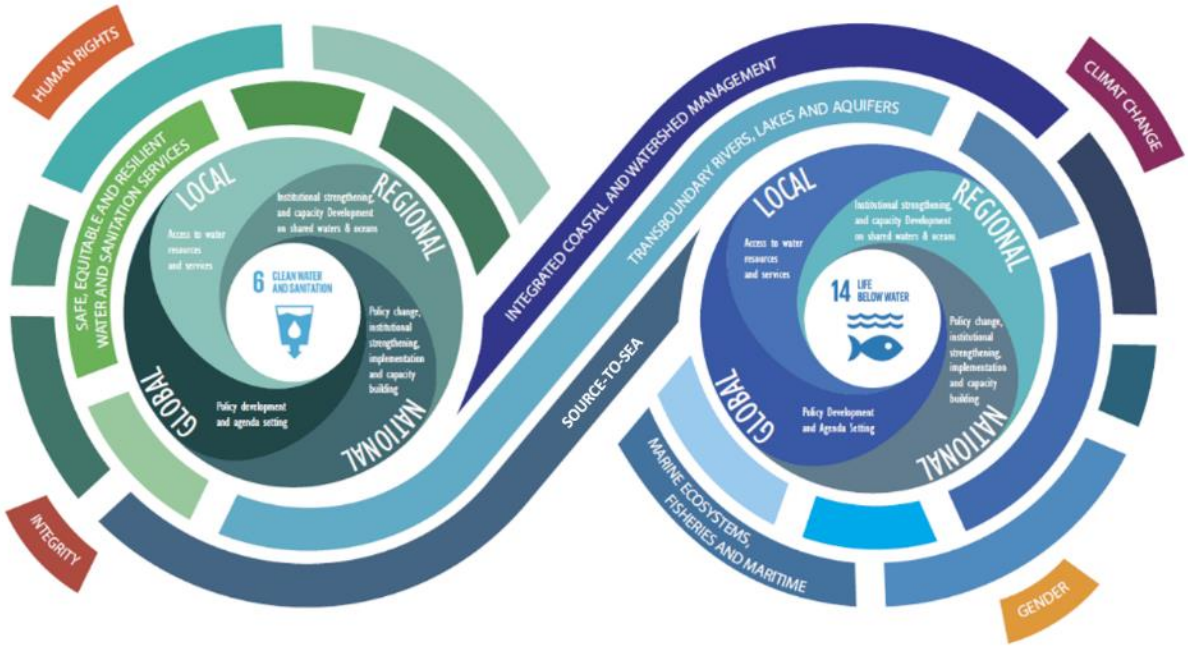
Water and Ocean Governance Programme
Contribution to Realizing the UNDP Strategic Plan



2014-2021 Final Report to Sida

UNDP Ref: Award No 50169 Sida Contribution Ref No 61050034

With support from:

Sweden
Sverige

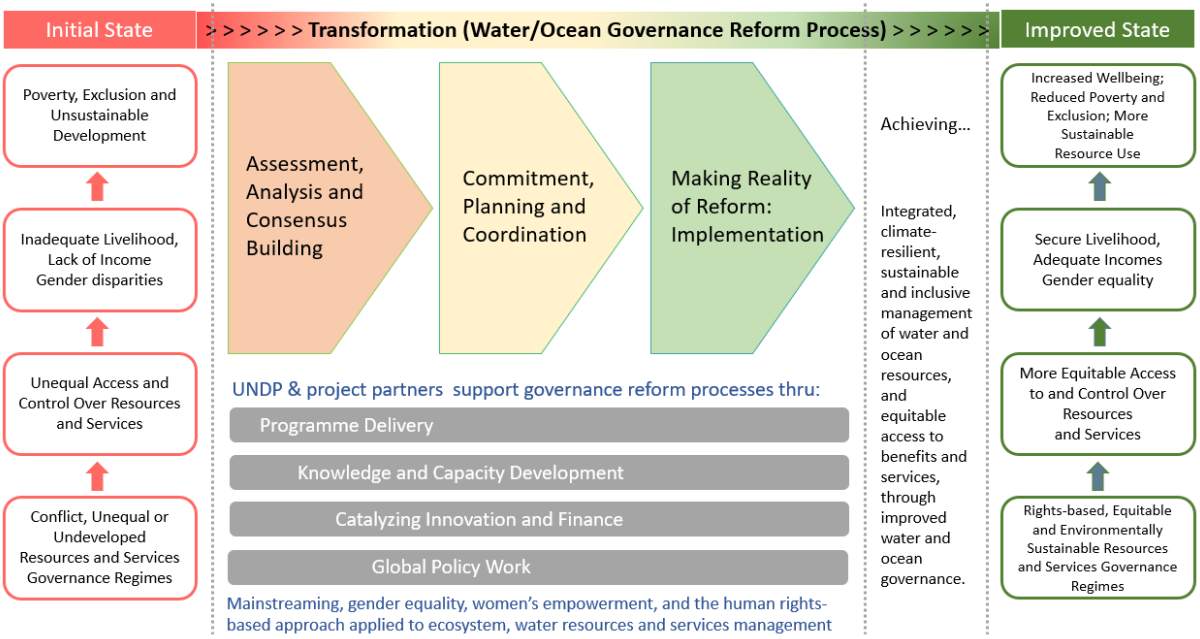
Contents:

Cover image: 2021 Update of image designed by Antoine Delepiere, water expert seconded by France, 2017-2019.

EXECUTIVE SUMMARY

This is the Final Report to the Swedish International Development Cooperation Agency (Sida) relating to Sweden's support to the *UNDP Water and Ocean Governance Programme (WOGP) Contribution to Realizing the UNDP Strategic Plan*. This support, by way of Cost-Sharing Agreement, was initiated 1 July 2014 and concluded 1 May 2021. The report outlines overall achievements of the WOGP and its portfolio of projects, and the utilization of Sida funding.[1]

Through policy advocacy, knowledge management, capacity development, and programmatic support, the UNDP-WOGP assists stakeholders to devise and agree on priority water and ocean governance measures and reforms, efficient means of implementation, and ways to catalyze the necessary investments to accelerate action, as per theory of change which has served as guide and rationale for WOGP-driven initiatives.



This final report summarizes the outcomes of WOGP's work, including salient contributions from the vast portfolio of projects overseen by the Programme. These results are contextualized into the 2030 Development Agenda, UNDP's Strategic Plan, WOGP's theory of change and related indicator matrix, as well as overall impact in terms of improving water and ocean governance more broadly.

As UNDP's focal point for Sustainable Development Goals (SDGs) 6 and 14, WOGP's endeavors span the thematic areas of water supply and sanitation, water resources and coastal management, protection of transboundary surface and groundwaters, and sustainable management of oceans – all

[1] The funding accounted for in this report refers to the UNDP-Sida Cost-Sharing Agreement from 2014 [Sida Ref 61050534, UNDP Award no 50169], constituting Sida's support to the Water and Ocean Governance Programme Contribution to Realizing the UNDP Strategic Plan. The total disbursement under this Cost-Sharing Agreement (2014-2021) amounted to SEK 165 million, equivalent to US$19,715,536 received by UNDP.

with a 'source-to-sea' and climate resiliency perspective.[2] Moreover, the Programme integrates cross-cutting issues of human rights, integrity and gender equality, which have in practice developed into a thematic area in its own right.

The vast majority of WOGP projects are financed by the Global Environment Facility (GEF), Green Climate Fund (GCF), Adaptation Fund and Least Developed Countries Fund (LDCF). The active projects of the WOGP portfolio, listed in Annex 1, are together valued at nearly US$375 million, including the contribution from Sweden. The total support from Sweden to the WOGP constitutes 4.4 per cent of portfolio value.[3]Sida's support is crucial for the WOGP cross-programme knowledge management, capacity development, policy advocacy and thought leadership. This way, the actual value of Sida's contribution goes well beyond its proportional size of the portfolio.

The support to UNDP's country offices is organized through the UNDP Global Policy Network (GPN) but typically delivered through the mechanisms developed through long-standing partnerships: The UNDP-SIWI Water Governance Facility (WGF), hosted by the Stockholm International Water Institute (SIWI), and the International Capacity Development Network for Sustainable Water Management (Cap-Net UNDP), since 2019 hosted by the Global Water Partnership Organization (GWPO), are integral to WOGP's endeavors. IW:LEARN – the UNDP-coordinated GEF International Waters Learning Exchange and Resource Network – is equally critical for cross-project knowledge management and support. Other important mechanisms for coordination, country and inter-agency collaboration are UN-Water and UN-Oceans.

UN-Water, coordinating the efforts of UN entities and international organizations working on water and sanitation issues, is one of the more active inter-agency collaboration mechanisms of the UN system. UNDP plays a critical role in UN-Water's endeavors to inform policy, especially by advocating for participatory and rights-based water governance in World Water Development Reports and other publications, and leadership in UN-Water's country-level engagement. Going forward, the country-level coordination is to be channeled through the SDG 6 Global Acceleration Framework. The advocacy for inclusive water governance arrangements continues through the preparations (and follow-up) of the United Nations 2023 Water Conference.

Through its long-standing engagement in promoting the sustainable management and governance of Large Marine Ecosystems, UNDP is one of the major providers of ocean governance solutions. Bridging social, economic and environmental concerns related to ocean challenges, UNDP-WOGP's portfolio of projects has also had major impact on fisheries and coastal management in Asia, Africa, Central Europe, and Latin America and the Caribbean.

[2] Sida's support to the WOGP cuts across all the thematic priority areas, and it is counted among the global/cross-cutting programmes in the WOGP portfolio. However, the support to water supply and sanitation endeavors has been phased out, implying a shift in the programmatic work supported by Sida towards freshwater, coastal and marine resources management. This has implied that latter years' investments have not been geared directly at SDG targets 6.1 and 6.2 but more broadly at integrated management of water and coastal resources, e.g. as captured by targets 6.5 and 14.1, putting the Programme's contribution firmly into the realm of environment rather than socio-economic endeavors.

[3] The contribution from Sida within the WOGP portfolio includes also newer support like the Ocean Innovation Challenge (OIC) and the freshwater and ocean governance parts – thematic area B – of the Sida-UNDP Strategic Collaboration Agreement on Environment and Climate Change. The still active part (2019-2021) of the WOGP Cost-Sharing Agreement – incorporated into the Global Water and Ocean Governance Support Programme and hence included in the WOGP portfolio calculation – amounts to US$4.5 million, which represents 1.2 per cent of the active portfolio value.

Recognizing the significant gaps remaining in progress on implementing nearly all the SDG 14 targets, to spur further innovation towards resolving ocean challenges, UNDP launched its Ocean Innovation Challenge (OIC) with support from Sweden in December 2019.[4] The first cohort of innovators, addressing SDG 14.1 on marine pollution, were presented in a Conversation with the UNDP 2020 Ocean Innovators World Ocean Day 2021, featuring Norwegian and Swedish royal highnesses. The second call, on sustainable fisheries, is under review to select the most promising innovators. The third OIC call will focus on the management and protection of marine and coastal ecosystems and non-fisheries blue economy innovations.

The cross-cutting concerns of UNDP-WOGP, principally climate change resiliency, but also human rights, integrity, and gender equality, are continued and reinforced through the interlinked Global Water and Ocean Governance Support Programme,[5] Sida-UNDP Strategic Collaboration Programme on Environment and Climate Change[6] and the overarching Climate Promise. These programmes emphasize the cross-sector and cross-programme integration which is critical to the achievement of the 2030 Agenda and the UNDP Strategic Plan.

[4] The Ocean Innovation work was enabled by a 2.2 MUSD 'proof-of-concept' support from Sida [Contribution No 61050352]. OIC support is maintained through the Sida-UNDP Strategic Collaboration Programme on Environment and Climate Change, providing an additional 3.4 MUSD, as well as contributions from Norway: 1.1 MUSD contributed in 2020, and another NOK 25 million (approx. 2.7 MUSD) agreed in 2021.

[5] The Sida support to WOGP constitutes the principal funding source of Atlas Output # 00113069.

[6] The Water and Ocean funding is administered as Atlas Output # 00120004

OVERVIEW OF UNDP-WOGP CONTRIBUTION

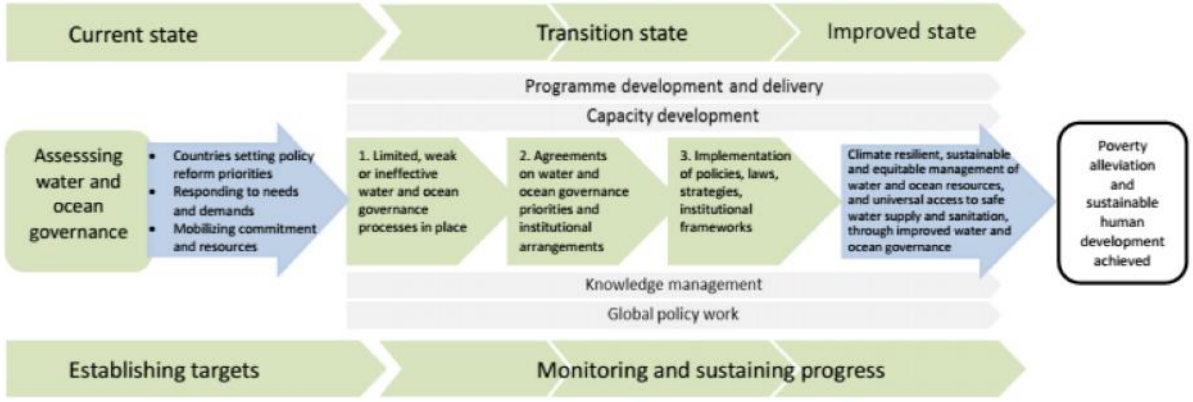
This section summarizes the UNDP-WOGP results from several perspectives. First it relates to the evolution of the WOGP theory of change and established result reporting framework. Then it provides a broader outlook on results in the reporting framework and context of the UNDP Strategic Plan. The last two sub-sections touch upon global progress on the SDGs 6 and 14 and the broader impact of WOGP's work on issues like climate integration, source-to-sea perspectives, water security and inclusive governance.

WOGP Theory of Change and Result Reporting Framework

WOGP supports countries and partners by way of programme development and delivery; capacity development; knowledge management; and global policy work.

In line with the WOGP (incremental) theory of change; the change is initiated by an assessment of the current state, along with agreement around existing needs and demands, policy reform priorities, as well as the requisite commitment and resources. In the transition state, governance reform and institutional arrangements, including policies and laws, are implemented towards the improved state with '*climate resilient, sustainable and equitable management of water and ocean resources, and universal access to safe water supply and sanitation through improved water and ocean governance*.' This in turn alleviates poverty and achieves sustainable human development.

Figure 1 – WOGP theory of change (2014 illustration)



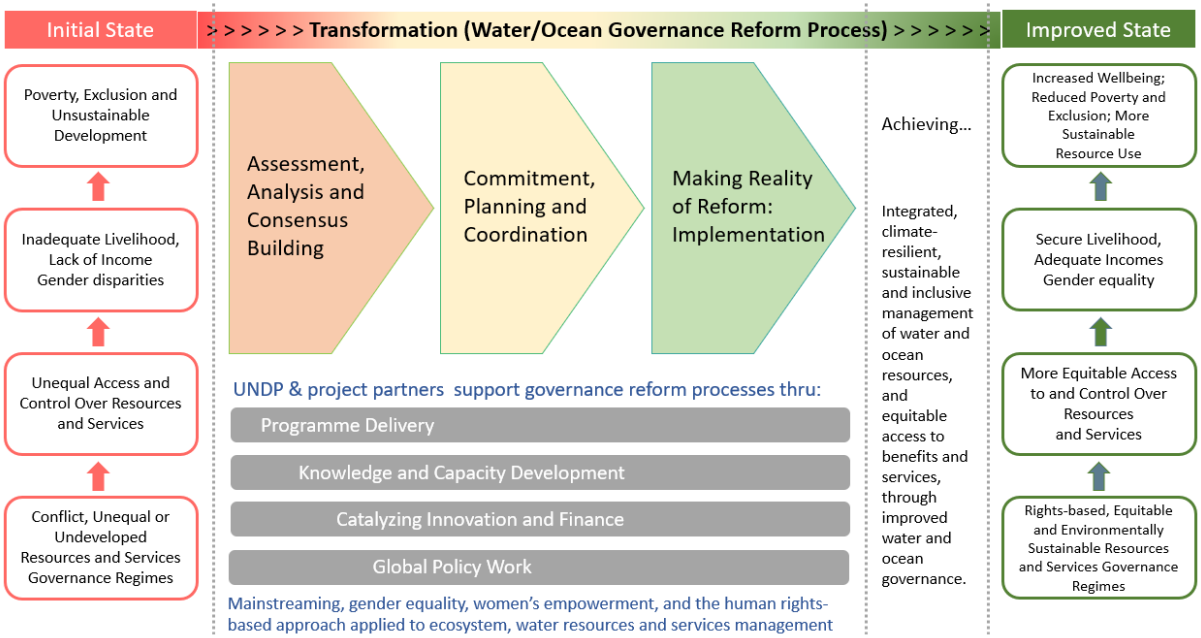
Source: UNDP (2014) Water and Ocean Governance Programme Contribution to Realizing the UNDP Strategic Plan: Figure A1.3. Theory of change: stages in governance progression to achieve the UNDP Water Vision

Figure 1 above shows how this was illustrated in the 2014 write-up of the Water and Ocean Governance Programme Contribution to Realizing the UNDP Strategic Plan. This theory, in turn, builds on the GEF TDA / SAP [Transboundary Diagnostic Analysis / Strategic Action Programme] approach

developed for GEF-International Waters.[7] It is also the model around which the WOGP result reporting framework was constructed.

A theory of change must not be static but continuously pondered and sharpened through analysis and distilling of lessons learned out the operations. For WOGP, the most prominent review of its theory of change was undertaken in the exercise of sympathetically reviewing What Works in Water and Ocean Governance.[8] Building on this review, the UNDP support to the country reform *process* came to be clarified as programme delivery, knowledge and capacity development, catalyzing *innovation and finance*, and global policy work. The expanded illustration also delves into the internal dynamics of the initial and improved states, and updates the vision towards achieving: *'Integrated, climate-resilient, sustainable and inclusive management of water and ocean resources, and equitable access to benefits and services through improved water and ocean governance,'* see Figure 2. This illustration was produced in the process of operationally bringing the Sida-financed parts of WOGP's work into one project, the Global Water and Ocean Support Programme.

Figure 2 – WOGP theory of change (2019 illustration)



Source: Global Water and Ocean Governance Support Programme (Project Document), page 13 (based on WOGP Contribution to Realizing the UNDP Strategic Plan and discussions in the process of producing the Impact Stories from the UNDP Water and Ocean Governance Programme 'What Works in Water and Ocean Governance')

[7] The Transboundary Diagnostic Analysis / Strategic Action Programme (TDA/SAP) approach is the major strategic planning tool for GEF International Waters Projects (See: Manuals and Methodologies: TDA/SAP - A Planning Tool for IW)

[8] UNDP (2018). What Works in Water and Ocean Governance: Impact Stories from the UNDP Water and Ocean Governance Programme. (https://www.undp.org/content/undp/en/home/librarypage/environment-energy/water_governance/what-works-in-water-and-ocean-governance.html)

The government / partners' steps and parts of UNDP's support (capacity development) towards a governance transition, are captured by the four outcomes (also tallying with some of the GEF project stages) formally reported on by WOGP to Sida:

Outcome 1: Common understanding among stakeholders at different levels on gaps and barriers
Outcome 2: Agreement on priority water governance reforms and/or investment priorities
Outcome 3: Implementation of agreed governance frameworks (policies, laws, institutions, strategies, etc.) and local action
Outcome 4: Institutional and human capacity and knowledge base strengthened to formulate and implement relevant policies, laws and strategies

In relation to this 'governance transition' it should be noted that countries are of course in constant evolution and flux, implying that assessment, agreement, implementation are continuous and overlapping processes. Whereas project implementation may be forced into a linear process; a governance transition of a country or basin is bound to be 'messier' and more prone to other influences. Result reporting is also dependent upon a conducive monitoring and reporting framework. It is notably easier to report on project-internal progress compared to broader influencing factors which may nonetheless have greater influence on the final outcome and impact.

With these caveats, results have been reported annually to Sida in line with the result reporting matrix capturing the main elements of the WOGP theory of change. Annex 2 below provides a global summary of results from 2014-2020, along with some indicative examples or explanation. More detailed results for any particular year can be read from the relevant WOGP Annual Report.[9] All results are reported in relation to the thematic priority areas as defined in the *Water and Ocean Governance Programme Contribution to Realizing the UNDP Strategic Plan 2014-2017*. These are:

1. **[climate-resilient access to water supply and sanitation;][10]**
2. **climate-resilient integrated water resource and coastal management;**
3. **protection of transboundary surface and groundwaters in a changing climate; and**
4. **sustainable management of oceans in a changing climate.**

[5.] cross-cutting governance issues: capacity development; human rights-based approaches (HRBA); water integrity; and gender.[11]

Annex 2 (starting on page 90) summarizes and exemplifies results reported annually since 2014. A snapshot of this summary is contained in Table 1, drawing essentially on Annex 2 for thematic priority areas 1, 2 and 5, and from the cumulative transboundary results contained in Table 2 below for thematic priority areas 3 and 4.

[9] The WOGP Annual Reports to Sida are being uploaded on the relevant IATI Transparency Page: UNDP Water Governance Support Programme Award/Project #50169

[10] The thematic priority area of 'climate-resilient access to water supply and sanitation' is bracketed because the Sida strategy that provides support to the WOGP does not include this priority area. Sida-supported activities in this area have hence been gradually closed and completed during 2019. Yet, since results, by definition, are produced *after* the intervention, the theme remains in the result reporting framework.

[11] The cross-cutting issues are treated as a thematic priority area in the budget and results reporting, to be appropriately highlighted but not attributed to any single other priority area. (In portfolio overview, 'cross-cutting' also coincides with 'global' activities.)

Table 1 – Snapshot of Results Status of the four thematic priority areas in relation to the four WOGP outcomes

Stage in governance progression Thematic priority area	Outcome 1: Common understanding among stakeholders at different levels on gaps and barrier	Outcome 2: Agreement on priority water governance reforms and/or investment priorities	Outcome 3: Implementation of agreed governance frameworks (policies, laws, institutions, strategies, etc.) and local action	Outcome 4: Institutional and human capacity and knowledge base strengthened to formulate and implement relevant policies, laws and strategies
Climate-resilient access to water supply and sanitation	**36** assessments strengthening understanding gaps and barriers, including on accountability and integrity	Agreement on priority reforms and priorities in **17** countries	**19** countries implementing governance frameworks **2** global / regional adoptions of integrity and transparency principles. **12** countries improved access to water and sanitation for >**70,000** people	Nearly **5000** people with strengthened capacities to formulate and implement relevant policies, laws, and strategies
Climate-resilient integrated water resource and coastal management	**27** assessments (**24 S2S/R2R**) conducted national inter-sectoral coordination mechanism established for **18** major water bodies	**6** global institutions / financing mechanism integrating S2S approach, **17** SIDS instituting national IWRM	**20** SIDS implementing R2R IWRM/ICM **22** countries implement water governance reforms at the national / sub-national levels **12** national institutions set up.	**3,800** individuals with improved capacity and knowledge on issues such as water efficiency, pollution, and climate change. (+>400,000 students in contact with EDM-Black Sea Box)
Protection of transboundary surface and groundwaters in a changing climate	**22** multi-country agreement on priority transboundary issues (column 1, table 2)	**21** multi-country agreement on governance reforms (column 3, table 2)	**17** shared rivers/lakes/aquifers implementing stress-reduction measures (column 6, table 2)	**28** shared rivers / lakes / aquifers supported (table 2)
Sustainable management of oceans in a changing climate.	**13** multi-country agreement on priority transboundary issues (column 1, table 2)	**13** multi-country agreement on governance reforms (column 3, table 2)	**12** shared large marine ecosystems implementing stress-reduction measures (column 6, table 2)	**15** shared large marine ecosystems supported (table 2)
Cross-Cutting Issues: Integrity, Human Rights, Gender Equality…	**5** countries carried out water integrity risk assessments	**4** countries agreed on governance with HRBA, gender and/or integrity	**103** communities / organizations in **5** countries implement water integrity action plans	>**6,000** individuals with strengthened capacity on the cross-cutting issues. 7 tools developed

Source: Annex 2: WOGP Result Matrix (Outcomes and Key indicators by Thematic Priority Area) and Table 2 (below)

Table 2 – UNDP-GEF International Waters Portfolio Cumulative Results Tracker 1991-2021

Transboundary Waterbody	Multi-country agreement on priority transboundary issues / causes (TDA/equiv.)	National inter-sectoral coordination mechanisms established	Multi-country agreement on reforms to address priority transboundary issues(SAP/equiv.)	Regional transboundary waterslegal agreement in force	Regional transboundary waters management institution in place	Implementation of stress reduction measures under-way(SAP/equiv. implementation)
Large Marine Ecosystems (LMEs)						
Benguela Current LME	√	√	√	√	√	√
Black Sea LME	√	√	√	√	√	√
Caribbean Sea and North Brazil Shelf LMEs	√	√	√			√
Guinea Current LME	√	√	√	√	√	√
Humboldt Current LME	√	√	√			√
W/C Pacific Ocean	√	√	√	√	√	√
East Asian Seas	√	√	√		√	√
Sulu-Celebes Sea LME	√	√	√			
Timor-Arafura Seas	√	√	√			√
Agulhas/Somali CurrentLMEs	√	√	√	√	√	√
Yellow Sea LME	√	√	√		√	√
Red Sea LME	√	√	√	√	√	√
Rio de la Plata/MF	√	√	√	√	√	√
Sargasso Sea					√	
Pacific Central-American LME						
Transboundary Rivers						
Artibonite River basin	√	√				
Danube River basin	√	√	√	√	√	√
Dnipro River basin	√	√	√			√
Kura River basin	√	√	√			√
Niger River basin	√	√	√	√	√	√
Nile River basin	√	√	√		√	√
Senegal River basin	√	√	√	√	√	√
Orange/Sengu River basin	√	√	√	√ (SADC)*	√	√
Okavango River basin	√	√	√	√ (SADC)	√	√
Tisza River basin	√	√	√	√	√	√
Drin River basin	√	√	√		√	√
Chu-Talas River basin	√	√	√		√	
Puyango-Tumbes, Catamayo-Chira and Zarumilla Aquifers	√	√	√	√	√	
Limpopo River					√	
Mira-Mataje						
Dniester River	√	√	√	√	√	√
Bug & Neman Rivers						
Cuvelai-Cunene					√	
Daugava-Dvina						
Motagua River						
Sixaola River basin						
Transboundary Lakes						
Lake Chad	√	√	√	√	√	√
Lake Prespa	√	√	√	√	√	√

Transboundary Waterbody	Multi-country agreement on priority transboundary issues / causes (TDA/equiv.)	National inter-sectoral coordination mechanisms established	Multi-country agreement on reforms to address priority transboundary issues(SAP/equiv.)	Regional transboundary waterslegal agreement in force	Regional transboundary waters management institution in place	Implementation of stress reduction measures under-way(SAP/equiv. implementation)
Lake Baikal	√	√	√			
Lake Tanganyika	√	√	√	√	√	√
Lake Peipsi	√	√	√	√	√	√
Caspian Sea	√	√	√	√	√	√
Lake Titicaca	√	√				
Transboundary Aquifers						
Dinaric Karst Aquifer	√	√	√		√	
Nubian Sandstone Aquifer	√	√	√	√	√	

Source: **2021 Update** of UNDP-GEF INTERNATIONAL WATERS PORTFOLIO – CUMULATIVE RESULTS TRACKER 1991-2015, page 7 of 2016 International Waters - Delivering Results.

For the transboundary freshwater bodies and large marine ecosystems, results have been reported through Sida Annual Progress reporting (summarized in Annex 2) but also as part of the UNDP-GEF International Waters portfolio. Hence, the cumulative progress of these 45 UNDP-led transboundary freshwater/marine projects (supporting 15 Large Marine Ecosystems (LMEs), 21 rivers, seven lakes and two aquifers) during the past two decades is outlined in Table 2. (This table contains the full set of UNDP-GEF International Waters Transboundary Water engagements. Since not all of them are active as development projects, not all of them feature in the active portfolio, listed in Annex 1).

All in all, thousands of people have been trained, and numerous assessments have been carried out. Above all, some 40 countries (20 of which are Small Island States (SIDS)) are reforming governance frameworks towards the implementation of integrated water resources and integrated coastal management; nearly 30 transboundary water bodies/ecosystems are implementing stress reduction measures, and over a hundred organizations and communities have been implementing water integrity action plans. The actual changes in people's lives and their environments as an effect of these measures can only be conjectured. Some indications / testimonies are provided in the narrative part of the report.

Some aspects of these results are also fed into UNDP's Integrated Results and Reporting Framework (IRFF) attached to the UNDP Strategic Plan, as explained in the next section, Annex 3, and Annex 4.

WOGP Contribution to UNDP Strategic Plans

UNDP does not have a water, coastal or ocean strategy per se, but a broader Strategic Plan. The most recent Strategic Plan posits that: *UNDP works with countries to expand people's choices for a fairer, sustainable future, to build the world envisioned by the 2030 Agenda for Sustainable Development with planet and people in balance.* For this, UNDP supports change in three overall directions: *structural transformation; leaving no one behind; and building resilience*. [12]

The broader directions, development settings or areas of work, as listed in Table 3 with regard to the three most recent Strategic Plans, have been fairly consistent over time. Transformation, resilience and poverty eradication/leave no one behind are the long-standing concerns of UNDPs work.

Table 3 - Overall directions/settings/work areas of UNDP's Strategic Plans

Overall directions, development settings and areas of UNDP's Strategic Plans		
2022-2025 Strategic Plan Directions:	**2018-2021 Strategic Plan Development Settings:**	**2014-2017 Strategic Plan Areas of Work:**
• Structural transformation, particularly green, inclusive and digital transitions; • Leaving no one behind, a rights-based approach centred on human agency and human development; and • Building resilience to respond to systemic uncertainty and risk.	A. Eradicate poverty in all its forms and dimensions B. Accelerate structural transformation for sustainable development C. Build resilience to shocks and crises	Area of Work 1: Sustainable development pathways Area of Work 2: Inclusive and effective democratic governance Area of Work 3: Resilience-building

Sources: UNDP Strategic Plan 2022-2025, UNDP Strategic Plan 2018-2021, and UNDP Strategic Plan 2014-2017

These are huge, whole-of-society puzzles that require collective efforts and integrated approaches. UNDP offers a unique network of global reach and local presence, sectoral expertise and trusted partnerships to work with countries to expand human capabilities to solve these puzzles. As an integrator, UNDP helps governments to convene across line ministries and development partners to promote the relevant responses to the development challenges.

The two latest Strategic Plans also propose a series of signature solutions that can be combined and configured with a mix of interventions to achieve progress towards key SDGs and targets. The six signature solutions are about poverty and inequality, governance, resilience, environment, energy, gender equality. As shown in Figure 3, these are in the most recent Strategic Plan combined with three enablers (strategic innovation, digitalization, development financing) and the three directions (structural transformation, leaving no-one behind, building resilience) as outlined above.

[12] UNDP Strategic Plan, 2022-2025. (https://undocs.org/DP/2021/28)

Figure 3 – UNDP Signature Solutions, Enablers and Change Directions

Source: UNDP Strategic Plan 2022-2025 (popular version, page 7),

Most of UNDP's work on Water and Ocean Governance is fitted into the Signature Solution #4 related to the Environment and a Sustainable Planet. The quantitative result reporting is channeled through UNDP's IRRF which feeds into the overarching development settings and areas of work.[13] The most relevant indicator, for UNDP's GEF-IW work (in relation to the 2018-2021 Strategic Plan) is "1.4.1.2 Natural resources that are managed under a sustainable use, conservation, access and benefit-sharing regime" where it is reported under sub-indicator ***1.4.1.2.c Number of shared water ecosystems (fresh or marine) under cooperative management***.

As outlined in Annex 3, the indicators link action on the ground to the broader development outcomes. It should be noted that at the broader level, freshwater- marine- and ocean-related results also involve disaster risk reduction and people's access to basic services, including water and sanitation. Regarding natural resources management frameworks, the results indicators also emphasize the extent to which such frameworks are gender responsive.

Only a fraction of the detailed results and examples make it into UNDP's corporate annual reporting. Annex 4 brings out qualitative highlights about UNDP's broader water and ocean endeavors, drawing on projects and initiatives from around the network of UNDP's offices. Especially water and sanitation-related endeavors from across UNDP, featuring e.g. the close relation between ocean and biodiversity, water and energy, as well as UNDP's engagement in post-conflict rehabilitation of social and economic infrastructure. In effect, water and ocean concerns are integral to sustainable development.

[13] For the 2022-2025 UNDP Strategic Plan, the IRRF is outlined in its Annex 2. For the 2018-2021 UNDP Strategic Plan, the IRRF is included with targets as its Annex 5. For the 2014-2017 UNDP Strategic Plan, the IRRF with 2017 results are available here.

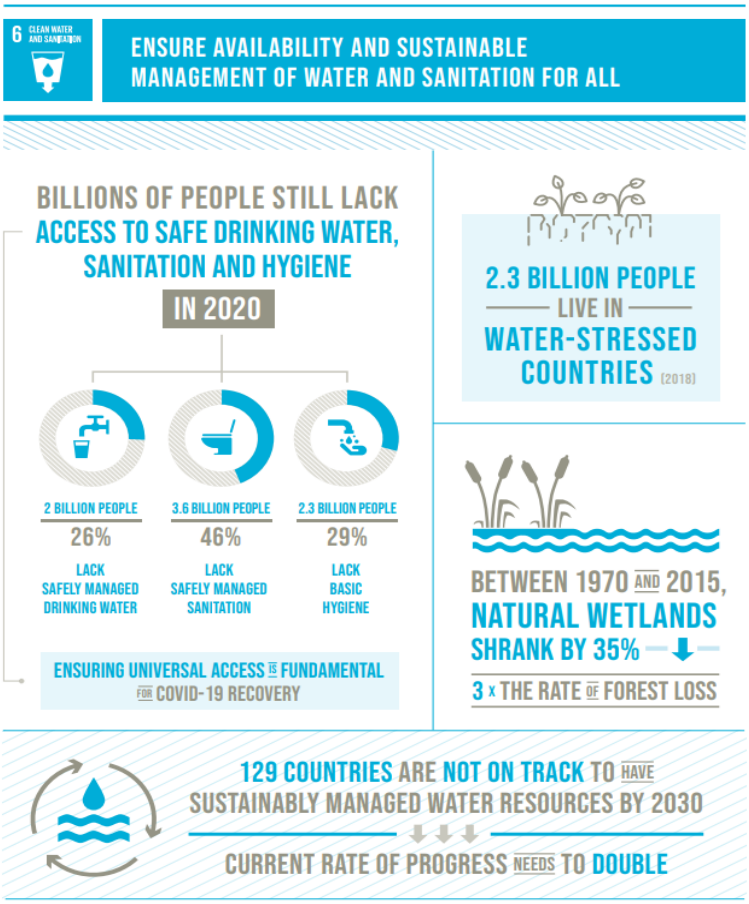
WOGP Contribution in the SDG Context

The UNDP-WOGP works across the SDGs 6 and 14, relating to freshwater and marine resources respectively. The focus on governance and collective efforts towards protecting freshwater and marine resources and delivering related services connects it with the full gamut of Transforming our world: the 2030 Agenda for Sustainable Development.

The 2030 Agenda – the world's plan of action for people, planet, and prosperity, towards universal peace and larger freedoms – is integrated and indivisible. It balances the three dimensions of sustainable development; the economic, social, and environmental, across the goals as well as among the various targets of SDG 6 and 14. Global progress towards the SDGs is monitored by a set of SDG indicators linked to each of the targets.

On SDG 6, the 2021 SDG report emphasizes that billions of people still lack access to safe drinking water, sanitation and hygiene (WASH); that 2.3 billion people live in water-stressed countries; that natural wetlands are shrinking and that current progress towards sustainably managing water resources is insufficient. (See Figure 4). [14]

Figure 4 - SDG 6 Overview



To redress this situation, UNDP – in collaboration with the GCF is implementing several projects to improve water and climate security among vulnerable communities.[15] These efforts relate to improving access to water for human consumption as well as for productive uses.[16] On the governance side, both UNDP[17] GoAL WaSH and UNDP GoAL-WaterS have contributed greatly to more transparent, accountable and

[14] United Nations (2021). The Sustainable Development Goals Report 2021. New York. (https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf), page 13.

[15] Beyond the endeavors under UNDP Climate Change Adaptation (CCA), WOGP endeavors in this area have been spearheaded by the GoAL WaSH Programme and the collaboration with UNICEF and UN-Habitat.

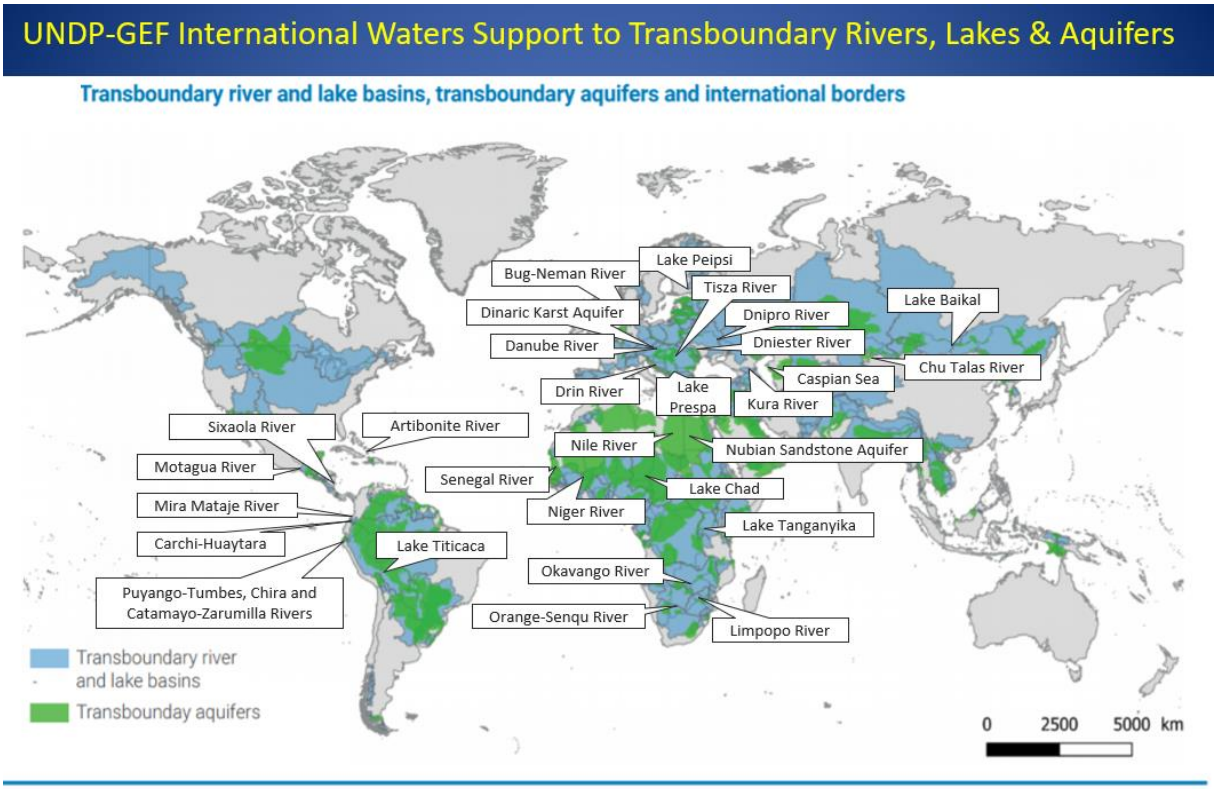
[16] Important freshwater-related CCA endeavors include projects addressing water resources management and small-holder productivity (e.g. Strengthening the resilience of smallholder agriculture to climate change-induced water insecurity in the Central Highlands and South-Central Coast regions of Vietnam, and Enhancing Adaptive Capacities of Coastal Communities, especially Women, to Cope with Climate Change-Induced Salinity in Bangladesh) and IWRM/WASH-focused interventions – many on small island states (including,Strengthening the climatic resilience of the drinking water sector in the South of Haiti, and Supporting Vulnerable Communities in Maldives to Manage Climate Change-Induced Water Shortages).

[17] GoAL WaSH = Governance, Advocacy and Leadership in Water, Sanitation and Hygiene; GoAL-WaterS = Governance, Accountability and Learning for Water Sustainability.

participatory water services and water resources management regimes in over 20 countries.

The uptake of Integrated Water Resources Management (IWRM) approaches is far from sufficient. The global call for IWRM implementation was formulated at the United Nations Conference on Environment and Development in 1992 and reiterated through target 6.5 of the 2030 Agenda. Notwithstanding, most countries are not progressing sufficiently, and the rate of IWRM implementation would need to double if SDG target 6.5 were to be reached. Nearly half (47%) of the countries report "low" or "medium-low" levels of IWRM implementation.

Figure 5 – Map of UNDP's engagement in transboundary rivers, lakes and aquifers



Source: UNESCO-IGRAC. 2015. Map of Transboundary Aquifers of the World. Scale 1:50 000 000. Paris, France (aquifers); UNEP and GEF, TWAP River Basins Data Portal: http://twap-rivers.org/indicators/ (accessed 2 July 2018) (river and lake basins)

UNDP – engaging in 30 shared rivers, lakes, and aquifers (see Figure 5) – remains the largest global provider of water resources management solutions in the transboundary context. In partnership with the GEF and the capacity development efforts implemented through the Global Water Partnership, UNDP is vigorously addressing the main deficiencies – coordination, financing, capacity, data- and information-sharing, and ineffective legal frameworks[18] – that hold back IWRM implementation. Among these efforts, Cap-Net is working with UNEP to promote the integration of environmental data

[18] See: UNEP (2021) *Progress on integrated water resources management. Global Indicator 6.5.1 Updates and Acceleration Needs*. (https://www.unwater.org/publications/progress-on-integrated-water-resources-management-651-2021-update/), page XI.

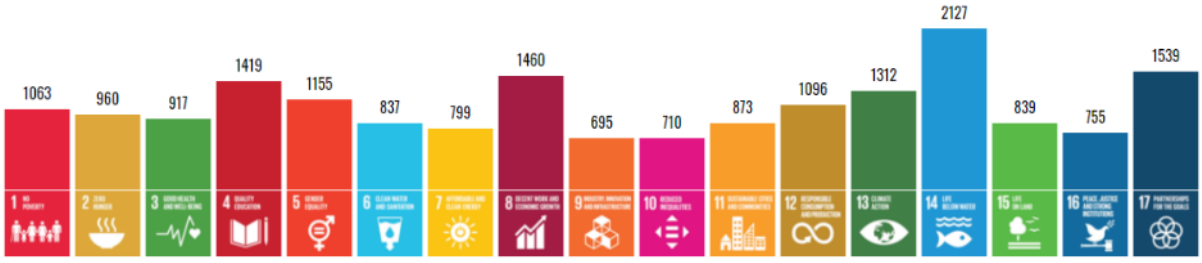
within relevant decision-making processes through multi-stakeholder engagement, to improve the protection, management, and restoration of freshwater ecosystems.[19]

Reflecting the scale and complexity of the challenges and the wide array of responses from diverse actors, UNDP's contribution to global progress is not easily quantified. Nevertheless, a global SDG6 synthesis evaluation positioned UNICEF and UNDP as the most important water agencies in terms of water-related projects selected for evaluation and included in the meta-review of evaluations.[20]

On SDG 14, UNDP has contributed to the improved management of marine resources at the local and regional levels, as well as to global processes of ocean governance.

In conjunction with the 2017 Ocean Conference, UNDP worked with UN-DESA to help structure the call for voluntary commitments and arranged a large set of country-level consultations. It was notable that countries holding consultations before the conference were more forthcoming in terms of recording voluntary commitments on the Partnership Platform. With its over 2000 voluntary commitments, SDG 14 remains the most-subscribed SDG of all, see Figure 6. UNDP itself contributed some 38 voluntary commitments to the SDG 14 platform and continues to populate the registry as new projects come on-line.

Figure 6 - Voluntary Commitments Registered on UN-DESA Partnership Platform, by SDG



Source: SDG Partnerships Platform (https://sdgs.un.org/partnerships)[21]

On SDG 14, the 2021 SDG Report emphasizes the multiple threats to our ocean, putting the livelihoods of over 3 billion people at risk (see Figure 7 below). The livelihood aspect is a key feature of the innovations awarded through Ocean Innovation Challenge to address SDG 14 challenges.

