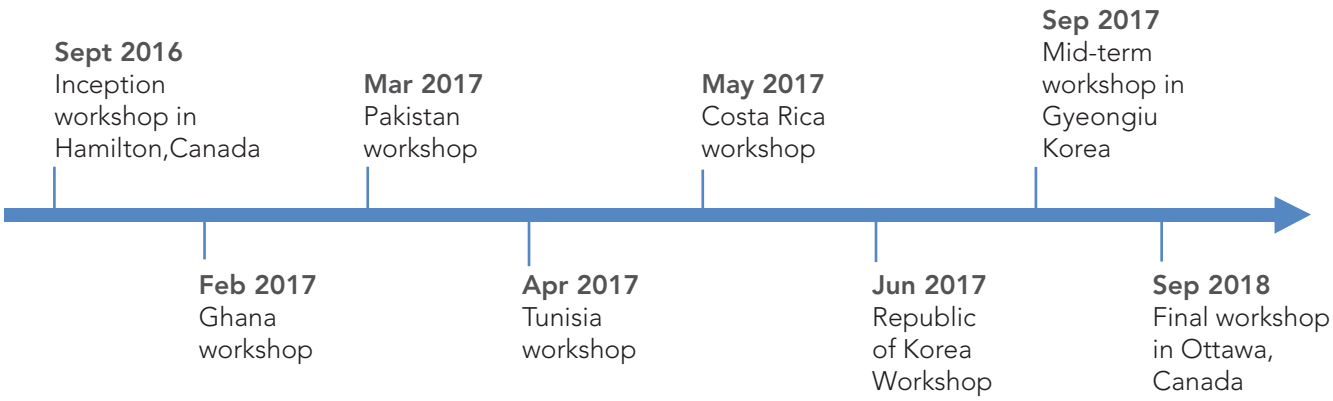
2 PROJECT MEETINGS AND WORKSHOPS

The SDG-PSS was the main product of this project. It is designed as a cross-sectorial collaborative platform and resource to improve countries processes for evidence-based policy-making. It is a collaborative tool that engages a range of stakeholders from the five trial countries. They worked together to build the SDG-PSS in several workshops and consultation meetings from 2016 to 2018 (see timeline, Figure 1).

2.1 Inception Workshop

The SDG-PSS inception workshop was organised in Hamilton, Canada, 20-22 September 2016, with project partners and representatives from Costa Rica, Ghana, Pakistan, Republic of Korea, and Tunisia (Photo 1). The team shared experiences and challenges around international and national efforts to focus on policy, planning and strategies to address the new 2030 SDGs. Project objectives were defined, and team agreed on the initiative's aim to accelerate the success of water-related SDGs. Participants noted that while data supporting

Figure 1 Timeline of project related workshops (September 2016 to September 2018).



sustainable development and water-related datasets are the lifeblood of decision-making, countries face several challenges to obtaining the quality data required data for effective policy-making. Water and sanitation-related data may not be available, accessible, of high quality, well documented and harmonised, or available at the required level of detail or useful form for decision making. It was also noted that many countries are expected to find many challenges to collect water- and sanitation-related data systematically and effectively in the initial years of the SDG era.

Photo 1 Participants of the inception workshop of the SDG project

To address data-limited situations prevalent in many developing countries, project partners and countries agreed to cooperate to develop a unique tool that supports policy decision making, using trends, information, observations and limited data from the water and sanitation sectors. To move forward, workshop participants agreed to organise: (1) stakeholder consultations; (2) national workshops involving government officials, policy makers, water and sanitation professionals, and international experts; and (3) synthesis of a range of water, sanitation, and policy tools available in the public domain to feed into the development of the project-led tool, SDG-PSS.

2.2 National Workshops

In 2017, national workshops were organised in project countries to introduce the project and to engage government officials, policy makers, water and sanitation experts, and professionals from related disciplines. This included representatives of international organizations involved in monitoring SDG 6 targets. A draft version of the SDG-PSS was presented at the workshops requesting feedback for further refinement. These national meetings provided a platform for national stakeholders to discuss steps and actions needed for collaborative policy-making to progress to accelerated achievement of SDG 6.

2.1.1 Ghana

Ghana's NDPC has made significant efforts to align national development plans and aspirations in the face of challenges to address the SDG framework. Some 70% of the SDG targets were reflected in the Ghana Shared Growth and Development Agenda (GSGDA), which spanned from 2014 to 2017. This demonstrates that most of the work led by Ghana is consistent with the SDG framework. The current Medium-Term National Development Policy Framework (2018-2021) is also consistent with the SDGs. NDPC has adapted some of the SDG targets and indicators to suit Ghana's development context and capacity at both national and sub-national levels.

It is expected that if Ghana achieves SDG 6, this will help reduce the occurrence of water and sanitation-related diseases. For this, NDPC calls for national policies to strengthen coordination among institutions responsible for managing drinking water quality and aligning Ghana's SDG 6 enabling environment with the MDG 2030 agenda.

The Ghana workshop was held in Accra on 23 February 2017 (Photo 2). This meeting introduced the project

Photo 2 Participants of the SDG project workshop in Ghana

to national stakeholders and licked-off a collaborative platform for international and Ghanaian partners to discuss critical components of SDG-PSS to achieve water-related SDGs and demonstrate how these components will be incorporated in national policy-making for SDG 6. At the end of the workshop, the National Level Learning Alliance Platform (NLLAP) recommended the SDG-PSS to be adopted and adapted to Ghana's local and national context. Participants said they appreciated the flexibility of the SDG-PSS to fit with country-specific needs and priorities.

2.2.2 Pakistan

Pakistan was the first country to adopt the 2030 Sustainable Development Agenda in a unanimous parliamentary resolution passed in February 2016 (Ali, 2017). The country's key development goals are also closely aligned with the SDGs. They are seven pillars specified in the country's long-term development roadmap "Vision 2025". As provinces are empowered to lead the implementation of SDGs in Pakistan – especially those related to social sectors – localization and ownership of SDGs at the lowest administrative tier are key SDG tracking and delivery here. To achieve this, extensive inter-ministerial coordination at the federal and provincial level are required. Efforts to address SDGs are now at the initial stages. The national statistical system needs substantial capacity building efforts to put in place the data monitoring and accountability needed to track SDG progress accurately as some SDG targets require disaggregation of data by sex, age and other salient socio-economic characteristics, including income/wealth, location, class, ethnicity and age.

The Pakistan workshop in Islamabad (14-15 March 2017) engaged a group of committed professionals and policy makers who discussed how critical components of the SDG-PSS relate to the country's challenges and opportunities in achieving SDG 6 (Photo 3). Using a

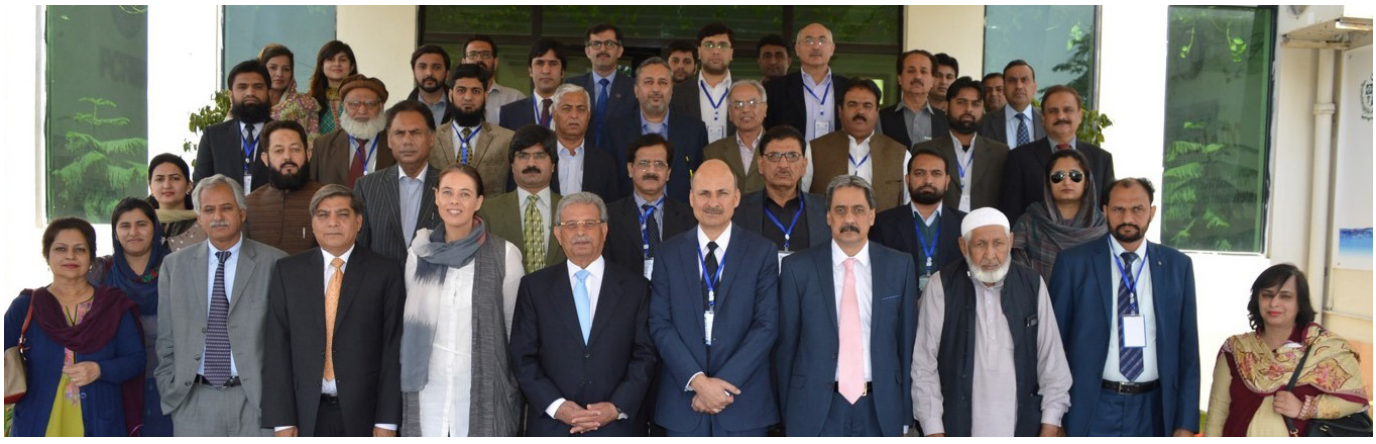


Photo 3 Participants of the SDG project workshop in Pakistan

SWOT approach, the team discussed links between water and each component of SDG-PSS in the Pakistan context. This helped identify strengths, weaknesses, opportunities, and threats to Pakistan's water policies and to align these issues to SDG 6 targets and indicators.

2.2.3 Tunisia

Tunisia adopted its SDG plan in its 2016–2020 five-year National Development Plan, developed using a participatory approach, with a regional 'bottom-up' dimension. The plan has five pillars: good governance and reform; transition from a low-cost country to an economic hub; human development and social inclusion; fulfilment of regional ambitions; and green economy, the latter being included in SDG 6 as well. As the five-year plan spreads over multiple areas, it has several links with the SDG framework. Setting national level indicators seems challenging due to complexities requiring organization and planning to achieve SDG 6.
A key challenge for Tunisia in addressing SDG 6 relates to gathering fragmented information and data from different sources and translating it into 'fit-for-policy' evidence. For this to happen, it is critically important to produce comparable datasets and reliable indicators. So, collaboration between actors in the water sector in the country and between different projects is fundamental to achieving SDG 6, as data is scattered across sectors and government agencies.

The workshop (Tunis, 20-21 April 2017) welcomed 60 participants from different national and international institutions (Photo 4). It was opened by the Secretary of State to Water Resources and Fisheries at the Ministry of Agriculture, Water Resources and Fisheries (MARHAP). A working group of Tunisian experts from governmental and non-governmental water-related institutions was formed and formally approved by the lead Ministry, MARHAP. The working group consists of 15 members with expertise ranging from rural women's issues to water quality, international development and hydrology. The key tasks of this working group are to champion the project in the country, report on its progress, contextualise and collect data for use in the SDG-PSS, and raise funds for future activities pertaining to the project and leading to the achievement of SDG 6.

A key outcome of the workshop was the prioritization of the SDG-PSS components where finance and integrity were deemed the most critical and the hardest to accomplish. The workshop also highlighted that SDG-PSS serves as a tool for innovation and has the potential to support Tunisia's efforts to achieve SDG 6. In many ways, the tool encourages collaboration between policy makers and experts. The system automatically transforms existing institution-level data into evidence. It can be contextualised and configured according to the data available at the national level.

Photo 4 Discussions on SDG-PSS during the project workshop in Tunisia

2.2.4 Costa Rica

The Costa Rica national workshop (22-23 May 2017) received high-level political support and priority by the Minister of Planning and Economic Policy and the Minister of Environment and Energy (Photo 5). Some 50 participants contributed to the workshop, including representatives from government institutions including the lead ministries, universities, United Nations offices based in Costa Rica, NGOs, donor agencies, and public institutions involved in water and sanitation management in the country.

Following up on the national workshop and other consultations, Costa Rica launched an Executive Decree with the aim of defining SDG governance and establishing inter-institutional coordination mechanisms between

Photo 5 Participants of the SDG project workshop in Costa Rica

different sectors. Based on this regulation, a technical group in charge of water statistics and data, called the Inter-Institutional Technical Committee for Water Statistics, was set up to contribute to the development and implementation of the SDG-PSS in the country.

2.2.5 Republic of Korea

The national workshop in the Republic of Korea (4 July 2017) was hosted by the Ministry of Environment, K-eco, and UNOSD. Some 30 officials from several water-related government ministries and public agencies attended. Its aim was to explain and demonstrate the SDG-PSS and discuss approaches to produce data for each SDG 6 indicator. As a result, datasets were produced for each group of indicators, and the results later shared among workshop participants.

A second national workshop was held in 2018. It brought together some 20 participants from government ministries and agencies. This meeting was called to supplement and validate the data produced after the first workshop. This meeting featured an in-depth discussion for each SDG 6 indicator. For some components, such as Gender and DRR/Resilience, the team found it relatively difficult to link to each indicator; so further interviews were done with experts from these fields.

These national workshops and expert interviews successfully enabled stakeholders to gain significant insight of SDG 6 and the SDG-PSS and produced enough data to cover the critical components of the tool (Photo 6). But the group also noted that the lack of coordination among ministries and related agencies and lack of data remain challenges. Continued efforts are needed to produce and validate data in further interactions and collaboration among a wide range of national stakeholders.

2.3 Mid-term Workshop

The project's mid-term evaluation workshop was held during the Korea International Water Week (20-23 September 2017, Gyeongju) (Photo 7). Participants shared progress and challenges in trial countries and developed a detailed work plan for the remainder of the project. Some 50 participants from five countries, partner organizations and Korean institutions attended the workshop.