On target 14.1 – marine pollution – this was in focus for the first call of the Ocean Innovation Challenge, resulting in 9 innovations implemented in the 2021-2023 period. Addressing the increasing number of 'dead zones' is a consequence of nutrient pollution, UNDP works with partners on source-to-sea approaches and water quality protection. A very important long-standing UNDP contribution in this area is the multi-agency collaborative work on *Restoring the Danube and Bringing the Black Sea Back*

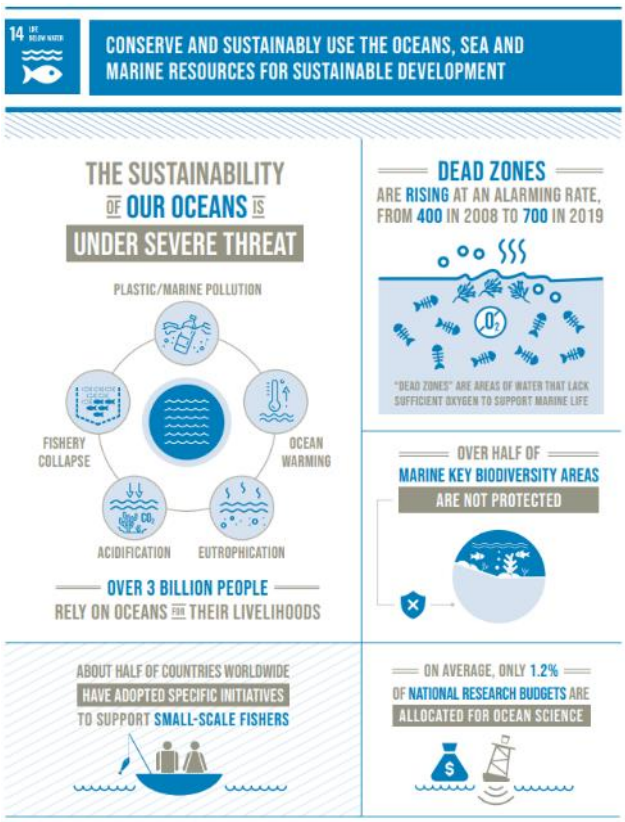
[19] See: Integrating freshwater data into sector-wide decision making to improve the protection and restoration of freshwater ecosystems - pilot project

[20] The Review notes high efficiency in terms of project implementation, but concern as regards the long-term sustainability of endeavors.

[21] The Partnership Platform (https://sdgs.un.org/partnerships) is a global registry of voluntary commitments and multi-stakeholder partnerships made by stakeholders in support of the implementation of the Sustainable Development Goals (SDGs), and through various UN conferences and thematic action networks, including the UN Ocean Conference, the Small Island Developing States Conference, the UN Sustainable Transport Conference, the Rio+20 Conference, and others. All stakeholders are encouraged to register their partnerships and voluntary commitments that support the implementation of the SDGs into the platform, or through the different action networks, per their preference and alignment of interest.

to Life: A series of GEF-financed UNDP projects in the Danube and the Black Sea over 20 years delivered policy, legal and institutional resulting in an enabling environment that catalyzed more than US$3 billion in nutrient pollution reduction investments across the basin countries. These investments helped reduce nitrogen and phosphorous loads to the Black Sea. The downstream impact of this has been the effective elimination of the 'dead zone' in the northwest shelf of the Black Sea, a marked decrease in the frequency of algal blooms, and the return of many species that had become locally extinct. Associated with these changes, there was a recovery in revenues from tourism and fisheries and local livelihoods in the Black Sea region.[22]

Figure 7 - SDG 14 Overview



The above example is an important contribution to the protection and restoration of marine ecosystems, captured by target 14.2. Further in this area, UNDP works with 15 Large Marine Ecosystems – covering nearly 100 countries – many of which have adopted ministerially endorsed implementation measures.

Regarding target 14.3, the GEF-UNDP-IMO GloMEEP project supported uptake and implementation of energy efficiency measures for shipping, reducing greenhouse gas (GHG) emissions from shipping. Further measures to reduce fuel consumption and GHG emissions were address by GloFouling project, reducing friction resulting from biofouling of ships' hulls.

UNDP has a long track-record in support of sustainable fisheries (target 14.4). This includes reducing the pressure on fisheries by e.g. vessel buy-back, marine ranching, reduction in fisheries subsidies, mesh size control, reducing vessel size and power, implementing harvest control measures like 'Total Allowable Catch' and closure seasons, as well as the promotion of green aquaculture and re-employment training to displaced fishermen. UNDP also supports effective institutional cooperation to address fisheries crime (corruption, fraud, trafficking, as well as illegal fishing), and facilitates e.g. SIDS in getting a fair deal in fisheries negotiations. This serves to increase their economic benefits from the sustainable use of marine resources (target 14.7), especially in the Pacific.[23]Small-scale fisheries are supported with a number of projects, with GEF support, in the Latin America and Caribbean region (target 14.B).

On the conservation of coastal and marine habitats (target 14.5), UNDP has facilitated or strengthened the establishment of nearly 70 million hectares of Marine Protected Areas. More broadly, UNDP's portfolio supports scientific knowledge creation (target 14.A) as well as global and regional

[22] UNDP (2018). What Works in Water and Ocean Governance: Impact Stories from the UNDP Water and Ocean Governance Programme. (https://www.undp.org/content/undp/en/home/librarypage/environment-energy/water_governance/what-works-in-water-and-ocean-governance.html) page 78.

[23] UNDP's SIDS offer – Rising up for SIDS- supports the 'Blue Economy' more broadly.

management organizations and arrangements (14.C), collaborating also with UN-OCEANS and the UN Ocean Conferences.

All in all, the 2030 Agenda recognizes that eradicating poverty in all its forms and dimensions, is the greatest global challenge and an indispensable requirement for sustainable development. This resonates with the UNDP Strategic Plans, and the specific Global Water and Ocean Governance Support Programme – into which the Sida-supported WOGP work has been channeled into. This project, initiated in 2019, focuses not only on SDGs 6 and 14, but addresses specifically SDG targets 1.4 on equal rights to resources and services, 1.5 on reducing vulnerability, and 2.3 on increased productivity and income of small-scale food producers. This involves a specific perspective on people and participatory and inclusive environmental resource management measures. As affirmed also in UNDP's Annual Reporting (see Annex 4): People and Planet go together.

So What? – To Where Points the Needle on Water and Ocean Governance?

Among the long-standing pursuits of the WOGP, a few areas stand out as possibly having moved the needle – expanding people's choices for a fairer, sustainable future, with planet and people in balance. These areas cut across the reported results, and relate to climate integration and resiliency, and the role of local communities/indigenous peoples, and innovative financing – especially on SDG14. Finally, the 'good governance' agenda is moving towards participation, accountability and integrity, all within a holistic source-to-sea perspective.

BRINGING WATER INTO CLIMATE, AND CLIMATE INTO WATER

Climate resilience has been an overarching concern for WOGP's work from the onset. In the past decade, however, this recognition has gone beyond integrating climate change concerns in water and ocean governance. Beyond mainstreaming the climate challenge into all its endeavors, WOGP also helped move water and ocean concerns upwards on the international agenda and global climate deliberations.

Through the UNDP Climate Promise – working in 120 countries to reduce greenhouse gas emissions and meet the challenges of climate change – climate has become the overarching consideration for all UNDP's work on natural resources. UNDP, through its mobilization of climate change mitigation financing from the GEF, GCF and other sources, maintains the largest climate change mitigation portfolio in the UN system, cumulatively valued at some US$2 billion in grant finance. UNDP's Climate Change Mitigation portfolio represents a sizeable contribution to overall efforts to protect the ocean and the water cycle from the impacts of climate change.

UNDP's Climate Change Adaptation portfolio spans initiatives in over 137 countries, where UNDP advances a 'whole-of-society' approach to accelerate adaptation, and supports countries to mobilize public and private finance to implement their adaption priorities. UNDP assists government partners to scale up the integration of climate change adaptation into policy, planning, and investments at both national and local levels through the support to National Adaptation Planning (NAP) processes and the

Nationally Determined Contributions (NDCs). UNDP supports climate change adaptation action in the context of agriculture and food security, water resources, coastal zone management, ecosystems protection, public health, resilient infrastructure, urban resilience, livelihoods, and climate information/early warnings.[24]

Moreover, UNDP has, with many partners, pushed important substantive messaging into global climate deliberation. A synopsis of the type of messages put forward, and being practically worked on in projects, is presented here:[25]

On freshwater:

A. **Most impact of climate change is felt through water: "Water is to adaptation what energy is to mitigation."**[26]

B. **Adaptation and related water action are underfinanced and poorly targeted**.[27]

C. **The role of water management in mitigation action remains undervalued.**[28]

D. **Adaptation and mitigation action go together, and rely on policy integration and poverty reduction for success**.[29]

[24] The CCA programme supports water projects on several small islands and helps restore traditional knowledge to solve challenges of today, see e.g. video on Ancient water tanks of Sri Lanka to adapt to a changing climate. In Colombia, climate resilient water management practices are being implemented by vulnerable communities in the Wetlands of La Mojana. On coastal management, Egypt, with support from the Green Climate Fund and UNDP, is protecting its people and its economy from the devastating impacts of sea-level rise. In Liberia, integrated coastal zone management is expected to benefit 250,000 people battling coastal erosion.

[25] The water and ocean thematic messaging for COP26 are included Annex X and made available on UNDP's COP26 Resource Portal. see Water. Thematic Brief for COP26 and Oceans. Thematic Brief for COP26.

[26] World Bank (2016). High and Dry: Climate Change, Water, and the Economy. Washington, DC. (http://www.worldbank.org/en/topic/water/publication/high-and-dry-climate-change-water-and-the-economy), p. vii; UN-Water (2019). Climate Change and Water: UN-Water Policy Brief. Geneva. (https://www.unwater.org/publications/un-water-policy-brief-on-climate-change-and-water/), p. 16.

[27] Mason, *et al* (2020). Just add water: a landscape analysis of climate finance for water. London. (https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/just-add-water-a-landscape-analysis-of-climate-finance-for-water.pdf)

[28] SIWI, UNDP, PIK and SRC (forthcoming 2021). Achieving the Paris Agreement Mitigation Targets through Water [under production].

[29] Timboe, *et al* (2019). Watering the NDCs: National Climate Planning for 2020—How water-aware climate policies can strengthen climate change mitigation & adaptation goals. Corvallis, Oregon. (https://www.wateringthendcs.org/)

The top-line ocean messages include:

1) The impacts of climate change on the ocean

The ocean is one of the largest carbon reservoirs on Earth, holding about 50 times more carbon than the atmosphere:

• **Ocean warming** – the ocean absorbs 93 percent of the additional energy added to the earth atmosphere-ocean system due to anthropogenic climate forcing...

• **Ocean Acidification** – the ocean has absorbed about 30% of cumulative anthropogenic CO2 emissions…

• **Ocean deoxygenation** – As the ocean warms, its capacity to hold dissolved gases decreases…

• **Sea level rise** (SLR) – As the ocean warms, it expands and sea level rises; this SLR is furthered by increased ice loss from Antarctica and Greenland as well as the continued melting and runoff from continental glaciers.

2) The role of the ocean in climate change mitigation and adaptation

The most important factor which will minimize each of the four major impacts of climate change on the ocean would be achievement of the Paris Agreement targets of limiting the increase in global warming to 'well below 2°C', with a goal to keep it to 1.5°C. Beyond this, several ocean-related strategies and approaches can support climate change mitigation and adaptation:

• **Ocean-based renewable energy,** transport, coastal and marine ecosystems; fisheries, aquaculture and dietary shifts; and seabed carbon storage.[30]

• **Protect and restore key 'blue carbon' ecosystems.**

• **Smart, innovative and networked Marine Protected Areas (MPA).**

• **Reduce harmful fisheries subsidies and IUU fishing.**

• **Consider sub-seabed carbon capture and storage (CCS) for greenhouse gas removal.**

• **Reduce other anthropogenic stressors.**

• **Smart marine spatial planning to enhance the multiple uses of the marine environment.**

• **Prioritize ocean finance and leverage of co-benefits.**

Important UNDP practical action in this area includes "Restoring Marine Ecosystem Services by Restoring Coral Reefs to Meet a Changing Climate Future" (financed by the Adaptation Fund), which is increasing climate resilience at both regional and local levels by implementing coral reef restoration with thermally tolerant corals as adaptation to climate change. Moreover, the suite of GEF-UNDP-IMO Global Maritime Partnerships (GloMEEP, GloFouling and GloBallast) have put the global shipping industry on a more sustainable path, both regarding energy efficiency and reduced greenhouse gas emissions as well as regarding biodiversity protection by way of reducing the risks of spreading invasive species**.**

For freshwater, an important unifying WOGP activity became the formulation, jointly with partners, of the guidance on Water Interactions to Consider for NDC Enhancement and Implementation. This helped strengthen intersectoral interactions and commitment at COP events, the Africa Climate Week, as well as through global and regional-level 'water and climate webinars,' bringing water issues more productively into the climate community. As discussed at the most recent Conference of Parties (COP)[26], there is an increasing openness – and urgency - to fully appreciate the role of water management for achieving the Paris Agreement targets. Moreover, the climate urgency seems to be

[30] Identified by the High Level Panel on a Sustainable Ocean Economy in its report "The Ocean as a Solution to Climate Change: 5 Opportunities for Action."

giving impetus and drive to the important inter-dependency and integration water resource management with water services provision.

LOCAL COMMUNITIES – VITAL FOR ECOSYSTEM-BASED RESOURCES MANAGEMENT

Local communities, and especially indigenous peoples, may have a more reciprocal and respectful relation to nature, and consequently a more long-term and less exploitative perspective on natural resources. As expressed by UNDP's NDC coordinator: "As we see circular economy climbing up the political agenda, we must acknowledge that circularity has been a way of life for millennia for Indigenous peoples worldwide." Much of UNDP's and WOGP's work on natural resources management build on this tenet, and therefore advocate for natural resource management regimes that empower local communities to influence and benefit from resource management decisions.

The unwavering support to local community empowerment through natural resource management, be it in fisheries, wetlands or watershed management, has made UNDP a partner of choice for community action in the UN System. UNDP has established itself as the governance specialist and defender of human rights e.g. in the context of the joint UN collaborative production of World Water Development Reports, where UNDP has been leading much of the writing on inclusion.

In practical action, several projects include traditional ecological knowledge and community management schemes – not least through the GEF Small Grants Programme's International Waters window. Building on this track-record, UNDP is anticipated to being local community and indigenous peoples' concerns strongly into the 2023 UN Water Conference, and beyond.

INCLUSION, INTEGRITY AND ACCOUNTABILITY

Inclusive and participatory approaches area critical for the engagement of local communities. Meaningful participation involves having stakeholders being able to express themselves in ways suitable to them. Meaningful participation also requires mutual respect[31] and openness in a way that exposes vested or hidden agendas.

For this reason, participation and inclusion align closely with 'integrity' work to reduce the risk and incidence of corruption. Research has shown that participation by a broader set of stakeholders – including different genders – can break up the close-nit, like-minded, groups in which corruption may breed. Capacity building – including training on direct operational procedures, as well as broader perspectives on gender, rights and integrity – is also critical for reducing corruption. Lack of information and knowledge about procedures and job contents may also serve to increase the risk of corruption.

UNDP-WOGP, together with partners across the globe, have persistently fostered 'water integrity' at all levels. Numerous water practitioners, journalists and policy makers have been trained, and corruption issues has to a greater extent come out into the light. UNDP is also increasingly engaging in

[31] The Recommendations for working with indigenous peoples in rural water and sanitation, developed by the UNDP-SIWI Water Governance Facility, emphasize the qualities of dialogue, mutual trust and respect, for inter-cultural, long-term and inclusive relations with communities.

ways of reducing illegal, unreported and unregulated (IUU) fishing as well as broader fisheries crime, through research and partnerships.

WOGP has been a critical global force for the greater inclusion, integrity and accountability[32] in water and ocean governance. This is important not only for improving equity or the situation of vulnerable communities. Inclusion, participation, transparency, and accountability are also critical pathways towards greater effectiveness and efficiency in policy implementation across the board.

INNOVATION AND (SEED) FINANCE

UNDP is increasingly emphasizing innovation, not least digital innovation, as a critical pathway for achieving the SDGs. Innovation in all realms is further spurred by seed financing for design, piloting and scaling up.

In this vein, the UNDP Ocean Innovation Challenge (OIC) actively identifies, competitively selects, and fosters ocean innovations that are transformative, sustainable, technically feasible, replicable, scalable, create livelihoods, reduce poverty, and mainstream gender. These innovations are supported in the two-year OIC incubator which provides innovators with technical and management mentoring, communications and promotions guidance, and connecting to capital to ensure a long-term sustainability and upscaling of innovations to address SDG 14.

The OIC with its first call on marine pollution, its second on sustainable fisheries, can make a difference. It is on the verge of scaling up and becoming of global importance. Similarly, in the realm of 'closing the financing gap' on water provisioning in Africa, UNDP and partners are in the process of designing potentially game-changing financing methodologies.

INTEGRATION AND HOLISTIC PERSPECTIVES: SOURCE-TO-SEA

Integration of policy perspectives and different sectoral considerations is as important as stakeholder participation for good governance. UNDP's work. UNDP supports countries across the world to tackle complex development challenges and achieve the SDGs. In the water and ocean arena, such integration is fostered through set of catchment-to-coast, ridge-to-reef and Source-to-Sea approaches.

[32] The tripartite Accountability-for-Sustainability partnership has contributed to the prominent role of 'accountability' in UNICEF's Strategy for Water, Sanitation and Hygiene 2016–2030 .

The Source-to-Sea approach is integral to the work of the WOGP – and its name! it has been implemented through practical action[33] in most of the GEF-UNDP International Waters projects, and not least as ridge-to-reef holistic thinking on SIDS.

At the global level, UNDP has engaged and supported the SIWI-coordinated Action Platform for Source-to-Sea Management (S2S Platform) since its initiation in 2014. This platform has effectively pushed policy, financial and operational commitment to source-to-sea management in support of implementation of SDGs 6 (clean management and sanitation), 14 (life below water), and 15 (life on land). The UN Ocean Conferences (2017 and 2022) and the upcoming UN Water Conference (2023) constitute important forums for such discussion, paving the way for more integration in the support to local action.

[33] Cross-SDG6 integration – to overcome the breach between water and sanitation services provision and the broader water resources management – is addressed in a forthcoming UN-Water/UNDP/UNICEF/SIWI report on Cooperation Opportunities for Improved Integration Across SDG6.

NARRATIVE: UNDP-WOGP SUPPORT TO WATER AND OCEAN GOVERNANCE REFORM

This section highlights achievements of WOGP endeavors, focusing principally but not exclusively on the Sida-financed parts of WOGP's work. It qualitatively complements the cross-portfolio highlights provided in the previous overview section and details contained in Annex 2. The account does not aim for a comprehensive of what has been outlined in previous reporting, but instead provides salient and indicative examples of WOGP's contribution in the areas covered.

Global Policy Work

The main avenue for impacting on the global policy debate goes through the generation of new information insights, discussions of existing knowledge and the dissemination of the resulting implications for policy action and institutional reform. The majority of this work is undertaken in close collaboration with a wide set of partners and especially those collaborating under the umbrella of UN-Water.

UN-Water is one of the more active UN coordination mechanisms, and UNDP is among the most active agencies in this inter-agency collaborative mechanism, involving over 30 members (UN agencies) and more than 40 partners (international organizations).

A longstanding contribution in this area is exemplified by UNDP's involvement in the annual production of the United Nations World Water Development Reports.

UNDP's contribution has principally been channeled through a chapter focusing on governance issues, and there explaining the importance of 1) inclusive and participatory approaches – for different perspectives and all voices to be heard, and 2) integrity and rights-based approaches – for policy agendas to maintain focus on poverty eradication and addressing the needs of the most vulnerable – as legitimate stakeholders and knowledge contributors.

These contributions, greatly drawing on WGF and SIWI support, have been summarized in the first part of Annex 5, containing details on the UN World Water Development Reports produced 2014 to 2021. Forthcoming reports focus on Groundwater (2022 edition) and Partnerships and Cooperation (2023 edition).

In line with these persistent recommendations, UNDP is – in the context of UN-Water collaboration and the preparatory process towards the 2023 UN Water Conference – advocating for systematic stakeholder involvement, to bring on board perspectives of major groups more generally and those of local communities / indigenous peoples in particular.

For the 2018 High-Level Political Forum (HLPF), UN-Water coordinated the production of the SDG 6 Synthesis Report on Water and Sanitation. This report pushes many of UNDP's water-related messages on 1) *integrating* water resources management, 2) addressing poverty and *eliminating inequalities*.

The Synthesis Report indicates that the more important steps towards achieving SDG 6 will come from recognizing the interconnected nature of water and sanitation and acting on the linkages. Among the many important interlinkages to act on, the principal one for WOGP in the past few years has been the water and climate nexus.

As highlighted in the previous section, one of the more important game changers is the slow, but steady, integration of water and climate concerns. The years 2020 and 2021 featured the important global exercise of updating Nationally Determined Contributions (NDCs) to the Paris Agreement. Much of the water-related advocacy was hence channeled through the 'Climate Promise' and geared towards strengthening countries' climate pledges in taking due consideration of water and ocean concerns.

Leading up to the launch of the UNDP Climate Promise, WRI and UNDP developed the Enhancing NDCs – A guide to Strengthening National Climate Plans by 2020. This was complemented with several sectoral guides, including e.g. Enhancing Nationally Determined Contributions: Opportunities for Ocean-Based Climate Action and one [yet to be published] water guide. On the global and regional level, WOGP has increasingly engaged through in the UN Climate COPs, the Race to Zero Dialogues, the regional climate weeks, and other relevant events. Notable here is also WOGP's engagement with the Marrakesh Partnership on the Climate Action Pathway for Water, and three events in the Water Pavilion at COP26.

Another important WOGP endeavor in this area was the 'water and climate' webinars – bringing in contributions from across the WOGP delivery mechanisms and partners, notably the WGF, SIWI, Cap-

Net, GWP and AGWA. The webinars draw on information and arguments put forward in the 2019 UN-Water Policy Brief on Climate Change and Water, 2020 UN World Water Development Report, and the set of sectoral checklists on Water Interactions to Consider for NDC Enhancement.[34] See Figure 8 and Figure 9 for summaries of the 2020 and 2021 editions of the global webinars.

Figure 8– Overview of Climate & Water Webinar Series (2020 edition)

Source: Cap-Net UNDP Annual Report, 2020

Figure 9– Overview of Climate & Water Webinar Series (2021 edition)

Source: Cap-Net UNDP Progress Report, Q3-2021

[34] This guide has inspired a new offering by AGWA, which is currently testing and refining the checklist, and is going to include Climate Promise countries in the next round.

Ocean policy will be getting important attention in 2022, featuring the second UN conference on the Ocean to be held in Lisbon in June-July, followed by the HLPF reviewing COVID-19 recovery and 2030 Agenda advancement including a focus on SDG14.

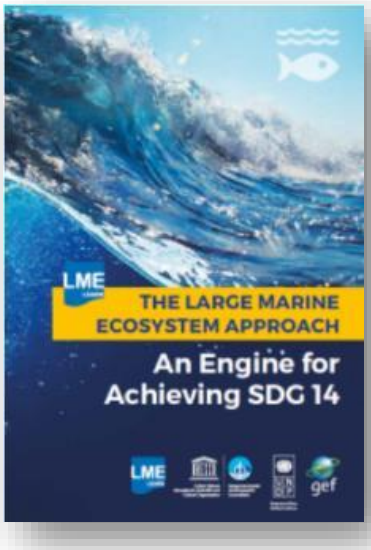
For the first UN conference on the Ocean in 2017, Our Oceans, Our Future: Partnering for the Implementation of Sustainable Development Goal 14, UNDP assisted the UN Department for Economic and Social Affairs (UN-DESA) and the co-chairing governments of Fiji and Sweden in the arrangements. A major achievement involved the facilitation of multi-stakeholders' engagement through the Ocean Action Hub. UNDP also proposed and led the design of the Voluntary Commitments platform launched through the Ocean Conference which led to over 1,400 voluntary commitments by governments, UN, civil society, academia, the private sector and philanthropic organizations by the final day of the Ocean Conference.

Andrew Hudson, UNDP, provided an overview of the linkages between SDGs 6 and 14.

Among the side events, UNDP, with WGF support, organized a joint UN-Water and UN-Oceans event: ***Joining hands to help achieve SDGs 6 and 14 – a win-win for freshwater and oceans***.

This is an important outcome of the groundwork of the **Source to Sea Action Platform** (S2S Platform), whose conceptual framework and theory of change for source-to-sea management this year was adopted as a STAP Advisory Document by the GEF and published as an open access article in the Water Policy journal.

The Ocean Conference and 2017 HLPF also provide the ideal timing for LME:LEARN to put forward The Large Marine Ecosystem Approach - An Engine for Achieving SDG14. This publication provides a five-module strategy for assessing and monitoring LMEs and for taking remedial actions toward the recovery and sustainability of degraded goods and services in LMEs.



On the scientific side, UNDP works with the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP). This advisory body, established in 1969, is composed of a group of independent scientific experts that provides advice to the UN system on scientific aspects of marine environmental protection. This contribution towards maintaining a knowledge base and creating new scientific insights contributes specifically to SDG target 14.A.

A major part of the knowledge generation and policy advocacy is also undertaken as part of sub-national, national and regional/transboundary projects as exemplified in the section on Programme Delivery further below.

PUBLICATIONS

In the 2014 -2021 period, the WOGP produced over 130 knowledge assets, which on a rapid count comprise 11 Cap-Net manuals, 27 tools, 62 reports and 31 briefs. In addition, WOGP collaborators have contributed to a range of journal articles on large marine ecosystems, water, IWRM, WASH, and human rights. A quick classification puts most of the publications as related to water [resources] governance or water, sanitation and hygiene (WASH), followed by biodiversity and ecosystems issues and water integrity, see Table 4 – Thematic Spread of WOGP Publications, 2014-2021 below.

Table 4 – Thematic Spread of WOGP Publications, 2014-2021

Topic	Nr. Of Publications
Water Governance	103
WASH	85
Biodiversity & Ecosystems	38
Integrity / Anti-Corruption	31
Water Quality	27
IWRM	26
Transboundary Waters	24
Climate Change	22
HRBA	19
Poverty & Development	17
Oceans	17
Gender	14
Decentralization	13
Data & Innovation	13
Finance & Economics	13
Urban	12
Indigenous	8
Source-to-Sea	8
Private Sector	7

A listing of publications and communications assets, by category, generated by (or about) the WOGP is contained in Annex 5. The annex also contains a list of selected videos (starting page 154) generated by WOGP projects. To this should be added the operational reporting, e.g. Annual Reports provided to Sida and external reviews and quality assurance documents.

Forthcoming publications worth mentioning include a study on the role of water management in achieving the Paris Agreement targets (in collaboration with SIWI, SRC, PIK and GIZ), an NDC guide on water (with WRI), a book chapter on urban river governance, and a study entitled 'Cooperation Opportunities for Improved Integration Across SDG6' which is being reviewed by UN-Water members and partners.

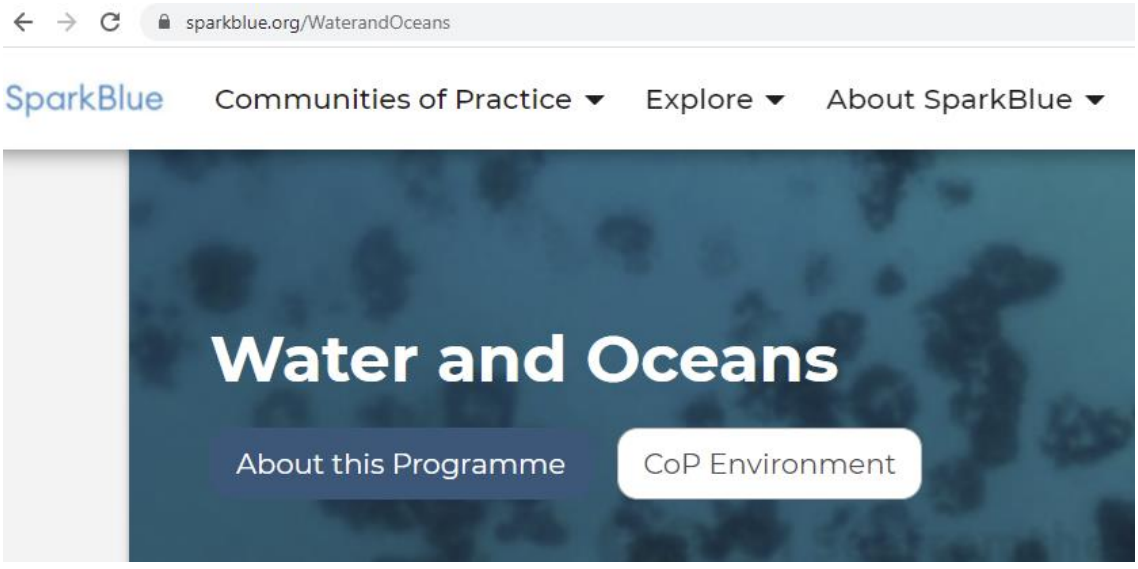
In 2017, the Water and Ocean Governance Programme produced its first global brochure, *Delivering on the Sustainable Development Goals*, highlighting the issues at hand and how UNDP's response contributes to the achievement of the full 2030 Agenda. It is available in English, French and Spanish.

WEBSITES

The previous undp.org/water has been suspended. Whilst a new WOGP site is to be developed, the https://www.sparkblue.org/WaterandOceans has come to serve as the main (temporary) site for UNDP's water and ocean governance programme information.

The presently active WOGP-related websites are the following:

- https://www.sparkblue.org/WaterandOceans
- (https://www.undp.org/expertise)
- https://www.oceaninnovationchallenge.org/
- https://www.oceanactionhub.org/
- https://cap-net.org/
- https://www.watergovernance.org/
- https://iwlearn.net/



Catalyzing Innovation and Financing

A major impetus to support innovation to address SDG14 challenges is composed by the UNDP Ocean Innovation Challenge (OIC).[35] Officially launched in December 2019, the OIC identifies and finances pilot initiatives that demonstrate innovative approaches to resolve ocean sustainability challenges.

The first call for proposals (link) focused on reducing marine pollution – SDG target 14.1: "By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution" –attracted 609 proposals (concept notes). After a first screening against OIC selection criteria, the most promising proposals were shortlisted and invited to submit full proposals, which were subsequently subjected to both external expert peer review and internal administrative review towards final selection of innovators by the OIC Technical Review Board.

The results of the 1st call were officially announced in March 2021 (Nine projects combating marine pollution selected as UNDP Ocean Innovators), allowing the innovators to introduce their innovations (https://oceaninnovationchallenge.org/ocean-innovators).

Progress to-date (Nov. 2021) includes initial surveys and reviews and setting up of stakeholder engagement and alliances.

UNDP OIC Round One Innovators Main Outputs to Date:

Adelphi: Report on EPR strategies in Maldives

AquaInSilico: Stakeholder engagement event for wastewater treatment plant improvements in Cape Verde

UNDP Comoros: Waste surveys for plastics management in Comoros

Duke University: Database of 500+ plastics policies globally

Ficosterra: Trainings for farmers on alternative ocean friendly fertilizers in Mexico (soon in Morocco)

Forum for the Future: Collaboration with major textile manufacturer in Malaysia

Fortuna Cools: Upscaling alternatives to polystyrene coolers underway in the Philippines

OneSea: Multi-stakeholder alliances on plastic wastes including cigarette butts, ghost fish gear, single-use plastic, and microplastics in Costa Rica

[35] The OIC has financial support from Sweden and Norway. Note that the Sida support to the OIC is a different contribution from the 'WOGP' (Cost-Sharing Agreement, Sida Ref 61050034/UNDP Award 50169).

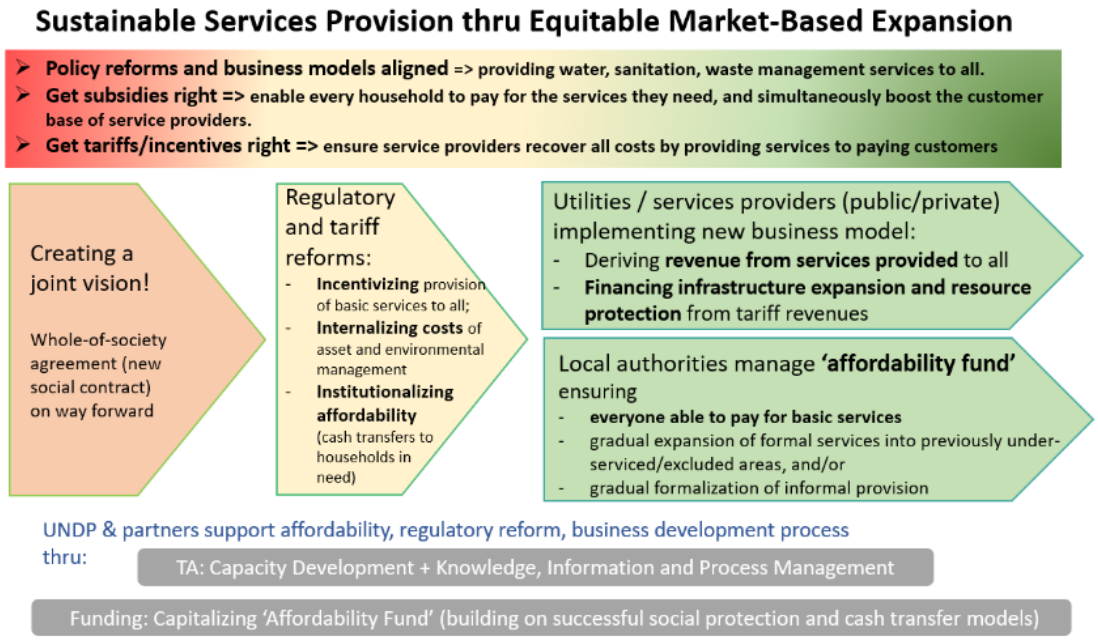
Concurrently, the second call for ocean innovations on sustainable fisheries (14.4, 14.7, 14.b) was launched online (link). This call will also contribute significantly to increasing benefits to Small Island Developing States.

The second OIC call drew nearly 300 concept proposals for initial review by the UNDP OIC Technical Review Board, which has been expanded to 8 members (all UNDP Staff) with ocean and fisheries experience. The Board shortlisted some 40 proposals and subsequently invited a cohort of 22 to submit detailed technical and operational proposals for review.

Top international experts in the very specific topic of each proposal have since conducted anonymous expert peer reviews of the proposals, while the OIC Secretariat made sure that all criteria required for contracting are met and that all advancing proponents will be capable of implementing their proposed projects. The finalization of the review includes a full social and environmental safeguards screening process. It is expected that some 10-12 fisheries innovators will be contracted in early 2022.

On the freshwater side, UNDP is a co-convener of the GWP-coordinated International High-Level Panel on Water Investments for Africa of the Continental Africa Water Investment Programme (AIP). For this, UNDP is building a model for an Africa Water Investment Facility with a strong component on technical assistance to African utilities and service providers to 'level-up' and access financing on their own merits for universal access and the greater good. In conjunction with this, a new governance / regulatory / business model is being explored – drawing on positive experiences from social protection modalities of cash transfers – whereby water services, and the requisite asset management and environmental resource protection (including watershed management as well as wastewater treatment), can be financed through user tariffs. By enabling universal water access and affordability (through subsidies paid only to low-income users), utility operational incentives will align with actual water provision and also enable long-term resource management.

Figure 10 – Illustration of innovative financing – targeting household affordability – in support of renovated business models and regulatory frameworks



Source: based on Blog: Sustainable sanitation for health and dignity.

Capacity Development

The capacity development work of the WOGP is mainly delivered through the South-South cooperation framework consisting of the International Capacity Development Network for Sustainable Water Management (Cap-Net UNDP). Cap-Net is a long-standing UNDP project cooperation (see more in the section on UNDP-WOGP Organization and Delivery Mechanisms further below) and is now celebrating 20 years of existence, see Figure 11.

Figure 11 – Result summary of Cap-Net UNDP @ 20

Key Cap-Net milestones in the 2014-2021 period are illustrated in Figure 12**Error! Reference source not found.** below. **Error! Reference source not found.** indicates that the largest number of training programmes (92) were given on topics principally related to IWRM/ICM. Most participants (over 6,000) were trained – many of them on-line – on cross-cutting governance topics, and nearly as many on topics mostly related to IWRM/ICM.

Table 5 – Cap-Net Trainings 2014-2021: number of programmes and participants, by year and thematic priority area

Year	2014	2015	2016	2017	2018	2019	2020	2021	ALL YEARS
Climate-resilient access to water supply and sanitation									
# Programmes	4	8	3	3	8	8	9	25	68
# Participants	280	449	139	113	551	553	1,079	800	3,964
Climate-resilient integrated water resources and coastal management									
# Programmes	9	15	10	6	14	17	6	15	92
# Participants	241	426	395	257	574	692	1,453	1,606	5,644
Protection of transboundary surface and groundwater in a changing climate									
# Programmes	5	5	6	4	2	6	9	9	46
# Participants	165	129	178	178	59	603	885	943	3,140
Sustainable management of oceans in a changing climate									
# Programmes	-	-	-	-	3	2	4	2	11
# Participants	-	-	-	-	71	33	221	142	467
Cross-cutting Governance Issues: Gender, Integrity and Human Rights									
# Programmes	4	13	3	4	14	11	18	16	83
# Participants	94	344	210	116	748	796	1,908	2,006	6,222
TOTAL: All Thematic Priority Areas									
# Programmes	22	41	22	17	41	44	46	67	300
# Participants	780	1,348	922	664	2,003	2,677	5,546	5,497	19,437

Source: Cap-Net UNDP Progress Report, Q3-2021

A fundamental pillar of Cap-Net is to develop the capacity of water practitioners in themes that support integrated water resources management. This commonly involves adding perspectives of governance, inclusive participation or human rights to technical areas of IWRM, adaptation to climate change, water quality/pollution management or water supply management.

Figure 12 - Key Cap-Net milestones in the 2014-2021 period

Five salient examples of training programmes provided by Cap-Net during this period include courses on water sustainability, non-sewered sanitation, water footprint assessment, water integrity, and IWRM monitoring:

- Water Education for Sustainability and Global Citizenship

This online course aims to create awareness and strengthen water education through increased knowledge on how to embed it into a more challenging and meaningful approach towards Education for Sustainability and Global Citizenship.

In the current global context of acknowledged environmental hazards of pressing importance, Education plays a key role in fostering sustainability and empowering citizens to act locally while contributing to global challenges. Yet educational systems may need to adjust their practices to embrace the full potential that Education for Sustainability and Global Citizenship offers. Content-laden encyclopedic teaching, subject-based curriculum designs and top-down school management approaches can be replaced by student-centered learning, interdisciplinary project-based curriculums and distributed leadership management schemes.

Thus, when a school or university dives into a wholistic approach towards sustainability and global citizenship, other forms of improvement of its teaching and management practices come in the wake and bring forth paradigm shifts that make the school or university a scalable model for sustainable communities.

(4 editions: 2018-2019-2020-2021, 668 participants to-date)

- ISO 30500 and ISO 24521: International Non-Sewered Sanitation Standards

This course aims to encourage the national review, adoption and use of two international non-sewered sanitation standards, ISO 30500 and ISO 24521. It intends to expand the reach of these standards beyond national standards bodies and increase collaboration with WASH sector stakeholders such as relevant ministries, local governments, NGOs and the private sector.

The overall goal of this training is to generate a deeper and shared understanding of ISO 30500 and ISO 24521 to support the United Nations Sustainable Development Goals (SDG) 6.2 and 6.3 by providing adequate access to equitable sanitation and hygiene and by improving water quality.

(2 editions: English, French and Chinese, 2020-2021, 625 participants to-date)

- Evaluación de la Huella de Agua (Water Footprint Assessment)

Globally, there is a growing demand from organizations for tools that allow them to improve water management. Particularly in Latin America and the Caribbean, organizations are increasingly interested in methodologies with international validity and recognition by stakeholders, which allow them to quantify the impacts generated by their activities on water resources.

The ISO 14046 standard is presented as an option to assess the potential impact of products, services or organizations on water in a comprehensive manner, as it takes into account both quantity and quality with a life cycle approach. The main objective of the course is to promote the technical skills of the participants in the realization, evaluation, and interpretation of water footprint studies according to ISO 14046.

The course provides recommendations to anyone conducting a water footprint assessment for any product or organization in Latin America and the Caribbean, providing guidance on

topics such as data sources by country, recommended assessment methods and good practices for accreditation, verification and communication of results.

(4 editions: Spanish, 2017-2019-2020-2021, 519 participants to-date)

- Water Integrity: Principles and Concepts

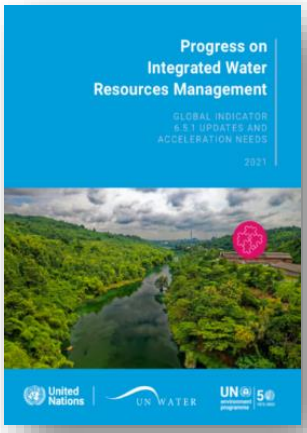
Fighting corruption requires leadership and courage, but also demands knowledge of the phenomenon to stimulate new capacities and boost change in water resources management

This online course aims to create awareness and strengthen water governance through increased knowledge on how to improve transparency and accountability. It offers a "grain" of the needed knowledge required by water practitioners, public officials, NGO personnel, and anybody else who want to contribute to increase the efficiency and integrity of water management.The course explains the principles and concepts of water integrity and helps depicting concrete applications in the daily life of water experts. It aims to create awareness and strengthen water governance through increased knowledge on how to improve transparency and accountability.

(4 editions: 2018-2019-2021 English and Spanish, 471 participants to-date)

- Training of Facilitators Course for SDG 6.5.1

This course allows those interested in organizing a multi-stakeholder consultation process on SDG indicator 6.5.1, the degree of implementation of Integrated Water Resources Management, to fully understand what that indicator is, how it is calculated, as well as both the importance of involving multiple stakeholders and the practical means of involving those different stakeholders.



The overall goal of this training is to generate a deeper and shared understanding of the SDG 6.5.1 survey instrument and how it is calculated among those who will be facilitating the consultation and reporting process around IWRM.

(2020; English, French and Spanish, 207 participants to-date)

In the context of UN-Water and the SDG6 Global Acceleration Framework, the United Nations SDG 6 Capacity Development Initiative builds on existing capacity development activities across the UN-Water family and is co-coordinated by UN DESA and UNESCO. Cap-Net represents UNDP in this initiative.

Workshops and training activities form the mainstay of many projects and programmes delivered by WOGP.

IW:LEARN

IW:LEARN is the GEF International Waters Learning Exchange and Resource Network. The IW:LEARN project was established to strengthen transboundary water management around the globe by collecting and sharing best practices, lessons learned, and innovative solutions to common problems across the GEF International Waters (GEF IW) portfolio. It promotes learning among project managers, country officials, implementing agencies, and other partners. One consistent strategic objective of GEF IW is to support foundational capacity building, portfolio learning, and targeted research needs for ecosystem-based joint management and governance of transboundary water systems.

IW:LEARN supports capacity-building through a consolidated service line including the Biennial GEF International Waters Conference, global/regional thematic training, project twinning exchanges, global dialogue participation, regional transboundary dialogues, programmatic support (in terms of guidelines and toolkits), the project website (a content management system, iwlearn.net), data and information management. GEF IW:LEARN is the flagship of the IW Focal Area and setting the cross-project and cross-agency experience sharing and learning agenda.

Between 2014-2020, IW:LEARN produced a number of noteworthy results across multiple service lines that foster this community—from coordinating information management through the IW:LEARN website (containing over 7000 documents and archived results of the GEF IW portfolio) and its applications, to face-to-face events, including:

- 12 project twinnings with 132 beneficiaries from 33 GEF IW projects;
- 6 regional training workshops on water and ocean management issues with 197 beneficiaries representing 49 GEF IW projects;
- 4 Annual Consultation Meetings of Large Marine Ecosystems attended by 333 LME stakeholders and averaging about 11 active GEF funded LME projects;
- 2 Data and Information Management: Working Group Meeting and Trainings with 43 beneficiaries from 7 GEF funded LME projects;
- 4 regional transboundary dialogues in South-eastern Europe and Central American regions; and
- 2 GEF Biennial International Waters Conferences (the signature learning event of the portfolio) bringing together over 649 transboundary water and ocean stakeholders, averaging about 70 GEF IW projects from 80 countries at each conference.