Photo 6 Discussions on SDG-PSS during the project workshop in Korea

Photo 7 Participants of the mid-term workshop of the project in Republic of Korea

Country project champions shared progress on their SDG implementation and presented challenges and opportunities they face to establish enabling environments for water-related SDGs. Many champions reported substantive progress for their SDG-PSS, some presenting a snapshot of the enabling environment status for key components of the tool. Open sessions attracted the interest of stakeholders from international organizations, government officials and water experts and raised awareness of the project in their broader water communities.

In closed sessions, champions and country core representatives shared common challenges such as difficulties of coordinating among various water-related ministries and organizations, lack of understanding of the SDG process, lack of relevant data, and finance and capacity gaps for water-related SDGs. They shared the view that SDG-PSS helped to raise awareness for the water-related SDGs in their countries, potentially contributing to the successful implementation of SDG 6. The champions welcomed the national versions of the SDG-PSS to fit with each country's priorities and needs and agreed to work further on plans for implementing the SDG-PSS.

2.4 Final Workshop

The final workshop was hosted by the Global Affairs Canada (19-20 September 2018, Ottawa), and attended by representatives of project partner institutions and champion countries (Photo 8). This was all partners' opportunity to share their experience on the implementation of water-related policies toward meeting SDG 6 targets. Country representatives highlighted opportunities and challenges during the development and implementation of the SDG-PSS over the last two years.

Key discussion points were on expectations of using the SDG-PSS for evidence-based policy-making and to produce reliable results and evidence that adequately address national realities. The lack of capacity and funds remain the primary challenge to achieving SDG 6. This issue risks undermining the benefits of SDG-PSS. The lack of country capacity and funding can create missing, incomplete, scattered or inaccurate data for several indicators. As SDG-PSS may work under data-limited conditions, the partner countries see the tool as a viable option as they can generate valuable information to measure their progress towards SDG 6, even if they can only provide limited information, trends and data. Although the project has ended in September 2018, all participants expressed the willingness to remain engaged in providing input to continue improvement of SDG-PSS during the transition to the web version.

3 PROJECT SESSIONS AT INTERNATIONAL EVENTS

The project partners and countries showcased the project and its approach in a series of international events where a trial version of SDG-PSS was demonstrated. Special sessions were organised to engage a broader group of public policy makers and experts to enrich learning from the SDG-PSS experience.

3.1 World Water Congress, Mexico

UNU-INWEH and its partners held a session on SDG-PSS at the World Water Congress (Mexico, May 2017). The platform was presented to a wide audience of professionals, researchers and policy makers from the water sector from around the world. Project partners from Ghana and Tunisia contributed to the session, evaluating current and future trends in water-related policy while offering insights from the first year of water-related SDG planning and policy-making in the context of their respective countries.

The session aimed to provide guidance on the policy-critical components of SDG 6. For this, the session described how the SDG-PSS draws from existing water-related tools and national data to automatically build 'fit-for-policy' evidence related to water policies on the six components. The session was also an opportunity to invite more agencies and development actors from different countries to know more about the SDG-PSS

4 THE SDG-PSS

A key project output was the creation of a comprehensive framework that a country can use to define and address gaps and weakness in its water-related policy-making and gather specific evidence – that will better inform policy-making and define critical aspects that need to

Photo 8 Participants of the final workshop of the project in Ottawa, Canada

and implement and improve evidence-based policy-making through its use.

3.2 World Water Week, Sweden

An SDG-PSS session at World Water Week (Sweden, August 2017) presented the critical components of the platform, and demonstrated how they are measured and used to enable national evidence-based policy-making and to accelerate progress towards water related SDG targets. The session showcased how SDG-PSS accelerates progress towards SDG target 6.3, sparking discussion on how national governments can realign policy frameworks to accelerate progress to achieve SDG 6.3 by collaborating around and building evidence for the components.

Project partners from Pakistan, Tunisia and Republic of Korea shared their experiences with the SDG-PSS, in practical demonstrations of how the components can be measured and integrated into water sector policy-making. The session highlighted that achieving SDG 6 requires fast and effective national policy adjustments and cross-sectorial decision making. The discussion was directed by a live mind-mapping exercise built by the audience during the event.

be addressed to reach SDG 6 targets nationally. In 2017, 43 countries presented their Voluntary National Reviews (VNRs). Even though all reviews reported progress in realigning, strengthening and making new institutional mechanisms for SDGs, the UN stated that major challenges exist for most countries, namely the need for better policy coherence and multi-sectoral coordination (UN, 2017). It was also noted that the line ministries have not yet fully integrated SDGs into their policies, programs and priorities for achieving sustainable development across different sectors and segments of society (UN, 2017). Based on the 2018 VNRs, several countries reported the need for cooperation among UN Member States through water-specific initiatives to trigger action in achieving SDG 6 at the national level (UN, 2018b).

If governments cannot assess strengths and weaknesses or track change and progress against these components, policy makers and development actors will not be able to effectively set a path to sustainability. This also applies to water-related sustainable development. For this reason, with many indicators already requiring regular monitoring and reporting, the SDG-PSS was built entirely on well-established tools, processes and practices that are used for water-related management at national and

international levels. Here, it is important to note that SDG-PSS improves the richness and relevance of data for national decision makers but does not add an unrealistic data collection burden to national governments.
The critical components of SDG-PSS were identified using two main criteria:

1. Its ability to encourage creation of national enabling environments to implement SDG 6, as supported by available literature and by the 2030 Sustainable Development Agenda;
2. Whether the component is supported by at least one tool, system or framework developed by an authoritative body, which is relevant to all SDG 6 targets (not only 6.1 and 6.2) and which can be or has already been adapted to an SDG context for use at the national level.

Key existing tools, systems and frameworks that were considered first included those developed by UN agencies and related to the Water Governance Principles of the Organisation for Economic Co-operation and Development (OECD). But the SDG-PSS did not adopt a single existing framework or tool exclusively, as none was seen as specifically developed to assess and monitor the means of implementation for the water related SDGs.

4.1 Critical Components of SDG-PSS

The following critical components were proposed and agreed upon after consultations with project partners and countries: Capacity Assessment; Finance Assessment; Policy and Institutional Assessment; Gender Mainstreaming; Disaster Risk Reduction (DRR)/Resilience Mainstreaming; and Integrity. In addition, the component 'Status' was also included as it presents data trends on different targets and indicators of SDG 6 (see Figure 2).

4.1.1 Status

The 'Status' component aims to present water related data and information to allow the assessment of each SDG 6 target and indicator while considering aspiration in 2030. This component is expected to present SDG-PSS as a collaboration tool, allowing different government partners to visualise all water-related datasets together, run simple scenarios, and present different aspirational outcomes. The 'Status' component can also contribute to setting up national targets for SDG 6 for reporting through international monitoring mechanisms and processes.

SDG 6 is monitored through national and international mechanisms and processes, such as national level monitoring and reporting and international level assessment, for example, SDG 6 Synthesis Report on Water and Sanitation (UN, 2018a). The practices and tools for SDG targets 6.1 and 6.2 may be more easily available compared to other SDG targets, i.e. SDG 6.3 to 6.6, based on the following:

- At an international level, SDG targets 6.1 and 6.2 are being monitored by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP).
- For SDG targets 6.3 to 6.6, a new global monitoring initiative, GEMI – Global Environmental Management Initiative – provides integrated monitoring of these SDG targets. GEMI focuses on the development of monitoring methodologies and other support tools as well as the establishment of a global baseline for SDG targets 6.3 to 6.6. GEMI is an integral part of SDG 6 monitoring, and its implementation will be harmonised with that of JMP and GLAAS, as a part of the UN-Water Integrated Monitoring Initiative (IMI) for SDG 6.
- The monitoring of the means of implementation (SDG targets 6.a and 6.b) can build on the UN-Water led GLAAS and GEMI reporting towards target 6.5 on integrated water resources management (IWRM).

The key tools and documents used to develop the Status component of SDG-PSS included:

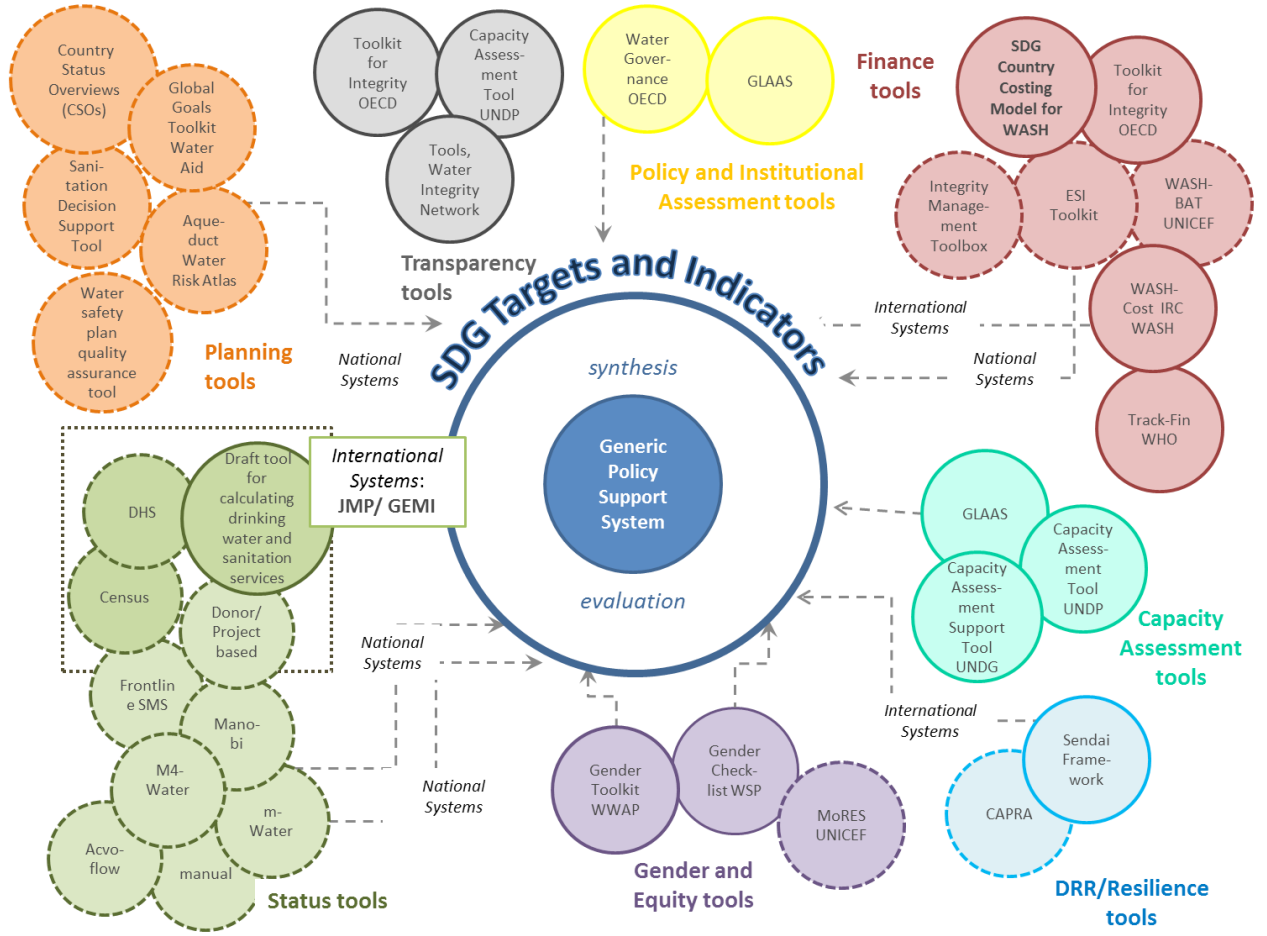
- WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (WHO and UNICEF, 2018): https://washdata.org/monitoring
- Metadata on Suggested Indicators for Global Monitoring of SDG 6 on Water and Sanitation (UN-Water, 2018): http://www.sdg6monitoring.org/indicators/
- IWRM surveys available through the IWRM data portal (UNEP-DHI, 2018): http://iwrmdataportal.unepdhi.org/iwrmmonitoring.html

4.1.2 Capacity Assessment

As water-related SDGs have expanded the water agenda developed over the MDG era, the capacity of countries to develop and implement evidence-based policies and build effective enabling environments in the early years of the SDGs is critical. According to UN-Water, there is a need to invest in capacity-building as this is a major challenge many countries are facing to progress with SDG 6 achievement (UN-Water, 2015). Therefore, assessing capacity needs and planning and implementing need-specific capacity development is crucial for many countries.

To meet national capacity assessment challenges, policy makers must identify the key capacities they have and the additional capacities they need to reach SDG 6 targets. The SDG-PSS Capacity Assessment component is designed to guide decision makers and managers

Figure 2 Tools used to development different components of SDG-PSS



through this process. A capacity assessment analysis is desired as this would generate a new understanding of capacity assets, needs and gaps. UNDP perceives capacity assessment not as a single action but as a continuous cycle (UNDP, 2008), and one that requires political support to enable an ongoing interface between building evidence and using the evidence. This understanding informs capacity development policies, strategies and plans that will guide lead agencies and development actors.