IW:LEARN portfolio programmatic support also included guidance, publications and other knowledge products and media. IW:LEARN has revised a number of practical manuals and methodologies that have been utilized by IW practitioners (TDA/SAP Methodology; Public Private Partnerships Guidebook; Project Management Manual; Mainstreaming Climate Change Guidance; a series of seven Marine Toolkits). The IW practitioners have responded positively to this effort by using them in developing water management strategies and plans, as well as marine spatial plans.

IW:LEARN also developed a number of thematic information hubs including Gender and Economic Valuation which contain appropriate guidelines as well as best practices from the GEF IW portfolio. Following the impacts of the COVID 19 crisis, IW:LEARN adapted to new realities in terms of executing capacity building activities by ensuring that key courses it had developed for the GEF IW portfolio were available online as self-paced learning. These include the International Waters Project Management Course, Transboundary Diagnostic Analysis-Strategic Action Programme Course, Transboundary

Marine Spatial Planning and Sustainable Blue Economy Course (available in English, Spanish and French), and the Ocean Governance course.

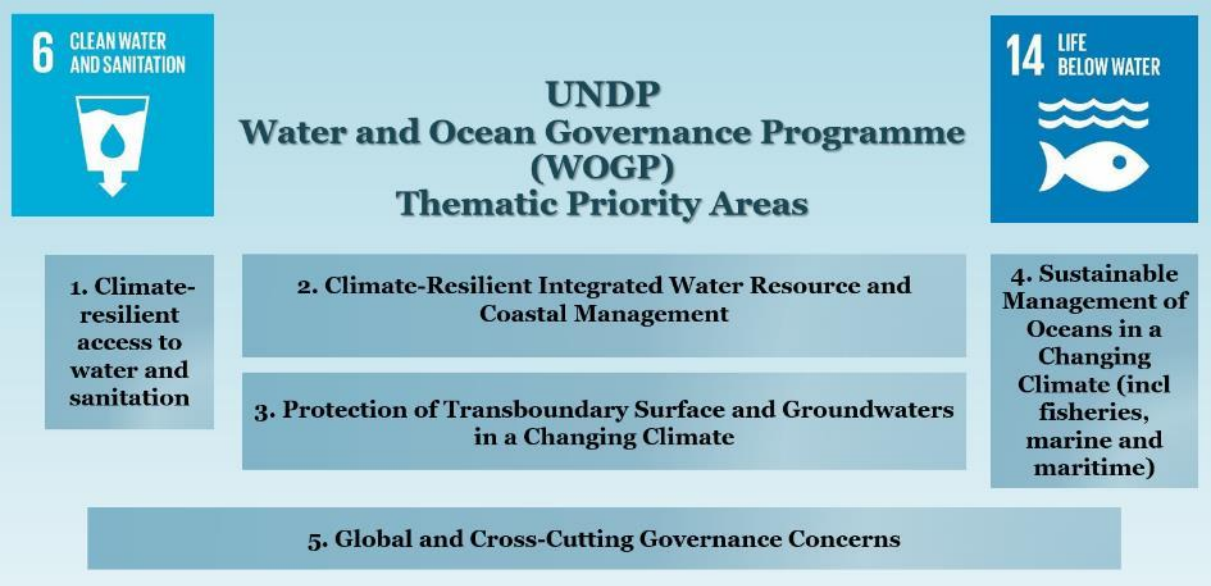
In addition, IW:LEARN was catalytic in the development of two Massive Open Online Courses (MOOCS) on Large Marine Ecosystems: Assessment and Management and Transboundary Freshwater Security Governance which have attracted 11,915 and 2,360 participants respectively. IW:LEARN has also contributed significantly to raising awareness among experts and policy-makers about the GEF IW projects and their outcomes, thus indirectly also contributing to new investments. In addition, it served as a linkage to other global processes, frameworks and initiatives on water management as well as transboundary water cooperation.

The new phase of IW:LEARN (2022-2026) will continue supporting the core mandate of the GEF IW Focal Area to support transboundary cooperation in shared marine and freshwater ecosystems and assist the project portfolio in achieving long-term benefits. The project's proposed activities will help the portfolio to implement regionally endorsed SAP priorities, mainstream gender considerations, and stimulate private sector investment.

Programme Delivery, by Thematic Priority Area

This section covers the project and programme delivery activities, structured around the WOGP thematic priority areas. Whereas the priority area including water and sanitation has been scaled down during the 2014-2021 period, the priority area involving ocean and marine resources governance has been scaled up. Above all, UNDP works with integration and holistic approaches, implying that all the WOGP signature programme / thematic priority areas are connected through the source-to-sea / ridge-to-reef approach. The thematic priority areas are depicted in relation to SDG 6 and 14 in Figure 13 – WOGP Thematic Priority Areas in SDG Context

Figure 13 – WOGP Thematic Priority Areas in SDG Context



The five sub-sections below highlights WOGP work during the period to assist partners to achieve *Integrated, climate-resilient, sustainable and inclusive management of water and ocean resources, and equitable access to benefits and services through improved water and ocean governance.*

Climate-resilient access to water supply and sanitation

WOGPs support water supply, sanitation and hygiene (WASH) enters from the angle of climate change adaptation. The largest such endeavors forming part of the WOGP active portfolio are two projects in the Asian region:[36]

- Addressing Climate Vulnerability in the Water Sector in the Marshall Islands

As with many small island developing states, the Republic of the Marshall Islands (RMI) has had little if anything to do with causing global climate change but is left to now cope with the consequences. The country faces worsening droughts, and coastal inundation which can contaminate groundwater resources, resulting in water shortages that have significant economic and social impacts.

[36] Similar interventions managed under Climate Change Adaptation team include Strengthening the climatic resilience of the drinking water sector in the South of Haiti and Supporting Vulnerable Communities in Maldives to Manage Climate Change-Induced Water Shortages.

This 7-year project (2019-2026) supports the Government to adapt to increasing climate risks, particularly more frequent and extreme droughts, which impact the country's water supply for drinking, cooking, hygiene and sanitation. The project focuses on:

• Improving household and community rainwater harvesting and storage structures to increase resilience of water supply in all outer islands and atolls

• Securing groundwater resources from contamination due to inundation caused by wave overtopping of seawater.

• Strengthening the technical capacities of national and subnational institutions and key stakeholders to integrated climate change risks into water governance processes so that management of climate change risks are coordinated, effective, participatory, equitable, and sustained over the long-term when risks are expected to worsen.

- Advancing Climate Resilience of Water Sector in Bhutan (ACREWAS)

Bhutan is highly vulnerable to the adverse impacts of climate change. As a result of climate change, summer months are predicted to become wetter and warmer while winter months are expected to be drier. In the face of water scarcity there are opportunities to enable adequate, clean, and assured water supply to the population and increase climate resilience for rural and urban communities. The Royal Government of Bhutan has prepared a water flagship programme to provide assured drinking and irrigation water for the country in the face of climate change.

The ACREWAS project will form a core part of the national plan to provide integrated water supply for four Dzongkhags (districts) in Bhutan that comprise the major parts of the upper catchments of the Punatsangchhu River Basin management unit. The project will support critical catchment protection by adopting climate-resilient watershed management principles. Additionally, these measures will also ensure that downstream climate-resilient infrastructure development works are managed in tandem with upstream initiatives.

A collaborative effort initiated through the UNDP-SIWI Water Governance Facility has brought UNDP and UNICEF together in a joint endeavor:

- Accountability for Sustainability

The *Accountability for Sustainability* is a collaborative initiative between UNICEF, SIWI and UNDP looking into ways to strengthen governance systems for sustainable delivery of water services.

The UNDP contribution (financed through Sida's support to WOGP) has focused on finding ways to overcome the institutional breach between Water Resources Management (WRM) and WASH services delivery. A draft report on *Cooperation Opportunities for Improved Integration Across SDG6* has been circulated for comments in the UN-Water family and beyond, and its publication through UN-Water is being explored. Preliminary conclusions – including that climate change, which by way of adding

urgency to this integration also paves the way for cross-sectoral collaboration – have been discussed at the Stockholm World Water Week[37] and COP26.[38]

Beyond BPPS, the UNDP Crisis Bureau manages broader Stabilization Programmes refurbishing infrastructure systems, including water and sewerage, in fragile and post-conflict settings. This vital infrastructure can be severely damaged by war, intentionally or not.

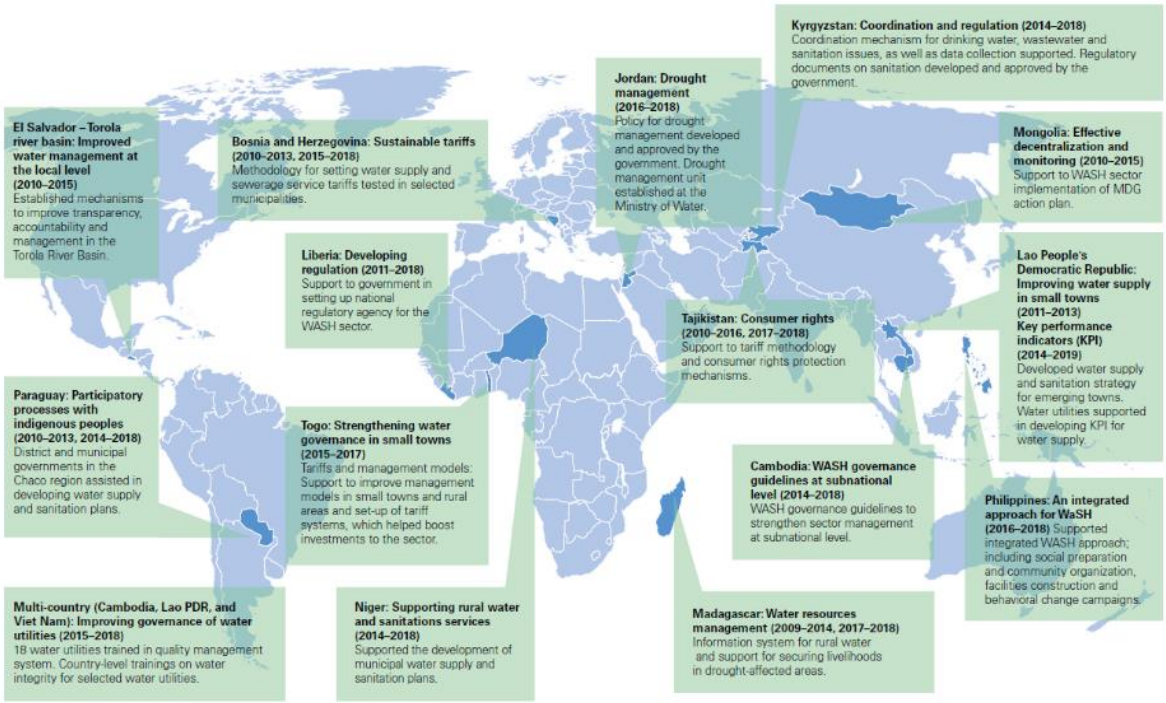
The major WOGP utilization of Sida's support in this area has been dedicated to the recently closed GoAL WaSH mechanism, described in the following sub-section.

GOAL WASH (GOVERNANCE, ADVOCACY AND LEADERSHIP IN WATER, SANITATION AND HYGIENE)

The Governance, Advocacy, and Leadership in Water, Sanitation, and Hygiene (GoAL WaSH) Programme was established in 2008 to accelerate the achievement of the water and sanitation targets of the Millennium Development Goals (MDGs) and subsequently the more ambitious water, sanitation and participation targets of the SDGs. Countries with specific water-related challenges, often in a post-conflict context, and the appropriate alignment of government and UNDP country office interests in addressing those challenges by way of governance reform, see Figure 14 and

Table 6.

Figure 14 – Map of GoAL WaSH Programme Interventions



Source: A DECADE OF SUPPORT FOR WATER GOVERNANCE REFORM: Final report of the GoAL WaSH programme

[37] Event 1 on Intersectoral cooperation: a catalyst for climate resilience and SDG6 acceleration was held 25 August 2021. Event 2 on Intersectoral cooperation: a catalyst for climate resilience and SDG6 acceleration was held on 26 August 2021.

[38] Discussed as part of event on Adaptation: Building adaptive capacity through climate resilient water, sanitation and hygiene solutions, held 6 November 2021.

Table 6 – Short descriptions of GoAL WaSH support in 15 localities (2014-2019)

Bosnia and Herzegovina – Sustainable Tariffs
The first phase focused on an awareness-raising campaign on water rights and responsibilities, specifically targeting school children in ten municipalities. The second phase supported the development of a methodology for setting water supply and wastewater tariffs. The methodology defines tariffs to enable recovery of all costs, including operating and investment maintenance costs, as well as capital investment costs. It also included a study on the administrative positioning of intended legal bodies for setting tariffs for water supply, and wastewater collection and treatment services. The tariff methodology was tested in four selected pilot municipalities in 2017–2018. The tariff methodology is now being applied by at least 16 additional municipalities, and it is under discussion at parliamentary level to be recommended for adoption.
Cambodia – Governance guidelines at sub-national level
GoAL WaSH supported the development of WaSH governance guidelines in 2016. Since then, government officials at national and provincial levels have been trained in how to implement the guidelines. In 2018, representatives from four provinces (including provincial, municipality, and Sangkat councillors) undertook training on such topics as WaSH institutional functions, WaSH challenges, and how to improve WaSH services at commune and village levels.
El Salvador – Improved Water Management at the local level
The project strengthened national and local capacities for effective development and implementation of a new regulatory and institutional framework for water supply and sanitation. The aim was to increase the sustainability of water and sanitation services. It also supported dialogue towards enacting a national water law. Due to political confrontation relating to the law, the second phase focused on strengthening capacity among local actors to manage water in the Torola river basin, developing as well a social audit manual to be used at local level.
Jordan – Drought Management
The project mainly supported drought management, establishing a drought management unit at the Ministry of Water and gaining governmental approval for a water sector policy for drought management in 2018. To put drought management in place at municipal level, three pilot projects have been implemented in different locations focusing on water saving and water efficiency.
Kyrgyzstan – Coordination and Regulation
GoAL WaSH supported a coordination mechanism for drinking water, wastewater, and sanitation issues, and WaSH data collection for the sector. This included developing a new statistic for rural areas to improve assessment of drinking water quality, which was approved for official use from 2016. The project included a training component. Ten regulatory documents on sanitation were also developed and, by January 2019, all had been endorsed by the government.
Lao PDR – Improving water supply in small towns
In Lao, GoAL WaSH worked with the United Nations Human Settlement Programme (UN-Habitat) to support the water sector. First, a strategy for water and sanitation in emerging towns was developed, for the first time in the country. This was complemented with support to utilities in developing key performance indicators for water supply (including indicators relating to sustainability, water safety, and reliability of services). A database with technical information and designs on water and wastewater infrastructure was also developed for the use of the government officials, which has reduced the costs and improved the quality and efficiency of the design of new infrastructure. During the second phase, 80 staff from 11 water utilities received training on key performance indicators and water database development.
Lao PDR and Cambodia (Mekong Regional) – Governance of water utilities
Within the GoAL WaSH Mekong regional project, 18 water utilities from Lao and four from Cambodia received training in a quality management system. This led to the Nam Papa State-owned Enterprise (NPSE) Attapeu water utility in south-eastern Lao being awarded International Organization for Standardization (ISO) certification (ISO 9001:2015) for quality management systems. This was the first ISO certification for a water utility in Lao. Staff from four water utilities in Cambodia, four in Lao and one in Viet Nam were trained on the Integrity Management Toolbox methodology. This supports

organizations in making integrity a part of their strategic plans, business models, and daily practices, aiming to reduce risks and improve performance.
Liberia – the Creation of a Regulatory Commission
GoAL WaSH supported the establishment of a regulatory agency for the water supply and sanitation sector. In 2017, the Liberian House of Senate passed the National Water Supply and Sanitation Commission Act. In November 2017, the Act was signed off by all relevant government departments and approved by the President of Liberia. The agency was named the National Water, Sanitation and Hygiene Commission. A WaSH Pool Fund feasibility study was also carried out with the objective to inform government and partners on how to proceed in improving financing for the sector.
Madagascar – Water Resources Management
The original project began in 2009, aiming to strengthen water governance and advance national progress in Madagascar on the water supply and sanitation MDGs. However, it came to a halt in 2009 due to the national political crisis. Project activities were realigned in 2011 to focus on technical interventions, with a geographical focus on the northern part of the country to ensure complementarity with ongoing UNDP Madagascar projects. From 2017, the interventions aimed to secure livelihoods in drought-affected areas (following a two-year period of extreme drought). Project activities included constructing a dam and two boreholes for agricultural use and setting up management arrangements for the water infrastructure.
Mongolia – Decentralization and Monitoring
The project supported government efforts to establish and institutionalize monitoring systems for water supply and sanitation. Assistance to the government in establishing and heading a sector working group on the MDGs and a road map towards water MDG, which ensured an increased focus on water supply and sanitation. The programme supported the development of service delivery models at decentralized level (*Soum*), including the coordination set-up as well as development of technical standards to enable proper use of facilities and improve water treatment systems.
Niger – Rural water and sanitation services
The project developed the national sanitation guide, under the guidance of the Ministry of Hydraulics and Sanitation, and in collaboration with UNICEF, which has become the 'go-to' reference document for sanitation interventions. The project developed guidance for a local water and sanitation development plan (Plan Local de l'Eau et de l'Assainissement) to help municipalities analyse the water and sanitation status of their communes and prioritize investment. A total of 18 municipal water and sanitation development plans were validated. Following this support, the government is currently developing an additional 80 local plans covering all regions of the country.
Paraguay – participatory processes with Indigenous Peoples
GoAL WaSH supported the establishment of the Inter-Institutional Water and Sanitation Platform for the Chaco, and the elaboration of participatory water and sanitation plans with indigenous communities in the Chaco region. Capacity on relevant intercultural issues was also strengthened among local governmental and civil society organizations, with the collaboration of the National Institute for Indigenous Peoples. The experience and methodology were documented for further replication in other parts of the Chaco. Technical units for water supply and sanitation were set up in six municipalities. The units are now included in the municipalities' budgets and so will continue to operate. Project support also helped the government set up an additional nine technical units in the Chaco region.
Philippines – An Integrated Approach for WASH
The project focused on an integrated WaSH approach, which includes a package of interventions comprising social preparation and community organization, construction of water supply and sanitation facilities, and behavioural change campaigns. The target population was 13 municipalities that were left behind in terms of achieving SDG 6. Local citizens' groups have been established to monitor the implementation of integrated safe drinking water, sanitation, and hygiene at the community level. The approach has also been adopted by other municipalities in the country.
Tajikistan – Consumer Rights
The project supported the introduction of a new tariff methodology for rural water systems. It also trained water service providers in tariff-setting, the application of consumer rights protection mechanisms, and strengthening relationships between service providers and consumers. Public Advisory Councils have been established in water supply companies to protect the rights and interests of consumers. The final year of implementation supported a local intervention in a rural district, installing water meters for

households and establishing a transparent and accountable water management mechanism at village level, which can be replicated in other rural areas.
Togo – Strengthening Water Governance in Small Towns
GoAL WaSH support focused on strengthening capacities for sustainable management of drinking water supplies in small towns. Technical guidelines for management of rural water supply were developed. An assessment of the status of services and tariffs in small towns and emerging urban areas led to the development of a financing plan for their improvement nationwide.

Source: A DECADE OF SUPPORT FOR WATER GOVERNANCE REFORM: Final report of the GoAL WaSH programme

As a 'gap-filling' mechanism, GoAL WaSH complemented other ongoing initiatives and built synergies to allow national authorities to accelerate the realization of water governance reforms. This was for example the case in Kyrgyzstan, as testified by Department of Drinking Water Supply and Sewerage, see Figure 15.

Figure 15 – Appreciation of GoAL WaSH effective gap-filling approach

GoAL WaSH Kyrgyzstan

Toktoshev Askarbek, Director of the DWSS Department, Bishkek:

"The GoAL WaSH project of UNDP came with really little money and has been able to achieve tangible results while other projects with greater funds – having millions – are barely progressing. This project is unique and it has united all partners by creating a constructive environment towards cumulative success in the field of drinking water supply and sanitation services. We officially celebrated it by awarding the GoAL WaSH project in Kyrgyzstan with the Governmental diploma".

In some places, methodologies developed by GoAL WaSH have been replicated across the country. For example, the tariff-setting methodologies developed and piloted through GoAL WaSH in Bosnia and Herzegovina, and Tajikistan are being replicated in larger programmes. In Niger, GoAL WaSH supported the development of 18 municipal water supply and sanitation plans. Following this support, the Niger government began developing an additional 80 local water and sanitation plans covering all regions of the country.

In other places, new institutional arrangements promoted by GoAL WaSH were replicated on a large scale. In Paraguay, the programme supported the creation of technical units for water and sanitation in six municipalities. The units were included in the municipalities' budgets, and nine additional units were set up by the government. In the Philippines, GoAL WaSH supported the implementation of an integrated approach known as iWaSH (where the 'i' stands for 'integrated'). 16 municipalities developed iWaSH plans using the iWaSH Toolbox. Following the training supported by GoAL WaSH, another 345 municipalities developed their sector plans, supported by the government.

GoAL WaSH also facilitated the development of investment plans: In Togo, GoAL WaSH supported a study and helped design a road map to improve drinking water systems in small towns. These documents prompted the Government of Togo to commit an investment of US$23.4 million to improve water systems in semi-urban areas.

The total resources invested into GoAL WaSH amount to 6 million US dollars (89% at the country level and 11% in strategic management). The calculated leverage lands at nearly 60 million. The leverage of GOAL WASH over the last five years has been estimated to US$16 leveraged for every US$1 invested at the country level.

GoAL WaSH was closed in 2019 because of a lack of funding.[39] The flexible and country-driven approach has been continued through the 'sister' endeavor GoAL-WaterS, addressing integrated water resources and coastal management (see below under IWRM/ICM).

EVERY DROP MATTERS

Every Drop Matters (EDM), with funding from Coca-Cola, piloted solutions to water resource problems throughout the world during the 2011-2016 period. Combining the respective strengths of UNDP, Coca-Cola, and local community organizations, the programme benefitted hundreds of thousands of people.

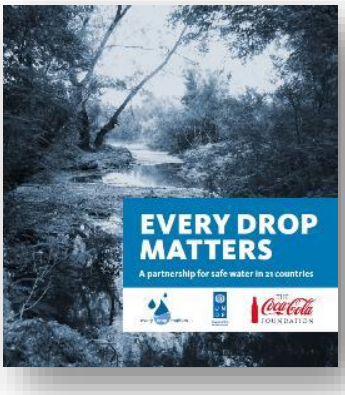
It has developed community water management initiatives, promoted the increased use of grey water, empowered young people to become agents of change, and capacitated farmers facing increasing water scarcity. Through over 80 projects in more than 20 countries, EDM has in total:

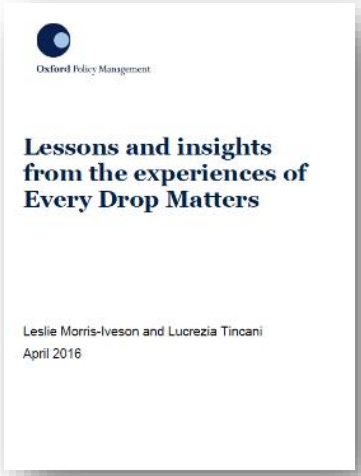
- Conserved nearly 60 million cubic meters of water;
- Improved access to water, sanitation and hygiene for nearly 280,000 people;
- Enhanced the adaptive capacity to climate change for over 84,000 people;
- Reached an estimated 1.2 million people through awareness raising activities.

[39] As it was realized that the Thematic priority area 1 'Climate-Resilient Access to Water Supply and Sanitation' did not fit into Sida's global strategy on environment [from where the WOGP support has been funded], activities in this thematic area were gradually ended before the close of the agreement. Hence, same approach was instead transferred to the Thematic priority area 2 ' Climate-Resilient Integrated Water Resources and Coastal Management.' Some projects reoriented to fit into the new theme, but most GoAL WaSH collaboration was ended.

The reach and impact of the programme goes well beyond what has been achieved within the time scale of its small grant projects reflected in the numbers above. The overall impacts reside within the long term, benefits to the communities it has reached. Several UNDP country offices have expressed interest in continued smaller-scale support to communities.

The Black Sea box and many projects supported are described in more detail in the EVERY DROP MATTERS: A partnership for safe water in 21 countries report.





Climate-resilient integrated water resource and coastal management

Over a third of the world's population lives within 100km of the coast or estuaries. Harboring a major share of the world's economic activities, coastal ecosystems are under constant threat. Integrated coastal management (ICM) embraces a broader, more systemic approach to the management of coastal environments and fosters sustainable development of coastal areas by bringing together government, technical specialists and local stakeholders. Increasingly, stakeholders are linking upstream IWRM with downstream ICM, in "source-to-sea" or "ridge-to-reef" approaches. In one way or the other, all endeavors link to IWRM, see Figure 16, which by definition embraces all water uses and users' concerns.

UNDP is involved as a GEF Agency in a range of WRM and ICM projects. The full list of WOGP projects addressing principally *Climate-Resilient Integrated Water Resources and Coastal Management* is contained in Annex 1. The endeavors directly facilitated by Sida's support to WOGP, include the GoAL-WaterS programme and the support to the SIWI-coordinated Source-to-Sea Action Platform, see further below.

Through series of GEF-financed UNDP projects, in partnership with UNEP, all 34 of the SIDS have advanced on IWRM and/or ICM policy and planning as well as national IWRM/ICM demonstrations ranging from ecological sanitation to watershed management to groundwater protection. More recent efforts are supporting SIDS in assessing and realizing their blue economy ambitions.

Figure 16 – IWRM and its relation to sub-sectors

Source: Global Water Partnership (https://www.gwp.org/en/learn/iwrm-toolbox/About_IWRM_ToolBox/).

Many SIDS epitomize the application of IWRM principles and the **ridge-to-reef approach**. The Atlantic and Indian Ocean SIDS IWRM project, implemented in partnership with UNEP, delivered a whole set of outcomes worthy of highlighting:[40]

Figure 17 - Atlantic and Indian Ocean SIDS working with IWRM

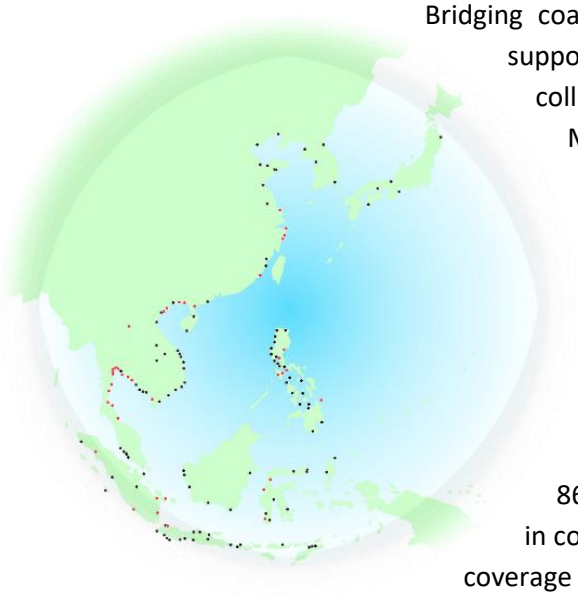
Source: [IW:LEARN brochure: IMPLEMENTING IWRM IN ATLANTIC AND INDIAN OCEAN SMALL ISLANDS]

- Cape Verde: National Strategy to Climate Change Adaptation was developed in Oct 2017 through a national stakeholder consultative process to better understand and prioritize measures needed to reduce the impacts of climate change and associated vulnerabilities.
- Comoros: National Integrated Water Resource Management Plan was developed in 2018 through a national level participatory consultation process, to guide the development, management and governance of the water sector in Comoros for the next 12 years.
- Maldives: National Water and Sewerage Policy for Maldives was developed following the project interventions, endorsed by the Cabinet in Aug 2017. To implement this policy, Strategic Action Plan for Water and Sewerage in Maldives was also developed, mainstreaming IWRM principles in the Policy, validated by national stakeholders.
- Mauritius: National Integrated Water Resource Management Plan was developed through a participatory approach as a strategic framework for the implementation of the National Water Policy. National Guidelines for the Establishment of Desalination Plants, National Guidelines

[40] Moreover, for Comoros and the Maldives, these endeavors have also contributed to proposals developed for the GCF.

for the Establishment of Effluent Discharge Permits, and National Guidelines and Indicators for Gender Mainstreaming in the Water and Energy Sector were also developed.

- Sao Tome & Principe: First, the National IWRM Plan was developed following a participatory approach; then, the National Water Act – the first of its kind in the country – was developed and enacted in 2018, providing the legal basis to implement the National IWRM Plan.
- Seychelles: The National Water Policy and the National IWRM Plan were developed through a consultative process and approved by Cabinet in 2017.Subsequently, the National Water Act was drafted.



Bridging coastal and ocean/marine management, UNDP's long-standing support to the Seas of East Asia – comprising nearly three decades of collaboration – has been completed. Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) is an intergovernmental organization operating in East Asia to foster and sustain healthy and resilient oceans, coasts, communities and economies across the region.

Working in partnership with local and national governments, international development organizations, companies, scientific institutions and regional initiatives, PEMSEA has applied ICM solutions across East Asia, impacting more than 86,000 km of coastline and hundreds of millions of people living in coastal and watershed areas. In fact, PEMSEA has facilitated ICM coverage over 38% of the region's coastline, across 12 countries. Having exceeded the goal to cover 25% of the region's coastline by 2021, PEMSEA is now focusing on individual country targets and validating existing reported coverage.

The concluding report, SEA Change: The PEMSEA Story, suggests that "UNDP and PEMSEA are steadfast development partners in advancing shared visions in equitable and poverty-alleviating sustainable development and good governance… The 14 countries in the East Asian Seas region can look to PEMSEA to support a green recovery by harnessing more innovative ways to sustainably co-manage the coastal and marine resources of the region. UNDP looks forward to continued strong cooperation with PEMSEA in our joint commitment to safeguard sustainable development for the region."

GOAL-WATERS (GOVERNANCE, ACCOUNTABILITY AND LEARNING FOR WATER SUSTAINABILITY)

The GoAL-WaterS programme was launched as GoAL WaSH closed (due to funding restrictions on WASH-related interventions). Drawing on the flexible, country-driven approach of GoAL WaSH, the programme on *Governance, Accountability and Learning for Water Sustainability* (GoAL-WaterS) was launched in 2019 to support the *Sustainable Use and Protection of Freshwater and Coastal Resources through Strengthened National and Local Governance*.

To some degree, GoAL-WaterS has become a part of the new Sida-UNDP Strategic Collaboration Programme on Environment and Climate Change. However, with most country activity being jointly programmed with other thematic areas, the GoAL-WaterS identity and approach has not been actively incorporated. The GoAL-WaterS mechanism is hence actively seeking replenishment in order to be able to continue its work on freshwater and coastal resource governance.

The countries having benefitted from GoAL-WaterS support are Armenia, Bosnia & Herzegovina, Cambodia, Comoros, Jordan, India, Kazakhstan / Kyrgyzstan, Laos, Paraguay, Tajikistan, Vietnam. GoAL-WaterS also aligns with the UNDP NDC Support Programme / Climate Promise – aiming to support the inclusion of water-climate interlinkages in climate change mitigation and adaptation. Along these lines, collaboration has been developed to support Nigeria's NDC enhancement.

- A long-standing collaboration in this area includes the support to **Jordan**, where a drought management plan and operational unit was established (with GoAL WaSH support) in previous years. Under GoAL-WaterS, activities focused on pumping surface water into the aquifer, i.e. "managed aquifer recharge" (MAR). This work, which contributes towards reduced evaporation and increased water storage, has raised local interest in reviving activities like recreation and traditional salt harvesting, and receives co-financing from the Azraq Municipality. (See also news story on Floods to avert droughts in Jordan using the force of nature.)

- In the **Comoros**, the Water Code has been updated by way of consultations with stakeholders on the three main islands. The continued elaboration of by-laws and possibly tariff guidelines and watershed management is to be supported by the GCF-funded Ensuring climate resilient water supplies in the Comoros Islands.

- In **India**, one of the main themes pursued has been Women's Leadership; where grassroots leaders in water conservation and management - 'Women Water Champions' - are being recognized and provided with platforms for amplifying their voices. One such platform is the Ministry of Jal Shakti's National Water Mission 'Water Talk.' Several online events have been

organized by the India office on #WaterMatters. (See compendium of 41 women stewards from the grassroots which is highlighted under cross-cutting issues below.)

- **In Cambodia,** GoAL-WaterS has two lines of support: to water catchment management in the Kbal Chhay Multiple Use Area (KCMUA); and to wastewater management in coastal areas, mainly around the cities of Sihanoukville, Kampot and Kep. The Kbal Chhay Multiple Use Area provides several ecosystem services, and it is the main source of freshwater supply to Preah Sihanouk provincial town, providing close to 10 to 12 million cubic meters per year. This city has been experiencing water shortages due to the sharp increase of water demand in the dry season. KCMUA water supplies are constrained and there is an urgent need to manage the catchment area to protect its ecosystem, and to improve water governance and monitoring of the area. The objective is to institute a Payment for Ecosystem Services to finance the monitoring, management and protection of the watershed area.

- The Government in **Bosnia & Herzegovina** tasked the Ministry of Agriculture, Water Management and Forestry to prepare a Decree for Tariff Setting Methodology for Water Supply and Wastewater Management. The process included public discussions and consultations with sectoral stakeholders, drawing on UNDP advice and support. The work furthers the work under UNDP Municipal Environmental and Economic Governance (MEG) Project on the alignment of policies and regulations to ensure stainability of investments and provision of water and wastewater services in local communities. Further trainings drawing on the Water Integrity Toolbox area planned for 2022.

- In **Armenia**, through the SDG6 IWRM Support Programme implemented by the GWP Armenia Water Partnership, GoAL WaterS supports the localization of SDG6 targets and the development of an implementation strategy and

In 2020-21, the SDG 6 IWRM Support Programme, with funding from UNDP (through the GoAL WaterS programme) and under the framework of Stage 3, supported Armenia in implementing an activity aiming to identify capacity development needs for SDG 6 implementation and monitoring, related to SDG 6 localisation. Even though the country has not been previously supported by the Support Programme through Stage 2, the need to create an enabling environment in Armenia to promote and implement the country's commitments to the 2030 Agenda for Sustainable Development was identified and support was offered to implement relevant activities. After the completion of the needs assessment, a dedicated country strategy for SDG 6 target implementation was developed. The strategy consists of a series of actions and measures to improve capacity development for SDG 6 in the country, covering technical and legal aspects for water subsector improvements. Explore Armenia's actions for SDG 6 capacity development on our IWRM Action Searcher.

Source:https://www.gwp.org/en/sdg6support/sdgmap/?location=Armenia#

monitoring mechanisms. The aim is to build commitment for achieving especially SDG 6.5.1 at national, local and basin levels, including the Lake Sevan Basin. This includes the identification of national and sub-national governance gaps and weaknesses, and to develop a National SDG 6 Strategy and Action Plan. Through this process, a draft SDG6 Implementation Strategy and Program of Measures were developed, and the first round of consultations were conducted. Human rights are included as a fundamental part of the strategy development.

In 2020-2021, UNDP (through the GoAL-WaterS programme) supported the Viet Nam Water Partnership/ GWP to implement an activity supporting local water governance in the Lower Mekong Delta, as part of Stage 3 of the SDG 6 IWRM Support Programme. The aim of this intervention was to synthesize what is known about local water governance practices and aspirations and the current status of IWRM in the Mekong Delta, to analyse the different levels, space and forms of power as well as their interrelationships. The project assessed how current governance structures to support IWRM capacity might perform under a range of possible futures (including anticipated water-use changes and climate change). Finally, the project drew on the findings from the practices to propose, in collaboration with stakeholders, recommend options to enhance the roles of local communities in water governance. The recommendations outlined in the synthesis report highlight the need for better integration of local water user groups and cooperatives (which relates to the issue of local governance, inclusiveness and transparency), women's union and youth unions in water governance mechanisms

Source:https://www.gwp.org/en/sdg6support/sdgmap/?location=Viet%20Nam

- In **Vietnam**, GoAL-WaterS has helped bring traditional and local water management knowledge, practices and perspectives into the Mekong Delta Integrated Master Planning. The work towards Enhancing Local Water Governance in the Mekong Delta of Viet Nam has been developed jointly with the GWP and is indicated to have co-funding from Norad and SDC.

- In **Tajikistan** GoAL-WaterS supported the development of regulations for hydro-protection zones around key infrastructure, resulting in a technical regulation on hydropower safety submitted to the Government of Tajikistan for endorsement

As mentioned, the UNDP Climate Promise / NDC Support Programme has been providing support to Nigeria. Nigeria was one of the first African countries to start revising their national climate pledge. The government has developed a national toolkit to integrate climate action into broader development efforts such as the Economic Recovery and Growth Plan. For the climate response relating to water, there has been stakeholder engagement and the development of a Situation Analysis and Draft National Climate Resilience Water Management Plan of Nigeria. With the use of Sida funds, UNDP/WGF has provided targeted support this process which is coordinated by the NDC Partnership.

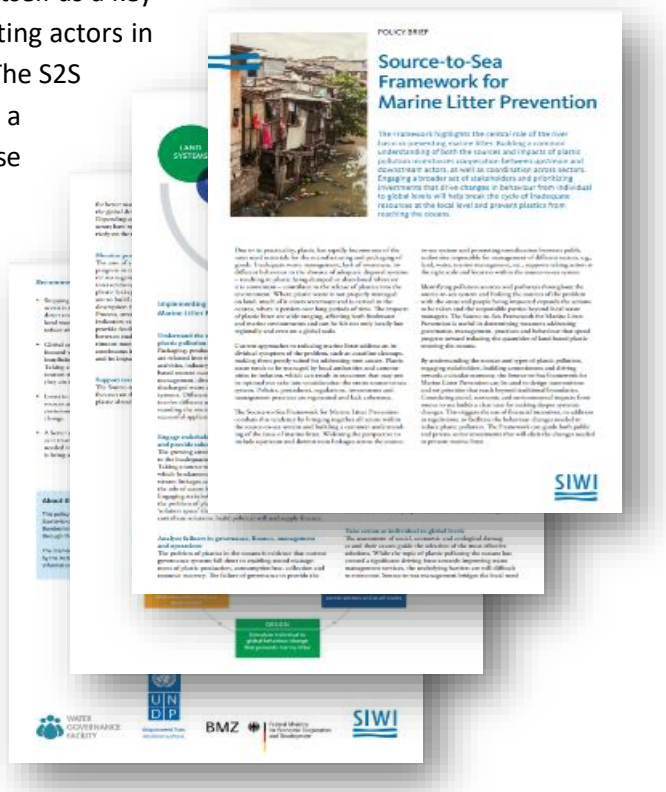
GoAL-WaterS activities have to some degree been incorporated in the Sida-UNDP Strategic Collaboration Programme on Environment and Climate Change: Specifically, Cambodia (ongoing, as mentioned above) and Nepal (to be programmed) implement GoAL-WaterS activities in conjunction with the work programmes of those country offices. The broader set Pilot Countries of the Sida-UNDP Strategic Collaboration Programme on Environment and Climate Change are Haiti, Colombia, Cambodia, Myanmar, Uganda, Ethiopia, Bangladesh, Nepal, and Fiji MCO. Their joint work plans

(combining thematic concerns of biodiversity, water, ocean, climate, energy and food systems) also benefit from WOGP backstopping (as regards water and ocean activities). For example, the UNDP Senior Water Advisor participated in the launch of the Water Security programme for the Central Region of Colombia.

Source: *Seguridad Hídrica en la Región Central*. (live-streamed 1 Dec 2021)

THE ACTION PLATFORM FOR SOURCE TO SEA MANAGEMENT (S2S)

The Source to Sea (S2S) Platform has established itself as a key player in the international policy arena of connecting actors in terrestrial, freshwater and marine management. The S2S Platform has been successful in developing a common problem formulation and knowledge base in the form of a source-to-sea conceptual framework and building commitment at global and regional levels for using a source-to-sea approach to resource management.



The Platform, hosted by SIWI, has been supported by UNDP from the start in 2014. UNDP continues to support the S2S secretariat as/when needed [depending on availability of support from other partners] to ensure a stable existence.

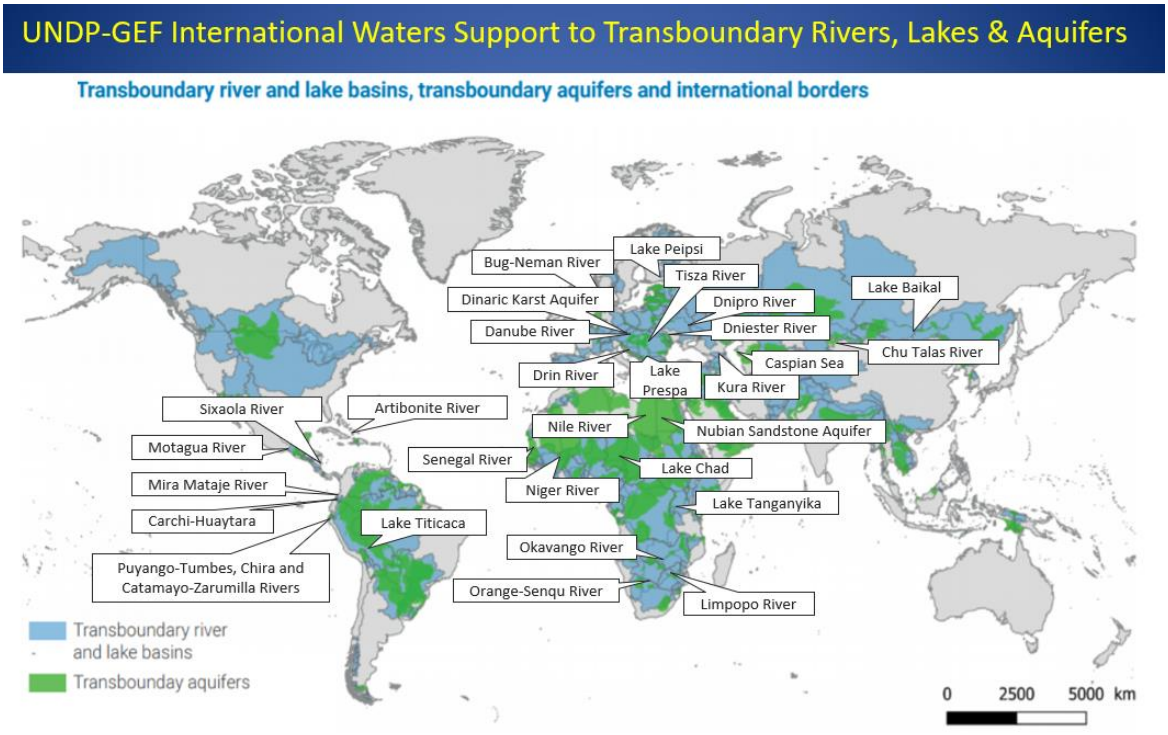
UNDP is a regular contributor to the events, communications and other activities organized by the S2S Platform.

Source: Video displayed @ COP26: Hope comes out of the blue: Inspiring climate action from source to sea session.

Protection of transboundary surface and groundwaters in a changing climate

UNDP is involved as a GEF Agency in 30 transboundary waters projects (including rivers, lakes, and aquifers) applying the Transboundary Diagnostic Analysis/Strategic Action Programme (TDA/SAP) methodology for issue prioritization, causal chain analysis and multi-country agreement on governance reforms and investments.