The key tools and documents used to develop the Capacity Assessment component included:

- Capacity Assessment Methodology User's Guide (UNDP, 2008): http://www.undp.org/content/dam/aplaws/publication/en/publications/capacity-development/undp-capacity-assessment methodology/UNDP%20Capacity%20Assessment%20Users%20Guide.pdf
- UN-Water global analysis and assessment of sanitation and drinking-water (GLAAS, 2014): http://apps.who.int/iris/bitstream/10665/139735/1/9789241508087_eng.pdf
- Toolkit for Capacity Development (European Commission, 2010): https://ec.europa.eu/europeaid/sites/devco/files/guidelines-toolkit-capacity-development-2010_en.pdf

4.1.3 Finance Assessment

As the 2030 Development Agenda brings a new understanding of sustainability with its array of goals, targets and a higher level of ambition for water, sanitation and hygiene (WASH) services, financial assessments now play a critical role in informing governments on the gaps and weakness in their funding mechanisms for the water sector. Providing enough funds to achieve SDGs is often regarded as a key barrier between governments and sustainable development. This holds true for countries across low-, middle- and high-income economies. For example, estimates on the total capital cost of meeting targets 6.1 and 6.2 by 2030 are $114 billion per year (GLAAS, 2017), while 77% of countries involved in GLAAS reporting have public funding levels that are insufficient to meet WASH targets (GLAAS, 2014). Still, the governments in middle- and low-income countries, UN agencies and other water-related

international organisations may have more experience and capacity to work with and plan for funding mechanisms for SDG targets 6.1 and 6.2, as these targets inherit decades of discussions and accomplishments from the MDGs, compared to the capital required to achieve SDG targets 6.3 to 6.6.

The GLAAS report in 2017 emphasised that most countries have financial mechanisms for water and sanitation and national budgets for WASH are increasing by an average of 4.9% above inflation annually. However, two-thirds of countries reported that financial plans are not consistently followed, and 80% of the countries surveyed reported inadequate funding to meet their national targets, a gap that can deepen among vulnerable regions and its population, such as rural areas (GLAAS, 2017). Moreover, national funding needs to meet only WASH related SDG targets continue to outweigh available resources (World Bank Group and UNICEF, 2017).

Although funding is allocated for SDG 6.1 and 6.2, there is a need for clear and realistic evidence-based financing mechanisms to fill the funding gaps for SDG 6.1 and 6.2, and for funding for SDG targets 6.3 to 6.6. Several internationally developed toolkits exist to measure and monitor requirements and flows in the water sector. Almost all of them are targeted at WASH and relevant to SDG 6.1 and 6.2, such as the GLAAS and Tracking Financing to WASH (TrackFin).

It is currently difficult to find tools to create evidence for financial decision making around SDG targets 6.3 to 6.6. The SDG-PSS does this. It allows countries to track financial mechanisms' strengths and weaknesses and provides evidence to policy makers to help them see what adjustments are needed to financial resources for water-related sustainable development.

The key tools and documents used to develop the Finance Assessment component included:

- Toolkit for Integrity (OECD, 2014): http://www.oecd.org/cleangovbiz/CGB-Toolkit-2014.pdf
- UN-Water global analysis and assessment of sanitation and drinking-water (GLAAS, 2014): http://apps.who.int/iris/bitstream/10665/139735/1/9789241508087_eng.pdf

4.1.4 Policy and Institutional Assessment

In recent years, the international water community has focused on governance as "the most important challenge" to improve service provision and broader water management (UNDP, 2013). Assessments of the governance of water resources can guide the design of policies and strengthen institutional power by helping to identify weakness, strengths and gaps. These assessments are particularly critical for achieving SDGs, as the 2030 Development Agenda emphasises links and interactions among SDGs, and the importance of implementing it as an indivisible whole (Nilsson, 2016). Indeed, if countries try to achieve targets individually or do not understand interlinkages, they risk producing perverse outcomes. So, increased policy coherence and evidence-based policy-making are critical in achieving SDG 6.

In addition to the importance of strong evidence-based policy-making for the SDG framework – specifically for SDG 6 – the water-related policies need to be practical enough to deliver on these targets in many countries. In this way, business as usual policies and institutional power are not enough. Also, weak policy implementation in low- and middle-income countries is an opportunity for SDG-PSS to provide an evidence framework that allows countries to measure their progress against water policies and identify their weaknesses and strengths, to improve SDG 6 implementation. Comprehensive water related policy and institutional assessments can also guide the design of effective evidence-based policy interventions by identifying areas where changes are needed, and the actions needed to make them happen. Without institutions that are fully empowered and able to implement policies and national strategies for water and sanitation, policies will not result in progress in the SDG timeframe.

The key tools and documents used to develop the Policy and Institutional Assessment component included:

- User's Guide to Assessing Water Governance (UNDP, 2013): http://www.undp.org/content/undp/en/home/librarypage/democratic-governance/oslo_governance_centre/user-s-guide-on-assessing-water-governance.html
- Water Governance in OECD Countries: A multi-level approach (OECD, 2011): http://dx.doi.org/10.1787/9789264119284-en
- UN-Water global analysis and assessment of sanitation and drinking-water (GLAAS, 2017): http://www.who.int/water_sanitation_health/monitoring/investments/glaas-2016-2017-cycle/en/

4.1.5 Gender Mainstreaming

Gender mainstreaming is an important aspect of achieving water and sanitation-related targets. As early as 1992, Principle 3 of the Dublin Principles stated that women play a central part in the provision, management and safeguarding of water (UN, 1992). More recently, UNESCO has highlighted that although policy makers and development actors may be committed to promoting equity and non-discrimination, this commitment must be enshrined and codified in policy and plans (Seager,

2015), as no water assessment can be realistic without a gender perspective, and no decision making is inclusive unless both women and men participate in the process. Gender aspects must be considered as a core element of all water-related policy at national and international levels. It is now widely understood that the gendered dynamics of water and sanitation reinforce the linkages between poverty, gender and sustainable development. Looking at SDG-oriented policies on gender and water, there is general agreement that women and men express different priorities, uses and needs for water and sanitation, for water-related ecosystem use and water security.

SDG-PSS supports gender mainstreaming into SDG water and sanitation-related targets by providing planners and decision makers with an evidence framework to measure the status of water and sanitation through a gender lens and create an enabling environment for gender mainstreaming in the water sector. A clear picture of the gender situation is only possible with sex-disaggregated data. A lack of this data means that policy-oriented information cannot be corroborated, that comparative analysis of countries and regions cannot be done and that strategies for tackling gender and water cannot be formulated on based ion credible evidence.

The SDG-PSS draws its Gender Mainstreaming component from the World Water Assessment Report Gender Toolkit – an output of the UN-WWAP-UNESCO Project on Gender Sensitive Water Monitoring, Assessment and Reporting (Seager, 2015). The toolkit proposes five priority areas for gender mainstreaming: water governance; safe drinking water, sanitation and hygiene; decision-making and knowledge production; transboundary water resource management; and water for income generation.

The key tools and documents used to develop the Gender Mainstreaming component included:

- Sex-disaggregated indicators for water assessment, monitoring and reporting (Seager, 2015): http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/Sex_disaggregated_indicatorsfor_water_assessment_monito.pdf
- Gender in Water and Sanitation (WSP, 2010): https://www.wsp.org/sites/wsp.org/files/publications/WSP-gender-water-sanitation.pdf

4.1.6 DRR/Resilience Mainstreaming

Under the Sendai Framework for Disaster Risk Reduction (2015-2030), disaster risk reduction and resilience building are identified as mechanisms to anticipate, plan for and reduce disaster risk to protect people, communities and countries. From 2005-2015, over 700,000 people have lost their lives, and some 1.4 million have been injured because of disasters. More than 1.5 billion people were affected by disasters, with women, children and people in vulnerable situations disproportionately affected (UNISDR, 2015). Climate change and extreme weather events mean that countries will face massive economic losses from the damage or destruction of assets. Total economic losses over this period total more than $1.3 trillion (UNISDR, 2015).

The relationship between risk, resilience and water requires a multi-dimensional approach. Water-related policies must assure sufficient funds to reduce risks and mitigate their impacts, protect critical water infrastructure, strengthen policies on water and critical infrastructure, and empower institutions to act effectively. This can only be done if sufficient evidence is available and shared among agencies so that disaster risk governance and coordination among relevant stakeholders happens. Indeed, decision-making must be based on the open exchange of data that is disaggregated by sex, age and disability. Risk information needs to be easily accessible, up-to-date, easy to digest, science-based – and as relevant complemented by traditional knowledge (UNISDR, 2015).

SDG-PSS engages with the planning, policy and preparedness objectives of the Sendai Framework. While Sendai Framework for Disaster Risk Reduction is broader than water, many of its indicators can be adapted to the water sector. The key framework used to develop the DRR/Resilience component of SDG-PSS was Sendai Framework for Disaster Risk Reduction:

- Sendai Framework for Disaster Risk Reduction 2015-2030 (UNISDR, 2015): http://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf

4.1.7 Integrity

Water governance is rules, practices and processes that guide decisions for the management of water resources and services are and used to hold governments accountable. Mainstreaming integrity and transparency practices across water policies, water institutions and water governance frameworks is critical to achieve greater accountability and trust in water related policy-making (OECD, 2015). Corruption is one of the main obstacles to sustainable economic, political and social progress, for both low, middle and high-income economies. Bribery, nepotism, fraud, theft and extortion impose costs on business and undermine transparent policy-making. This is costly, especially in the water sector whose effective management relies on empowered institutions and adequate funding.

Despite the widespread recognition that integrity in governance and operational structures is a prerequisite for effective water management, corruption in public water institutions remains one a chronic and challenging issue that many countries need to address (UN, 2006). Increased efforts are needed to improve international and national water governance and eliminate corruption in the sector. Recent reports indicate that there is no evidence that corruption has declined in the water sector globally (WIN, 2016). This points to an urgent need to take stock of recent experiences, identify good practices and develop practical tools to assist different levels of government and other stakeholders to ensure effective, fair and sustainable water policies. To address these challenges, the SDG-PSS allows producing evidence on transparency, accountability and stakeholder participation in the water sector based on indicators that enable the collection of data at the national level on issues from whistle-blower protection to lobbying with integrity and transparency (OECD, 2014).

The international tool used to develop the Integrity component was the OECD Toolkit for Integrity:

- Toolkit for Integrity (OECD, 2014): http://www.oecd.org/cleangovbiz/CGB-Toolkit-2014.pdf

4.2 Main Features of SDG-PSS

In the water sector, multiple agencies, complex science and uncertainty all lead to difficulties in using evidence when crafting effective policies. Producing evidence that is 'fit-for-policy' is a challenge for many decision makers and planners as data is missing, overlapping or inconsistent. The SDG-PSS platform helps clarify the landscape for policy makers as they agree on one evidence base for water-related SDGs. This results in policies that are more aligned and potentially more effective. SDG-PSS aims to be a dynamic and flexible national system. It is flexible to evolve with the situation in a specific country, who can make changes and updates, based on national SDG targets and adapted to fit national and international planning cycles.

The primary outcome of this project is the creation of a secure space where policy makers have a framework to build a national evidence base that better informs their policies and action plans to deliver on the water-related issues of Agenda 2030. In this way, SDG-PSS brings together a strong network of government actors who exchange knowledge, promote evidence-based policy and collaborate more closely to generate water evidence. The anticipated impact of the project is more comprehensive and effective evidence-based policy and decision making on water-related SDGs, which can lead to accelerated SDG 6 success. It has the potential to improve the exchange of data, experience and policy information between countries – as data from various levels and locations is in a similar format and analyzed according to a set of common criteria.

By using SDG-PSS, the countries have a useful tool to bring critical data and information together and present it as 'fit-for-policy' evidence. It demonstrates to national decision makers how they can understand information emerging from different SDG initiatives, and apply it to social, economic, and environmental planning for their water and sanitation sectors. As a strategic tool, SDG-PSS shows what is required to meet SDG water-related targets, and helps countries develop realistic water policy priorities. It is also a powerful collaboration nucleus for government and line agencies and the water-science community connecting technical expertise to policy questions. Cross agency and sector collaboration made possible by the SDG-PSS will improve water-related SDG results.

SDG-PSS automatically synthesises and evaluates national level data, trends and information against SDG 6 targets and indicators. This gives users one summary of strengths, gaps and needs for SDG 6 indicators (see example, Figure 3). Policy makers can view a range of summary reports – probably for the first time easily comparing data such as progress against gender mainstreaming with gaps and needs in capacity development highlighted. SDG-PSS summary products are strategic information for collaborative planning to develop, implement and assess performance of water-related policies.

5 PROJECT OUTPUTS

The development and implementation of SDG-PSS presented all partners with critical reflections on how they assess progress toward SDG 6. This led to a range of knowledge and learning products that inform thinking of other countries and encourage them to use SDG-PSS as a planning tool. These resources are an evidence base for UN-Water partners and the SDG 6 global community to act (see outputs and timeline in Figure 4).