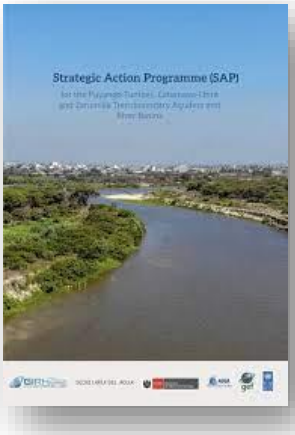
Figure 18 – UNDP-GEF transboundary freshwater projects



Source: UNESCO-IGRAC. 2015. Map of Transboundary Aquifers of the World. Scale 1:50 000 000. Paris, France (aquifers); UNEP and GEF, TWAP River Basins Data Portal: http://twap-rivers.org/indicators/ (accessed 2 July 2018) (river and lake basins)

Some indicative developments from this part of the portfolio includes:

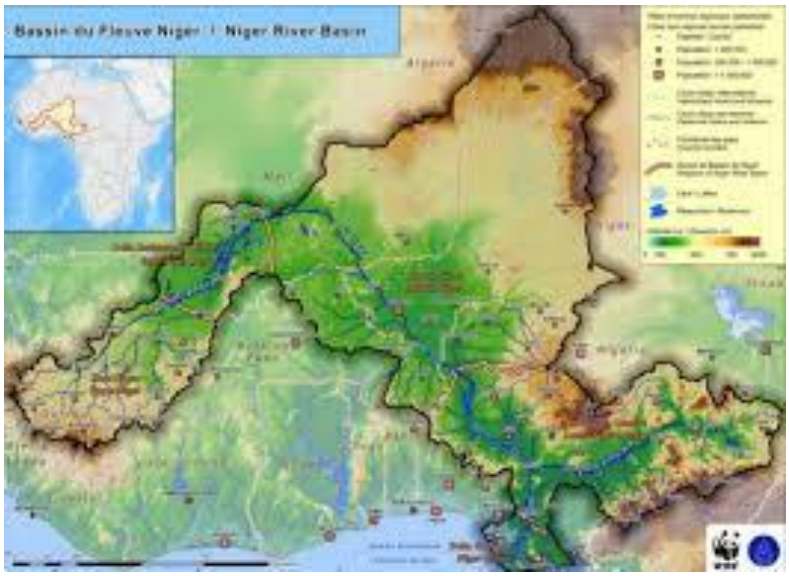
- ✓ The Drin River Basin in South East Europe had its SAP endorsed by ministers and high-level representatives of the riparian countries (Albania, Greece, Kosovo, Montenegro and North Macedonia). This endorsement confirmed the political will among the five riparian countries to work across borders and sends a strong message that improved water resources management, which also yields benefits for public health and livelihoods, remains a priority and will continue to be pursued at the transboundary level, in spite of current difficulties associated with the COVID-19 pandemic. This crisis underscores the vital importance of water for hygiene. [The ministerial endorsement, adapting to the conditions posed by the pandemic, was achieved over the Zoom meeting platform.] The project completion finds the Drin Riparians stronger and marks the beginning of a new phase in cooperation.



- ✓ On the Latin American continent, Puyango-Tumbes, Catamayo-Chira and Zarumilla Basins/Aquifers SAP was endorsed in 2020.

- ✓ The TDA for the Moldovan-Ukrainian Dniester River contributed to the common understanding around the issues and way forward. The UNDP/GEF project supported the operation of the Moldovan-Ukrainian Dniester River Commission and the consequent development of a SAP and consultation between the two riparian states. The project released a range of studies, including on gender, the impact of hydropower on the Dniester ecosystems, hydrological modeling for artificial spring flash floods, and an inventory of tailing storage facilities. Also, there has been a screening of the Dniester water for 40,000 chemicals, and an economic valuation of ecosystem services of the Lower Dniester wetlands.

- ✓ The TDA of the NB-ITTAS [Niger River Basin and the Iullemeden-Taoudéni/Tanezrouft Aquifer System] is being developed to promote conjunctive manage-ment of water resources (ground and surface). The TDA with its accompanying SAP should sustain water resources while reducing pressures on certain water systems and the well-being of the people and the ecosystems within the ITTAS and Niger River basin. Hydrogeological modelling of the ITTAS has been carried out by expertise of the Sahara and Sahel Observatory (OSS).



UNDP Crisis Bureau is also managing an Institutional Partnership on Water and Climate-Related Security Risks in the Liptako-Gourma Region (geographically overlapping with the ITTAS and Niger River basin):

In response to the multidimensional crisis in the Liptako-Gourma region insecurity in the West African Sahel, UNDP, in collaboration with the Authority for the Integrated Development of Liptako-Gourma Member States (LGA), is in the process of implementing a regional stabilization facility project. To support the LGA in this process, a dedicated UNDP task-team has been embedded within their headquarters. Given the impact of climate change in the region and the risks that this generates for peace and security, a climate and security risk expert was assigned to this task-team, with the support of the Climate Security Mechanism, to carry out research, provide policy and program support and support the integration of climate security into LGA's portfolio and the expanded stabilization mechanism strategy. The LGA's water strategy, in accordance with the policies of its member states, is based on the principle of integrated water resource management, which implies a systems approach that considers environmental, economic, and social concerns among various sectors. The partnership aims to support the LGA to analyze the water-climate-security nexus in the Liptako-Gourma Region and identify entry points for addressing these risks.

Beyond the programs implemented with support from vertical funds, emphasizing ecosystem- and science-based approaches, and the Climate Security Mechanism, emphasizing peace and stability, the Shared Waters Partnership (SWP), see below, targets the political and diplomacy side of the transboundary water cooperation – in some ways combining these other entry points.

SHARED WATERS PARTNERSHIP (SWP)

The SWP was initiated by UNDP and SIWI in 2011 with support from the U.S. Department of State. It has since evolved into a Strategic Network which brings together Development and Intervention Partners to promote water diplomacy and transboundary cooperation.

The SWP Coordination, housed by the Transboundary Water Management team at SIWI, works with UNDP focal points from headquarters and regional hubs to encourage transboundary water cooperation, including by way of responding to UNDP requests for support – as facilitated through the broader WGF partnership.

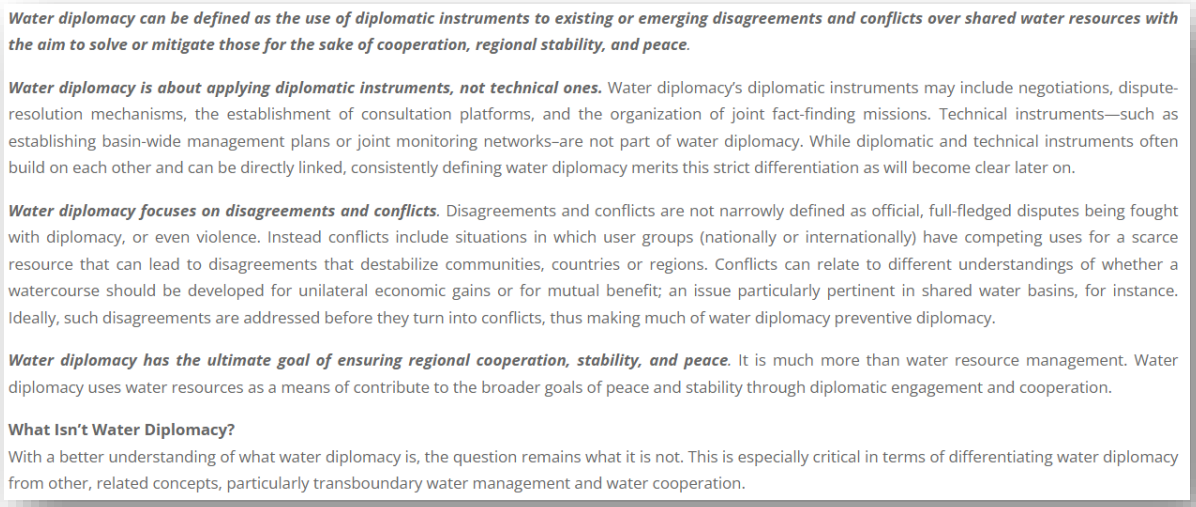
The SWP engages broadly to gather strategic information in areas of interest and identifies opportunities to prevent disputes and resolve bottlenecks in cooperation. Numerous knowledge products have been developed and meetings attended under the umbrella of the International Centre

for Water Cooperation (ICWC), a UNESCO category II Centre hosted by SIWI to support basin analysis and decision support.

An important ongoing initiative supported by SWP is the Women in Water Diplomacy Network in the Nile : Since its launch in 2017, the Network has contributed to building trust and enabling environment for cooperation. It engages senior and mid-career women professionals from Ministries of Water and Ministries of Foreign Affairs, as well as other relevant line ministries from across the Nile Basin. The aim is to enhance the collective capacity of women throughout the basin and to support the engagement of women water leaders in decision making and peacebuilding processes.

The Network hosts annual workshops and regular online activities. In 2020, a Network Joint Statement was issued in support of inclusive water governance. The Network draws inspiration from Sweden's Feminist Foreign Policy and the Nordic Women Mediators Network. The Women in Water Diplomacy Network in the Nile, also supported through a partnership with the Environmental Law Institute, hosts experience exchange sessions with other networks focused on mediation and water diplomacy.

Figure 19 – What is Water Diplomacy?



Water diplomacy can be defined as the use of diplomatic instruments to existing or emerging disagreements and conflicts over shared water resources with the aim to solve or mitigate those for the sake of cooperation, regional stability, and peace.

Water diplomacy is about applying diplomatic instruments, not technical ones. Water diplomacy's diplomatic instruments may include negotiations, dispute-resolution mechanisms, the establishment of consultation platforms, and the organization of joint fact-finding missions. Technical instruments—such as establishing basin-wide management plans or joint monitoring networks–are not part of water diplomacy. While diplomatic and technical instruments often build on each other and can be directly linked, consistently defining water diplomacy merits this strict differentiation as will become clear later on.

Water diplomacy focuses on disagreements and conflicts. Disagreements and conflicts are not narrowly defined as official, full-fledged disputes being fought with diplomacy, or even violence. Instead conflicts include situations in which user groups (nationally or internationally) have competing uses for a scarce resource that can lead to disagreements that destabilize communities, countries or regions. Conflicts can relate to different understandings of whether a watercourse should be developed for unilateral economic gains or for mutual benefit; an issue particularly pertinent in shared water basins, for instance. Ideally, such disagreements are addressed before they turn into conflicts, thus making much of water diplomacy preventive diplomacy.

Water diplomacy has the ultimate goal of ensuring regional cooperation, stability, and peace. It is much more than water resource management. Water diplomacy uses water resources as a means of contribute to the broader goals of peace and stability through diplomatic engagement and cooperation.

What Isn't Water Diplomacy?

With a better understanding of what water diplomacy is, the question remains what it is not. This is especially critical in terms of differentiating water diplomacy from other, related concepts, particularly transboundary water management and water cooperation.

Source: What is water diplomacy and why should you care? (Global Water Forum blog by Dr. Susanne Schmeier, IHE Delft, The Netherlands, August 31st, 2018

Sustainable management of oceans in a changing climate

The ocean contributes substantially to human development, including to the provision of food security, transport, energy supply, tourism and many of the planet's most critical ecosystem services (carbon and nutrient cycling, climate regulation, oxygen production). The ocean contributes around US$3 trillion per year to the global market economy, or about 5 percent of GDP. Estimates of the value of ocean non-market services run at about 63 percent of all such services provided by the planet's ecosystems.

Fisheries and aquaculture contribute US$100 billion per year and about 260 million jobs to the global economy. Women comprise nearly half of the fisheries workforce dependent on commercial capture fisheries for their livelihoods, including the post-harvest sector.

International shipping moves over 90 percent of international trade, valued at US$435 billion per year, provides 13.5 million jobs. Thirty percent of global oil extraction now occurs in offshore waters, valued at approximately US$ 900 billion per year and increasing. Tourism represents 5 percent of global GDP and about 6 percent of global jobs; coastal tourism is clearly a major component, with an estimated value of about US$271 billion per year.

The integrity of these key ocean values and services is at significant risk due to a range of ocean management policy and market failures leading to fisheries over-exploitation, pollution (especially nutrients and plastics), invasive species introductions, habitat loss and ocean acidification.

Ninety percent of global fish stocks are fully exploited, overexploited or collapsed. Each year, overfishing costs the world about US$83 billion, coastal hypoxia US$200 billion to US$800 billion, invasive aquatic species US$100 billion and ocean plastics US$13 billion. In the 'business as usual' climate change response scenario, ocean acidification will cost US$1.2 trillion per year by 2100 as ocean acidity increases an additional 250 percent.

Nutrient loads to the oceans have tripled since preindustrial times, leading to a geometric increase in coastal hypoxic areas, now numbering over 500. Twenty percent of the world's coral reefs have already been lost and another 20 percent degraded.

The rapid growth of the shipping industry as the means of transport of international goods and commodities has led to an explosion of introduced aquatic species, primarily carried via ship ballast water and hulls. Due to human CO2 emissions, the oceans are acidifying rapidly, perhaps faster than ever before, with ocean acidity increasing by 30 percent over the last 50 years and already starting to impact the functioning and integrity of ocean ecosystems.

In line with SDG 14 – Conserve and sustainably use the oceans, seas and marine resources for sustainable development – ambitions, UNDP is working with other UN agencies, the GEF, international financial institutions, regional fisheries organizations and others to strengthen ocean management and to sustain livelihoods at the local, national, regional and global scales through effective ocean governance. UNDP supports the creation of an enabling policy environment for ocean restoration and protection through the development and application of ocean and coastal management strategic planning tools and methodologies such as the Transboundary Diagnostic Analysis/Strategic Action Programme approach

UNDP has supported the establishment of Marine Protected Areas in over 48 countries around the world. These projects impact protected areas covering nearly 177 million hectares in marine and related ecosystems.

LARGE MARINE ECOSYSTEMS (LMES)

UNDP is assisting 94 countries that share fourteen of the world's Large Marine Ecosystems to apply ecosystem-based approaches to sustaining ocean and coastal resources for the millions of people whose livelihoods and food security depend upon healthy oceans.

Source: https://iwlearn.net/marine/portfolio (Note: LMEs marked in green)

Among the Large Marine Ecosystems UNDP supports e.g. the Humboldt Current LME, Yellow Sea LME, Benguela Current LME, Agulhas/Somali Current LMEs, Caribbean Sea & North Brazil Shelf LMEs, Pacific/Central America LME, and Timor-Arafura Sea.

- Since 2002, UNDP/GEF has been facilitating cooperation between People's Republic of China and the Republic of Korea to identify environmental priorities and agree upon governance reforms and investments to address various challenges in the Yellow Sea through the TDA and SAP processes. The collaboration around the YSLME progressed in areas of fisheries sustainability, pollution reduction and habitat protection. This includes regulation, monitoring and infrastructure to reduce marine littering. Fishing pressure is relieved through vessel buy-back programs, seasonal closure of commercial fisheries, reducing capture production, and spawning and nursery ground

conservation. Yet, many challenges remain. For example, high temperatures and nutrient concentrations may be causing algal blooming. The YSLME Story' underscores that transformation at various levels is possible through cooperation toward shared goals.[41] The UNDP/GEF YSLME Phase II project provides assistance to China and South Korea to implement the SAP and support the institutionalization of the YSLME Commission. This mechanism is envisaged as a permanent non-legally binding framework which continues to implement the SAP into the future after the life of the project.

Some of the transformational impacts of the YSLME programme include:

- A 22 per cent and 17 per cent reduction in fishing pressure (# of vessels) in PR China and the Republic of Korea, respectively. At the same time, re-employment training has helped people to transition to alternative, sustainable opportunities;
- The creation of an additional 207,000 hectares in marine protected areas – now representing some 5.5 per cent of the total Yellow Sea area;
- The scaling up of integrated multi-trophic aquaculture in both countries – it now covers some 13,000 hectares and produces over 200,000 metric tonnes of sustainable seafood products every year;
- A more than seven-fold increase in the catch per unit effort in the Republic of Korea's marine ranching sites;
- A 49 per cent improvement in water quality (chemical oxygen demand) in Sihwa Lake in the Republic of Korea;
- Measurable declines in the occurrence of harmful algal blooms in the Republic of Korea with none observed in 2016 or 2017.

SUSTAINABLE FISHERIES

Fisheries focused projects include the Pacific Oceanic Fisheries Management Project, the Global Marine Commodities Programme, and the GEF Coastal Fisheries Initiative (Latin America component).

UNDP supports the 14 Pacific Island countries in the governance and sustainable management of the West and Central Pacific's shared tuna stocks, representing over half of the world's tuna supplies. The revised and updated Strategic Action Programme (SAP) for the Pacific Oceanic Living Resources , endorsed by the Pacific Forum Fisheries Committee and Fisheries Ministers from Western and Central Pacific Island countries, represents a high level commitment to sustainable management of one half of the world's annual tuna catch. The SAP identified the priority concerns, including weak compliance

[41] UNDP (2021) The YSLME Story: Management and Governance for the Restoration and Protection of the Yellow Sea Large Marine Ecosystem. Incheon, RO Korea. (quote from page 19)

to conservation and management measures, especially in the high seas; inadequate attention to the impacts of climate change, and; weak consideration of ecosystem approach to fisheries management.

Going forward, key issues include the impacts of climate change and the subsequent implications for the socio-economic status, livelihoods and food security of Pacific peoples; the need for adaptive ecosystem-based management relating to harvests and by-catches,; and supporting innovations in tackling Illegal, Unreported and Unregulated (IUU) fishing.

TRANSFORMING A GLOBAL INDUSTRY

UNDP has been working with IMO and the GEF to 'green' the shipping industry through a series of initiatives: GloBallast, GloFouling, and GloMEEP. These have helped countries and the maritime industry to reduce the spreading of invasive species from ship ballast water and hull fouling, and to increase energy efficiency in a way to reduce the carbon footprint of shipping – mitigating both climate change and ocean acidification.

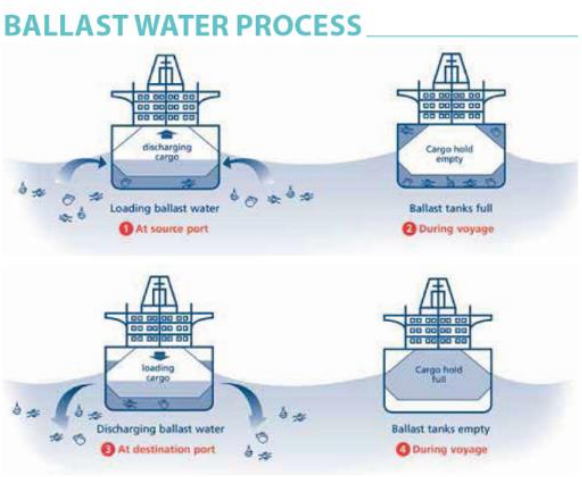
In 2018, the Global Maritime Energy Efficiency Partnership Project (GloMEEP) finalized and published the Ship and Port Emission Toolkits, comprising of several guides aimed at assisting countries and ports, respectively, to conduct emissions assessments and develop strategies to reduce emissions. The GloMEEP Project has concluded, the continued transition towards Low Carbon Shipping is supported by the IMO-Norway GreenVoyage2050 Project.

In 2020, Global Industry Alliance (GIA) was launched to tackle the issues of invasive species and greenhouse gas emissions from the shipping industry. The Alliance brings together stakeholders in the private sector and the GloFouling Partnerships, a project led by United Nations entities to address the transfer of harmful aquatic species through biofouling. The GIA is also looking into addressing operational and contractual barriers to just-in-time arrival of ships, thereby reducing emissions from ships at anchorage and speed optimization.

The GEF-UNDP-IMO GloFouling Project seeks to implement the IMO Guidelines for the control and management of ships' biofouling, providing a globally consistent approach on how biofouling should be controlled and managed to minimize the transfer of invasive aquatic species through ships' hulls. Biofouling can lead to the introduction of potentially invasive species to new environments, where they may threaten native species and cause irreversible damage to biodiversity. It also has measurable impacts on a number of economic sectors such as fisheries, aquaculture and ocean energy. Once

established in a new ecosystem, invasive species are extremely difficult – if not impossible – to eradicate.

This work builds on the experience of the GEF-UNDP-IMO GloBallast Partnerships Programme, which in collaboration with the Global Industry Alliance for Marine Biosecurity created a dynamic e-learning platform on Operational aspects of Ballast Water Management.



Credit: based on IMO 2018

Cross-cutting Governance issues: Gender, Integrity, Human Rights – and Indigenous Peoples

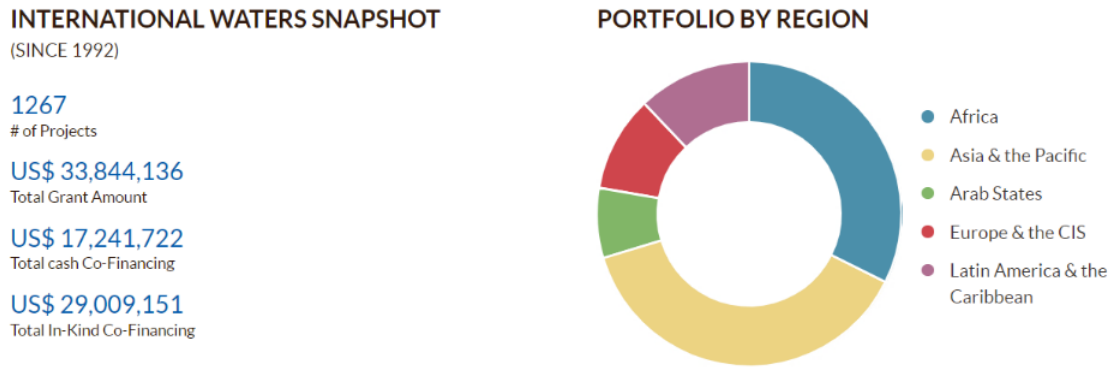
Most governance issues can be counted as cross-cutting and are hence central to the WOGP. Beyond governance and integration, specific attention has also been paid to integrity (anti-corruption), human rights, and gender equality. These concerns are incorporated into thought leadership, knowledge management and capacity development, and mainstreamed into programme implementation relating to the other thematic areas.

Beyond what has been presented above, this section pulls out cross-cutting issues that have taken on a 'life of its own.' The cross-cutting issues of equality, rights and integrity are so critical to poverty eradication and community engagement in environmental resource management.

In this context it is worth highlighting that the GEF International Waters focal area also addresses transboundary surface, groundwater, and marine systems development challenges through a Small Grants Programme. SGP's IW portfolio promotes sustainable international waters management through regionally connected community-based activities such as:

- Conservation and rehabilitation of coastal habitats (mangroves, coral reefs, seagrass and other types of wetlands)
- Fresh water resource use and management;
- Land-based pollution prevention and reduction;
- Sustainable fisheries management;
- Protection and sustainably use of ecosystem services and goods;
- Protection of forests and reforestation in river basins;
- Creation of alternative livelihoods to reduce pressure on fisheries and other natural resources;
- Capacity development and knowledge sharing among communities on water management

Figure 20 – GEF-IW Small Grants Programme Overview



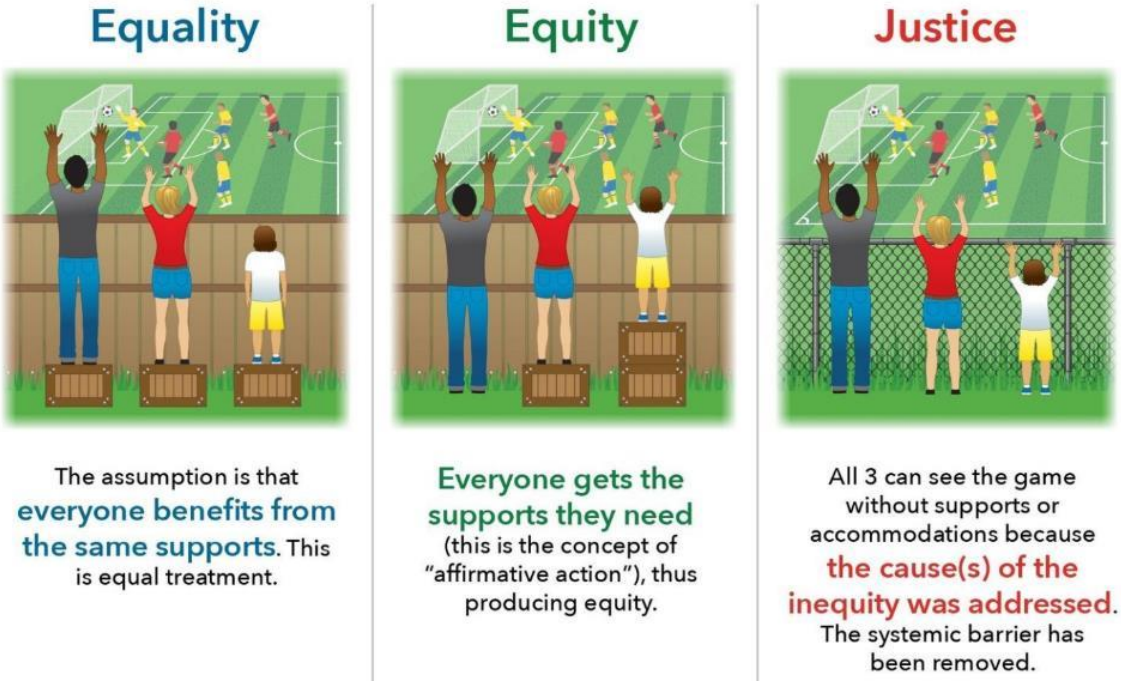
Source: https://sgp.undp.org/areas-of-work-151/international-waters-173.html

The remainder of this section gives an outline of WOGP's work on gender mainstreaming, integrity/anti-corruption, human rights, and also with Indigenous Peoples – where many issues of rights and equality come to the fore.

GENDER MAINSTREAMING

Gender mainstreaming is an important overarching concern for UNDP, and to "Strengthen gender equality and the empowerment of women and girls" is also a Signature Solution (#6) of its own standing in both the 2018-2021 and 2022-2025 Strategic Plans.

Figure 21 – Comparative Illustration of Equality, Equity and Justice

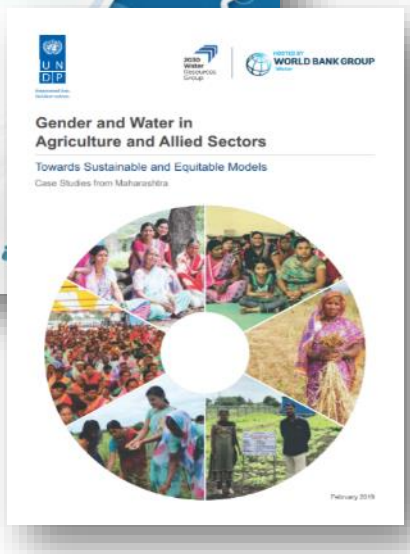


Source: CRFM Secretariat (2020) Final Narrative Report: Mainstreaming Gender Equality in Caribbean Fisheries (extract from Environmental Equity Vs. Environmental Justice: What's the Difference? based on LateStageCapitalism Equality vs. Equity image).

The Mainstreaming Gender Equality in Fisheries in the Caribbean project aimed to improve sustainable fisheries for women and girls and other vulnerable populations in the Caribbean by advancing gender issues, decent work and youth involvement in sustainable development of fisheries. UNDP utilised resources from Global Affairs Canada, through the existing agreement for the CLME+ Flyingfish subproject, with CRFM as a delivery mechanism to benefit fisherfolk, national fisheries agencies and regional organizations charged with supporting fisheries management development in the 17 CRFM Member States.

The Global Marine Commodities programme has also developed a set of gender resources (link). These include analyses of the role of women in the fisheries sector in several countries, as well as The Global Marine Commodities Project Gender Strategy: Building Equal Opportunities in Fisheries.

Another way is to give visibility to women's work and contribution. The 'Women Water Champions' exercise provided a platform for amplifying the voices of women grassroots leaders in Water conservation and management. UNDP India, with support from WGF, has finalized the Women Water Champions compendium of 41 women stewards from the grassroots, also available on the National Water Commission website (link). Adding to this recognition, OXFAM in India proudly presented amicable profiles of Our Women Water Champions giving further recognition of the importance of the achievements of these water stewards in Assam and Uttar Pradesh. The Times of India (link). and the Smart Water Magazine (link) also covered the story of the 'water champions.'

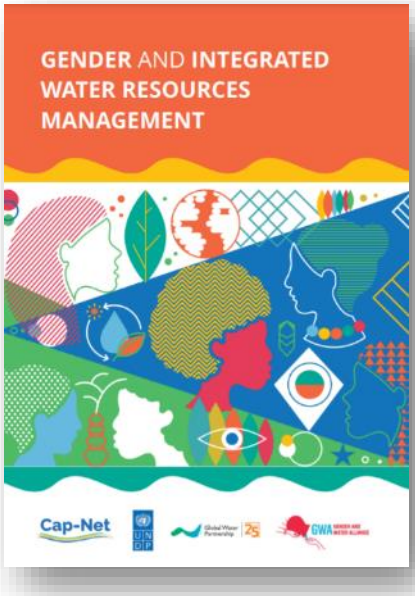


Also from UNDP in India, the path-breaking Gender and Water in Agriculture and Allied Sectors report, stems from a collaboration between UNDP and the 2030 Water Resources Group. This 2019 publication showcases five successful case studies of women-led growth and entrepreneurship, supported by the collaboration and intervention of public and private sector, and civil society organizations. The report highlights scalable, innovative interventions in the agricultural sector to address the challenge of water resources management, use of technology for improved agricultural practices and sustainable value chains, while embedding initiatives that empower women economically and socially. These are:

- Project Disha of UNDP removes gender barriers in post-harvest management in the drought-prone region of Western Vidarbha, through a group of 30 women sourcing managers (WSMs)
- Swayam Shikshan Prayog makes farming economically viable for women farmers in Marathwada region through its 'one-acre model' also known as Women-led climate resilient farming model
- Sahyadri farms, unlocks value chains for small and marginal farmers through sustainable agriculture practices and enhanced market access
- The Goatry Project improves the value chain economics of goat-rearing, a predominant form of livelihood for communities living in the water-scarce regions of western Maharashtra

- Happy Roots, a socially-conscious food company that empowers women and small farmers through a responsible supply chain

Cap-Net's updated training module on Gender and IWRM delves into the challenges of skewed decision-making (where strategic decision making on the different uses of water is controlled by men, while the everyday management of water for family and small-scale production is mostly managed by women) and tools and cases about ways of addressing them.



An analysis of UNDP's work with the MDG Achievement Fund's projects on Democratic and Economic Governance on Water and Sanitation (WGF Report No. 4: Gender Practice in Water Governance Programmes – From Design to Results) found the most effective gender strategies to have been those focusing on the collective action of women, and those involving men and boys in the challenging of gender relations. An example of women's collective action on water is the SIWI-hosted Women in Water Diplomacy. (mentioned with Shared Waters Partnership above).

Gender inequalities have many ramifications, for example, the gendered roles and special responsibilities that in many societies are associated with women make them subject to corruption to obtain water for the household's needs. WGF's 2017 report on Women and corruption in the water sector: Theories and experiences from Johannesburg and Bogotá brought out the important topic of sextortion, when the currency of bribes is sex.[42] This is but one of the ways in how corruption concerns men and women in different ways.[43]

INTEGRITY – REDUCING CORRUPTION

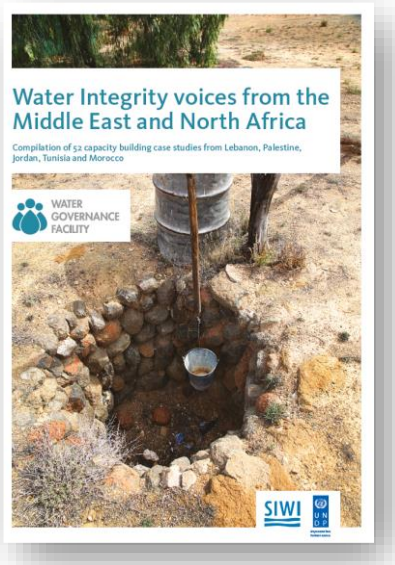
The WOGP has long been involved with 'water integrity' work – reducing corruption in the water sector through training and advocacy for participation, accountability and transparency.

In 2014, the 1st African Water Integrity Learning Summit mobilized nearly 100 participants and high-level policy makers from all over the African continent to share experience and lessons-learned, and to build political momentum in the quest for greater water integrity. The Summit triggered the African Ministers' Council on Water (AMCOW) to consider Water Integrity in its future activities.

[42] This report helped bring attention on 'sextortion,' later followed up by the Swedish Expert Group for Aid Studies (Expertgruppen for Biståndsanalys, EBA) in its report on 'Sextortion: Corruption and Gender-Based Violence'.

[43] See also UNDP report: Purushothaman, S., T. Tobin, S. Vissa, P. Pillai, S. Silliman and C. Pinheiro (2012). Seeing Beyond the State: Grassroots Women's Perspectives on Corruption and Anti-Corruption. New York. (http://www.undp.org/content/dam/undp/library/Democratic%20Governance/Anti-corruption/Grassroots%20women%20and%20anti-corruption.pdf)

At the same time, several countries in the Middle East and North Africa embarked on a water integrity capacity programme (managed by the WGF). At the knowledge management and experience sharing Regional Conference on Water Governance held under the auspices of the Union for the Mediterranean (UfM) it was concluded that the programme has managed to bring water integrity onto the highest political agenda. This was also demonstrated by the Ministerial Declaration for the development of a "UfM Water Agenda" which highlights the importance of good water governance.



Working across various levels – from high-level decision-makers at the regional and national level, to the operational-level water managers and local level farmers, water user associations, media women's groups and other civil society actors – the programme gathered Water Integrity voices from the Middle East and North Africa. The report compiles 52 capacity building case studies from the five participating countries: Lebanon, Palestine, Jordan, Tunisia and Morocco.

In 2016, the Water Integrity Network (WIN) published the Water Integrity Global Outlook (WIGO).[44] This was a joint publication of Cap-Net, GWP, GIZ, Transparency International, UNESCO-IHE, IWMI, WGF, and WIN who was leading the exercise. The Outlook report aims to be an authoritative survey of issues and best practices in water integrity supporting evidence-based advocacy, policy-making and collective action. WGF and Cap-Net were heavily involved.

"Just by including the anti-corruption clause in the organization's contracts it has enhanced the integrity of its dealings and continues to send a message to all stakeholders."

Strengthening Civil Society and Media's Role in Promoting Integrity and Accountability in the Water Sector, 20-22 May 2013, Johannesburg, South Africa.

The chapter on capacity development turned into a reflective review exercise of Cap-Net's and WGF's joint capacity development in this area. This analysis, published as Water Governance Facility Report number 6 - Developing capacities for water integrity: Reflective review of approach and impact of training courses, highlights lessons learned relating to understanding the context and getting the right participants, along with the importance of follow-up activities and support to alumni. It also highlights the important trend in capacity development work towards that of institutional change. In spite of a limited number of responses to the alumni survey, it showed that the knowledge gained has been shared, and that training activities have contributed towards instilling greater transparency or changes towards improved integrity in course participants' organizations.

[44] The follow-up, Water Integrity Global Outlook 2021: Urban Water and Sanitation, WIGO 2021 brings together examples of how integrity champions -mayors, regulators, water and sanitation professionals, civil society, funders, the media- are building integrity in cities step by step, to improve water and sanitation services and leave no one behind.

Illustrating the trend towards organization- and institution-building; four water utilities in Laos were trained on the Integrity Management Toolbox methodology in 2016. At the end of the training each utility developed an integrity action plan.

Following these and other trainings, the NPSE Attapeu water utility in southeastern Laos was awarded an ISO certification for quality management systems, ISO 9001:2015. The certification is the first of its kind for any water utility in Laos. To achieve the certification, NPSE Attapeu has gone through several processes. The utility has developed a quality manual, established a strategic plan for water integrity and operationalized processes in line with the quality management requirements of the ISO standard. The certification process involves a strong commitment from the senior management and staff. The ISO certification and the water integrity plan will be instrumental in improving NPSE Attapeu's customer orientation and services.

In Tajikistan, water supply companies raised transparency and improved cooperation with consumers. In 2015, Khujandvodokanal, the main water supply company in Tajikistan's second largest city, Khujand, inaugurated its first Public Advisory Council. Similar councils were established also in other large cities of Tajikistan. The Public Advisory Councils provide opportunities for companies to develop effective feedback mechanisms with their clients, facilitating timely consideration of complaints and operational efficiency. They also improve water use practices among consumers. (Supported by GoAL WaSH).

More recent – and continuing – work includes water integrity trainings organized by UNDP in Bosnia and Hercegovina, drawing also on WGF expertise. These trainings build on long-standing work by GoAL WaSH, GoAL-WaterS and the Municipal Environmental and Economic Governance (MEG) Project.[45]

During latter years, UNDP's engagement in relation to combatting crime also in the fisheries sector has increased. The UNDP Nordic Representation office (NRO) has been greatly involved with the Blue Justice / FishCRIME set of conferences and processes led by Norway, UNODC and others.

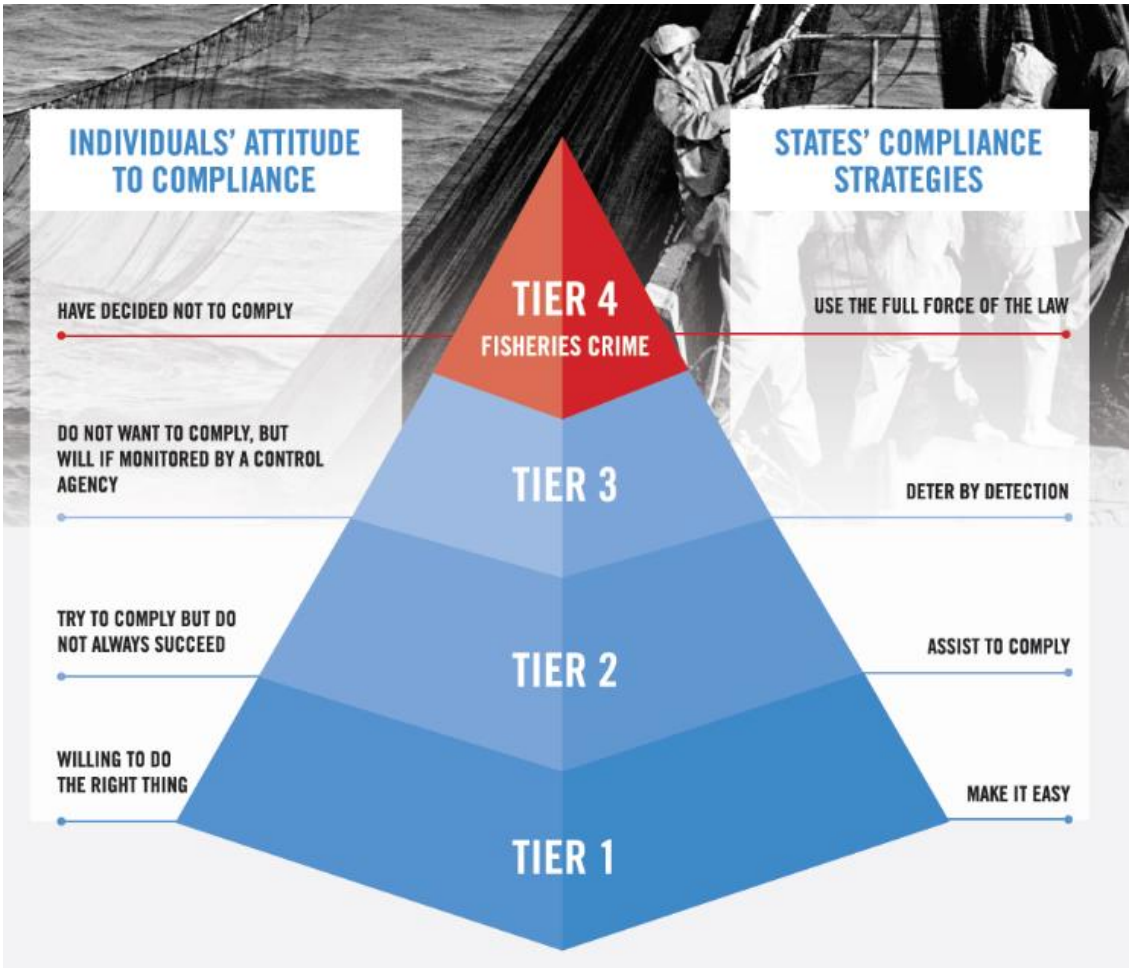
Fisheries crime refers to a range of serious offences committed along the entire fisheries value chain. These crimes extend into the trade, ownership structures and financial services associated with the fishing sector. The various types of offences, such as corruption, fraud and forgery, tax and customs evasion deprive states of income and adversely affects coastal communities' livelihoods, and undermines fisheries management and conservation efforts, resulting in overfishing and depletion of fish stocks.

[45] In September 2020, the Government of Federation of Bosnia & Herzegovina made the official decision that the Ministry of Agriculture, Water Management and Forestry should prepare a Decree for Tariff Setting Methodology with regard to Water Supply and Wastewater Management. (link). This way the Federal Government effectively took on board the preparatory work of the UNDP support projects (MEG, GoAL WaSH and GoAL-WaterS) and engaged the procedure of reviewing and adoption of the draft decree by parliament. These procedures included public discussions and consultations with sectoral stakeholders. MEG track record includes Better water supply in 18 cities and municipalities in BiH by reduction of Non-Revenue Water.

The methods of working to reduce crime and corruption in resources management provide key interlinkages between FishCRIME and Water Integrity work, with important insights e.g. to be drawn from the Fisheries Compliance Strategy Pyramid (Figure 22 below) on how to deal with different types of misconduct. This involves creating transparent systems that are more robust to withstand corruption by way of making it easy for those who want to follow the rules to actually do so, and to the extent possible persuade others to also comply.

NRO has also taken on a research and learning project entitled 'Blue Resilience.' The objective of Blue Resilience is to strengthen capacity for institutional cooperation towards effective governance responses to addressing organized crime in the fisheries sector. Focused on improved governance, it facilitates a knowledge-based learning package towards improved cooperation between agencies such as fisheries, tax, labor and the police to more effectively to address fisheries crime. The project is supported by the Government of Norway (link).

Figure 22 - Fisheries Compliance Strategy Pyramid



Source: https://fishcrime.com/wp-content/uploads/2016/09/compliance_strategies3.pdf [46]

An important part of the work towards improving integrity in the fisheries sector involves reducing illegal, unreported and unregulated (IUU) fishing. This is addressed in several programmes. Recent

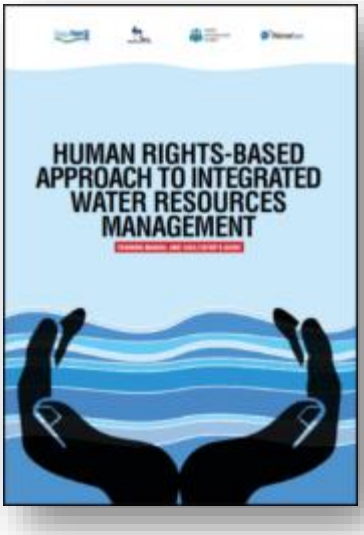
[46] Graphic presentation based on the compliance pyramid developed by the Organization for Economic Co-operation and Development's Forum on Tax Administration Compliance captured in De Coning (2016) Fisheries Crime, in Elliott & Schaedla (eds) *Handbook of Transnational Environmental Crime.*

results of this work has come from the UNDP-GEF work on tuna fishing in the Western and Central Pacific Ocean (see story on how Regional cooperation is reducing illegal, unreported and unregulated tuna fishing in the Western and Central Pacific Ocean). According to a recent Pacific Islands Forum Fisheries Agency (FFA) report, IUU fishing has reduced by 5% over the past decade. The report estimated the total annual volume of tuna product harvested or transshipped in the Pacific involving IUU activity during 2017-19 to be 192,186 tons. This compares with a similar study conducted between 2010-15 where IUU was estimated at 306,440 tons.

"This result shows that the strong regional cooperation between FFA members on monitoring, control and surveillance is working," says FFA's Director General, Dr Manu Tupou-Roosen. "The Pacific tuna fishery covers a large body of water and our island states have limited resources, but it reinforces that our strategies are having a profound impact on the volume and nature of IUU in the Pacific."

THE HUMAN RIGHTS-BASED APPROACH (HRBA)

UNDP has consistently promoted the inclusion of the human rights-based approach and the human rights to water and sanitation. In fact, all UN development agencies have subscribed to the HRBA. What this means for water management is further explained in the training manual on A Human Rights Based Approach (HRBA) to Integrated Water Resources Management (IWRM) which was produced by Cap-Net, SIWI, REDICA and other partners.