1. Sustainable Development Goal 6: Gaps in the race for indicators:

This paper, jointly written by project team members, identified two types of gaps in SDG 6 indicators: the first, between the aspirations captured in SDG 6 targets and what will be measured by the relevant indicators; and the second, between what is being measured and what the key achievements of many countries are expected to be under SDG 6. The paper suggests that the discussion over gaps and weaknesses of global indicators to track and assess national progress is critical, especially for SDG 6.

Figure 3 Summary view of SDG-PSS reflecting status of progress towards SDG 6, its targets and indicators

Target		Indicator		Capacity			Finance				Policy & Institutional		
				Overall current capacity	Strengthening mechanisms	Overall Progress	Adequacy of financial flows	Funding Sources	Financing for equity	Accountability	Policy for equity	Coordination & cooperation	Awareness
6.1	By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1	Proportion of population using safely managed drinking water services	Significant	Adequate	Adequate	Adequate	Inadequate	Inadequate	Inadequate	Adequate	Inadequate	Significant
6.2	By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1	Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water	Adequate	Inadequate	Inadequate	Adequate	Inadequate	Inadequate	Inadequate	Adequate	Inadequate	Significant
6.3	By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.1	Proportion of wastewater safely treated	Adequate	Adequate	Adequate	Inadequate	Adequate	Inadequate	Adequate	Adequate	Inadequate	Adequate
		6.3.2	Proportion of bodies of water with good ambient water quality	Significant	Inadequate	Inadequate	Adequate	Adequate	Inadequate	Inadequate	Adequate	Inadequate	Inadequate
6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	6.4.1	Change in water-use efficiency over time	Adequate	Inadequate	Adequate	Adequate	Adequate	Inadequate	Inadequate	Adequate	Inadequate	Significant
		6.4.2	Level of water stress - freshwater withdrawal as a proportion of available freshwater resources	Significant	Inadequate	Significant	Adequate	Adequate	Inadequate	Adequate	Adequate	Inadequate	Significant
6.5	By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	6.5.1	Degree of integrated water resources management implementation (0-100)	Adequate	Inadequate	Inadequate	Significant	Adequate	Inadequate	Inadequate	Adequate	Inadequate	Significant
		6.5.2	Proportion of transboundary basin area with an operational arrangement for water cooperation	Significant	Inadequate	Inadequate	Adequate	Adequate	Inadequate	Significant	Adequate	Inadequate	Adequate
6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	6.6.1	Change in the extent of water-related ecosystems over time	Adequate	Inadequate	Adequate	Adequate	Adequate	Inadequate	Adequate	Adequate	Inadequate	Adequate

This paper brings out the experience of working with the trial countries on building a system to monitor and evaluate the enabling environment needed for countries to deliver on SDG 6. It emphasises the need for more efforts to systematically assess and address these gaps where they impact national level SDG 6 progress and the development of a strong MoI to make sure the progress of achieving SDG 6 remains on track (Guppy et al., 2019).

2. Means of Implementation: Six components in six steps for achieving Sustainable Development Goal 6:

This discussion paper was developed by members of project partner institutions and champion countries. It provides a description of the project's achievements and shares their discussion on the policy-critical components of the SDG-PSS. Among its main conclusions are that the trial the SDG-PSS in five countries demonstrated that agreeing on key components of an enabling environment at a national level can foster collaborative efforts and target critical actions. It showed that SDG-PSS can be used in low-, middle- and high-income countries for effective prioritization and planning around MoI for SDG 6 at the national level. It also showed that SDG-PSS can be used in different ways in different contexts to assess and monitor the MoI for SDG 6, and that government decision makers and experts can innovate together to progress this work when a collaborative environment is created (Guppy et al., 2018).

3. Accelerating Water-Related SDG Success: 6 Steps and 6 Components for SDG 6:

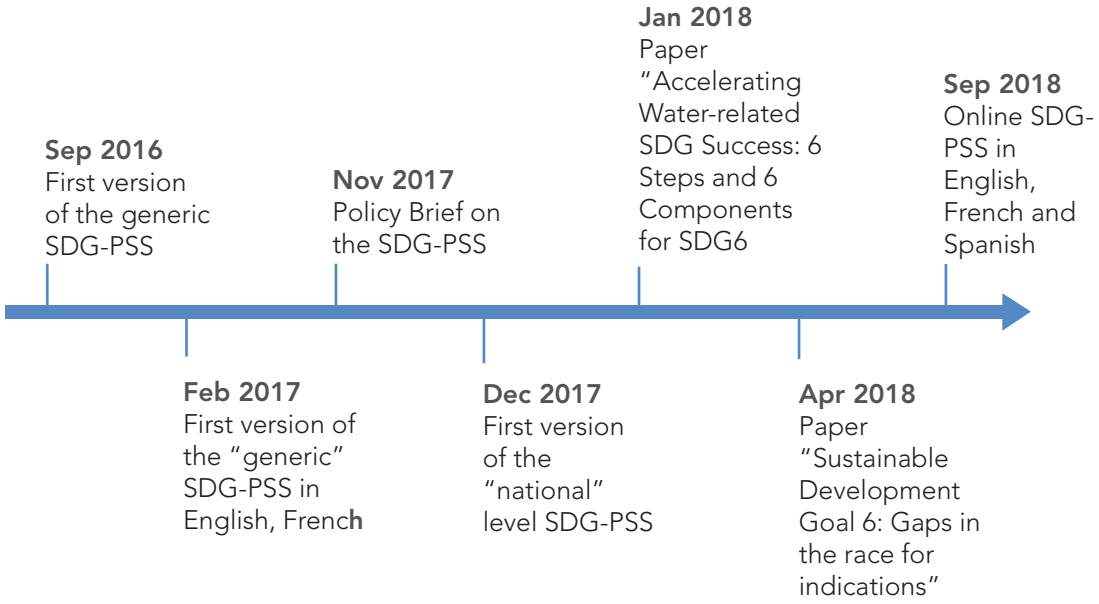
This policy brief, published in English and French languages, addresses the challenges of achieving SDG 6 and how the six critical components of the SDG-PSS and the six proposed steps can shed some light on the problems faced by countries. The six steps aim to support countries towards an evidence-based approach that relies on cross-sector, inter-agency collaboration and dynamic planning. It presents core features of the SDG-PSS aligned with the six-step water SDG planning process for use by national level planners (Guppy, 2018).

6 LESSONS LEARNED AND FUTURE PERSPECTIVES

Achieving SDG 6 at the national level is a complex task that requires much more effort and cooperation between countries. There is now an opportunity for the project to showcase SDG-PSS as a key tool that all countries can use for decision making on SDG 6 – by project countries and others interested in joining the initiative and using of SDG-PSS for their SGD policy processes.