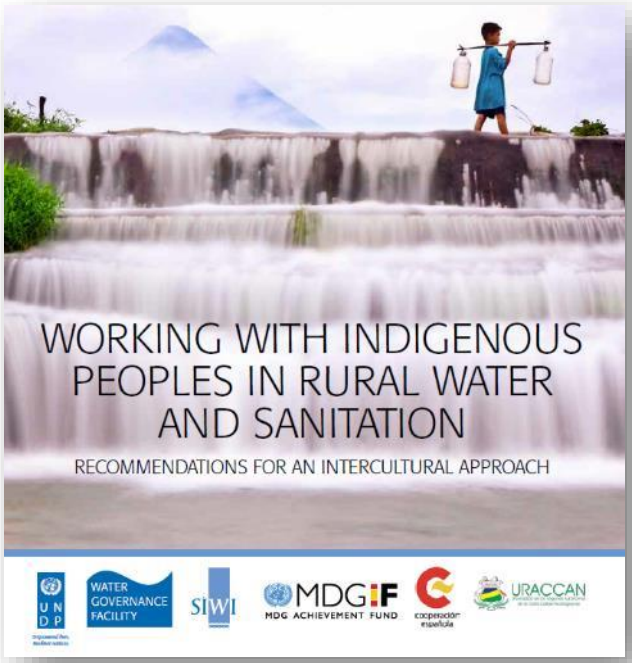
With an HRBA, target groups are considered to rights-holders with legal entitlements. Government institutions are duty-bearers, which have an obligation to fulfil human rights for all according to the UN Universal Declaration of Human Rights and the human rights conventions. Applying an HRBA to development cooperation implies to empower rights-holders to claim their rights and enhance the capacity of duty-bearers to meet their obligations in line with international human rights law. (Transparency and e.g. consumer councils mentioned under 'integrity' above are also ways to further the HRBA.)

Human rights were also in focus in the 2019 World Water Development Report 'Leaving No One Behind'. For UNDP, an important part of the practical work on human rights are in relation to the relation between Indigenous Peoples and environmental resources management.

INDIGENOUS PEOPLES – KEY FOR ENVIRONMENTAL RESOURCE MANAGEMENT

WOGP has been working with indigenous peoples mostly in conjunction with the previous support from the Spanish Millennium Development Goals Achievement Fund (MDG-F). Beyond the knowledge management for the 'Democratic Economic Governance' of Water and Sanitation work, WGF was engaged in a research project entitled "Towards Transcultural Transparency." This research partnership explored the different perspectives of communities, service providers, development

cooperation actors and local authorities regarding how water and sanitation services, with a view towards how relations could improve towards a more efficient and sustainable water governance system for indigenous areas.



The results were summarized into the action-oriented report on Working with Indigenous Peoples in Rural Water and Sanitation: Recommendations for an Intercultural Approach. The recommendations provided, with a view towards project implementation in indigenous areas were:

- Dialogue,
- Respect and Trust
- Flexibility and Inclusion
- Long-term Supportive Relations

Dialogue is the basic tool to generate long-term relationships of mutual trust and support between the indigenous communities, the responsible authorities and development agencies.

These recommendations were applied in, the GoAL WaSH work in Paraguay which operated in the Chaco region where more than 60% of the country's indigenous peoples live. Drawing on the recommendations for an intercultural approach, participatory municipal plans has been drafted and short radio programmes on water treatment were broadcast on the radio-stations Ondas Ayvu and Radio Pa´i Puku.

Whereas much of the work was initiated from the perspective of WASH, it is clear that the greater challenges for indigenous peoples relate to human rights and natural resources management. There

are important conflicts not only over resource use: A WGF-led journal article pointed on that of all development projects altering natural aquatic systems that are critical to indigenous peoples, mining and the construction of hydropower infrastructure are the most conflict-ridden. Over the past decades, very few of water-related conflicts involving indigenous communities have transitioned to a full cooperative agreement between the parties. The number and intensity of these conflicts are substantial and have even increased over the last two decades.

Moreover, there is also competition between worldviews – what perspective on nature, environment and resource ownership is to prevail? The varying perspectives on water management philosophy – including whether water in itself can be considered 'governable'– has been discussed at many events, including at the Stockholm World Water Week, as exemplified in Box 1.

Box 1 - Event: Experiences from Indigenous People's Networks on Water Management

Experiences from Indigenous people's networks in water management

World Water Week event, 26 August 2019

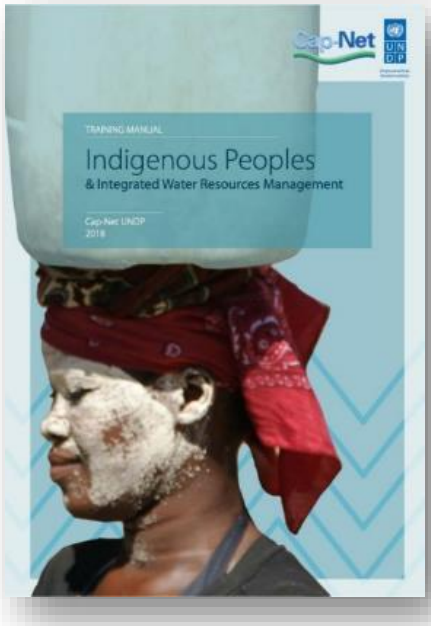
Complementing with the Week's theme for the year 'Water for society – including all', the objective of this session was to provide a platform for indigenous voices and sharing of experiences and efforts led by indigenous networks around water management. In particular, the challenges faced, and initiatives taken towards strengthening local systems and knowledge in water management and integrating them in policy and practice.

Represented by three young indigenous women voices, indigenous networks from Asia and Latin America presented experiences on promoting local access to safe water, enhancing community water management practices and integrated resource management, and ways to ensure water security, land and water rights, and water pollution challenges faced by these communities.

The UN Special Rapporteur on the human rights to safe drinking water and sanitation Mr. Léo Heller and UN Special Rapporteur on the rights of indigenous peoples Mrs. Victoria Tauli-Corpuz addressed the gathering with closing keynotes stressing patterns of discrimination and inequalities, the need to respect indigenous rights and traditional knowledge, as well as the spiritual and cultural connection of water and people.

Human rights are often abused in relation to the resource use on indigenous people's land. Such issues spurred the development of a follow-on training manual on Indigenous Peoples and IWRM. The manual was also inspired by the thought that the integration of indigenous peoples' rights and traditional knowledge into water resources management can be an effective means to enhance sustainable development in a river basin.

The manual on Indigenous peoples and IWRM addresses issues of indigenous peoples as custodians of biologically and culturally diverse environments and possessors of invaluable knowledge about their water resources. Yet, they are often ignored in decision-making on water, unequally treated in conventional water management systems, and disproportionately affected by water conflicts.



The manual, produced with WaterLex, Nile IWRM-Net, WGF, International Rivers, and Justicia Hídrica, aims to enhance the understanding of the different interests inherent in water management and governance, and to assist in finding ways to fruitfully involve indigenous peoples in governance and management processes, and to find ways of incorporating their greater and often different type of knowledge about natural resources into these wider processes

A policy brief on "Indigenous peoples, water and climate" was launched at the World Environment Day on 5 June 2020, following the COP25 outcome in which Parties adopted a two-year workplan for the Local Communities and Indigenous Peoples' Platform (LCIPP). The policy brief includes recommendations on how to further highlight and include indigenous perspectives as part of the UNFCCC and other climate processes. Further, the work on a WGF-led study to present worldviews and perspectives on water management among different faith-based communities and indigenous peoples is being finalized and will be published in 2021.[47]

UNDP's work in this area may best be represented by the Equator Initiative, which brings together the United Nations, governments, civil society, businesses and grassroots organizations to recognize and advance local sustainable development solutions for people, nature and resilient communities. Also, SGP has 25 Years of Engagement with Indigenous Peoples,

Indigenous peoples are increasingly recognized partners for addressing contemporary challenges such as climate change and global biodiversity loss.[48] It has been estimated that traditional territories of Indigenous Peoples and local communities contain approximately forty percent of the remaining globally intact ecological landscapes.[49] As these territories contain important headwaters and wetlands, Indigenous Peoples are critical partners in addressing global challenges, including climate change and the growing water crisis.

[47] The study on different groups' perspectives on water management was originally conceived as a contribution to the 2021 edition of the World Water Development Report focusing on "Valuing water." Data was gathered through a survey circulated broadly in late 2019, and its contributions can be found in four of the chapters of the World Water Development Report.

[48] Indigenous peoples to get $1.7bn in recognition of role in protecting forests. Also, a UNDP blog post on recognition and reciprocity (link) called attention to that indigenous peoples are stewards of a large portion of the lands, water and biodiversity that provide a planetary safety net for humanity. In fact, indigenous peoples often in the lead of much-needed essential global transformation on nature, climate, economies.

[49] WWF, et al (2021) The State of Indigenous Peoples' and Local Communities' Lands and Territories: A technical review of the state of Indigenous Peoples' and Local Communities' lands, their contributions to global biodiversity conservation and ecosystem services, the pressures they face, and recommendations for actions Gland, Switzerland (2021)

Notwithstanding the critical role of Indigenous Peoples for water management, there is currently a lack of mechanisms to channel indigenous perspectives and cultural values into the global water policy discourse. The UNDP Water & Ocean Governance is working intensively to open the preparatory process of the 2023 UN Water Conference to major groups and indigenous peoples' contribution and influence. This would constitute an important feat of inclusive and participatory water governance also at the global level.

Indigenous peoples possess traditional ecological knowledge, and their insights are essential for the understanding of how nature-based solutions can be made to work.

Notwithstanding, development cooperation would typically also involve blended solutions and construction work, which can open up avenues for skills development, income generation and the transgressing of gender roles.

Many projects are working towards improving watershed protection – with indigenous knowledge – as well as improved services provision and social protection for vulnerable communities.

Capacity and skills development can help open for inclusion and long-term supportive relations in project implementation, within the broader realm of dialogue, mutual respect and trust.

Now we are skilled workers … we used to be the community counterpart; now we can be contracted"

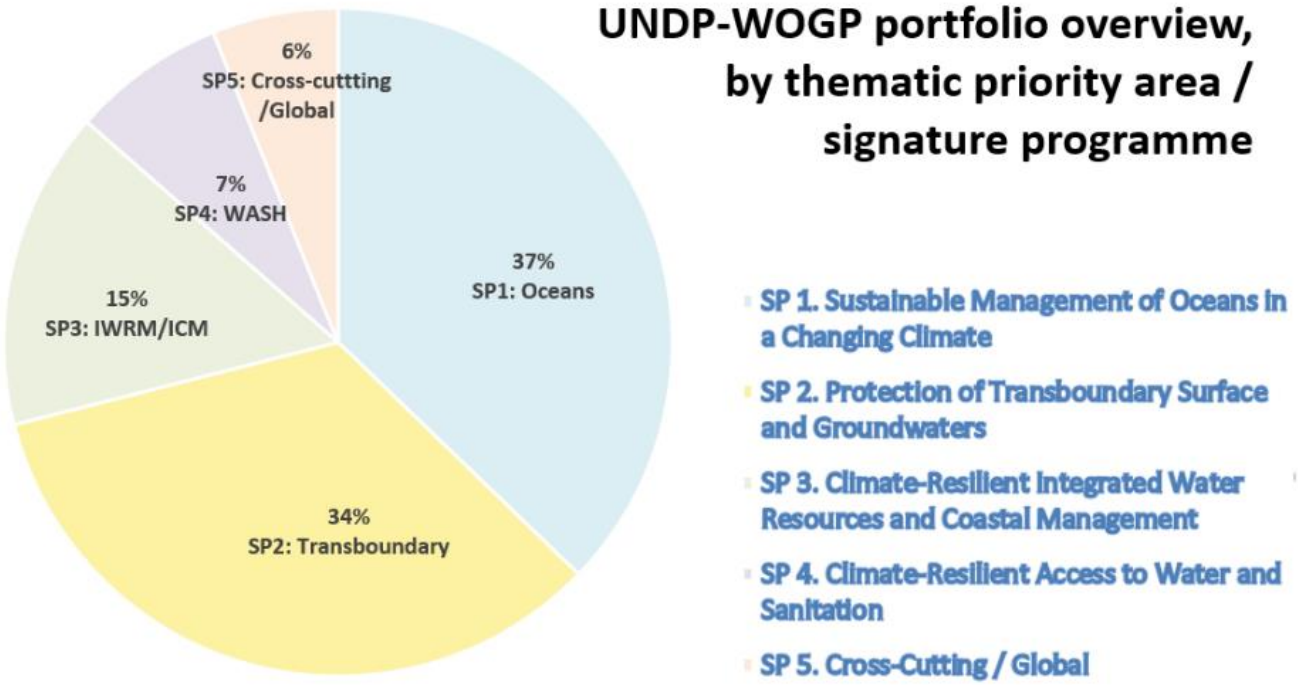
(Miskita woman, trained as a bricklayer - ILO, 2012)

RESOURCES, BUDGET REALIZATION AND MANAGEMENT

This section provides a brief overview of the programme management and the use of funds of the 2014-2021 Sida contribution. To contextualize, first a snapshot overview of the total WOGP portfolio.

The total value of the presently operational WOGP portfolio is estimated at US$374 million. See Annex 1 for a listing of project titles, budgets and main funders, by thematic priority areas / Signature Programmes. Figure 23 illustrates the thematic spread of the portfolio, , with the largest contribution to oceans (37%), followed by transboundary waters (34%) and Integrated Water Resources and Coastal Management (15%).

Figure 23 - WOGP Portfolio, by Theme/Signature Programme



Source: Annex 1 (drawing on UNDP Project Information Management System PIMS+)

The volume of the portfolio is dominated by projects funded by GEF, but there are also other Vertical Funds (Adaptation Fund, Least Developed Countries Fund (LDCF), Green Climate Fund) and bilaterals like Sida, Norad and Canada. Sida's contribution, amounting to US$16.4 million in the active portfolio, represents 4.4% of the total. Thematically, the Sida-supported projects feature under the Sustainable Ocean Management and the Cross-Cutting / Global Signature Programmes. The contribution, however, is highly significant since it addresses cross-cutting knowledge management and helps keep the portfolio together.

Utilization of Sida's 2014-2021 Contribution

The Third-Party Cost-Sharing Agreement between Sweden, represented by Sida, and UNDP initially covered the 4-year period 2014-2017.[50] It has since been extended with additional funding provided for 2018 and 2019, and eventually a no-cost extension - to accommodate delays caused by the Covid-19 pandemic - until 1 May 2021.[51] The activities in 2020 and early 2021 have hence utilized the remaining balances from the previous years.

Table 7 below consolidates the expenditures reported in the 2014-2020 Annual Reports to Sida. All in all, a total of US$19,715,536 were received and utilized under the 2014-2021 period under the Sida Cost Sharing for the WOGP contribution to the realization of UNDP's Strategic Plan. Most resources have been put into capacity development and policy support, as follows:

- 43% ($8.57 million) invested in individual and institutional capacities of water professionals in Africa, Asia, and Latin America and the Caribbean (Cap-Net)
- 25% ($4.96 million) invested in technical advisory and policy support implemented through the UNDP-SIWI Water Governance Facility
- 21% ($4.21 million) invested in local and national water governance reform work, delivered through UNDP country offices
- 10% ($2.02 million) utilized for WOGP-BPPS thought leadership, project oversight, administration, and quality assurance.

All the expenditure figures include an 8% GMS, Global Management Support cost recovery rate to fund the corporate structure, management, and oversight of UNDP.

The corrections on row 11 in Table 7 above relate to:

- In 2014, US$50,605 were transferred from the previous Trust Fund into the then new Cost Sharing Agreement arrangement with Sida.[52]
- Minor income adjustments to the years 2017 ($22) and 2018 (-$57) were made in conjunction with the financial closure of the relevant projects.

The formal final accounts/financial reporting will be sent separately to Sida as part of UNDP's Certified Financial Reports. Any 2021 expenditure or adjustment on the range of projects forming part of the WOGP contribution to the realization of the Strategic Plan figure there.

[50] The Third-Party Cost-Sharing between Sweden, represented by Sida (Donor Reference: 60150034), and UNDP (Award: #50169) was signed with an initial contribution of SEK 120 million on 1 July 2014.

[51] After a reduction of the annual contributions for 2016 and 2017, the total contribution amounted to SEK 110 million. The subsequent additions coming with extensions amounted to SEK 25 million for 2018, and SEK 30 million for 2019. The final contribution from Sida to the WOGP Contribution to the UNDP Strategic Plan, operationally extended until 1 May 2021, amounted to a total SEK 165 million.

[52] These funds were added to Adaptive Water Management project #72388, implemented by UNOPS, and have in the reporting been deducted from the expenditures/delivery for the year 2014.

Table 7 – Total Resources Received and Utilized under Sida Cost Sharing for WOGP Contribution to UNDP Strategic Plan 2014-2021, by Year

Year	2014	2015	2016	2017	2018	2019	2020	2021	All years
Resources (USD)									
Incoming balance	-	2,049,487	3,468,283	2,657,947	2,504,762	2,211,543	2,314,267	211,057	n.a.
Contribution received	4,440,497	3,550,716	2,930,832	2,863,383	2,780,502	3,149,606	-	-	19,715,536
Available funding	**4,440,497**	**5,600,203**	**6,399,115**	**5,521,330**	**5,285,264**	**5,361,149**	**2,314,267**	**211,057**	**19,715,536**
Delivery, by Mechanism / Sub-Programme (USD)									
HQ Thought leadership, Admin & QA	207,711	146,942	109,969	336,966	363,276	454,785	323,861	77,345	2,020,855
UNDP-SIWI Water Gov Facility	336,386	580,090	1,249,562	677,120	839,346	635,883	643,523	-	4,961,910
Country Offices (GoAL WaSH/WaterS)	268,814	388,652	810,782	803,872	673,223	700,575	490,323	72,262	4,208,503
Capacity Dev (Cap-Net)	1,628,705	1,016,235	1,570,855	1,198,588	1,197,932	1,255,640	645,502	61,451	8,574,908
CORRECTIONS	*(50,605)*			*22*	*(57)*				*(50,640)*
Total Expenditures	**2,391,010**	**2,131,920**	**3,741,168**	**3,016,568**	**3,073,721**	**3,046,882**	**2,103,209**	**211,057**	**19,715,536**

The delivery of WOGP's contribution to the UNDP Strategic Plan has for most of the 2014-2021 period been channeled through a large number of independent projects.

- The UNDP Water Governance Support Programme Award/Project #50169) housed the global projects/outputs: 'Adaptive Water Governance' (Atlas Output #72388), UNDP Water Governance Facility (Atlas Output #61827), and 'Water Governance Support Programme (Atlas Output #102175).
- The UNDP Capacity Development Network for Water Management Award/Project #44301 housed the International Network for Capacity Development in Sustainable Water Management (Cap-Net) Atlas Output #75442.

Support to local and national level water governance reform through GoAL WaSH was channeled through a number of separate projects managed by Country Offices. (See Table 6 above.)

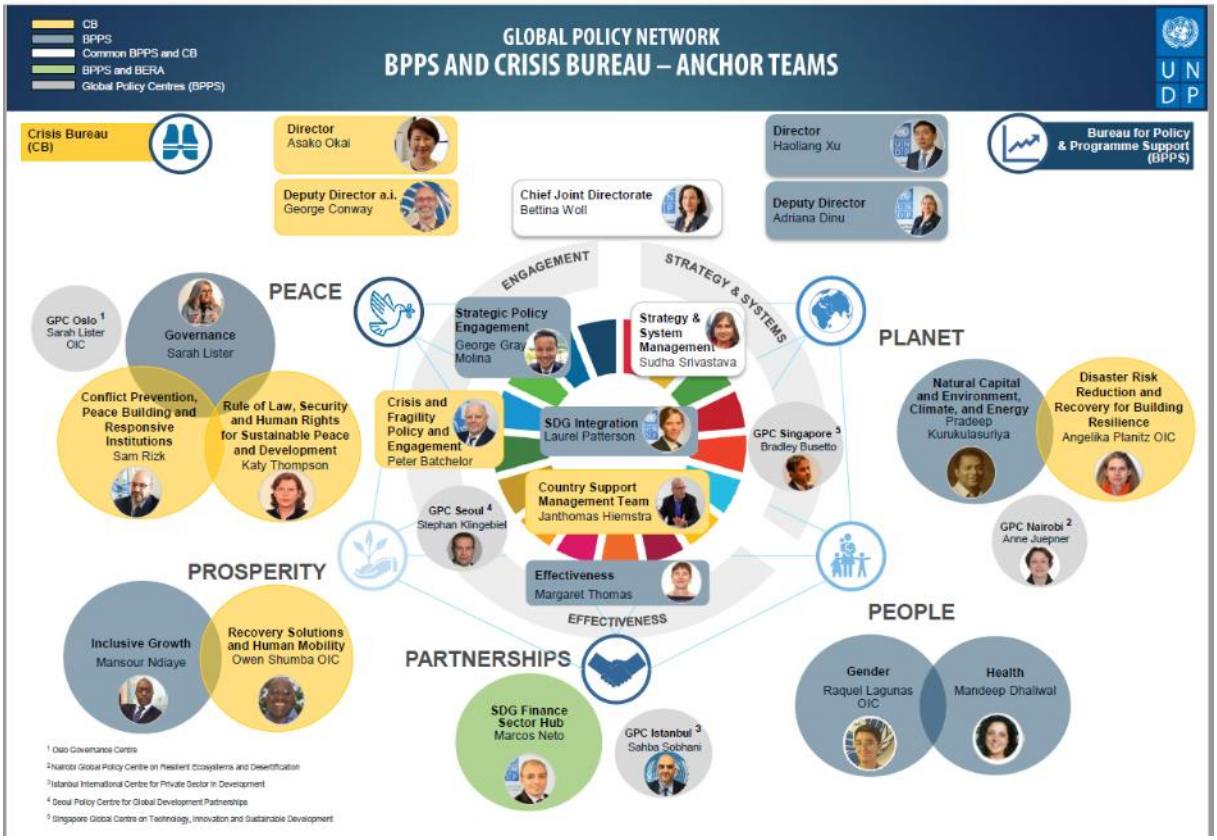
Since 2019, the delivery has been consolidated into one Global Water and Ocean Governance Support Programme (Project #115482), which provides a continuation of the long-standing WOGP SDG14 and SDG6 delivery mechanisms (Atlas Output #113069: Water Governance Support Programme) as well as the newer addition focusing specifically on SDG14 innovation (Atlas Output #117778: Ocean Innovation Challenge).

The continued work in all these areas effectively constitute the delivery in Thematic Area B: Waters and Oceans (Atlas Output #120004) of the Sida-UNDP Strategic Collaboration Programme on Environment and Climate Change (Project #124739).

UNDP-WOGP Organization and Delivery Mechanisms

Based in the Bureau for Policy and Programme Support (BPPS), the WOGP sits within the Nature, Climate and Energy (NCE) team and forms part of UNDP's Global Policy Network (GPN). GPN is UNDP's engine for thought leadership, programmatic work and a vital delivery mechanism of the 'integration' function. Relating closely to the 2030 Agenda it is organized around the pillars of People, Planet, Prosperity, Peace and Partnership, see the overview of GPN leadership in Figure 24.

Figure 24 – Overview of UNDP's Global Policy Network (GPN) Leadership and Anchor Teams

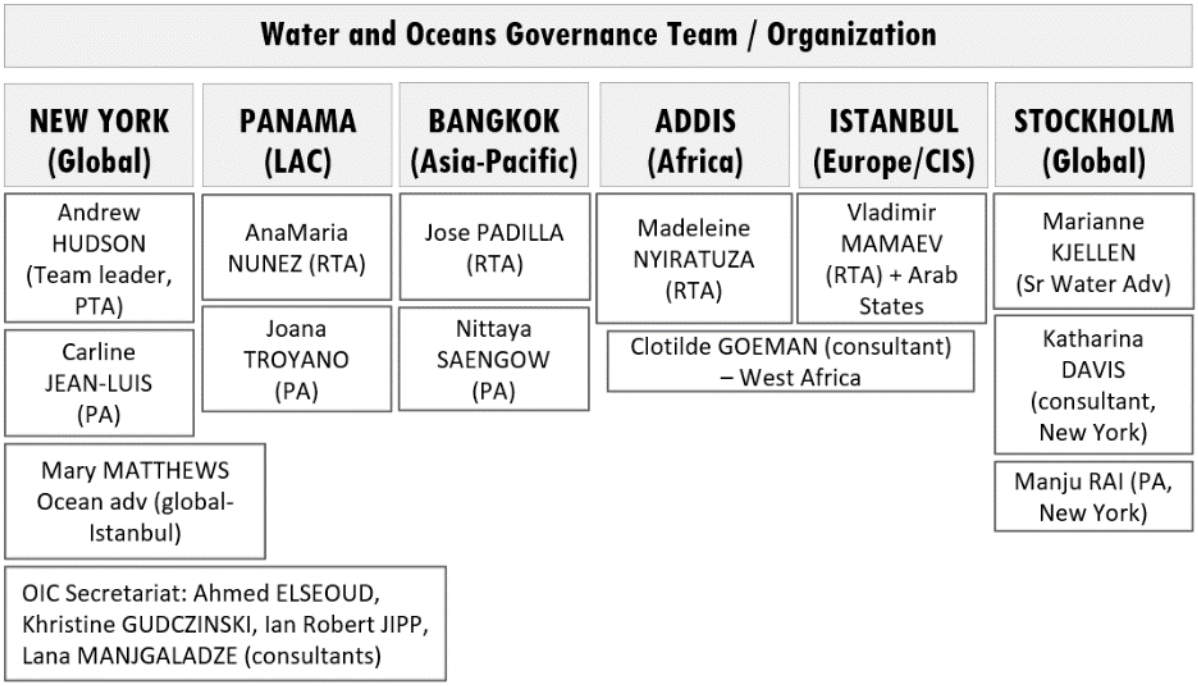


Source: Overview UNDP-GPN Leadership Team (February-2020)

WOGP develops and oversees UNDP's knowledge management on freshwater and marine resources governance and serves as the organization's focal point for SDGs 6 and 14 issues. This implies developing corporate positions on these matters and support country and regional offices with project and programme implementation. It should be noted that a number of projects beyond WOGP address issues related to marine resources management. Regarding freshwater, and especially WASH, the majority of programmes are managed by regional hubs and country offices. Nevertheless, WOGP supports knowledge management for all freshwater endeavors and has developed the UNDP-SIWI Water Governance Facility for that purpose.

Within the GPN – or UNDP's expertise areas[53] – WOGP falls under the *Planet* core offering, and the Nature, Climate and Energy (NCE) team. There is long list of sub-teams / expertise areas[54] under NCE including ocean and water governance. Most joint endeavors are found with the teams of Ecosystems and Biodiversity, Climate Change Mitigation, Climate Change Adaptation, Chemicals, and Energy.

Figure 25 – Water and Ocean Governance Programme Team



Source: Updated and adjusted from GPN Organigram

The work of the WOGP is overseen by the Principal Technical Advisor (PTA) in New York. The portfolio of vertically funded projects is developed and overseen by the Regional Technical Advisors (RTAs) based at UNDP's regional hubs in close cooperation with UNDP Country Offices across each of the five UNDP regions as well as a wide range of UNDP implementing partners (UN, IGO, NGO, etc.). The Senior Water Advisor, based in Stockholm, oversees Sida's support to WOGP endeavors, including global thought leadership and knowledge management related to freshwater, and the work of WGF and Cap-Net. An Ocean Advisor was recruited to manage the Sida co-financed UNDP Ocean Innovation Challenge and support global policy advice on marine resources governance. During the past year, personnel has also been recruited to fill the OIC secretariat. Figure 25 provides an 'end of 2021' snapshot of the WOGP team.

Further, WOGP's work is implemented through the range of delivery mechanisms. UNDP Country Offices constitute the main channel for national and sub-national support, whereas most of the GEF International Waters projects are delivered through inter-governmental agencies, NGOs or other UN agencies (IMO, IOC/UNESCO, IAEA, UNEP, etc.). All advisors engage in global or regional policy work,

[53] https://www.undp.org/expertise

[54] Resilient Ecosystems and Desertification [Nairobi Global Policy Centre], Montreal Protocol, Chemicals and Waste Management, Circular and Green Economy, Climate Change Adaptation, Ecosystems and Biodiversity, Ecosystems and Biodiversity, Energy, Climate and Forests, Global Environmental Finance (GEF, GCF, AF), Food, Agriculture and Commodities Systems, Climate Policies and Strategies, Nature-Based Solutions to Climate, Small Island Developing States, Urban Climate, Ocean Governance, and Water Governance.

drawing, as appropriate, on the support and division of tasks with WGF and Cap-Net UNDP (and its implementing partner, the GWP). Knowledge management, capacity development, portfolio exchange and other KM services for the transboundary waters thematic area are facilitated through IW:LEARN, led and coordinated by UNDP on behalf of the GEF partnership for over twenty years.

Long-standing delivery mechanisms for the Sida-supported endeavors of the WOGP are constituted by Cap-Net, WGF and the signature programmes delivered through country offices – see further below. These are complementary to the long-standing Vertical Funds delivery (UNDP-GEF-International Waters Portfolio) and the more recent OIC. All detailed further below here below:

UNDP-GEF International Waters Portfolio

There are some 268 transboundary rivers on earth - transboundary river basins make up just over half of the earth's land area and some 145 countries have one or more transboundary rivers within their territory. There are also over 300 transboundary aquifers which help meet the water needs of some 2 billion people. Similarly, over two-thirds of the world's 64 LMEs are shared by two or more countries, in some cases (Caribbean Sea) as many as 25 countries share these resources. As a result, addressing environmental sustainability challenges under both SDGs 6 and 14 often requires multi-country cooperation on both shared freshwater and marine systems. Comprehensive and sustainable solutions to these challenges require integrated, cross-sectoral and ecosystem-based approaches that engage all the countries that share these ecosystems.

Since its founding in 1991, UNDP has worked closely with the GEF as a key financing partner in the development and implementation of a large portfolio of projects under the GEF's International Waters focal area. To date, UNDP has mobilized nearly US$900 million from the GEF, representing some 30 percent of all GEF commitments in this focal area. These projects have helped countries to conduct joint waterbody assessments (TDA) and to develop, adopt and implement agreed multi-country SAPs that set forth commitments to policy, regulatory and institutional reforms required to move overall management and government of these shared systems towards sustainable use. Cumulatively, UNDP has supported multi-country cooperation in some 30 shared freshwater (river, lake, aquifer) and 14 shared Large Marine Ecosystems; the overall progress and results of this support can be seen in

Table 2 (page 10), UNDP-GEF International Waters Results Tracker. This number of shared freshwater systems represents over ten percent of all transboundary basins on earth and the LMEs represent over 20 percent of all the world's LMEs, underscoring the scale and transformational impact of these long-term investments in shared water and ocean systems.

UNDP Ocean Innovation Challenge

While some progress has been made, the majority of the SDG 14 targets were not achieved by their target year (4 with 2020 as target year) and remain quite behind. While a number of important commitments and actions are being made by a broad range of stakeholders, from governments to the UN to NGOs, it is clear that transformational change is required in a number of ocean-related sectors if progress on SDG 14 is to be accelerated towards overall achievement of the targets. To help address this gap, UNDP in dialogue with Sida and later Norad has established the UNDP OIC.

The OIC is a unique mechanism that identifies, finances and mentors/incubates ocean innovations drawing from private sector (including start-ups), government, NGO, IGO, UN and academia. The OIC seeks technological, policy, regulatory, economic, financial and other solutions that meet key criteria including innovativeness, replicable, scalable, contribute to gender/poverty reduction, enhance livelihoods and have the potential to transform the relevant sector(s).Each year, the OIC issues its annual 'call for proposals' focusing on a sub-set of SDG14 targets. The first call, on SDG 14.1 pollution, generated over 600 concept submissions and 8 final projects were selected for support; these projects are presently under implementation. The second call, on sustainable fisheries SDGs 14.4/14.7/14.b, received over 300 submissions which are presently undergoing final review and appraisal to determine the 2021 cohort of Innovators to receive UNDP support in 2022-23.

The International Capacity Development Network for Sustainable Water Management (Cap-Net)

The International Capacity Development Network for Sustainable Water Management (Cap-Net UNDP) was conceived in the mid-1990 at a UNDP Symposium on Water Capacity Development held in Delft, The Netherlands. It was launched with DGIS funding in the early 2000s, hosted by UNESCO-IHE Water Institute for Water Education (now IHE-Delft). A second phase (from 2006) saw an expansion with new funding from Norway, DGIS and Sida. The Cap-Net secretariat relocated to Pretoria, South Africa, to be hosted by the Water Research Commission. Operations implemented through United Nations Office for Project Services (UNOPS). Secretariat relocated to Rio de Janeiro, Brazil, in 2014 and subsequently down-sized due to funding constraints. After institutional review, global secretariat function further integrated with Global Water Partnership. Since early 2019 operations implemented by the Global Water Partnership Organization (GWPO).

The strength of Cap-Net lies with the vital partners and implementing members: the affiliated networks. The networks are autonomous, associations of experts and organizations, that have emerged globally as a strategic response to the demand for increased skills and capacities in the water sector, leading towards the implementation of integrated water resources management. (see https://cap-net.org/the-network/ and Annex 6 for a listing of Cap-Net's partner networks.) The networks commit a considerable amount of their own time and resources in the quest for 'Water Knowledge for All.'

The UNDP-SIWI Water Governance Facility (WGF)

The UNDP-SIWI Water Governance Facility (WGF), previously the UNDP Water Governance Facility at SIWI, was initiated with Sida support in 2005. It is hosted by the Stockholm International Water Institute (SIWI). The main function of WGF is to enhance UNDP's capacity to provide relevant policy support and advice to countries, and to build the knowledge and capacities for improved water governance within governments and civil society as well as among UN agencies. It advances water governance knowledge in thematic areas such as water supply and sanitation, integrated water resources management, transboundary waters, climate change adaptation, integrity, gender and human rights. The Facility connects directly through UNDP country offices to provide advisory services in several countries in Central and South Asia, Middle East and North Africa, Sub-Saharan Africa, and Latin America.

Figure 26 – Presentation of UNDP-SIWI Water Governance Facility

Source: https://www.watergovernance.org/about-us/contact-us/

WGF has been acting as 'strategic manager' of the UNDP GoAL WaSH and GoAL-WaterS signature programmes, which are implemented through UNDP Country Offices.

UNDP Country Offices – Delivering Water Governance Support to National and Local Processes

The WOGP support to national and local endeavors has been delivered through UNDP Country Offices, commonly with WGF management support. The most prominent signature programmes in this area are the recently completed GoAL WaSH and the more recent GoAL-WaterS, both further described below. Beyond these signature programmes, the WOGP supports water and ocean related endeavors implemented by 'Sida Programme Pilot Countries' under the auspices of Sida-UNDP Strategic Collaboration Programme on Environment and Climate Change.[55] Those undertaking the most prominent water and ocean endeavors in this context are Haiti, Cambodia, Colombia and, according to plan, Nepal.

[55] The Pilot Countries implementing 'joint work plans' between Biodiversity and Ecosystems, Water & Ocean Governance, Climate & Energy, and Food Systems, are Haiti, Colombia, Cambodia, Ethiopia, Myanmar, Uganda, Bangladesh, Nepal, Fiji Multi-County Office.

GOVERNANCE, ADVOCACY, AND LEADERSHIP IN WATER, SANITATION, AND HYGIENE (GOAL WASH), 2008-2019

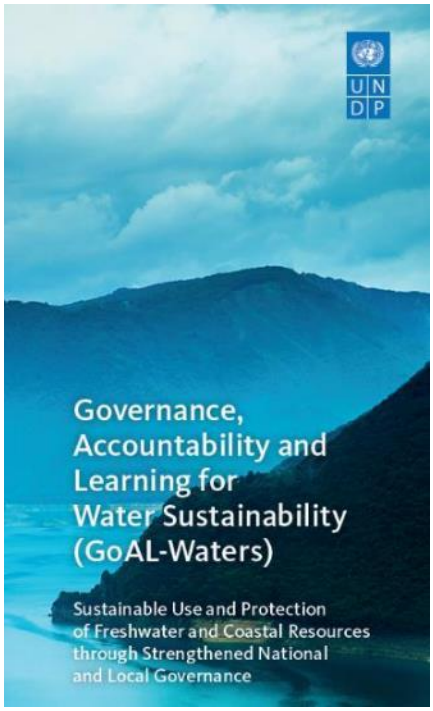
The GoAL WaSH Programme was established in 2008 to accelerate the achievement of the water and sanitation targets of the MDGs and subsequently the more ambitious water, sanitation and participation targets of the SDGs.

Countries with specific water-related challenges, often in a post-conflict context, were selected for GoAL WaSH support. This support built on the alignment of government and UNDP country office interests in addressing those challenges by way of governance reform.

Further, as a 'gap-filling' mechanism, GoAL WaSH complemented other ongoing initiatives and built synergies to allow national authorities to accelerate the realization of water governance reforms. As a result, GoAL WaSH has promoted water governance reform in 15 countries across all regions of the world.

GOVERNANCE, ACCOUNTABILITY AND LEARNING FOR WATER SUSTAINABILITY (GOAL-WATERS), 2019–

As GoAL WaSH was closed due to lack of funding for WASH, the successful approach was continued with a focus on integrated water and coastal management. Hence, in 2019, the programme on *Governance, Accountability and Learning for Water Sustainability* (GoAL-WaterS) was launched for the Sustainable Use and Protection of Freshwater and Coastal Resources through Strengthened National and Local Governance.



The programme supports equitable, efficient and environmentally sustainable use and protection of freshwater and marine resources. It helps identify priorities and opportunities and address gaps and constraints in water and ocean governance by developing action at national and local levels. Important endeavors have been carried out in Jordan (Managed Aquifer Recharge initiated by GoAL WaSH), Vietnam and Armenia (in close collaboration with the GWP-led SDG6 Support Programme), the Comoros (preparing water governance reform preparing for GCF project implementation), and India (particularly on gender and traditional knowledge on springs).

ABBREVIATIONS AND ACRONYMS

AECID	Agencia Española de Cooperación Internacional para el Desarrollo
AF	Adaptation Fund
AfDB	African Development Bank
AWARENET	Arab Integrated Water Resources Management Network
BCC	Benguela Current Convention
BCLME	Benguela Current Large Marine Ecosystem
BERA	(UNDP) Bureau for External Relations and Advocacy
BPPS	Bureau for Policy and Programme Support of UNDP
Cap-Net UNDP	International Network for Capacity Development in Sustainable Water Management (UNDP)
CBOs	Community-Based Organizations
CEO	Chief Executive Officer
CFI	Coastal Fisheries Initiative
CLME+	Caribbean and North Brazil Shelf Large Marine Ecosystems
DGIS	Directorate-General for International Cooperation, Ministry of Foreign Affairs of The Netherlands
EBA	Expert Group for Aid Studies (Expertgruppen for Biståndsanalys)
EEZ	Exclusive Economic Zone
ESA	External Support Agency (ESA)
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FFA	Pacific Islands Forum Fisheries Agency
FIP	Fisheries Improvement Project
FONAG	Fondo para la protección del Agua (Water Fund in Ecuador)
GCF	Green Climate Fund
GEF	Global Environment Facility
GEF-IW	Global Environment Facility – International Waters
GEF IW:LEARN	GEF International Waters Learning Exchange and Resource Network
GEF STAP	Global Environment Facility Scientific and Technical Advisory Panel
GEMI	Global Expanded Monitoring Initiative (UN-Water)
GERD	Grand Ethiopian Renaissance Dam
GHG	Greenhouse gas
GIA	Global Industry Alliance
GIZ	German Federal Enterprise for International Cooperation
GLAAS	UN-Water Global Analysis and Assessment of Sanitation and Drinking Water (led by WHO)
GloBallast	*Building Partnerships to Assist Developing Countries to Reduce the Transfer of Harmful Aquatic Organisms in Ships' Ballast Water* project
GloFouling	*'Building Partnerships to Assist Developing Countries to Minimise the Impacts from Aquatic Biofouling'*
GloMEEP	Global Maritime Energy Efficiency Partnership Project
GMC	Global Marine Commodities
GoAL WaSH	Governance, Advocacy and Leadership for Water, Sanitation and Hygiene Programme
GoAL-WaterS	Governance, Accountability and Learning for Water Sustainability
GPN	Global Policy Network
GWP	Global Water Partnership
GWPO	Global Water Partnership Organization
GWP-MED	Global Water Partnership-Mediterranean
HLPF	High Level Political Forum
HRBA	Human Rights-Based Approaches
HRWS	Human Right to Water and Sanitation
IACG	UN Interagency Coordination Group on Antimicrobial Resistance (
IADB	Inter-American Development Bank
ICWC	International Centre for Water Cooperation
ICM	Integrated Coastal Management
ILO	International Labour Organisations
IMO	International Maritime Organization
IRRF	Integrated Results Reporting Framework
ISO	International Organization for Standardization
ITTAS	Iullemeden-Taoudeni/Tanezrouft Aquifer System
IUCN	International Union for Conservation of Nature
IUU	Illegal, Unreported and Unregulated fishing.
IWA	International Water Association
iWASH	Integrated Water and Sanitation approach
IWEco	Integrating Water, Land and Ecosystems Management in

	Caribbean Small Island Developing States
IWC	International Waters Conference
IW:LEARN	GEF International Waters Learning Exchange and Resource Network
IWMI	International Water Management Institute
IWRA	International Water Resources Association
IWRM	Integrated Water Resource Management
LAC	Latin America and the Caribbean region
LA-WETnet	Latin America Water, Education and Training Network
LCIPP	Local Communities and Indigenous Peoples' Platform
LDCF	Least Developed Countries Fund
LME	Large Marine Ecosystem
LME:LEARN	GEF Large Marine Ecosystem Learning Exchange and Resource Network
MDG	Millennium Development Goal
MDG-F	Millennium Development Goals Achievement Fund
MENA	Middle East and North Africa Region
MOOC	Massive Online Open Campus
MPAs	Marine Protected Areas
MRC	Mekong River Commission
MSC	Marine Stewardship Council
MSP	Marine Spatial Planning
MUSD	Million US Dollars
NAP	National Adaptation Plan
NWASHC	National Water Sanitation and Hygiene Commission (of Liberia)
NB	Niger River Basin
NBI	Nile Basin Initiative
NB-ITTAS	Niger River Basin and the Iullemeden-Taoudéni/Tanezrouft Aquifer System
NBS	Nature Based Solutions
NDC	Nationally Determined Contributions
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
OECD WGI	OECD Water Governance Initiative
OFID	OPEC Fund for International Development
OIF	Ocean Innovation Facility
PEMSEA	Partnerships in Environmental Management for the Seas of East Asia

PIF	Project Identification Form
PIMS+	(UNDP GEF+) Project Information Management System
RBO	River Basin Organization
REDICA	Red Centroamericana de Instituciones de Ingeniería
RTAs	Regional Technical Advisers
RWSN	Rural Water Supply Network
SADC	Southern African Development Community
SAP	Strategic Action Programme
SCCF	Special Climate Change Fund
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goal
SEI	Stockholm Environment Institute
SEK	Swedish Krona/or
SGP	Small Grants Programme (UNDP-GEF)
Sida	Swedish International Development Cooperation Agency
SIDS	Small Island Developing States
SIWI	Stockholm International Water Institute
SWA	Sanitation and Water for All
SWP	Shared Waters Partnership
S2S	Source to Sea Management
ToT	Training of Trainers
TDA	Transboundary Diagnostic Analysis
TDPS	Titicaca–Desaguadero–Poopó–Salares system
UfM	Union for the Mediterranean
UN	United Nations
UN-DOALOS	United Nations Division for Ocean Affairs and the Law of the Sea
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP-DHI	UNEP-DHI Centre for Water and Environment
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNESCO-IHE	UNESCO- Institute for Water Education
UNESCO IHP	UNESCO International Hydrological Program
UNESCO-WWAP	UNESCO- World Water Assessment Program
UNFCCC	United Nations Framework Convention on Climate Change

UN-Habitat	United Nations Human Settlements Programme
UNICEF	United Nations Children's Fund
UNITAR	United Nations Institute for Training and Research
UNODC	United Nations Office on Drugs and Crime
UNOPS	United Nations Office for Project Services
UNRIC	United Nations Regional Information Centre
USAID	United States Agency for International Development
WASH	Water Sanitation and Hygiene
WASHBAT	WASH bottleneck analysis tool
WCPFC	Western and Central Pacific Fisheries Commission
WGF	Water Governance Facility
WHO	World Health Organization
WIN	Water Integrity Network
WMO	World Meteorological Organization
WOGP	UNDP Water and Ocean Governance Programme
WWF	World Wide Fund for Nature
WWW	Stockholm World Water Week
YSLME	Yellow Sea Large Marine Ecosystem

ANNEX 1: WOGP PORTFOLIO OF PROJECTS (ONGOING AND APPROVED PIPELINE), BY THEME[56]

Project Title	Ref #	Geographic Scope	Lead Country/ Office	Status	Total Resources (USD)	Main financial partner(s)
THEMATIC PRIORITY AREA: CLIMATE-RESILIENT ACCESS TO WATER SUPPLY AND SANITATION						
Addressing Climate Vulnerability in the Water Sector (ACWA) in the Marshall Islands	5701	Country	Marshall Islands	Under Implementation	18,631,216	GCF
Advancing Climate Resilience of Water Sector in Bhutan (ACREWAS)	6647	Country	Bhutan	Hard Pipeline	9,132,420	LDCF / GEF
THEMATIC PRIORITY AREA: CLIMATE-RESILIENT INTEGRATED WATER RESOURCE AND COASTAL MANAGEMENT						
Implementing Integrated Land, Water & Wastewater Management in Caribbean SIDS (IWEco)	4873	Regional	Regional – LAC	Under Implementation	1,500,000	GEF
Implementing a "Ridge to Reef" approach to Preserve Ecosystem Services, Sequester Carbon, Improve Climate Resilience and Sustain Livelihoods in Fiji	5216	Country	Fiji	Under Implementation	7,387,614	GEF
Pacific Islands Ridge to Reef National Priorities – Integrated Water, Land, Forest & Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods (PROGRAM)	5217	Country	Regional – Asia and Pacific	Under Implementation	0	LDCF / GEF
Implementing a 'Ridge to Reef' approach to protect biodiversity and ecosystem functions in Tuvalu (R2R Tuvalu)	5220	Country	Tuvalu	Under Implementation	3,762,844	GEF
Ridge to Reef – Testing the Integration of Water, Land, Forest & Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods in Pacific Island Countries	5221	Regional	Fiji	Under Implementation	10,317,454	GEF
Application of Ridge to Reef Concept for biodiversity conservation, and for the enhancement of ecosystem service and cultural heritage in Niue	5258	Country	Niue	Under Implementation	4,194,862	GEF
ASEAN IWRM: Reducing Pollution and Preserving Environmental Flows in the East Asian Seas through the Implementation of Integrated River Basin Management in ASEAN Countries	5635	Regional	Regional – Asia Pacific	Hard Pipeline	8,479,123	GEF

[56] In many cases, project activities fall into more than one thematic priority area. In this listing, however, each project is assigned into one specific Signature Programme / Thematic Priority Area

Project Title	Ref #	Geographic Scope	Lead Country/ Office	Status	Total Resources (USD)	Main financial partner(s)
Reimaanlok – Looking to the Future: Strengthening natural resource management in atoll communities in the Republic of Marshall Islands employing integrated approaches (RMI R2R)	5685	Country	Marshall Islands	Under Implementation	3,927,981	GEF
Managing Coastal Aquifers in Selected Pacific SIDS	6196	Regional	Fiji	Under Implementation	5,261,356	GEF
Adaptation to Climate Change in the Coastal Zone in Vanuatu – Phase II	6374	Country	Vanuatu	Under Implementation	12,844,037	LDCF / GEF
THEMATIC PRIORITY AREA: PROTECTION OF TRANSBOUNDARY SURFACE AND GROUNDWATERS IN A CHANGING CLIMATE						
Integrated Water Resources Management in the Titicaca-Desaguadero-Poopó-Salar de Coipasa System (TDPS)	4383	Country	Regional – LAC	Under Implementation	6,563,750	GEF
Enabling implementation of the Regional SAP for the rational and equitable management of the Nubian Sandstone Aquifer System (NSAS)	4736	Regional	Regional – Arab States	Under Implementation	3,990,000	GEF
Support to the Cubango-Okavango River Basin Strategic Action Programme Implementation	4755	Regional	Botswana	Under Implementation	6,100,000	GEF
Enhanced Water Security and Community Resilience in the Adjacent Cuvelai and Kunene Transboundary River Basins	4756	Regional	Namibia	PIF approved	11,467,890	GEF
Improving Lake Chad Management through Building Climate Change Resilience and Reducing Ecosystem stress through Implementation of the SAP	4797	Regional	Chad	Under Implementation	5,830,000	GEF
Improving IWRM Knowledge based Management and governance of the Niger Basin and the Iullemeden Taoudeni Tanezrouft Aquifer System (ITTAS)	4798	Regional	Niger	Under Implementation	8,925,000	GEF
Enabling countries of the transboundary Syr Darya Basin to make sustainable use of their groundwater potential and subsurface space with consideration to climate variability and change.	4984	Regional	Kazakhstan	Hard Pipeline	3,500,000	GEF
Support to the Orange-Senqu River Strategic Action Programme Implementation	5506	Regional	South Africa	Under Implementation	10,815,137	GEF
Strengthening the resilience of Central Asian countries by enabling regional cooperation to assess high altitude glacio-nival systems to develop integrated methods for sustainable development and adaptation to climate change	5516	Regional	Regional – Europe CIS	Hard Pipeline	6,392,694	GEF
Integrated Environmental Management of the Bi-National Río Motagua Watershed	5714	Regional	Regional – LAC	Under Implementation	5,329,452	GEF
IWRM Mira Mataje and Carchi Guaitara	5753	Regional	Regional – LAC	Under Implementation	3,850,000	GEF

Project Title	Ref #	Geographic Scope	Lead Country/ Office	Status	Total Resources (USD)	Main financial partner(s)
Implementation of the SAP of the Dinaric Karst Aquifer System: improving groundwater governance and sustainability of related ecosystems	5776	Regional	Regional Centre – Europe CIS	Under Implementation	5,145,000	GEF
Enhancing conjunctive management of surface and groundwater resources in selected transboundary aquifers: Case study for selected shared groundwater bodies in the Nile Basin	5783	Regional	Regional – Africa	Under Implementation	5,329,452	GEF
Fostering multi-country cooperation over conjunctive surface and groundwater management in the Bug and Neman Transboundary River Basins and the underlying aquifer systems	5876	Country	Regional – Europe CIS	Hard Pipeline	2,731,050	GEF
Integrated transboundary River Basin Management in the Limpopo Basin Project	6224	Regional	South Africa	Hard pipeline	6,200,000	GEF
Implementing the Strategic Action Programme in the transboundary river basins shared by Ecuador and Peru and draining to the Pacific Ocean (Zarumilla, Puyango-Tumbes and Catamayo-Chira)	6291	Regional	Peru	Under Implementation	8,200,000	GEF
Implementing the Strategic Action Programme of the Drin Basin to strengthen transboundary cooperation and enable integrated natural resources management	6300	Regional	Albania	Hard Pipeline	7,305,936	GEF
Towards the transboundary Integrated Water Resource Management (IWRM) of the Sixaola River Basin shared by Costa Rica and Panama	6373	Country	Regional – LAC / Costa Rica	Under Implementation	4,536,210	GEF
Conservation of Wetland Biodiversity and Sustainable Management of Freshwater Ecosystems in the Western Dvina/Daugava Transboundary River Basin	6442	Country	Belarus	Under Implementation	3,926,941	GEF
Implementation of the Fanga'uta Lagoon Stewardship Plan and replication of lessons learned to priority areas in Vava'u (Tonga R2R Phase 2)	6475	Country	Tonga	Hard Pipeline	4,014,685	GEF
Advancing transboundary co-operation and Integrated Water Resources Management in the Dniester River Basin through implementation of the Strategic Action Programme (SAP)	6643	Regional	Regional – Europe CIS	Hard Pipeline	6,150,000	GEF
THEMATIC PRIORITY AREA: SUSTAINABLE MANAGEMENT OF OCEANS IN A CHANGING CLIMATE						
Implementation of Global and Regional Oceanic Fisheries Conventions and Related Instruments in the Pacific Small Island Developing States (SIDS)	4607	Regional	Fiji	Under Implementation	5,000,000	GEF
Global Sustainable Supply Chains for Marine Commodities	4754	Global	New York – GEF	Under Implementation	4,994,026	GEF
Western Indian Ocean LMEs – Strategic Action Programme Policy Harmonization and Institutional Reforms (SAPPHIRE) Project	5262	Regional	Mauritius	Under Implementation	10,976,891	GEF

Project Title	Ref #	Geographic Scope	Lead Country/ Office	Status	Total Resources (USD)	Main financial partner(s)
Improving Ocean Governance and Integrated Management in the BCLME	5313	Regional	Namibia	Under implementation	10,900,000	GEF
FULL-ATSEA II (Timor/Arafura Seas SAP Implementation)	5439	Regional	Indonesia	Under Implementation	9,745,662	GEF
Coastal Fisheries Initiative	5573	Global	Regional – LAC	Under Implementation	6,588,991	GEF
Catalysing implementation of a Strategic Action Programme for the Sustainable Management of shared Living Marine Resources in the Humboldt Current System (HCS)	5697	Regional	Regional – LAC	Under Implementation	8,200,000	GEF
Restoring marine ecosystem services by rehabilitating coral reefs to meet a changing climate future	5736	Mauritius	Mauritius	Under Implementation	9,132,420	AF
Strengthening of the enabling environment, ecosystem-based management and governance to support implementation of the Strategic Action Programme of the Guinea Current Large Marine Ecosystem	6178	Regional	Regional – RBA	Under Implementation	847,875	GEF
Towards joint integrated, ecosystem-based management of the Pacific Central American Coastal Large Marine Ecosystem (PACA).	6273	Regional (LAC)	Regional – RBLAC	Under Implementation	7,301,547	GEF
Protecting and Restoring the Ocean's natural Capital, building Resilience and supporting region-wide Investments for sustainable Blue socio-economic development (PROCARIBE+)	6290	Global	New York – GEF	Approved/Endorsed	15,779,817	GEF
Effectively Managing an Ecological Network of Marine Protected Areas in the Large Marine Ecosystems in the ASEAN Region (ASEAN ENMAPS)	6375	Regional	Regional – Asia and Pacific	Hard Pipeline	12,837,961	GEF
Strengthening the Palau National Marine Sanctuary for the Conservation and Management of Global Marine Biodiversity and Sustainable Fisheries	6418	Country	Palau	Under Implementation	1,826,484	GEF
Mainstreaming climate change and ecosystem-based approaches into the sustainable management of the Living Marine Resources of the WCPFC	6445	Regional	Regional – Asia Pacific	Hard Pipeline	10,200,000	GEF
Strengthening the Stewardship of an Ecologically and Biologically Significant High Seas Area – The Sargasso Sea	6526	Country	New York – GEF	Hard Pipeline	2,752,294	GEF
Supporting sustainable inclusive Blue Economy Transformation in AIO SIDS	6528	Regional	Sao Tome & Principe	Hard Pipeline	9,203,847	GEF
Common Oceans – Sustainable Utilization and Conservation of Biodiversity in Areas Beyond National Jurisdiction	6559	Global	New York – GEF	Hard Pipeline	0	GEF
Implementing Ecosystem Based Management approaches in the Black Sea LME	6590	Regional	Regional – Europe CIS	Hard Pipeline	3,150,000	GEF

Project Title	Ref #	Geographic Scope	Lead Country/ Office	Status	Total Resources (USD)	Main financial partner(s)
Ocean Innovation Challenge (OIC), including Thematic Area B2 of Sida-UNDP Strategic Collaboration Programme on Environment and Climate Change	117778 & 120004 (Act.2)	Global	Global	Under Implementation	9,560,316	Sida/Norad
THEMATIC PRIORITY AREA: GLOBAL AND CROSS-CUTTING						
Building Partnerships to Assist Developing Countries to Reduce the Transfer of Harmful Aquatic Organisms through Biofouling (GloFouling Partnerships)	5775	Global	New York – GEF	Under Implementation	6,980,000	GEF
GEF International Waters: Learning Exchange And Resources Network (IW:LEARN) 5th Phase (incl LME:LEARN)	6438	Global	Paris – GEF	CEO endorsement	5,028,700	GEF
Global Water and Ocean Governance Support Programme (freshwater/coastal – comp.1-3), including Thematic Area B1 of Sida-UNDP Strategic Collaboration Programme on Environment and Climate Change	113069 & 120004 (Act.1)	Global	Global	Under Implementation	10,764,945	Sida

Summary by WOGP Signature Programme / thematic priority area:

Thematic Priority Area	Total Resources (USD)	Percentage share of portfolio
Sustainable Management of Oceans in a Changing Climate	$138,997,989.49	37%
Protection of transboundary surface and ground waters	$126,303,197.00	34%
Climate Resilient integrated water resource and coastal management	$57,675,271.00	15%
Climate-resilient access to water supply and sanitation	$27,763,636.00	7%
Global / Cross-Cutting	$22,773,645.10	6%
Grand Total	**$373,513,738.59**	**100%**

ANNEX 2: WOGP RESULTS MATRIX (SUMMARY BY THEME AND OUTCOME)

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
THEMATIC PRIORITY AREA 1: CLIMATE-RESILIENT ACCESS TO WATER SUPPLY AND SANITATION	
Outcome 1: Common understanding among stakeholders at different levels on gaps and barriers.	Total 36 countries carried out assessments to strengthen common understanding of WASH gaps and barriers, including 16 assessments on the sub-national level and 10 countries with improved understanding of accountability and integrity of WASH sub-sectors at national & subnational level.
	Accountability-for-Sustainability 10 countries and regions (Haiti, Suriname, Ecuador, Bolivia (Montero), Somalia, Nigeria, Lebanon, Syria, Iraq, Myanmar), i.e. WASH subsectors at national and subnational levels trained in 10 training sessions. Water Integrity Capacity Building Programme in MENA 5 of national water integrity assessments and 1 regional water integrity synthesis report, with related regional policy briefs. GoAL WaSH 16 assessments and reviews in Niger (12 municipalities), Burkina Faso (2 thematic assessments), Guinea Bissau, Ethiopia, Togo, Madagascar, West and Central Africa region (8 countries), Paraguay (4 communities), Bangladesh, Tajikistan, Cambodia, Kyrgyzstan, Bosnia-Herzegovina, Jordan, Lebanon. >> Highlight El Salvador endorsed a Territorial Water Observatory at the national level, which describes the state and different uses of the water resources in the Torola River Basin.
Outcome 2 Agreement on priority water governance reforms and/or investment priorities.	Total: 17 countries (5 on the sub-national level) and 1 UN agency (UNICEF) achieved agreement on reform and investment priorities.

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	GoAL WaSH 17 countries, of which 5 on the sub-national level, achieved agreement on reform and investment priorities. This includes Burkina Faso, Cambodia, Comoros, El Salvador, Jordan, Kyrgyzstan, Liberia, Madagascar, Mali, the Philippines, Togo, and Uganda on the national level, and at local level in Montero (Bolivia), Niger, the Philippines, Tajikistan, and Togo. Accountability-for-Sustainability WGF contribution to UNICEF Strategy "Accelerating Sanitation and Water for All programme", with particular emphasis on accountability and sustainability issues >> Highlight
Outcome 3 Implementation of agreed governance frameworks (policies, laws, institutions, strategies, etc.) and local action.	Total: 2 global/regional regimes adopted integrity and transparency principles. 19 countries and 1 region/basin implemented agreed governance frameworks. On the local level, 12 countries improved access to drinking water and sanitation for 71,438 people, including 16,317 students.
	Water Integrity Political support achieved by 5 countries (Lebanon, Palestine, Jordan, Tunisia, and Morocco) for capacity building on water integrity Good governance and water integrity recognised and adopted as important aspects of the Union for the Mediterranean (UfM) Water Agenda; Inclusion of integrity and transparency in OECD principles on Water Governance; GoAL WaSH 14 countries (Paraguay, Liberia, Iraq, the Philippines, Laos, Jordan, Tajikistan, Niger, Bosnia and Herzegovina, Madagascar, Ethiopia, Togo, Kyrgyzstan, El Salvador), and 1 region (Mekong) implemented agreed governance frameworks (policies, laws, institutions, and strategies), including local action. Local Action – UNDP-Coca Cola Foundation Every Drop Matters I

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	Around 71,438 people in 12 countries enjoy improved access to drinking water and sanitation, including 16,317 students. >> Highlight: In Bangladesh, where the schools also serve as shelters, access of 92pprox.. 24,000 community members to WASH has been improved during cyclones. 50 schools with 22,000 school students enjoy improved access to safe water, sanitation and hygiene. In addition, rainwater harvesting and groundwater recharge systems were constructed at 15 schools.
Outcome 4 Institutional and human capacity and knowledge base strengthened to formulate and implement relevant policies, laws and strategies.	<u>Total</u> 4,893 people strengthened their capacities to formulate and implement relevant policies, laws and strategies.
	<u>UNDP/GEF</u> 49 individuals improved their knowledge: 24 participants from NGOs and universities from 5 Arab countries who were trained on gender and water integrity, and 25 community members who were trained on water conservation and management methods in Pakistan. <u>Cap-Net UNDP</u> 3,964 individuals, an average of 42% female and undisclosed, have gained strengthened capacity through 68 training courses <u>Local Action – UNDP-Coca Cola Foundation Every Drop Matters</u> 880 people gained improved knowledge and capacity to implement WASH initiatives. >> Highlight: In collaboration with ANSI, development of training package for ISO 30500 and ISO 24521: International Non-sewered Sanitation Standards in 3 languages. The trainings generated a deeper and shared understanding of ISO 30500 and ISO 24521 to support the United Nations Sustainable Development Goals (SDG) 6.2 and 6.3 by providing adequate access to equitable sanitation and hygiene and by improving water quality. Reaching 1,144 water professionals and stakeholders across 60 countries. https://cap-net.org/nsss/

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
THEMATIC PRIORITY AREA 2: CLIMATE-RESILIENT INTEGRATED WATER RESOURCES AND COASTAL MANAGEMENT	
Outcome 1 Common understanding among stakeholders at different levels on gaps and barriers.	<u>Total</u> 27 assessments (24 on source-to-sea/ridge-to-reef) were conducted, and national inter-sectoral coordination mechanism were established for 18 major water bodies.
	<u>Source-to-Sea/Ridge-to-Reef</u> 1 assessment of all source-to-sea relevant projects for GEF-funding since 2000 6 regional source-to-sea case studies of multi-country initiatives 1 conceptual framework for the governance and management of resources in a source-to-sea continuum 1 source-to-sea Framework for Marine Litter Prevention – Plastic Leakage from River Basins 1 source-to-sea study on the linkages and gaps between SDG 6 and SDG 14 undertaken Membership expansion of source-to-sea platform. 14 diagnostics finalised based on R2R approach such as Rapid Coastal Assessments, including baseline environmental state and social data incorporating CC vulnerabilities (GEF-IW) <u>IWRM/ICM</u> 1 drought vulnerability assessment in Jordan National inter-sectoral coordination mechanisms established in: 10 river basins (Artibonite, Danube, Dnipro, Kura, Niger, Nile, Senegal, Orange/Sengu, Okavango and Tisza) and 6 lakes (Chad, Prespa, Baikal, Tanganyika, Peipsi and Caspian Sea), and 2 aquifers (Dinaric Karst and Nubian Sandstone) <u>Local Action – UNDP-Coca Cola Foundation Every Drop Matters (EDM)</u> 2 assessments – one on valuation of ecosystem services, one on industrial and household water pollution >> Highlight: India carried out an analysis of industrial water and waste pollution entering the Kelani River, informing national, provincial and local authorities of the Ministry of Environment and created database of direct and indirect pollution sources.

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
Outcome 2 Agreement on priority water governance reforms and/or investment priorities.	<u>Total</u> 1 Global institutions/regimes and 1 financing mechanism integrate the source-to-sea approach, 17 SIDS developed national IWRM policy, legislative and institutional reforms; and 4 SIDS secured US$19M in funding and US$78M in co-financing. In 2 countries (Belarus and Sri Lanka), communities identified areas for priority action, and 1 national funding mechanism was developed.
	<u>Source-to-Sea/Ridge-to-Reef</u> 1 Global Action Platform on Source-to-Sea Management established engaging a wide range of global organizations with an interest enhancing the linkages between land, river, coastal and marine management. 39 global institutions incorporated source-to-sea into their processes, strategies, programming and investment priorities (UNDP Strategic Plan 2018 – 2021, GEF-7 Strategy, 2019 UN Environment Marine and Coastal Strategy, UNFCCC COP 1 source-to-sea financing mechanism adopted Source-to-sea priorities highlighted in Sweden's bi-lateral collaboration with South Africa and China, and incorporated into 3-year strategy of the Swedish Agency for Marine and Water Management. <u>IWRM/ICM</u> 6 African SIDS (Mauritius, Seychelles, Cape Verde, Sao Tome & Principe, Maldives, Comoros) developed national IWRM policy, legislative and institutional reforms; implementation of targeted demonstrations of IWRM and water use efficiency. 7 PIC SIDS (Nauru, Palau and Niue, Samoa, Tuvalu, Vanuatu, Palau) with endorsed IWRM policies. Another 4 (Tonga, Solomon Islands, Fiji and the Marshall Islands) have a draft. 1 Vanuatu secured a total GEF/LDCF project grant amounting to US$13.673M with co-financing of US$58.8M for the national project concept "Adaptation to Climate Change in the Coastal Zone of Vanuatu – Phase II (VCAP II)". 39 countries – Marshall Islands, Palau and Tuvalu – secured new financing for the project "Managing Coastal Aquifers in Selected Pacific SIDS" to improve water security in the context of a changing climate. The total GEF grant is US$5.261M with co-financing of US$19.6M. <u>Local Action – UNDP – Coca Cola Foundation Every Drop Matters (EDM)</u> In 2 countries (Belarus and Sri Lanka), communities identified areas for priority action, and 1 national funding mechanism was developed.

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	>> Highlight: In Sri Lanka, two new mechanism were developed: one to operationalize the 5-year Kelani River Basin Management and Conservation Plan and one and to fund pollution prevention actions in the basin. In addition, a basin action plan as well as Integrated Environment Solution Plans (IESPs) were developed and a multi-sectoral Pollution Control Network was established.
Outcome 3 Implementation of agreed governance frameworks (policies, laws, institutions, strategies, etc.) and local action.	<u>Total:</u> 20 SIDS implemented 'ridge to reef' integrated water and coastal resource management, 22 countries and 1 region implemented water governance reforms at the national and sub-national level, and 12 set up national institutions. In addition, 8 countries implemented ICM across 50 sites, far exceeding their target of coastline under ICM.
	<u>Source-to-Sea/Ridge-to-Reef</u> 20 SIDS implemented 'ridge to reef' integrated water and coastal resource management (14 in the Pacific Region, and 6 in the Seas of East Asia) 14 PIC SIDS implementing water governance reforms, plans and pilot projects under GEF Pacific Ridge-to-Reef programme 12 PIC SIDS with functional national Apex Water Committees 8 East Asian countries implemented integrated coastal management across over 50 sites. With long-term support from PEMSEA for replication and upscaling, region has now achieved 37.9% of its total coastline under ICM, far exceeding target of 25% by 2021. <u>GoAL WaterS (?)</u> 8 countries and 1 region implemented agreed governance frameworks and promoted local action: Bosnia and Herzegovina (16 municipalities, 18 water utilities), Cambodia, India, Jordan, Kazakhstan, Laos, Tajikistan, Vietnam) and the Chu Talas region. <u>Local Action – UNDP – Coca Cola Foundation Every Drop Matters (EDM)</u> Communities in 6 countries implemented actions to improve water management, especially water and irrigation efficiency and water metering.

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	>> Highlight: In Kazakhstan, constructed 15 hydroposts – water metering and distribution points – to monitor water flows to farms and optimize timing of crop irrigation, easing social tension among the 72,000 people in the farming community, and resulting insignificant water savings – potentially reaching an estimated 1,480,000 m3.
Outcome 4 Institutional and human capacity and knowledge base strengthened to formulate and implement relevant policies, laws and strategies.	Total: More than 3,800 individuals have improved capacity and knowledge on issues such as water efficiency, pollution, and climate change, including 5,581 farmers, 215 large and small business representatives. Further, the EDM Black Sea Box reached some 100 CBO representatives and nearly 250,000 students. Representatives from various countries, and the African Lake and River Basin Organizations and Regional Economic Communities have been trained on water resource management, financing and water integrity. 1 academic article, 9 reports, 8 policy briefs and 4 training products were developed. The Source-to-Sea platform has been an important diffuser of information at international and regional events.
	Source-to-Sea: The S2S Platform disseminated information at 12 international and regional events 39 source-to-sea Sida workshops; 1 source-to-sea workshop for Baltic stakeholders and 1 webinar focused on water quality management. 31 PIC students completed the Post Graduate Certificate with James Cook University, increasing capacity to address integrated R2R approaches. GoALWaterS 8 countries (Laos, Cambodia, Vietnam, Jordan, Lebanon, Palestine, Tunisia, Morocco) with training vulnerability assessment, integrity in water resources management, and financing of sustainable water resources management and development. 3,301 farmers and water user association members gained improved knowledge on irrigation and climate-resilient water management. 440 persons were trained on water integrity in the MENA region, and 59 representatives from African Lake and River Basin Organisation as well as from Regional Economic Communities were trained on financing of sustainable water resource management.

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	Local Action – UNDP – Coca Cola Foundation Every Drop Matters (EDM) Around 410,605 people have improved knowledge or capacities, including 2,280 farmers, 215 large and small business representatives, 100 CBO representatives and 246,000 students. Cap-Net UNDP 5,644 individuals, an average of 42% female and undisclosed have strengthened capacity through 92 training courses 39 training products developed/revised: Drought Risk Reduction and IWRM (developed and revised), Climate Resilience in IWRM, Water Use Efficiency in Food Production, Aquaculture in Regions of Restricted Water Access >>Publication Highlights "Water quality management from source to sea: from global commitments to coordinated implementation" published in the scientific journal Water International. "Water interactions for considerations in NDC enhancement and implementation" – a checklist guiding NDC formulation for the implementation of the Paris Agreement.
THEMATIC PRIORITY AREA 3: PROTECTION OF TRANSBOUNDARY SURFACE AND GROUNDWATER IN A CHANGING CLIMATE	
Outcome 1 Common understanding among stakeholders at different levels on gaps and barriers.	Total: 39 transboundary water bodies involving 19 countries made progress on developing a common understanding, two of which involved the completion of TDAs, and one with improved inclusive governance mechanism. 1 strategic dialogue and 9 meetings aimed at promoting a shared understanding in the donor community. Another 12 workshops and 41 dialogues promoted a shared vision on topics such as water diplomacy, benefit-sharing, public-private partnerships, and female leadership.
	UNDP/GEF 39 TDAs completed – one for tranboundary Zarumilla aquifer between Peru and Ecuador and one for the Niger River Basin and the Iullemeden-Taoudéni/Tanezrouft Aquifer System (NB-ITTAS) involving Algeria, Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Guinea, Mali, Mauritania, Niger, Nigeria.

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	Waters Partnership (SWP) 1 basin (Greater Mekong Basin – 6 countries) with improved inclusion of non-governmental stakeholders through new multi-stakeholder platform 1 strategic dialogue for Nile Basin Initiative's technical committees and the international donor community 5 coordination meetings and 4 closed meetings to develop a shared vision amongst the donor community supporting target basins/regions; 12 workshops and 41 dialogues have been held, including on water diplomacy, benefit sharing, journalism around water cooperation, joint investment through public private partnerships, and female leadership.
Outcome 2 Agreement on priority water governance reforms and/or investment priorities.	Total: Adoption of 6 multi-country agreements/SAPs on transboundary water bodies shared by 32 countries and 2 transboundary aquifers shared by 10 countries, and 1 updated SAP shared by 4 countries. 1 RBO conducted governance reforms, 2 transboundary water bodies agreed on sustainable development plans or measures.
	GEF 6 multi-country agreements/SAPs on transboundary water bodies shared by 32 countries adopted- the Lake Baikal Basin (Russia and Mongolia);the Drin river basin (Albania, Kosovo, Macedonia and Montenegro); Chu-Talas River basin (Kazakhstan and Kyrgyzstan); Basin and the Iullemeden-Taoudeni/Tanezrouft Aquifer System – NB-ITTAS (Algeria, Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Guinea, Mali, Mauritania, Niger, Nigeria) and 2 transboundary aquifers, i.e. the Nubian Sandstone (Sudan, Chad, Libya, and Egypt) and Dinaric Karst (Italy, Slovenia, Croatia, Bosnia & Herzegovina, Montenegro, Albania) aquifers; and 1 SAP updated for Lake Chad Basin (Nigeria, Niger, Chad and Cameroon) to ensure sustainable and equitable water management in a changing climate. Okavango River Basin Water Commission (OKAKOM) comprehensive governance review conducted and new governance instruments developed. Sustainable development plan for Niger Basin; Operational plan of SAP with climate investment plan developed

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	Waters Partnership (SWP) Identification of a set of ecosystem-friendly sustainable land management measures for the Aral Sea Basin by Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan (to be implemented within the mandate of UNDP projects and the International Fund for Saving of Aral Sea).
	Total The countries sharing 15 transboundary water bodies, including 9 river basins, 5 lakes and 1 aquifer, have been implementing agreed action plans for sustainable water management.
Outcome 3 Implementation of agreed governance frameworks (policies, laws, institutions, strategies, etc.) and local action.	UNDP/GEF 6 shared waterbodies have been implementing SAP projects including: Kura River basin, Lake Chad, Niger River basin, Okavango River basin, Orange/Sengu River basin, and the Nubian Aquifer. Another 9 major transboundary water bodies implement agreed action programes for sustainable water management. This included 5 river basins (Danube, Dnipro, Nile, Senegal, and Tisza) and 4 lakes (Prespa, Tanganyika, Peipsi and Caspian Sea). >> Highlights Orange-Senqu River Basin (Botswana, Namibia, Lesotho & South Africa) 39 Desalination plants constructed in Rappelspan and Struizendam in Botswana; monitoring of water quality and availability in the basin started; baseline assessments on the level of the nutrient load and control of invasive species have been conducted for rehabilitation and sustainable management of the Orange-Senqu River Mouth. Okavango River Basin (Angola, Botswana and Namibia) The Basin Environmental Framework, the OKACOM Transboundary Payment for Ecosystems Services (PES), the Transboundary EIA guidelines, the IWRM Plan, and a Groundwater monitoring and management strategy were developed. A basin-wide water quality monitoring plan has been completed, and the development of a water quality monitoring framework has been initiated. Furthermore, 6 demo projects involving more than 140 particpants are in implementation including a fisheries in Angola and Namibia; sustainable community conservation tourism in Namibia, and Climate Smart Agriculture in Botswana and Namibia. A new EU financed programme is currently upscaling the demo achievements on improving land management.

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	Waters Partnership (SWP) 39 non-governmental organizations (NGOs, Civil Society, and Academia) enjoy increased access to formal decision-making channels across three intergovernmental platforms in the greater Mekong Basin;
Outcome 4 Institutional and human capacity and knowledge base strengthened to formulate and implement relevant policies, laws and strategies.	Total: 1 river basin organization strengthened institutional and technical capacities for joint water management; 16 countries shared experiences on transboundary water issues, and 3,167 people have improved knowledge on transboundary water issues.
	UNDP/GEF Okavango River Basin's OKAKOM institutional management capacities have been strengthened through establishment and trainings of technical committees and acquiring multiparameter water quality meters for all the member states. Technical capacity of member states to develop and apply Water Evaluation and Planning System (WEAP) enhanced. Joint training in Environmental Monitoring was organized and baseline data on water quality and baseline hydrological flows were collected. Data Sharing Procedures / Protocol developed and endorsed by the commission. Shared experience through various IW: LEARN organized activities. Cap-Net UNDP 5 Training packages developed/revised on groundwater management, freshwater ecosystems, earth observation tools for IWRM and water pollution management. 3,140 individuals, an average of 42% female and undisclosed, have gained strengthened capacity to implement relevant policies, laws, and strategies, through 46 training courses Shared Waters Partnership (SWP) 16 countries training and shared experiences on transboundary water issues, water diplomacy and gender, including Iraq, Ethiopia, Egypt, Sudan, South Sudan, Burundi, Democratic Republic of Congo, Kenya, Rwanda, Uganda, Kazakhstan, Tajikistan, Turkmenistan, Afghanistan, Uzbekistan, Kyrgyzstan >> Highlight: 27 journalists of the Eastern Nile Basin have improved access to accurate technical information on the Grand Ethiopian Renaissance Dam Waters Partnership following training. Over 50 media entries (print, radio, video,

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	etc.) published on Nile political issues within 2 months after training of journalists. Journalists established informal closed Facebook page to maintain awareness within the media community.
THEMATIC PRIORITY AREA 4: SUSTAINABLE MANAGEMENT OF OCEANS IN A CHANGING CLIMATE	
Outcome 1 Common understanding among stakeholders at different levels on gaps and barriers	Total 16 LMEs established or updated a multi-country agreement on priority transboundary issues and root causes.
	16 LMEs established or updated a multi-country agreement on priority transboundary issues and root causes (TDA/equiv). (Benguela, Black Sea, Caribbean, Guinea Current, Humboldt Current, W/C Pacific Ocean, East Asian Seas, Sulu-Celebes Seas, Timor-Arafura Seas, Agulhas/Somali Current, Yellow Sea, Red Sea, Rio de la Plata, and the New Pacific Central American Coastal LME (PACA).) <u>Cap-Net UNDP</u> Source to Sea initiative and capacity needs assessment survey, which captured the levels of awareness, commitment, capacity and skills available to coordinate and implement a source-to-sea approach, were carried out in partnership with the S2S Action Platform. >> Highlights: Caribbean & North Brazil Shelf Large Marine Ecosystems (CLME+) a vast marine area bordered by 35 countries and territories - accelerated implementation of SAP with the support of the UNDP-GEF CLME+ Project, supporting the piloting of a new approach to transboundary diagnostic analysis with a focus on opportunities and an innovative reporting mechanism for the TDA and next regional SAP iteration. The Pacific Oceanic Fisheries Management Project - updated TDA for the Living Marine Resources of the West and Central Pacific Ocean which in turn served as the technical basis for negotiation and adoption of an updated SAP for the W/C Pacific.

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	Coastal Fisheries Initiative conducted a fishing census on the amount of artisanal fishing gear for titi shrimp with passive bag nets, informing the Ministerial Agreement which establishes the management, monitoring, surveillance and control measures for the fishing activity.
Outcome 2 Agreement on priority ocean governance reforms and/or investment priorities.	<u>Total</u> 5 LMEs adopt strategic action plans or equiv to usher in governance reforms and define priority investments. The first regional coordinating mechanism for Mahi Mahi was established; the Global Ship's Ballast Water Management Convention, adopted by nearly all relevant parties, come into force; and the Global Industry Alliance addressed shipping optimization & CO2 reduction.
	5 LMEs adopt strategic action plans or equiv to usher in governance reforms and define priority investments. These included Peru and Chile bi-national Strategic Action Programme for the Humboldt Current Large Marine Ecosystem, the world's largest LME in terms of fisheries yield, CLME+ Regional Strategy and Action Plans as well as regional investment plans on IUU, Habitats and Pollution; adoption of several governance reforms at national level through UNDP/GEF Global Marine Commodities Programme and GEF Coastal Fisheries Initiative (LAC component) ; and regional approval of core aspects of major coordination mechanism for Caribbean and N Brazil Shelf LMEs and BCLMEII . <u>Global Marine Commodities</u> Development of the Regional Scientific Plan for Mahi-Mahi and a Regional Code of Conduct, forming the first regional coordinating mechanism between producers and processers of Mahi Mahi in the Eastern Pacific Ocean. <u>Shipping</u> Global Ship's Ballast Water Management Convention coming into force marks major outcome related to GloBallast Partnership. As of January 1, 2022, 89 countries (representing 91.2% of the gross tonnage of the global merchant fleet) had signed the BWM Convention. Global Industry Alliance addressed institutional barriers for optimization and CO2 reduction. >> Highlight: Implementation of the CLME+ SAP (2015-2024) was accelerated during 2020, and an online collaborative progress tracking mechanism was put in place and embedded in the CLME+ knowledge management

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	Hub (www.clmeplus.org). Under the umbrella of the more generic SAP, more specific Regional Action Plans (IUU, Habitats, Pollution) were developed.
Outcome 3 Implementation of agreed governance frameworks (policies, laws, institutions, strategies, etc.) and local action.	Total 18 LMEs have been implementing agreed governance frameworks, 3 Sustainable Marine Commodity Platforms have been formally adopted, and 6 national sustainable fisheries action plans are under implementation.
	18 LMEs have been implementing stress reduction measures (SAP/equiv implementation). In particular, Agulhas-Somali, BCLMEII, Benguela Current, Black Sea, Caribbean Sea, Coastal Fisheries Initiative, CLME+, East Asian Seas, Guinea Current, Humboldt Current, N Brazil Shelf, Pacific Warm Pool, Red Sea, Rio de la Plata, Timor-Arafura Sea, W-C Pacific Oceans, Yellow Sea LME. The Sustainable Development Strategy for the Seas of East Asia has been implemented as well. Global Marine Commodities Three of the Sustainable Marine Commodity Platforms (SMCPs) have been officialized by laws; 6 GMC-supported, national sustainable fisheries action plans (SFAP)/management plans under implementation. >> Highlights: Benguela Large Marine Ecosystem BCLME III - established regional and national level institutional mechanisms to address alien invasive species in ballast water and to strengthen oil spill responses; conducted an oil spill assessment and a coastal biodiversity assessment, as well as joint regional surveys and monitoring activities on water quality and ocean acidification, implemented of 4 blue economy and ecosystem restoration demonstration projects; implemented water quality monitoring sites and activities. Coastal Fisheries Initiative - Ministerial Agreements established the management framework and priority actions for the proper management of fishery resources; the implementation of Participatory Monitoring for the red crab (Ucides occidentalis) and ústulose ark (Anadara tuberculosa and Anadara similis) fisheries in the Gulf of Guayaquil, and the National Action Plan for the Management and Conservation of Red Crab (Ucides occidentalis).

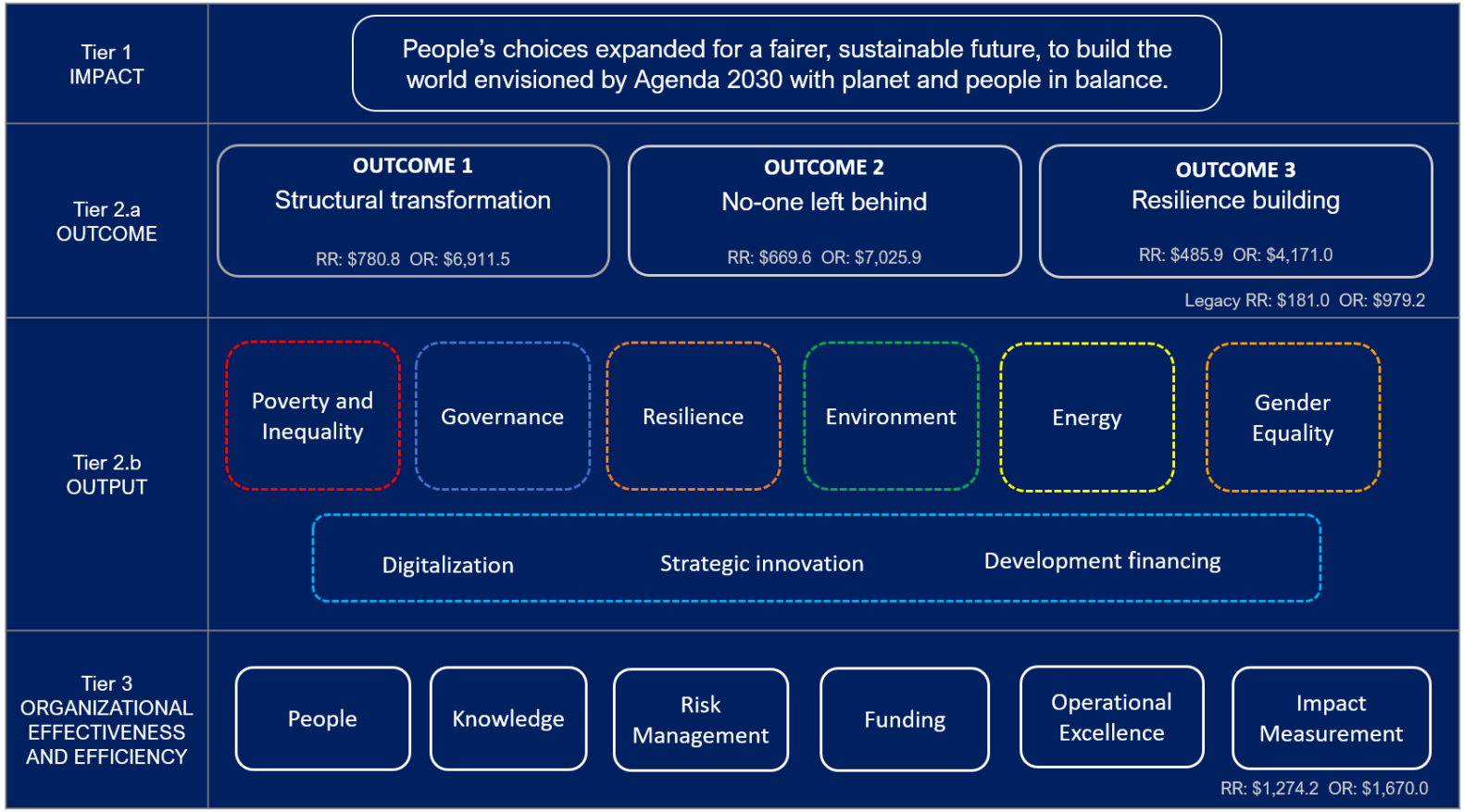
Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
Outcome 4 Institutional and human capacity and knowledge base strengthened to formulate and implement relevant policies, laws and strategies.	Total More than 1,050 people have increased their knowledge and capacities on ocean-related policies, laws and strategies. Furthermore, the GloBallast Partnership helped 70 countries build capacities to develop uniform legal, policy and institutional frameworks. 13 companies joined to launch the Global Industry Alliance to support developing countries with low carbon shipping. And the GloFouling Partnerships project supports countries with the reduction of biofouling.
	Capacities for Shipping Initiatives (1) GloBallast Partnerships -Supported the development of uniform legal, policy and institutional frameworks, improved capacities in over 70 countries. Emission reductions of 52.8 million mt CO2 were achieved (??) by the global shipping sector by 2017 under new GEF-UNDP-IMO Global Maritime Energy Efficiency Project (GloMEEP). (2) Global Industry Alliance (GIA) - launched to support low carbon shipping - 13 companies have signed up to launch the GIA, under the auspices of the GEF-UNDP-IMO GloMEEP Project, aimed at supporting developing countries in the implementation of energy efficiency measures for shipping. (3) GloFouling Partnerships project – the GEF-UNDP-IMO collaboration focuses on the implementation of the IMO Guidelines for the control and management of ships' biofouling. Training Ship and Port Emission Toolkits published; 250 personnel from port administration trained GEF LME:LEARN delivered 9 regional trainings on Ocean Governance, Marine Spatial Planning and Economic Valuation. This activity has benefited 161 participants from 43 countries. CLME+ developed a regional, collaborative knowledge management platform, the CLME+ Hub, Coastal Fisheries Initiative trained 176 government representatives in Ecuador and Peru on gender, Global Marine Commodities - capacity building on scientific reports for the investigation institutes in Ecuador and the Philippines. Peer-to-Peer Exchanges Benguela Current Convention & the Barcelona Convention for Marine Spatial Planning; PEMSEA & the CLME+ project for blue economies; and the Pacific Ridge to Reef project & the America Samoa EPA in Pago Pago for Piggeries Waste Management.

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
	Cap-Net UNDP 467 individuals, an average of 42% female and undisclosed, have gained strengthened capacity to implement relevant policies, laws, and strategies, through 11 training courses delivered via the virtual campus in Transboundary Marine Spatial Planning and Sustainable Blue Economy in English, French and Spanish and Ocean Governance >> Highlight BCLMEIII strengthened capacity of member states to implement international environmental treaties relating to marine pollution and ballast water management; established a compliance committee; formalized stakeholder engagement including with representatives from science, private sector; National dialogues on the management of shared fish stocks were organized; 1200 community members participated in outreach activities of the project, including 40% youth and 25% women.
CROSS-CUTTING GOVERNANCE ISSUES: GENDER, INTEGRITY AND HUMAN RIGHTS	
Outcome 1 Common understanding among stakeholders at different levels on gaps and barriers	Total 5 countries carried out water integrity risk assessments.
	Water Integrity 5 countries (Lebanon, Jordan, Palestine, Tunisia, and Morocco) carried out water integrity risk assessments, 25 workshops on water integrity held on the national level targeting different stakeholders including high-level representatives, Events at international conferences and fora (including World Water Week, Arab Water Week, IUCN Regional Knowledge Forum).
Outcome 2 Agreement on priority water governance reforms and/or investment priorities.	Total 4 countries forged agreement on priority water governance and investment reforms by establishing institutional mechanism.
	4 countries have established institutional arrangements addressing water governance reform, mainstreaming gender, water integrity and/or HRBA: Comoros, Uganda, Liberia, and Mali.