Given the complexities around policies on water, particularly in data-limited situations, no country should expect a 'one-size-fits-all' solution that indicates a clear path to achieving SDG 6. The complexities and challenges of using SDG-PSS that were highlighted by the trial countries reflect those of assuring a sustainable future for water and sanitation at national level. To achieve the SDG 6 and indeed its targets, all countries need an effective system that helps them produce robust evidence that fits water-related policy-making in the national context.

Figure 4 Timeline of project related outputs (September 2016 to September 2018).



At the end of the design and evaluation phase of the SDG-PSS project in 2018, all partners have agreed to continue working together in the second phase of the project as SDG-PSS platform goes into the public domain, open for use by national governments and other interested development agencies. The final workshop of the first phase of the project was an excellent opportunity for all partners to review progress of the project to date and develop their strategies for further work on the project and particularly SDG-PSS.

The next phase of the project is expected to address the following key aspects:

1. The SDG-PSS is organised around six critical components to track and evaluate progress toward SDG 6 targets and indicators. The system is drawn from well-established international tools, processes and practices as a cross-sectorial evidence framework. To be most effective, it requires cooperation across different sectors. Filling SDG-PSS with data requires significant efforts from various agencies and may be a burden on countries with constrained resources. This task may be time-consuming as data may not be readily available for all targets and indicators. In this light, the effort required to gather a solid body of evidence is an essential step for countries to better evaluate which data is missing and where gaps on policy-making exist. To do this, the online version of the system's design and usability of SDG-PSS must be improved, so users are able to navigate the system easily and focus on specific elements of importance related water management at the national level.
2. A key goal of SDG-PSS is to produce 'fit-for-policy' evidence from the data that countries have provided. For many features of the system, the Summary View and the Reporting pages automatically display pieces of this evidence graphically. Translating data on water-related policies into meaningful graphics is not an easy task. While the current version of SDG-PSS provides critical evidence in its main features, there is a need to improve the reporting pages of the system. The next phase of the project will address this issue by creating new interactive ways of producing evidence for specific user types, such as government officials, water management experts and researchers. All partners feel that if countries invest valuable time and effort to add relevant data and information to SDG-PSS, they will expect SDG-PSS to respond by producing reliable, high-value reports.
3. All five project countries have worked on SDG-PSS and this effort has allowed them to better assess the possibilities that SDG-PSS brings to better inform policy-makers. Countries must also task specialists to manage SDG-PSS to produce results that meet the needs of national ministries and institutions involved in SDG 6 and national water management issues. The SDG-PSS web version will allow countries to assemble a national team that has access to a common system, and they can work together on critical components of the tool. Experience gained on this project had shown that the SDG-PSS requires expertise from different agencies (e.g. gender, transparency, finance, climate change), and the online version must allow a secure way of using the system.
4. In the later stages of the project, partners observed that for greater effectiveness, the SDG-PSS needs capacity development and training of those expected to use the tool. To address this aspect, the next phase of the project will introduce an e-course – a training tool for potential users of SDG-PSS.
5. Building on the initial success of the SDG-PSS and assuring its wider use would require further engagement of more countries worldwide. A smart approach to engaging more countries would be to develop stronger bonds between the five trial countries – Ghana, Tunisia, Pakistan, Costa Rica and the Republic of Korea – and those expected to join the next phase. The five trial countries can create regional SDG-PSS networks – regional hubs – where other countries with similar water related challenges, management practices and policies can work in close collaboration. Specific criteria will be used to select additional countries for the project's next phase. To share their experience in using SDG-PSS, the trial countries will host regional workshops to improve existing water-related policies and develop new water policies aimed at supporting the achievement of SDG 6.

APPENDIX A: LIST OF CONTRIBUTORS TO THE PROJECT

Title	Name	Country	Affiliation
Mr	Guillaume Baggio Ferla	Canada	UNU-INWEH
Ms	Lisa Guppy	Canada	UNU-INWEH, now at UN Environment
Mr	Hamid Mehmood	Canada	UNU-INWEH
Ms	Praem Mehta	Canada	UNU-INWEH, now at McMaster University
Mr	Manzoor Qadir	Canada	UNU-INWEH
Ms	Yamileth Astorga Espeleta	Costa Rica	Costa Rica Institute of Aqueducts and Sewers
Ms	Vivian Gonzalez	Costa Rica	Water Directorate
Ms	Zaida Ulate Gutiérrez	Costa Rica	Drinking Water and Sanitation Services
Mr	Jose Miguel Zehdon	Costa Rica	Ministry of Environment
Mr	Felix AddoYobo	Ghana	National Development Planning Commission
Mr	Kwabena Asare Gyasi Duku	Ghana	Ministry of Sanitation & Water Resources
Mr	Maxwell Boateng-Gyimah	Ghana	Global Water Partnership, Water Resources Commission
Mr	Anthony Yaw Karikari	Ghana	Water Research Institute, Ghana
Mr	Muhammad Ashraf	Pakistan	Pakistan Council of Research in Water Resources
Ms	Bareerah Fatima	Pakistan	Pakistan Council of Research in Water Resources
Mr	Nasser Ahmed Gillani	Pakistan	Ministry of Planning, Development and Reforms, Pakistan
Mr	Faizan ul Hasan	Pakistan	Pakistan Council of Research in Water Resources
Mr	Ick Hoon Choi	Republic of Korea	K-eco
Mr	Yong Jae Choi	Republic of Korea	K-eco
Ms	Eun Hae Jeong	Republic of Korea	UNOSD
Ms	Giwon Seo	Republic of Korea	Ministry of Environment, Korea
Mr	Min Ho Song	Republic of Korea	K-eco, now at UNESCO-IHP
Mr	Okhyun Yang	Republic of Korea	UNOSD
Mr	Young Gwon Yoo	Republic of Korea	K-eco
Mr	Jong Soo Yoon	Republic of Korea	UNOSD
Mr	Ouasli Abderrahman	Tunisia	Ministry of Agriculture, Water Resources and Fisheries
Ms	Aida Jridi	Tunisia	DGGREE, MARHP
Ms	Olfa Mahjoub	Tunisia	INRGREF
Ms	Awatef Messai	Tunisia	DGEQV, MALE
Mr	Mohamed Tahrani	Tunisia	MDICI

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UNITED NATIONS
UNIVERSITY
UNU-INWEH
Institute for Water,
Environment and Health

204-175 Longwood Road South
Hamilton, ON Canada L8P 0A1

1-905-667-5511
www.inweh.unu.edu