Outcome #	2014 - 2021 Summary Result, by Thematic Priority Area
Outcome 3 Implementation of agreed governance frameworks (policies, laws, institutions, strategies, etc.) and local action.	<u>Total</u> 2 countries implemented governance reforms and 103 communities in 5 countries implemented water integrity action plans.
	2 countries (Vietnam and Laos) implemented governance reforms by applying the Integrity Management Toolbox methodology; 103 individual water integrity action plans for local action developed and implemented under the capacity building programme on water integrity in the Middle East and North Africa.
Outcome 4 Institutional and human capacity and knowledge base strengthened to formulate and implement relevant policies, laws and strategies.	<u>Total</u> 6,222 individuals as well as representatives from 7 countries strengthened their knowledge and capacities on the cross-cutting issues. 7 tools or training products were developed on these topics.
	7 countries (Lebanon, Jordan, Palestine, Tunisia, Morocco, Laos, Vietnam) strengthened institutional and human capacity to formulate and implement relevant policies, laws, and strategies 3 tools co-developed to strengthen human capacity including: "HRBA to IWRM training manual", "WASH Accountability Mapping Tools: Facilitator Guide", and "Social Audit Manual: Enhancing water integrity in management of water resources, El Salvador" <u>Cap-Net UNDP</u> 4 training products developed/revised: Human Rights Based Approach; Indigenous peoples and IWRM; Why Gender matters in IWRM and Gender and IWRM 6,222 individuals, an average of 42% female, have gained strengthened capacity through 83 training courses >> Highlight: Titicaca–Desaguadero–Poopó–Salares system (TDPS) designed a Communication Strategy for Environmental Education and Citizens Participation with focus in gender and interculturality to inform the population on these topics and promote engagement.

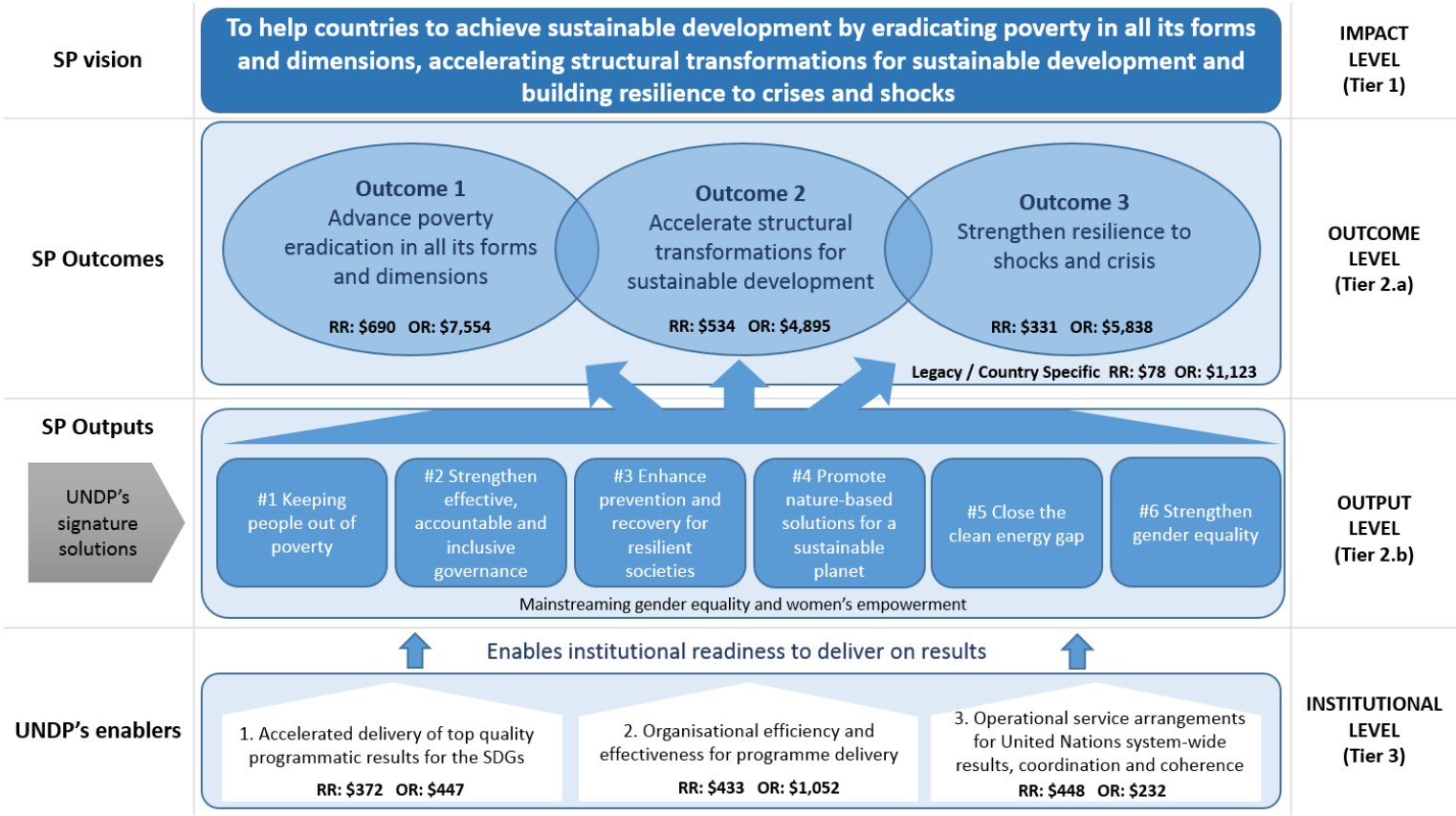
ANNEX 3: INTEGRATED RESULT REPORTING FRAMEWORK (IRRF) – RESULTS ARCHITECHTURE(S) AND WATER/OCEAN/MARINE-RELEVANT TARGETS

Figure 27 - 2022-2025 IRRF results architecture



Source: [Annex 2: Integrated results and resources framework (IRRF). 20 August 2021]

Figure 28 – 2018-2021 IRRF results architecture



Source:[The UNDP Strategic Plan 2018-2021. Annex 5, Integrated Results and Resources Framework of the UNDP Strategic Plan, 2018-21. Populated with baselines, milestones and targets. 25 May 2018](#).

TIER ONE: IMPACT - EXTRACT RELATED TO WATER / OCEAN / MARINE RESOURCES AND SERVICES (2018-2021 IRRF)

Impact: To help countries to achieve sustainable development by eradicating poverty in all its forms and dimensions, accelerating structural transformations for sustainable development and building resilience to crises and shocks.			
	Impact indicators	**Baseline**	**Progress towards 2030 target**
4	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population (disaggregated by sex to the extent possible)	Deaths: 8,161 (2016) Missing persons: 1,008 (2016) Directly affected persons/100,000 population: 40,438 (2016)	Direction of progress: Decrease
	Note: Based on data from SDG indicator database (https://unstats.un.org/sdgs/indicators/database/?indicator=1.5.1) and 80, 56 and 80 UNDP programme countries (for deaths, missing people and directly affected people, respectively) where data is available. Deaths and missing people are a direct summation across all countries with data. Affected people per 100,000 population is a simple average across all countries with data. Disaggregation by sex is not available. Baseline year is 2016 with country-specific data ranging from 2000 to 2016.		
	FUNDS AND PROGRAMMES COMMON INDICATOR (UNFPA, UNICEF, UN WOMEN) **Corresponding SDG target:** 1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries **Corresponding SDG Indicator**: 1.5.1, 11.5.1, 13.1.1		

TIER TWO: DEVELOPMENT OUTCOMES AND OUTPUTS - EXTRACT RELATED TO WATER / OCEAN / MARINE RESOURCES AND SERVICES

Outcome 1: ADVANCE POVERTY ERADICATION IN ALL ITS FORMS AND DIMENSIONS			
	Outcome indicators	**Baseline**	**Progress towards 2030 target**
1.5	Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	World: 0.30 (2015) Male: 0.31 (2015) Female: 0.28 (2015) Adults (15+): 0.37 (2015) Children (0-14): 0.08 (2015)	Direction of progress: Decrease
	Note: As published in "The Sustainable Development Goals Report 2017" for the world aggregated estimate and in the "Progress towards the Sustainable Development Goals Report of the Secretary-General Supplementary Information" from 2017, also known as the "Statistical Annex," for disaggregated estimates. Baseline year is 2015.		
	FUNDS AND PROGRAMMES COMMON INDICATOR (UNFPA, UNICEF, UN WOMEN) **Corresponding SDG target**: 3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases **Corresponding SDG Indicator**: 3.3.1		

Signature Solution	Output	Output Indicator	No. countries reporting	2017 Baseline	2018 Milestone	2019 Milestone	2020 Milestone	2021 Target
#1 **POVERTY**	1.1.1Capacities developed across the whole of government to integrate the 2030 Agenda, the Paris Agreement and other international agreements[57] in development plans and budgets, and to analyse progress towards the SDGs, using innovative and data-driven solutions	**1.1.1.1Number of countries that have development plans and budgets that integrate international agreements across the whole-of-government[58]:**						
		a) 2030 Agenda for Sustainable Development	*69*	38	55	60	65	67
		b) Paris Agreement	*57*	33	38	43	50	54
		c) Other international agreements[1]	*45*	27	29	36	40	42
		Note: Not all countries provided BMTs to all three components of this indicator. This applies to all IRRF output indicators.						
		1.1.1.2Number of national and sub-national governments and other partners sharing innovative and data-driven solutions from the Global South accessed through SSMART[59]:						
		a) National governments	*9*	4	12	20	25	29
		b) Sub-national governments	*7*	4	6	11	15	20
		c) Other partners	*6*	0	1	5	9	13
		Note: This indicator has been slightly modified to better capture UNDP performance.(Original indicator: Number of national and sub-national governments and other partners applying innovative and data-driven solutions from the Global South accessed through SSMART.)						
		1.1.1.3Number of countries with data collection/analysis mechanisms providing disaggregated data to monitor progress towards the SDGs:						
		a) Conventional data collection methods (e.g. surveys)	*69*	47	55	61	66	68
		b) Administrative reporting systems	*64*	38	46	56	60	61
		c) New data sources (e.g. big data)	*52*	13	26	36	40	47
	1.1.2Marginalised groups, particularly the poor, women, people with disabilities and displaced are empowered to gain universal access to basic	**1.1.2.1Number and proportion[61] of people accessing basic services[4], disaggregated by target groups**						
		Proportions:						
		a) Total	*19*	47%	62%	66%	72%	75%
		b) Poor[62]	*12*	38%	48%	53%	58%	61%
		c) Women	*18*	44%	60%	63%	68%	70%
		d) People with disabilities[63]	*10*	47%	48%	51%	54%	56%
		e) Youth[6]	*17*	51%	65%	67%	75%	78%
		f) Displaced populations	*5*	35%	53%	56%	61%	62%

[57]Includes Addis, Beijing, Istanbul, Quito, SAMOA and Sendai.

[58]Includes all parts of national government such as ministries, various commissions, agencies and authorities as well as other state bodies.

[59]SSMART stands for South-South Marketplace. This is the same as the global development solutions exchange referred to in UNDP's corporate strategy on South-South and Triangular Cooperation.

[61]Proportions can be calculated using estimates of coverage populations that are available in many countries using surveys and administrative reporting systems.

[62]As defined nationally.

[63]Includes victims of landmines.

Signature Solution	Output	Output Indicator	No. countries reporting	2017 Baseline	2018 Milestone	2019 Milestone	2020 Milestone	2021 Target
	services[60] and financial and non-financial assets to build productive capacities and benefit from sustainable livelihoods and jobs	g) Other marginalised groups	*4*	21%	26%	28%	32%	33%
		Numbers						
		a) Total	*23*	52,449,696	58,001,436	63,029,047	68,352,094	69,106,418
		b) Poor	*15*	52,921,734	54,304,694	56,070,140	58,954,973	60,350,162
		c) Women	*22*	52,996,096	58,533,541	64,012,816	70,898,923	75,120,650
		d) People with disabilities	*12*	3,885,782	4,023,317	4,152,442	4,400,655	4,645,930
		e) Youth	*17*	7,040,152	8,932,860	10,534,511	12,756,177	12,947,810
		f) Displaced	*5*	43,144	51,710	56,761	61,779	67,287
		g) Other	*8*	171,762	420,565	614,688	808,902	904,902
		Note: • Although all countries that selected this indicator provided numerical BMTs, some were unable to set BMTs in proportions due to the difficulty in estimating denominator values and/or did not use a consistent approach to populating denominators. • Countries provided disaggregated BMTs by target group(s) and where UNDP supported programmes are expected to have outputs. Total values do not necessarily match the sum of sub-components as target groups are not mutually exclusive. • "Other" marginalized group components are not described here due to space constraints. Information is available upon request.						
#1 **POVERTY**	2.1.1Low emission and climate resilient objectives addressed in national, sub-national and sectoral development plans and policies to promote economic diversification and green growth[64]	**2.1.1.1Number of countries with targets[65] for low emission and climate-resilient development in:**						
		a) Development plans and strategies	*62*	46	52	58	61	62
		b) Budgets	*52*	30	36	42	45	49
		c) Private sector business plans and strategies	*37*	17	24	30	32	33
		2.1.1.2Number of countries with public-private partnerships at national level to improve the enabling framework[66] for economic diversification and green growth	*27*	16	17	24	25	27
#4 **SUSTAINABLE PLANET**	1.4.1Solutions scaled up for sustainable management of natural resources, including sustainable commodities	**1.4.1.1Number of micro, small and medium-sized enterprises utilizing supplier development platforms for inclusive and sustainable value chains**	*35*	86,460	241,727	301,925	316,107	323,511
		1.4.1.2Natural resources that are managed under a sustainable use, conservation, access and benefit-sharing regime:						

[60]Basic services include social services (e.g. health and nutrition, education, water and sanitation, social housing, vocational training), economic services (including finance), environmental and energy services (e.g. renewables, clean fuels and technology, use of natural resources), and other services (e.g. rule of law and justice).Please note that UNDP focuses primarily on policies and capacities that improve the enabling environment for provision of basic services.

[64] Includes oceans and marine ecosystems, forests, biodiversity and ecosystems, land, and chemicals and waste.

[65] Includes nationally determined contributions (NDCs).

[66] Includes dialogue with the private sector on policy, legal, regulatory and institutional frameworks as well as measures to boost investment and sustainable development.

Signature Solution	Output	Output Indicator	No. countries reporting	2017 Baseline	2018 Milestone	2019 Milestone	2020 Milestone	2021 Target
	and green and inclusive value chains	a) Area of land and marine habitat under protection (hectares)	*37*	6,5147,850	71,445,549	74,065,233	68,472,533	80,498,513
		b) Area of existing protected area under improved management (hectares)	*49*	84,692,329	93,064,396	95,451,701	97,363,638	147,862,192
		c) Number of shared water ecosystems (fresh or marine) under cooperative management	*32*	8,175,321	8,149,774	8,187,391	8,187,492	8,199,528
		d) Area under sustainable forest management (hectares)	*53*	132,723,127	136,141,875	137,608,534	140,993,066	144,780,571
		e) Biodiversity (using appropriate units of measure)	*45*	11,071,460	12,653,498	14,081,207	84,132,525	91,775,870
		f) Amount of chemicals reduced or disposed (metric tons)	*35*	1,041,674	1,044,394	2,077,603	4,132,476	4,141,722
		g) Other	*18*	341,376	342,251	434,451	716,721	748,836
#4 **SUSTAINABLE PLANET**	2.4.1 Gender-responsive legal and regulatory frameworks, policies and institutions strengthened, and solutions adopted, to address conservation, sustainable use and equitable benefit sharing of natural resources[67], in line with international conventions and national legislation	**2.4.1.1Number of countries with gender-responsive measures in place for conservation, sustainable use, and equitable access to and benefit sharing of natural resources, biodiversity and ecosystems:**						
		a) Policy frameworks	*57*	24	26	36	46	53
		b) Legal and regulatory frameworks	*55*	22	23	28	40	48
		c) Institutional frameworks	*56*	23	22	29	43	51
		d) Financing frameworks	*48*	14	17	23	34	42

Outcome 2: ACCELERATE STRUCTURAL TRANSFORMATIONS FOR SUSTAINABLE DEVELOPMENT

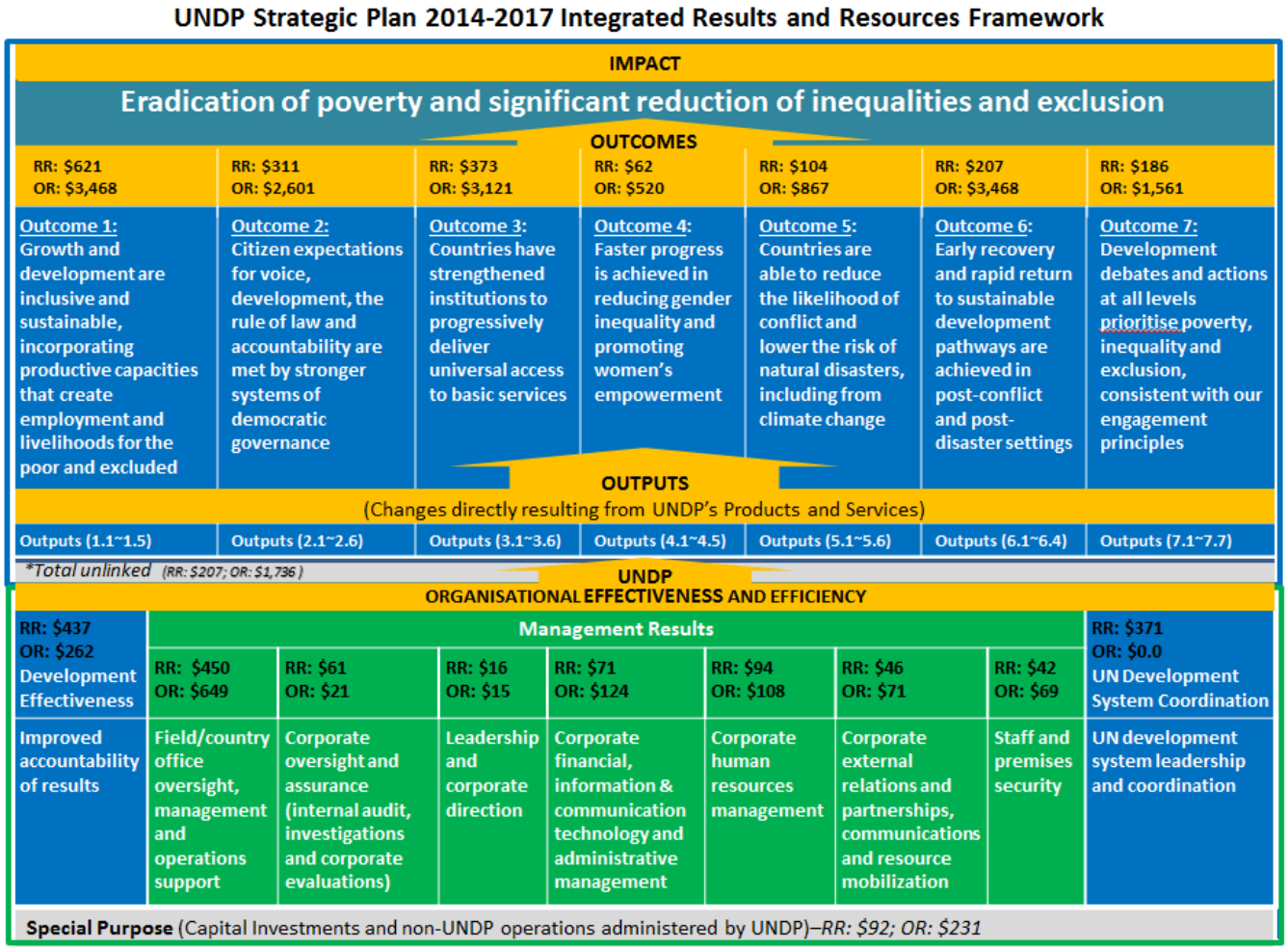
	Outcome indicators	Baseline	Progress towards 2030 target
2.9	**a.** Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type **b.** Coverage of protected areas in relation to marine areas	a. 47% (2017) b. 13% (2016)	Direction of progress: Increase

[67] Includes oceans and marine and freshwater ecosystems, forests, biodiversity and ecosystems, land rights, and management of chemicals and waste.

	Note: As published in "The Sustainable Development Goals Report 2017" and in the "Progress towards the Sustainable Development Goals Report of the Secretary-General Supplementary Information" for 2017, also known as the "Statistical Annex."		
	Corresponding SDG target: 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements; 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information. **Corresponding SDG Indicator**: (a) 15.1.2, (b) 14.5.1		
3.2	Direct disaster economic loss in relation to global gross domestic product (GDP), disaster damage to critical infrastructure and disruption of basic services, attributed to disasters	a. Average Annual Loss (AAL) attributed to disasters in relation to GDP: 0.38% (2016) b. Average Annual Loss attributed to disasters: 293,995 million US dollars (2016) c. Damaged critical infrastructure, health: 110 (2014) d. Damaged critical infrastructure, education: 579 (2014)	Direction of progress: Decrease
	Note: a/b: As published in "The Sustainable Development Goals Report 2017" and in the "Progress towards the Sustainable Development Goals Report of the Secretary-General Supplementary Information" from 2017, also known as the "Statistical Annex". Baseline data year is 2016. c/d: Based on data from Global SDG Indicator Database https://unstats.un.org/sdgs/indicators/database/?indicator=11.5.2and for 9 (health infrastructure) and 11 (education infrastructure) UNDP programme countries. Disaggregation by age and location is not available.		
	Corresponding SDG targets: 1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters; 11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations **Corresponding SDG Indicator**: 1.5.2/11.5.2		
3.3	Number of forcibly displaced people (millions), disaggregated by type (refugees, asylum seekers, internally-displaced persons) and by sex and age to the extent possible	World: 65.6 million (2016), Refugees: 22.5 million (2016). Asylum seekers: 2.8 million (2016). Internally displaced persons: 40.3 million (2016).Children: 51% (2016)	Direction of progress: Decrease
	Note: As published in "Global Trends – Forced Displacement in 2016" by UNHCR http://www.unhcr.org/globaltrends2016/. Children below 18 years of age comprised half of the refugee population in 2016. Disaggregation by sex is not available.		
	Corresponding SDG target: 11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations; **Corresponding SDG Indicator**: Non-SDG indicator.		

Source: The UNDP Strategic Plan 2018-2021. Annex 5, Integrated Results and Resources Framework of the UNDP Strategic Plan, 2018-21. Populated with baselines, milestones and targets. 25 May 2018 - IRRF 2018-2021.

Figure 29 – 2014-2017 IRRF results architecture



Note: Resources are in millions of US Dollars; RR-Regular Resources; and OR-Other Resources.

Source: [The UNDP Strategic Plan 2014-2017. Annex II. Integrated Results and Resources Framework.] Figure III: Summary of the IRRF (including estimated resources based on past expenditure patterns presented to the EB in September 2013).

ANNEX 4: HIGHLIGHTS ON WATER- MARINE AND OCEAN-RELATED ACHIEVEMENTS ACROSS UNDP (EXTRACTS FROM ANNUAL REPORTS, 2014-2020)

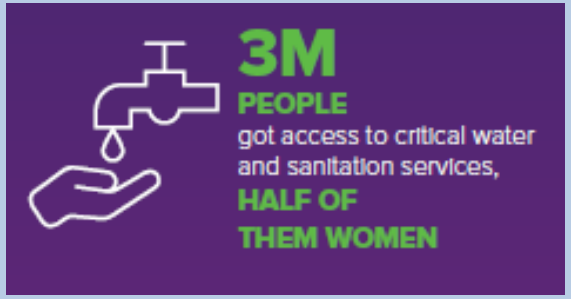
Water / Ocean Highlights from Across UNDP

2020 Annual Report

Because we owe our planet everything…

In Comoros, **programmes co-managed with communities nearly tripled fish catches**, while support for the law on protected areas led to the creation of the National Parks Agency…

We also worked with conflict-affected communities, including in Lebanon, Libya and Sudan, to **restore people's access to critical environmental services, including water** and solar energy.



2019 Annual Report

Speed and scale…

The Islamabad Urban Platform, for example, brings together civil society, public institutions, and the private sector to co-create large-scale infrastructure, **tackling growing urbanization challenges and water conservation** at the same time. This model is now being replicated in other major Pakistani cities.

Restoring coral reefs with nature

With the help of UNDP, inventors at Oceanus developed a resourceful way to **regenerate local ecosystems** in Mexico. The **coral nurseries** are built with a mix of organic concrete and the overabundant sargassum seaweed that washes up on the shores.

Time to fix our planet…

UNDP delivered nature-based results across our six Signature Solutions, building the resilience of 70,000 farmers in Zambia, generating an additional US$200 million in GDP through sustainable tuna fishing for 14 Pacific Island countries, and mobilizing green funding to benefit 37 million people. Because the force of nature is ours to nurture, not destroy.

Water / Ocean Highlights from Across UNDP

2018 Annual Report

Rising resilience in the crosshairs of the South Pacific

Tuvalu, with the second-lowest maximum elevation of any country, is highly vulnerable to the effects of cyclones and rising sea levels. UNDP has scaled-up its **community-based projects that protect coastal areas, food and water security** to better prepare people and islands for future extreme weather events.

2017 Annual Report

OCEAN CONFERENCE

June 2017 marked the historic Ocean Conference, with its powerful message about global interconnectivity: the 'seven seas' are, in fact, one shared ocean. With the support of UNDP, this game-changing event secured more than 1,300 commitments from the international community to protect the ocean. UNDP works with over 100 countries to restore and protect life under water, and better manage marine resources. From reducing the risks of marine-invasive species to creating protected areas in Belize, or safeguarding fishing livelihoods in India, UNDP is tackling many urgent threats to our life-sustaining ocean.

Keeping people out of POVERTY… Ending poverty is UNDP's primary focus and features in our work with governments, communities, and a wide range of partners… UNDP interventions help eradicate poverty… by creating decent jobs and livelihoods, providing social safety nets, boosting political participation, and **ensuring access to services like water,** energy, healthcare, credit, and productive assets…

Water / Ocean Highlights from Across UNDP

2017 Annual Report	**ENVIRONMENT: nature-based solutions for development…** Healthy ecosystems are at the heart of development, underpinning societal well-being and economic growth. Through **nature-based solutions**, such as the sustainable management and **protection of land, rivers and oceans**, we help ensure that countries have **adequate food and water**, are **resilient to climate change and disasters**, and can **sustain work for billions of people through forestry, agriculture, fisheries and tourism**. **Crisis prevention and increased RESILIENCE…** Among many other projects, UNDP is helping rehabilitate buildings at the University of Mosul, a vital road from the city to a nearby hospital, and **water treatment plants that provide safe water to over 600,000 people**. All told, these projects are giving the people of Mosul more reasons to return home, and the basic services they need to stay.
2014-2016 Annual Reports	**Protecting the environment…**UNDP is working with governments to **protect marine biodiversity**. In a major initiative backed jointly by UNDP and the government of Turkey, and with funding and technical support from the Global Environment Facility (GEF), more than 200,000 hectares of Turkish **coastal waters were added to the country's growing network of protected maritime sanctuaries**. This meant a 45 percent increase in marine protected areas of the country. Regulations **ban fishing in critical sites for species preservation**, including in the newly expanded Gökova and Datça-Bozburun Special Environmental Protection Areas- a major contribution to the **long-term protection of fish stocks** in the eastern Mediterranean basin. **Recovery in Palestine…** …through its longstanding Programme of Assistance to the Palestinian People (PAPP), UNDP took the lead in removing debris and restoring safe passage through Gaza's bombed and rubble-blocked streets and **reconnecting electricity, water and sewage services**. In cooperation with the Islamic Development Bank, UNDP helps rebuild damaged housing for displaced Gaza families. And it continues to promote income opportunities for the rising numbers of unemployed, from small business grants to support for Gaza's struggling small fishing industry. To help guide longer-term recovery, UNDP carried out the first detailed survey of damage to Gaza's economy and infrastructure, cataloguing losses in manufacturing and agricultural capacity and the destruction of school, hospitals, power generators, telecommunications towers, **sewage treatment plants and other essential services. Government estimates that damage to infrastructure and in the water and sanitation alone was nearly US$35 million.** Rebuilding is underway: in early 2015 UNDP broke ground on a state-of-the-art sewage treatment plant in the Khan Younis district, a US$58 million project PAPP is managing with support from Japan and Kuwait. The innovative plant will provide wastewater to farmers, while **putting an end to the environmentally destructive discharge of raw sewage** into Gaza's coastal waters.

Water / Ocean Highlights from Across UNDP

2014-2016 Annual Reports

Making development sustainable…UNDP supported the installation of advanced solar power systems in isolated desert towns in Morocco as part of the country's new 'sustainable oases' programme for climate change adaptation. This renewable-resources initiative includes **modernization of traditional oasis irrigation systems to reduce water loss from runoff and evaporation, and increase supplies of purified drinking water**.

In rural Mali, another UNDP-backed project helps families install solar panels on their homes, **to boil water for cooking and run pumps for vegetable gardens**…"Ever since we had the solar panels installed, women haven't been buying charcoal or kerosene for their household chores," says Nana Sangaré, a mother of seven and the deputy mayor of her small northern Mali town. "**We water our plants with the solar pump, and our market gardens have become much more profitable**."

Reforestation to protect water supply and well-being…Deforestation accelerates climate change and poses an immediate threat to water resources and livelihoods, especially for low-income communities within threatened woodlands. …In Haiti, which has suffered the most severe deforestation in the Western Hemisphere, UNDP is working on climate change adaptation and **strengthening the management of watersheds and protected areas**. During 2014, 150 environmental monitoring officers were deployed to Port-au-Prince and protected areas in the west. In southern Haiti, under the coordination of the local government, a Norway-funded UNDP programme led to the production of 5.5 million seedlings planted on 5,000 hectares of land between 2010 and 2014. During the same period, UNDP projects have planted 10 million trees and reinforced over 4 km of riverbank.

Environmental sustainability: Looking for practical solutions… One of the greatest challenges the Asia-Pacific region is maintaining the pace of human development progress while achieving environmental sustainability. Sea levels are rising; glaciers and forests are shrinking; air quality and water supplies are diminishing; and climate change to accelerate all these worrisome trends. UNDP is working with its partners on practical solutions to these problems:

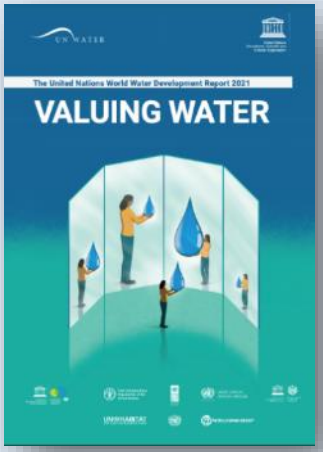
- In a partnership with the Ministry of New and Renewable Energy in India, UNDP installed a model solar heating system in a century-old Chennai boarding school for orphaned and destitute boys. **From sunlight alone, the system now provides hot water to students and power to the kitchen**, where 3,000 meals are cooked daily.
- Thailand is one of the world's biggest per capita exporters and consumers of chicken. But the more than 1 million hectares of maize needed to keep those chickens fed have created serious environmental problems, from soil erosion and the loss of forest reserves to **water contamination from fertilizers and pesticides**. UNDP convened gatherings of maize farmers, chicken ranchers, retail buyers, environmentalists, and Thai officials, who agreed to begin **working together to find more efficient, environmentally sustainable ways** to grow the maize and raise the poultry needed to satisfy consumer demand.

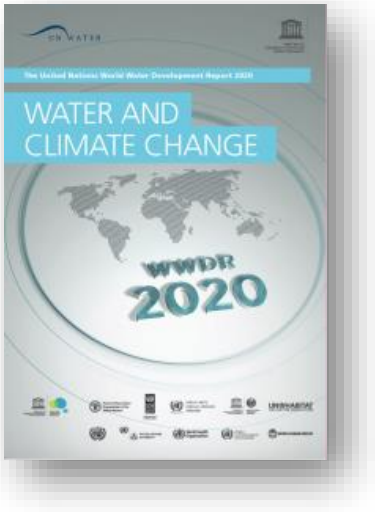
Water / Ocean Highlights from Across UNDP	
2014-2016 Annual Report	• The Marshall Islands face an existential threat from rising seas and prolonged droughts—both the consequences of climate change. To make more efficient use of scarce water supplies, the UNDP-backed Pacific Adaptation to Climate Change Programme is working to **improve rainwater storage in island reservoirs and to install solar water purifiers in smaller outlying islands**. On Majuro, the capital and most populous island, the airport runway is the largest paved area, making it an ideal surface to collect rainwater. The water is now treated and piped into a reservoir that is lined and covered to cut losses from seepage and evaporation. Majuro's freshwater reserves were previously enough for just a few weeks, but now the city could survive a drought of up to four months.

Source: UNDP Annual Reports (https://annualreport.undp.org/)

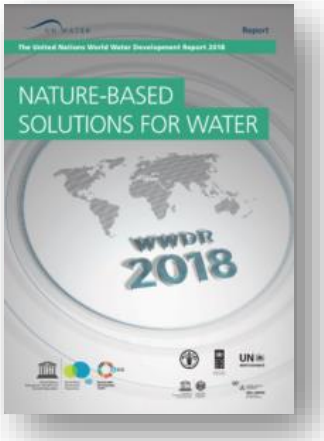
ANNEX 5: KNOWLEDGE WORK AND PUBLICATIONS

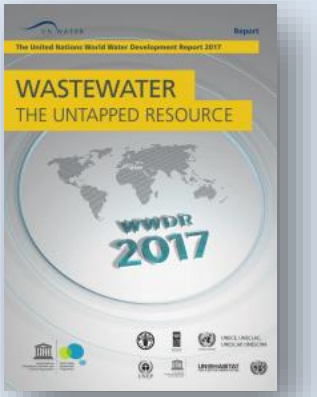
2014-2021 UN WORLD WATER DEVELOPMENT REPORTS AND UNDP CONTRIBUTION

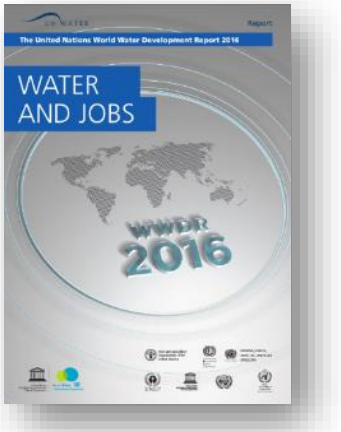
Report/Edition	About the report	UNDP Contribution
 **United Nations (2021). The United Nations World Water Development Report 2021: Valuing Water. Paris, UNESCO. (https://www.unwater.org/publications/un-world-water-development-report-2021/)**	The 2021 edition entitled 'Valuing Water ' groups current methodologies and approaches to the valuation of water into five interrelated perspectives: valuing water sources, in situ water resources and ecosystems; valuing water infrastructure for water storage, use, reuse or supply augmentation; valuing water services, mainly drinking water, sanitation and related human health aspects; valuing water as an input to production and socio-economic activity, such as food and agriculture, energy and industry, business and employment; and other sociocultural values of water, including recreational, cultural and spiritual attributes. These are complemented with experiences from different global regions; opportunities to reconcile multiple values of water through more integrated and holistic approaches to governance; approaches to financing; and methods to address knowledge, research and capacity needs.	***Co-Leadership of Chapter 9: Enabling Multi-Value Approaches in Water Governance*** The use of multi-value approaches to water governance entails acknowledging the role of values in driving key water resources management decisions as well as a call for active participation of a more diverse set of actors. Incorporating the intrinsic or relational values of diverse groups to better inform and legitimize water and related land resources management decisions entails the direct participation of groups or interests that are often excluded from water-related decision-making. It may bring greater emphasis on ecological and environmental processes and refocus efforts on sharing water resource benefits – for present and future generations – rather than allocating water quantities for highest-value economic priorities. ***Contribution to Chapter 11: Knowledge, Research and Capacity Development as Enabling Conditions*** ***Presentation of report at World Bank, EU and Sida events***.

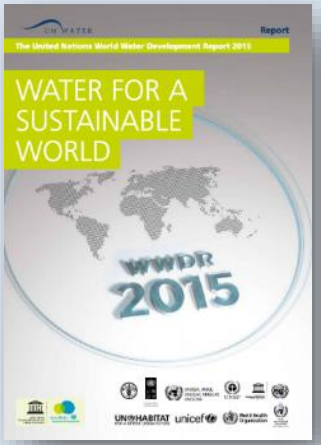
Report/Edition	About the report	UNDP Contribution
 **UNESCO / UN-Water (2020). The United Nations World Water Development Report 2020: Water and Climate Change. Paris. (https://www.unwater.org/publications/world-water-development-report-2020/)**	The scientific evidence is clear: the climate is changing and will continue to change, affecting societies mainly through water. Climate change will affect the availability, quality and quantity of water for basic human needs, threatening the effective enjoyment of the human rights to water and sanitation for potentially billions of people. The alteration of the water cycle will also pose risks for energy production, food security, human health, economic development and poverty reduction, thus seriously jeopardizing the achievement of the Sustainable Development Goals. The 2020 United Nations World Water Development Report focuses on the challenges, opportunities and potential responses to climate change, in terms of adaptation, mitigation and improved resilience that can be addressed through improving water management. Combining climate change adaptation and mitigation, through water, is a win-win proposal, improving the provision of water supply and sanitation services and combating both the causes and impacts of climate change, including disaster risk reduction.	***Co-leadership of Chapter 11 on Water Governance for Resilience to Climate Change.*** This chapter argues for the importance of good governance and more just and inclusive water resources management under the mounting pressures from climate change. The chapter emphasizes the importance of: - Political will, leadership and action - The cross-cutting nature of water and climate through the entire economy. Trade-offs and conflicting interests need to be addressed at all levels to negotiate solutions across sectors. - Participation and transparency can help inclusiveness and legitimacy in decision-making by way of allowing different perspectives to be brought to bear. - Poverty and inequality exacerbate vulnerability to shocks and stressors, including climate-related water crises. Greater equality in water/climate action not only helps alleviate poverty, but also builds resilience to the effects of climate change as well as every-day crises. ***Contribution to chapters 1: Climate Change, Water and Sustainable Development, and 2: International Policy Frameworks*** ***Presentation of report at World Water Day and Sida event.***

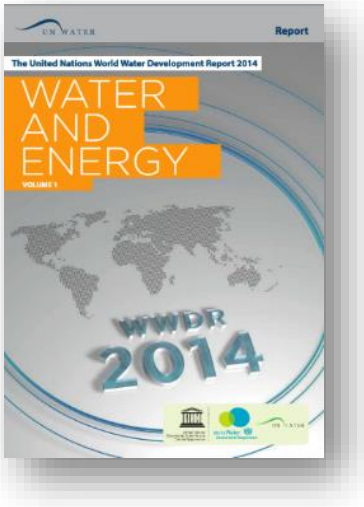
Report/Edition	About the report	UNDP Contribution
 **WWAP (UNESCO World Water Assessment Programme) (2019). The United Nations World Water Development Report 2019. Leaving No One Behind. Paris. (https://www.unwater.org/publications/world-water-development-report-2019/)**	The United Nations World Water Development Report, Leaving no one behind, launched during the 40th session of the United Nations Human Rights Council (UNHRC), demonstrates how improvements in water resources management and access to water supply and sanitation services are essential to addressing various social and economic inequities, such that 'no one is left behind' when it comes to enjoying the multiple benefits and opportunities that water provides. Safe drinking water and sanitation are recognized as basic human rights, as they are indispensable to sustaining healthy livelihoods and fundamental in maintaining the dignity of all human beings. International human rights law obliges states to work towards achieving universal access to water and sanitation for all, without discrimination, while prioritizing those most in need. Fulfilment of the human rights to water and sanitation requires that the services be available, physically accessible, equitably affordable, safe and culturally acceptable. 'Leaving no one behind' is at the heart of the commitment of the 2030 Agenda for Sustainable Development, which aims to allow all people in all countries to benefit from socio-economic development and to achieve the full realization of human rights.	***Co-lead of Chapter 3 – Political, Legal and Institutional Dimensions:*** This chapter outlines the legal, institutional and political mechanisms and tools aimed at promoting inclusive development in water resources management and ensuring that no one is left behind in relation to their basic rights to water and sanitation. The chapter emphasizes the power dynamics that lead to discrimination and exclusion of parts of society. In order to ensure equity and inclusion, corruption and vested interests need to be tackled, especially in policy implementation, since pro-poor measures may be proclaimed, yet derailed in policy implementation. ***Contribution to chapters 1: The human rights to water and sanitation and the 2030 Agenda for Sustainable Development, and 3: Social Dimensions.*** ***Presentation of report at World Water Day and Sida event.***

Report/Edition	About the report	UNDP Contribution
 **WWAP (United Nations World Water Assessment Programme)/UN-Water (2018). The United Nations World Water Development Report 2018. Nature-Based Solutions for Water. Paris. (http://unesdoc.unesco.org/images/0026/002614/261424e.pdf)**	The United Nations World Water Development Report, Nature-based Solutions for Water, launched during the 8th World Water Forum, and in conjunction to the World Water Day, demonstrates how nature-based solutions (NBS) offer a vital means of moving beyond business-as-usual to address many of the world's water challenges while simultaneously delivering additional benefits vital to all aspects of sustainable development. NBS use or mimic natural processes to enhance water availability (e.g., soil moisture retention, groundwater recharge), improve water quality (e.g., natural and constructed wetlands, riparian buffer strips), and reduce risks associated with water-related disasters and climate change (e.g., floodplain restoration, green roofs). Water management remains heavily dominated by 'grey' infrastructure and the enormous potential for NBS remains under-utilized. NBS include green infrastructure that can substitute, augment or work in parallel with grey infrastructure in a cost-effective manner. The goal is to find the most appropriate blend of green and grey investments to maximize benefits and system efficiency while minimizing costs and trade-offs.	***Co-lead of Chapter 6 on Enabling Accelerated Uptake of NBS:*** This chapter assesses challenges to implementing NBS that constrain them reaching their full potential to contribute to the sustainable management of water. Challenges include institutional inertia and the dominance of economics; lacking awareness, communication and knowledge of what NBS can offer: to reduce water variability risks and to improve water quality and availability. There are also uncertainties, lack of experience and technical guidelines. , compared to 'conventional' grey solutions – at all levels from communities to regional planners and national policy makers. In terms of financing, green and climate bonds are emerging as promising mechanisms to finance NBS. On the knowledge base, it is important to harness traditional ecological knowledge and work with local communities. Indigenous peoples play a special role in advancing NBS. ***Participation in panel debate at global launch event. Presentation of report at World Water Day event.***

Report/Edition	About the report	UNDP Contribution
 **WWAP (United Nations World Water Assessment Programme) (2017). The United Nations World Water Development Report 2017. Wastewater: The Untapped Resource. Paris. (http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/2017-wastewater-the-untapped-resource/)**	What if we were to consider the vast quantities of domestic, agricultural and industrial wastewater discharged into the environment everyday as a valuable resource rather than costly problem? This is the paradigm shift advocated in the United Nations World Water Development Report, Wastewater: the Untapped Resource. A large proportion of wastewater is still released into the environment without being either collected or treated. This is particularly true in low-income countries, which on average only treat 8 % of domestic and industrial wastewater, compared to 70% in high-income countries. As a result, in many regions of the world, water contaminated by bacteria, nitrates, phosphates and solvents is discharged into rivers and lakes ending up in the oceans, with negative consequences for the environment and public health. Wastewater generation is one of the biggest challenges associated with the growth of informal settlements (slums) in the developing world.	***Co-leadership of Chapter 3 on Governance:*** Wastewater management presents particular governance challenges. In cases where wastewater is discharged untreated, those affected may be geographically or temporally far away from the polluter. For this and other reasons, society must act collectively to promote human health and protect water resources from pollution. This chapter delves into the processes for policy making, regulation and financing, and the related socio-cultural challenges of compliance and policy implementation. The related governance challenges involve legal, institutional, financial, economic and cultural issues. ***Contribution to chapter 2: Wastewater and the Sustainable Development Agenda, and chapter 18: Creating an Enabling Environment.*** ***Presentation of report at World Water Day event***.

Report/Edition	About the report	UNDP Contribution
 **WWAP (United Nations World Water Assessment Programme) (2016). The United Nations World Water Development Report 2016: Water and Jobs. Paris. (https://www.unwater.org/publications/world-water-development-report-2016/)**	From its collection, through various uses, to its ultimate return to the natural environment, water is a key factor in the development of job opportunities either directly related to its management (supply, infrastructure, wastewater treatment, etc.) or in economic sectors that are heavily water-dependent such as agriculture, fishing, power, industry and health. Furthermore, good access to drinking water and sanitation promotes an educated and healthy workforce, which constitutes an essential factor for sustained economic growth. In its analysis of the economic impact of access to water, the 2016 United Nations World Water Development Report, Water and Jobs, cites numerous studies that show a positive correlation between investments in the water sector and economic growth. It also highlights the key role of water in the transition to a green economy.	***Contributions to Chapter 5: Water Jobs and Sustainable Development*** – on gender, by background study on water fetching – and to ***Chapter 12: Addressing Capacity Development Needs and Improving Dialogue***.

Report/Edition	About the report	UNDP Contribution
 **WWAP (United Nations World Water Assessment Programme) (2015). The United Nations World Water Development Report 2015: Water for a Sustainable World. Paris. (https://www.unwater.org/publications/world-water-development-report-2015/)**	Water resources, and the range of services they provide, underpin poverty reduction, economic growth and environmental sustainability. From food and energy security to human and environmental health, water contributes to improvements in social wellbeing and inclusive growth, affecting the livelihoods of billions. In a sustainable world, water and related resources are managed in support of human well-being and ecosystem integrity in a robust economy.	***Co-leadership of Chapter 2: Poverty and social equity:*** Water and economic development are closely associated, and poverty-oriented water interventions can have direct, immediate and long-term social, economic and environmental results, making a difference to billions of people. The chapter looks into the water and poverty relation. Comparatively powerless groups tend to be shut out of not just access to water but also the processes whereby allocation decisions are made. The most vulnerable are poor people living in informal urban settlements and those in rural areas whose livelihoods are dependent upon rainfed agriculture or the availability of grasslands and water for grazing animals. Protecting the rights of such people and avoiding elite capture of the resource and the benefits derived from it require tools that foster a more equitable allocation of scarce water resources. ***Co-leadership of Chapter 16: Framework for Implementing 'the Future We Want'*** The global water crisis is mainly one of governance. Addressing the challenges related to water requires changing the way we assess, manage and use our water resources. Progress calls for engaging a broad range of societal actors to take account of water in their decision-making processes and responses. ***Contribution to epilogue: Water for a Sustainable World***

Report/Edition	About the report	UNDP Contribution
 **World Water Assessment Programme (2014). World Water Development Report 2014 - Water and Energy. (http://unesdoc.unesco.org/images/0022/002257/225741E.pdf)**	Water and energy are closely interconnected and highly interdependent. Choices made and actions taken in one domain can greatly affect the other, positively or negatively. Trade-offs need to be managed to limit negative impacts and foster opportunities for synergy. The Report provides a comprehensive overview of trends and how challenges have been addressed.	No leadership role, but as reference e.g. on access to energy (with WHO), clean energy/small hydro and human development (in Asia), and the water-energy nexus (in the Arab region).

CAP-NET MANUALS AND KNOWLEDGE PRODUCTS

Product	Description	Partners	Year
Why Gender Matters in IWRM: A tutorial for water managers	This (new edition) tutorial is a self-learning tool for professionals and managers in the water sector. It is designed to help them account for the different needs of the women and men that will be affected by their work. The tutorial explains why it is important to consider gender mainstreaming in the water sector. It details the various ways in which men and women are affected differently by water management decisions. Despite the challenges, there are numerous benefits in considering gender from the design stage through to implementation of water policies and practices. The benefits can be seen in improved economic sustainability, economic efficiency and social equity and better water governance. The tools needed to achieve these benefits are discussed in the context of different sectors.	Gender and Water Alliance (GWA)	2014
Drought Risk Management in Integrated Water Resources Management	This manual is intended primarily for trainers and facilitators, practitioners, and water and natural resources managers, and is aimed at strengthening the capacity to anticipate and reduce the impact of drought through enhancing knowledge and skills for drought risk reduction practices as an integral part of the development process at community, national, sub-regional and regional levels. The approach of this manual emphasizes an improved understanding of both the natural hazard and the human exposure to this climatic event. The different elements of drought risk management and how they contribute to better understanding and management of drought risk are explained. When using this manual, considerable attention to practical examples, situations and realities on the ground is recommended to link and illustrate terms, concepts, and processes successfully.	WaterCap/ Jomo Kenyatta University of Agriculture and Technology; REMERH/ Universidad Autónoma del Estado de México; SCaN/ SaciWATERs; University of Twente-ITC; UNEP-DHI Centre; Stockholm International Water Institute (SIWI)	2015
Training manual on human rights-based approach to IWRM	This manual brings together two fields that, until recently, have been separate: human rights and IWRM. These two fields have been brought together as awareness has grown within the human rights community that water management is fundamental to the realization of a range of human rights. Similarly, water-management practitioners have become increasingly aware of the crucial importance of water in key human rights domains, such as the right to life, the right to health, the right to food and the right to a healthy environment. This manual introduces human rights and IWRM to the reader, progressively integrating them into a single approach that has been dubbed a 'human rights-based approach (HRBA) to integrated water resources management' or, in short, an 'HRBA to IWRM'.	REDICA; The Water Governance Facility (WGF); WaterLex	2015
Integration of Groundwater Management into Transboundary Basin Organizations in Africa	This training manual is the product of two specific policy visions. The first is derived from one of the pillars of Integrated Water Resources Management (IWRM): that all water should be managed as a unitary resource within hydrological basin boundaries. The second relates to the obvious transboundary nature of water as rivers flow from	Africa Groundwater Network (AGW-Net); Federal institute for geosciences and natural resources (BGR); Global	2015

Product	Description	Partners	Year
	one country to the next. International development cooperation in the water sector is therefore increasingly supporting transboundary cooperation mechanisms. Although groundwater has not been excluded from these policy visions, its integration into river basin management organizations and appreciation of the transboundary nature of groundwater flows have lagged. BGR / AGW-Net / IWMI carried out a 'needs assessment for transboundary groundwater management' in nine international river basin organizations in Africa. This training manual has been complied in response to the needs expressed and is designed to help develop capacity within the basin organizations to manage their transboundary groundwater issues. The topics covered range from policy and legislation, through bio-physical resource issues to communication and stakeholder relations. Much of the material in this manual is also relevant for internal national basin organizations.	Water Partnership (GWP); African Network of Basin Organisations (ANBO); Federal Ministry for Economic Cooperation and Development (BMZ); International Groundwater Resources Assessment Centre (IGRAC); imawesa – Improved Management of Agricultural Water in Eastern and Southern Africa; International Water Management Institute (IWMI); Aqua for All (A4A).	
Ecosystems Functions and Services in Water Management	This training manual on 'Ecosystem Functions and Services in IWRM' is aimed at building the capacity of water managers particularly. However, it can also be utilized by natural resources managers working with government, NGOs, and other entities responsible for developing, training, and implementing water resources management projects by introducing the issues and opportunities for integrating an ecosystem approach into IWRM projects. The material is structured considering rational processes that start with an understanding of the importance of IWRM, and its strong link with the ecosystem.	UNEP; UNESCO-IHE; REDICA; SIWI	2016
Earth Observation tools in IWRM	The objective of this training manual is to enhance the capacity of water sector professionals and managers on the use of earth observation satellite data and products in support of IWRM. The training manual will address technical skills required to access and select appropriate satellite imageries and products relevant to IWRM projects; approaches to satellite imagery processing and feature extraction; design of IWRM-related applications using EO tools; review the use of EO in the following thematic areas: watershed characterization, food mapping, rainfall monitoring, drought assessment, groundwater assessment, and water quality management. This training manual is an initiative of Cap-Net UNDP and ITC and strives to address this by developing international training materials for the use of earth observation tools for IWRM. The manual is presently in its first draft and through a series of training of trainers it is envisaged to be further refined and tested to reflect real needs and applications on the ground particularly these training materials.	ITC; MyCDNet; SCaN; Cap-Net Brasil; Caribbean WaterNet	2016

Product	Description	Partners	Year
Water Pollution Management	Water pollution management requires the participation of all stakeholders—polluters, victims, water managers and policymakers—under an integrated water resources management (IWRM) approach, as detailed in this training manual. The training course consists of 11 modules. Content is organized within three sections: water pollution issues, impacts and integrated management, the enabling environment, and water pollution management interventions. The training manual considers the interlinkages among different sectors and issues related to water pollution and provides guidance on identifying interdisciplinary challenges, bringing them into policy discourse, and planning for pollution prevention and management. The accompanying facilitators guide includes a description of each module and session, together with different exercises that can be practiced in training, guiding the trainer to lead participants for effective learning in each and every module.	United Nations Environment Programme (UNEP); UNEP-DHI - Centre for Water and Environment; Cap-Net Lanka; Nile IWRM Net.	2016
Indigenous Peoples and IWRM	Indigenous peoples are the most vulnerable to climate change impacts as they depend greatly on natural resources to sustain their economic activities and for survival. On the other hand, Indigenous and traditional people play an incredible role in conserving the natural resources and increasing resilience to climate change impacts. This training manual, therefore, is intended for trainers, water managers and professionals, and leaders in the water sector to facilitate the integration of traditional knowledge and indigenous peoples into water management and related interventions, and as a guide to adapt and use in their trainings. The facilitators' guide specifically provides tools and examples to plan training programmes on this topic.	WaterLex; Nile IWRM-Net; Water Governance Facility; International Rivers; Justicia Hidrica	2018
Drought Risk Reduction and IWRM	Droughts are considered the most far-reaching of all natural disasters, causing short- and long-term social, economic and ecological losses as well as significant secondary and tertiary impacts. Drought risk management (DRM) therefore is the concept and practice to avoid, lessen or transfer the adverse effects of drought hazards and the potential impacts of drought disaster through activities and measures for prevention, mitigation and preparedness. This manual is primarily for learners, trainers and facilitators, practitioners, and water and natural resources managers, and is aimed at strengthening the capacity to anticipate and reduce the impact of drought by enhancing knowledge and skills for drought risk reduction practices as an integral part of the development process at community, national, subregional and regional levels.	GWP; IDMP; WMO	2020
Integrating Data to Improve the Protection and Restoration of Freshwater Ecosystems	Freshwater ecosystems in the context of the Sustainable Development Goal (SDG) framework are foundational natural resources of the biosphere. Numerous development actions depend on them, and either succeed or fail depending on the functional capacity or integrity of the ecosystem. The training manual is designed to raise awareness and capacity of decision makers, managers and practitioners in protection and restoration of freshwater ecosystems through enhanced understanding of the role, value and importance of protecting and/or restoring freshwater ecosystems,	GWP; UNEP; UNDP; UNEP-DHI	2021

Product	Description	Partners	Year
	understanding of actions and management solutions, and on the use and application of data.		
Gender and IWRM	Fresh water is becoming increasingly scarce across the world, while remaining a daily basic need for all. Decisions about the different uses of water are overshadowed by men, while the actual use of water is mostly by women for their families, exacerbating this disparity. Guided by the Why Gender Matters in IWRM training manual, this course unravels the existing challenges faced by vulnerable groups when dealing with water, demonstrates how the two are connected, explains the benefits of addressing them in an integrated way, and presents comprehensive tools on how to achieve this. An abundance of case studies and lessons learned are shared to provide concrete examples which can be tailored and adapted to suit practitioners' needs.	GWP, GWA	2021

OTHER TOOLS AND MANUALS

Title	Description
Accountability in WASH: A reference guide for programming	The Reference Guide for Programming contains guidance on existing mechanisms promoting accountability, illustrated by examples of how they are currently being operationalized in different contexts. The aim of the document is to provide External Support Agencies with structured and concise information that can help programming support to accountability-related actions.
Faecal Sludge Management Book (Translation into Spanish)	Over a billion people in urban and peri-urban areas of Africa, Asia, and Latin America are served by onsite sanitation technologies. Hence, the adequate management of faecal sludge is essential for ensuring adequate sanitation services and protecting human health and the environment. This emerging topic has been addressed in the first "Faecal Sludge Management" Book which compiles the current state of knowledge of this rapidly evolving field, and presents an integrated approach that includes technology, management and planning.
Tariff Setting Methodology for Water Supply and Sewerage Services in Bosnia and Herzegovina	The GoAL WaSH programme has, in cooperation with the state, entity, cantonal and local authorities, developed a tariff setting methodology for water supply and sewage services in Bosnia and Herzegovina. The methodology defines tariffs to enable recovery of all costs, including operating and investment maintenance costs, as well as capital investments costs. The methodology also includes detailed guidelines for developing a business plan. Water utilities in Bosnia and Herzegovina are facing problems with high network losses and inadequate tariffs. The regular renewal and reconstruction of the network is often left without resources. Hence, network losses grow year after year hindering regular operations. In 2016 the tariff setting methodology will be piloted in two water utility companies.

Title	Description
Regional Training Manual: Water Integrity Risks in Middle East and North Africa	Most countries in the Middle East and North Africa (MENA) are chronically water stressed with population growth and the impact of climate change exacerbating the stress. However, the water scarcity in the MENA region is not only a result of physical water shortage but is also linked to lack of good governance structures, high water demand, and low levels of trust between different parties sharing the same water resource. Although most of these countries have developed comprehensive water laws and policies, many face significant challenges in implementing them. Poor resource management, insufficient capacity, lack of institutional integrity, bureaucratic inertia and a shortage of new investments further undermines effective governance of water in the region.
User's Guide on Water Governance Assessment	The User's Guide on Water Governance Assessment, written in collaboration with UNDP Oslo Governance Centre (OGC), the Water Integrity Network and the UNDP Programme on Anti-corruption for Development Effectiveness (PACDE), was finished and disseminated this year The Guide aims to assist water sector practitioners with tools to conduct comprehensive assessments that can inform effective policy processes. Specifically, this guide enables users to: (1) Understand how assessments can inform policy making. (2) Select, adapt and develop appropriate assessment frameworks and indicators for governance assessments in the water sector. (3) Design multi-stakeholders approaches that further dialogue and consensus building around water sector reform and strengthen accountability by offering an official track record of government performance and a platform for public scrutiny by a wide range of actors. (4) Implement water governance assessment to drive reform.
Social Audit Manual	The Social Audit Manual aims at enhancing water integrity in water management in El Salvador. It has been developed as part of the project "Promoting Good Governance in the Torola River Basin of El Salvador", financed by OFID and implemented by SIWI and the UNDP in El Salvador. The Manual presents clear advice on social audit and participation mechanisms for simple but effective control by citizen surveillance committees of the water management at local level.
WASH Accountability Mapping Tools: Facilitator Guide	The Facilitator Guide provides the methods to help groups understand accountability relations in their WASH context and plan improvement actions.
Sustainability Checks – Guidance to design and implement sustainability monitoring in WASH	This framework document was written under the collaboration between UNICEF and the UNDP-SIWI Water Governance Facility through the Accountability for Sustainability programme.
WASH Bottleneck Analysis Tool (WASHBat): A Country Implementation Guide	This guidance document was written with a strong involvement of UNDP-SIWI Water Governance Facility under the collaboration with UNICEF through the Accountability for Sustainability programme. This Guide aims at supporting resource people who are responsible for facilitating and organizing a workshop on the application of the WASH BAT to ensure an effective outcome. It guides each user to reflect on different elements, steps and preconditions required for a successful preparation and implementation of the entire process through a checklist of options. The Guide also provides different options so that it can be customized to any given context. A User Manual and Tutorial Video are available at WASH BAT homepage for further understanding the tool, as well as a Facilitators Page with additional training materials. http://www.washbat.org/

Title	Description
Water Interactions for Consideration in NDC Enhancement and Implementation	This document is specifically designed to promote conversations between climate change professionals and other sectors on the important role of water, and help to ensure that impacts of activities on water resources are not forgotten about as countries race to meet the challenge of climate change. And going back to the quote from UN-Water but shifting it around, water is likely to be the primary medium through which we will address the effects of climate change.
Aquaculture for Caribbean SIDS - ImprovingWater-Related Food Production Systems in Caribbean Small Island Developing States (SIDS)	Caribbean Small Island States import approximately 50% of all sea food consumed. On several occasions, these items arrive as a processed product either canned, dried, salted or frozen. This is not sustainable for the Caribbean, as our food security and food sovereignty is in jeopardy. This is where sustainable aquaculture with sound green implementation, can promote our future place in the BlueEconomy. The following modules seek to provide the initial stages of information for the Caribbean Aquaculturist to not only start and operate a successful facility, but also build an aquaculture sector within Caribbean SIDS.
Water Use Efficiency in Agriculture	The Training manual aims to: Demonstrate the benefits of improved Water Use Efficiency (WUE). Provide examples of demand calculation models for WUE in the agriculture sector. Demonstrate methodologies for assessing the economic benefits of improved WUE. Explain the potential impacts of climate change on water resources use in the sector. Initiate discussions at management levels that will make provisions for the adaptation of WUE measures. Foster discussions on retrofitting the industry with WUE devices.
Kura River Basin Tool Box	Kura Box is an innovative toolkit and it is designed as a material for schools. It includes general information about water, challenges in the water sector and Kura River Basin.
Basic Guidelines for a Gender-Responsive Fishery Improvement Project	As part of the Global Sustainable Supply Chains for Marine Commodities (GMC) Project gender strategy, basic guidelines have been developed for the promotion of gender-responsive Fishery Improvement Projects (FIPs). This document presents an overview of FIPs and gender and a theory of change for mainstreaming gender in FIPs to ensure they are gender sensitive and responsive. It also includes practical actions to incorporate gender considerations in a FIP, including four desired outcomes and accompanying activities and output indicators.
Integrating data to improve the protection and restoration of freshwater ecosystems	Application of data to provide the information and evidence for decision-making is increasingly essential for freshwater ecosystem management, protection and restoration. Unfortunately, and despite the increased availability of data especially through the data revolution and technology, uptake of data for decision-making is often limited. Data is only as valuable as the decision it enables –including status and compliance monitoring, planning and action. Understanding how to access and apply available data sets can help to improve decisions for different situations and to communicate more effectively with stakeholders.

REPORTS, BOOKS, ARTICLES

Title	Description
Supporting water services in small towns: the experience of GoAL WASH programme in Lao PDR programme in Lao PDR	In Lao PDR, it is estimated that more than 80 small towns (approximately 65% of all small towns in Lao PDR) and 5,000 remote villages(approximately50%ofallvillages) lack water supply services. The GoAL WaSH programme has addressed this challenge in Lao, in partnership with UN-Habitat. Up to now, the project has been successful in developing and obtaining approval for a national strategy for water and sanitation in Emerging Towns, and this has been complemented with operational tools for adapting technology and costs to the size of these towns. The adaptation of raw water treatment plant designs to small towns has been especially developed. Combining a governance approach with piloting initiatives in the field has proved to be very effective for getting full support and ownership from the Government.
United Nations Development Program (UNDP) perspectives on global large marine ecosystems movement	This commentary briefly reviews UNDP's nearly twenty-year perspective on application of the Large Marine Ecosystem (LME) approach to marine ecosystem assessment, planning and management. It underscores the continued value of the LME modules, economic valuation of LMEs, and linking LME programs to subsidiary integrated coastal management and marine protected area programs. It also notes the importance of linking LME efforts with management efforts in both the high seas and with LME drainage basins. It emphasizes the need for continued efforts to engage the private sector as key stakeholders in LME management and increasing recognition of LMEs as vehicles to advance national and regional economic development. Lastly, it notes the sizable recent increase in attention to oceans in the global policy arena (Rio+20 Outcome, Global Ocean Commission Ocean SDG, etc.) and the associated opportunity to build on, scale up and replicate successful LME approaches and programs. (By Andrew Hudson)
Indigenous Peoples and Industry Water Users: Mapping the Conflicts Worldwide	This article presents the findings of a mapping study undertaken in 2014 to determine the characteristics of conflicts between governments, private industrial users and indigenous peoples over the use of water resources. Gathering information about 384 situations of water-related conflicts reported around the world during 1960–2014, the study found that mining and hydropower development were the most conflict-ridden types of projects. In only 3 per cent of the cases had the parties reached the stage of formal cooperative agreements. Conflicts had significant impacts on operations, since one-third of projects had to be either cancelled or renegotiated. There is an urgent need to develop successful ways of cooperation between indigenous peoples, states and industries.
Restoring and Protecting the world's large marine ecosystems: An engine for job creation and sustainable economic development	Some of the most significant threats to the sustainability of the world's 66 Large Marine Ecosystems (LME) – invasive species, coastal hypoxia, overfishing, marine debris and ocean acidification – are due to a combination of market and/or policy failures which cause these environmental externalities. A concerted global effort to remove these barriers would not only lead to dramatic improvements in ocean health and preservation of trillions of dollars in ocean-related goods and services and hundreds of millions of existing jobs, but also catalyze transformation across a range of ocean using and affecting sectors that would create millions of new, and in many cases, well paying, jobs for people across both the developed and developing world.
Editorial – Stockholm World Water Week 2016: 'Water for sustainable growth'	This themed section features a selection of papers from the 2016 Water Week. They illustrate the width of the theme and the importance of holistically addressing social, economic and environmental concerns in order to assure 'water for sustainable growth'. Water security, the availability of water for health, livelihoods, production and ecosystems at an acceptable level of risk to people, environments and economies, is key for water's relation to sustainable growth.

Title	Description
Wastewater Governance and the Local, Regional and Global Environments	This paper reflects on the World Water Week theme and selected papers in the context of broader socio-environmental transitions, and how the governance of wastewater plays out at the local, regional and global levels. The papers explore the construction of engineering knowledge and its implication in pollution management, the monitoring of accountability in the provision of sanitation and water services and the way the equitable distribution of these services can improve girls' educational attainment.
Water quality management from source to sea: From global commitments to coordinated implementation	This article reviews links and gaps related to water quality in the 2030 Agenda for Sustainable Development. It uses these as a starting point to analyze challenges in water quality management at national and basin levels from a 'source to sea' perspective. Experiences in the Danube River, Black Sea, East Asian Seas and the Baltic highlight key issues to be addressed during the implementation of the agenda to achieve water quality objectives in fresh, coastal and marine waters. It assesses priorities for supplementary actions to be supported to improve prospects for achieving targets in these areas.
Monitoring Water Resources Governance Progress Globally: Experiences from Monitoring SDG Indicator 6.5.1 on Integrated Water Resources Management Implementation	Improved water resources governance supports important social, economic, and environmental objectives. The 2030 Agenda recognizes improved water governance to be critical for achievement of the Sustainable Development Goals (SDGs) and commits to monitor the progress of implementation of integrated water resources management (IWRM).
Regarding Groundwater and Drinking Water Access through A Human Rights Lens: Self-Supply as A Norm	Drawing on the literature, we discuss the State's duties to respect, protect and fulfil this right especially in relation to the freedom of end-users to self-supply from groundwater sources; the training and regulation of non-State service providers including drillers and private vendors; and health and safety concerns. Interpreting the State's duty to 'fulfil' through direct water service provision 'as a last resort', this paper suggests that self-provision is the original norm for enjoying the right to water. This has significant implications for the State's role in raising awareness concerning point source protection and aquifer recharge for water resources management and in decisions concerning water allocation. By ignoring self-provision, which is primarily from groundwater, the State is not only missing a tremendous opportunity but is jeopardizing the water security of future generations.
Navigating the Complexity of Regional Ocean Governance Through the Large Marine Ecosystems Approach	Over the last twenty-six years, the Global Environment Facility's (GEF) International Waters focal area has utilized the Large Marine Ecosystem (LME) approach to navigate the complex problems related to transboundary issues affecting the world's marine ecosystems, of which forty-one out of sixty-six are shared (62%) by one or more countries. To overcome the disputes and assumptions about the intentions of neighboring states, the GEF developed the Transboundary Diagnostic Analysis-Strategic Action Programme (TDA-SAP) assessment and strategic planning processes to help countries learn how to work together and build trust. This formal and inclusive process analyses all pertinent factual and scientific information to set priorities for action. This practical method for integrating science into management has provided an effective approach to inform and advance sustainable LME management and governance regimes; however, there is not a one size fits all approach.

Title	Description
Water and Cities in Latin America: Challenges for Sustainable Development	Approximately 80 per cent of the population of Latin America is concentrated in urban centres. It reviews key aspects of why water matters in cities and presents case studies on topics such as groundwater management, green growth and water services, inequalities in water supply, the financing of water services and flood management. Detailed examples are described from Argentina, Brazil, Colombia, Ecuador, Mexico and Peru, and there is also a chapter comparing lessons which might be learnt from US cities. Contributing authors are drawn from both within and outside the region, including from the Inter-American Development Bank, OECD and World Bank to set the issues in a global context.
Beyond the Hardware: Working for Governance, Advocacy and Leadership in Water, Sanitation and Hygiene	GoAL WaSH was created in 2008, with the aim of accelerating the work to reach the water and sanitation targets of the MDGs. UNDP aimed to do this through strengthening water governance in nations with serious political, structural and social challenges. Although governance may seem like a somewhat nebulous issue to work with, it forms the critical enabling environment for service provision. Evaluations of the programme point to its high relevance and effective use of to date modest funds.
WI Regional Cap Build Sub-Saharan Africa Stock Taking Report	This stock taking report came at the end of the three-year Programme 'Regional Capacity Building Programme, Promoting and Developing Water Integrity in Sub-Saharan Africa'. Since the beginning of the Programme in June 2011, the programme empowered a growing community of skilled water integrity ambassadors and actors with methodologies and tools to identify and reduce integrity risks. Participants developed individual water integrity action plans and implemented them in their home institutions, sharing the results with us. The feedback described changes incorporated into procedures and ways of working. These are powerful first steps towards ensuring that investment in the water sector has the intended outcome.
Gender Practice in Water Governance Programmes – From Design to Results	Women's important role in water management, both in the household and in small-scale farming is widely recognized, yet effective implementation of methods and strategies to overcome gender-based barriers to women's equal participation in water and sanitation projects remain elusive. This report looks at the gender strategies, results and reporting of the eleven water and sanitation governance programmes.
WGF report no 3 - Groundwater Governance in India: Stumbling Blocks for Law and Compliance	This report analyses the formal legal and institutional framework for groundwater governance in India, with special focus on implementation, enforcement and compliance matters in practice. It maps the recent development in the non-binding policy landscape as well as the law reform processes based on case studies of three different States.
1st African Water Integrity Summit "Accelerating Towards a Water Secure World"	In 2009, the African Water Vision 2025 outlined the challenges to the sustainable management of water resources on the continent. In the face of competing demands for basic water supply and sanitation, food security, economic development, and the environment, it recognised the 'disastrous consequences' of continuing business as usual. It named inappropriate governance and institutional arrangements as one core 'human threat' to sustainable water management. This report presents 27 case studies of lessons learnt and experiences related to social accountability, anti-corruption and infrastructure investments and capacity building. The case studies were presented at the 1st African Water Integrity Learning Summit in Lusaka in April, 2014.

Title	Description
Water Co-operation between Cultures: Partnerships with Indigenous Peoples for Sustainable Water and Sanitation Services	Indigenous peoples and ethnic minorities suffer lower levels of access to improved water and sanitation services due to socio-economic and cultural marginalization and geographical challenges. Lack of cultural sensitivity and operational limitations tend to render water and sanitation interventions less effective and services unsustainable. The purpose of the article is to illustrate the need to build respectful, inclusive and long-term partnerships with rural indigenous peoples and ethnic minorities to improve sustainability of water and sanitation services and to overcome socio-cultural barriers to improved access.
Gender Practice in Water Governance Programmes	WGF Report No 4 – Gender Practice in Water Governance Programmes: From Design to Results – was published early in the 2014. It focuses on how gender issues are tackled in water governance programmes and highlights the importance of supporting women's existing organizations and/or to help organize women in order to find a joint voice, and to engage in parallel work with men and men's attitudes. The report builds on interviews and documentary reviews of all 11 programmes forming part of the MDG-F Knowledge Management initiative
Water For Development – Charting a Water Wise Path	In their article on water and development at the international level Harlin and Kjellén take stock of the MDG progress as well as discuss the future SDGs and the role of water in (and for) them. They conclude that while water is essential for achieving the SDGs we need an adaptive and flexible approach as many of the key drivers – such as population growth, climate change.
Fighting Corruption in the Water Sector	This publication is part of a series of UNDP-sponsored studies that present methods, tools and good practices to map corruption risks, develop strategies and sustain partnerships to address challenges and tackle corruption in the education, health and water sectors. They complement UNDP's MDG Acceleration Framework (MAF), which has been endorsed by the UN Development Group and enables governments and development partners, within established national processes, to identify and systematically prioritize the bottlenecks to progress toward achieving the MDGs, and then devise strategies to overcome them. The studies bring together UNDP's efforts to support countries to develop frameworks to accelerate their efforts to meet the MDGs as well as successfully meet the commitments of the UN Convention against Corruption.
OECD Principles on Water Governance	The Water Governance Principles provide a framework for governments to put in place better water policies and they will be used to develop a broader OECD perspective on water management over the coming years. (OECD-WGI)
From Coast to Coast: Celebrating 20 years of transboundary management of our shared oceans	UNDP and GEF launched UNDP-GEF-IW:LEARN publication "From Coast to Coast: Celebrating 20 years of transboundary management of our shared oceans"; 7 of the 12 programs featured were UNDP/GEF International Waters projects, underscoring the nearly 20 year effectiveness of UNDP/GEF IW marine and coastal portfolio in delivering tangible environmental and development results in marine systems around the world

Title	Description
Accountability in WASH: Explaining the Concept	The Concept Note "Accountability in WASH, explaining the concept" provides water practitioners with a toolbox of concepts to help identify which accountability factors affect the sustainability of water and sanitation service delivery and match this diagnosis to different solutions and options for action
WGF Report 5 - Vulnerability Reduction and Portfolio approach	The latest IPCC Assessment Report (AR5) provides evidence that the impacts of climate change are strongest and most comprehensive for hydrological systems. At the same time, there is a huge gap between adaptation needs and the uptake of adaptation actions or programmes. This paper discusses the use of two key aspects in assessing effective water adaptation options: vulnerability reduction as an alternative effectiveness criterion and a portfolio approach to ensure the robustness of water adaptation options against uncertainties.
Recommendations for working with indigenous peoples in rural water and sanitation. Recommendations for an Intercultural Approach.	This document is one of the outcomes of a joint research initiative called Trans-cultural Transparency. It focuses on how to overcome socio-cultural clashes between communities, service providers, development co-operation actors and local authorities, particularly in areas with large groups of indigenous peoples. It poses recommendations to be borne in mind by stakeholders working on water and sanitation with indigenous peoples in Latin America. The recommendations apply to any work on water and sanitation in rural areas, but they are especially relevant to work with indigenous and ethnic minorities. Socio-cultural differences here matter very much for defining and realizing successful projects.
Water governance in perspective - Water Governance Facility 10 years 2005-2015	The Water Governance Facility (WGF), the long-standing collaboration between the United Nations Development Programme (UNDP) and the Stockholm International Water Institute (SIWI) has been in operation for ten years.
GoAL WaSH: Summary of Final Report – Mongolia	The GoAL WaSH project (Governance, Advocacy and Leadership in Water, Sanitation and Hygiene) was launched in Mongolia in 2010, in response to evidence that improved governance of the sector was a key requirement to accelerate achievements of the water and sanitation Millennium Development Goals (MDGs). The project provided resources to support sector coordination, sectoral reforms and developed a management model for water supply and sanitation services in rural areas. Additionally, GoAL WaSH provided support to develop an MDG Roadmap and standards on small-scale wastewater treatment facilities. The second phase of the project addressed local level capacity gaps in water supply and sanitation service delivery, with a specific focus on operation and maintenance. This document gives a summary of the activities implemented during the project period (2010-2015) as well as the main achievements.
Administrative positioning of the regulatory body for tariff setting of water supply and sewerage services in Bosnia and Herzegovina	The GoAL WaSH programme has in cooperation with the state, entity, cantonal and local authorities, prepared a study on establishing a regulatory framework for tariff setting for water supply and sewerage services in Bosnia and Herzegovina. The study includes an analysis of the legislative and institutional framework, as well as of the current practice in tariff setting and approval in Bosnia and Herzegovina. The document concludes with guidelines, principles and proposals for the establishment of a regulatory framework in this area.

Title	Description
From Coast to Coast: Celebrating 20 years of transboundary management of our shared oceans	From Coast to Coast showcases the GEF international waters large marine ecosystem and coastal area management portfolio, particularly how it has contributed to: 1) improved global and regional cooperation (e.g. conventions, commissions) in addressing priority transboundary water issues; and 2) improved ecosystem health and services and human wellbeing by addressing particular trans-boundary concern and through improved governance at regional, national and local levels. The publication highlights ocean successes from around the world, including: Establishment of the Benguela Current Commission, the world's first intergovernmental, cross-sector large marine ecosystem commission, which is now fully financed by the three governments of Angola, Namibia and South Africa; Adoption of the Caribbean and North Brazil Shelf Large Marine Ecosystems Strategic Action Programme by 31 ministers from 22 different countries, which sets 10 year priority actions for shared ocean governance in the region; and, Adoption and implementation by 12 countries of the Sustainable Development Strategy for the Seas of East Asia, which fostered integrated coastal management for 14% of South East Asia's 234,000 km coastline, benefiting over 146 million people.
UN World Water Development Report 2015 - Water for A Sustainable World	In a sustainable world that is achievable in the near future, water and related resources are managed in support of human well-being and ecosystem integrity in a robust economy. Sufficient and safe water is made available to meet every person's basic needs, with healthy lifestyles and behaviours easily upheld through reliable and affordable water supply and sanitation services, in turn supported by equitably extended and efficiently managed infrastructure. Water resources management, infrastructure and service delivery are sustainably financed.
Tariff Setting Methodology for Water Supply and Sewerage Services in Bosnia and Herzegowina	During 2013 and 2014, in cooperation with the state, entity, cantonal and local authorities, UNDP pre-pared an analysis of the possibility for establishing a regulatory framework for tariff setting for water supply and sewage services. The main objective was to develop a draft tariff setting methodology for water supply and sewage services in Bosnia and Herzegovina. The methodology defines such tariffs so as to enable recovery of all costs, including operating and investment maintenance costs, as well as capital investments costs, if so decided. This methodology also includes detailed guidelines for developing a business plan containing the selected key performance indicators as well as instructions for their calculating.
The Study on best administrative positioning of the Regulatory Body in the process of tariff setting of communal affairs of water supply and wastewater collection and treatment services	Communal affairs of water supply and wastewater collection and treatment services are of common interest since they meet the basic needs of citizens as beneficiaries of those services. These services are so important at present so we literally cannot imagine life without them. These activities are included in the group of communal services in individual consumption, and the performance of this activity is ensured from the tariff of communal services.
WGF Report 6 -Developing capacities for water integrity: Reflective review of approach and impact of training courses	This report on Developing Capacities for Water Integrity provides a reflective review of the approach to training and capacity development as a contribution to improved water governance and reduced risk of corruption in the water sector. It draws on the experience gained from implementing several Regional Water Integrity Capacity Development Programmes primarily in Sub-Saharan Africa and Latin America.

Title	Description
Synthesis report: Water Integrity in the Middle East and North Africa region	This report was completed as part of the Regional Capacity Building Programme on Water Integrity for the MENA region, a multi-year project supported by the Swedish International Development Cooperation Agency (Sida) and implemented by the UNDP Water Governance Facility at SIWI (WGF) in collaboration with Global Water Partnership – Mediterranean (GWP-Med), and International Union for Conservation of Nature – Regional Office of Western Asia (IUCN ROWA). Each of the national risk assessments that are synthesized in this report were produced by American University of Beirut, Lebanon; Al-Quds University, Palestine; Jordan University of Science and Technology, Jordan; CERTE-Centre for Water Research and Technologies, Tunisia; and Al Akhawayn University, Morocco.
Every Drop Matters - Lessons and Insights	The review highlights some of the positive effects resulting from the global EDM programme. It also highlights challenges faced in the implementation of EDM and similar programmes. It is therefore hoped that the lessons and insights gained through this review will assist in enhancing future development partnerships.
International Waters – Delivering Results	Since 1991, UNDP-GEF's International Waters Programme has been supporting over one 100 countries that share some of the world's largest and most important aquatic ecosystems to work cooperatively in addressing the agreed priority environmental and water resource concerns facing such waterbodies. 'International Waters – Delivering Results' is the fifth in a series of knowledge publications prepared by the UNDP-supported and GEF-financed IW programme that document and highlight key achievements at the project and portfolio level, comprising four 'signature' programme areas: Large Marine Ecosystems; Lakes, Rivers and Aquifers; Integrated Water Resources and Coastal Area Management; and Global Programmes. The portfolio continues to make progress in sustaining the world's most significant shared water systems for the billions of people who depend on these ecosystems for their livelihoods and security.
WGF Report 7 - The process of developing the water supply and sanitation strategy for emerging towns in Laos	This report looks at steps that have been taken to put emerging towns on the political agenda in Laos, leading to an increase in water supply and sanitation services in emerging towns. The particular foci of the report are the Water Supply and Sanitation Sector Strategy for Emerging Towns and the Lao National Water Treatment Plant Database, both produced with the support of the GoAL WaSH programme.
WGF Report 8 - Women and corruption in the water sector: Theories and experiences from Johannesburg and Bogotá	Corruption exists in many forms and the motivations behind an individual pursuing or accepting illicit conduct may be as diverse as the types of corruption. It is imperative to better understand the underlying aspects of corrupt behaviour and their implications in order to achieve several interlinked targets under the Sustainable Development Goals and to generally improve 'good' governance through more transparent, accountable and effective institutions and procedures. Among those are the gendered roles and special responsibilities that are associated with women in many societies, which make them subject to diverse forms of corruption to obtain water for the household's needs.
Understanding sustained use of ecological sanitation in rural Burkina Faso	Access to safe sanitation services is fundamental for healthy and productive lives, but in rural Burkina Faso only around 7 percent of the population uses improved sanitation.
Water Integrity voices from the Middle East and North Africa	Compilation of 52 capacity building case studies from Lebanon, Palestine, Jordan, Tunisia and Morocco

Title	Description
Stocktaking report: Regional Capacity Building Programme on Water Integrity in the Middle East and North Africa	In this report we detail the outcomes of everyone's hard work - what we've accomplished, what we've learned, what is left to do and how we can build on our progress to support countries and institutions to integrate water integrity in their work.
Sea, My Life: Protecting Oceans, Sustaining our Future	A diverse set of case studies presents the work of a wide range of GEF-financed and UNDP-supported projects that make a clear case for further investment in marine protected areas to restore the health of oceanic and coastal ecosystems, strengthen resilience in the face of climate change, sustain fisheries and other economic activities, and improve the lives of the world's poorest communities.
What works in water and ocean governance: Impact stories from the UNDP Water and Ocean Governance Programme	Rather than looking at why governance reforms usually take time, this report aims to unveil the most critical steps or factors that made these water and/or ocean governance projects reach their objectives. It puts a selected set of projects of the UNDP Water and Ocean Governance Programme (WOGP) under the spotlight. Whereas the achievements are often of a very different nature, they all tackle complex, cross-sectoral water or ocean issues that none of the actors involved could have managed on their own.
Nature for Water - Nature for Life	Water security is recognized as one of the great challenges of the 21st century. The triple decline in quantity, quality, and reliability of potable freshwater poses numerous serious problems. The purpose of this publication is to highlight the importance of safeguarding nature in order to secure water-related services, and to achieve the Sustainable Development Goals. This publication serves as a call to action, to governments, to land use planners, to corporations, and to citizens everywhere to take urgent action to secure nature for life.
Water Sector Policy for Drought Management	Drought, unlike other natural hazard such as flash floods and earthquakes, doesn't occur abruptly, it requires much longer time to evolve, which makes possible to mitigate its impacts if an effective management framework is in place. The Ministry of Water and Irrigation recognized the cross-cutting impacts of drought on the development sectors of Jordan and developed the national policy statement on drought management in the water sector through UNDP & GoAL WaSH financial & technical support. The policy statement was endorsed by the cabinet and is expected to guide the national efforts to lessen the striking impacts of drought on the vulnerable water resources of the country.
Accountability in WASH - Case studies from Kenya	The aim of this study is to better understand the social accountability mechanisms that can improve the delivery of water and sanitation services. It seeks to answer the question of how local communities engage with decision-makers to realize their human right to water and sanitation

Title	Description
WASH Accountability in Fragile contexts	This Concept Note is the fifth document of a series on Accountability in WASH service delivery that the Stockholm International Water Institute, UNDP and UNICEF have jointly published under the Accountability for Sustainability programme. It deepens the analysis of accountability actors and relations around WASH service provision in fragile contexts. It does so by using the analytical frameworks of the Accountability Mapping Tools[4] presented in previous publications. It is intended to give a framework for WASH practitioners and government partners to analyze and improve their interventions in fragile contexts through an approach based on reinforcing the government leadership role and improving accountability within the WASH service delivery framework.
Modeling the effectiveness of holding cages and Thai-style hatcheries in Philippines blue swimming crab fisheries and their economic viability	Fisheries are an important aspect of global food production, but for many, such as the blue swimming crab (Portunus pelagicus) fishery in the Philippines, stock abundance has dropped significantly due to over harvesting. Many strategies exist to manage fisheries, and one such method to mitigate the effects of overharvesting is to allow gravid female crabs to release their larvae before processing the crabs. This strategy can be implemented through placing females in holding cages to allow for spawning or to rear the eggs in Thai-style hatcheries. However, the efficacy of larval release to mitigate the effects of overharvesting has not yet been measured. In this report, a theoretical population model was constructed as a first step in estimating the efficiency of these release methods. The model tracks the survival of a cohort of released crab larvae both in the planktonic and benthic phase.
Evaluación de stock de peces pelágicos pequeños en la costa continental ecuatoriana	Este documento sintetiza y presenta los resultados de un conjunto de actividades y análisis realizados en el marco de la consultoría financiada por el proyecto Cadenas Mundiales Sostenibles de Productos del Mar(GMC, por sus siglas en inglés), a través del Sustainable Fisheries Partnership (SFP).
The Global Marine Commodities Project: Our Model and Early Results	After two years of implementation, the GMC Project shares its model and compelling results to promote sustainable fisheries for the Blue Economy. The project has facilitated new fisheries policy consultation forums in Costa Rica, Ecuador, and Indonesia and has strengthened the fisheries management Technical Working Groups in the Philippines. These forums have generated the Costa Rica Large Pelagic National Action Plan and are currently building or updating another eight national action and management plans in the other three countries. Thanks to the GMC project partner Sustainable Fisheries Partnership (SFP), international seafood buyers and retailers are taking an active role in supporting sustainability improvements in the project's target fisheries. In addition, by employing emerging market tools such as sustainable seafood purchasing policies, Supply Chain Roundtables with seafood importers, and 6 Fishery Improvement Projects (FIPs), SFP is also helping the private sector in both producing and consuming countries make direct contributions to the integration of sustainability into seafood supply chains.
Impacts of COVID-19 in Target 75 Fisheries	The present brief provides a high-level overview about the impact of COVID-19 in some T75 fisheries that are key for global seafood production and supply, and identifies the measures taken by vendors and suppliers and their perspectives for the near future. T75 fisheries are high-volume fisheries with product destined mainly for the export market. The final goal of this analysis is to inform the development of targeted interventions that can be implemented by SFP, as well as by other organizations and partners interested in providing support during the crisis.

Title	Description
Key Considerations for Multi-Stakeholder Dialogue Spaces for Improved Fisheries Governance	The United Nations Development Programme (UNDP) is committed to enabling people to share their goals,needs and commitment to managing the use of natural resources (water, forests, soils, fisheries) in a way that meets global sustainable development goals. The UNDP has been facilitating dialogues between people involved in a variety of commodities such as coffee, oil palm, soy, beef and cocoa. The move into seafood enabled this approach to be applied to seeking solutions to the well documented issues associated with overfishing and the inequitable distribution of benefits from the use of fishery resources. As publicly owned resources, fisheries are more likely to be sustainable when stakeholders are actively involved in the management process. The Sustainable Marine Commodity Platform approach ensures that those in the wider supply chain, who also have an interest in sustainable use, are proactively included
Development of climate scenarios in the TDPS Water System	The study on “Development of climate scenarios in the Titicaca, Desaguadero – Poopó -Salar de Coipasa System (TDPS) Water System” brings a better understanding of the current and future climate context in this region (precipitation and temperature), and to establish mechanisms of conservation and public policies for adaptation and / or prevention.
Taking Every Drop into Account - Testing Tariff Setting Methodology for Water and Wastewater Services in Bosnia and Herzegovina	The primary goal of the exercise was to evaluate performance of utility companies in respective municipalities based on the application of the Methodology and to estimate a ‘real’ tariff that would take into account all real service-associated costs and investment plans. Secondary goal was to evaluate the level of political support such policy may receive from local authorities as well as arguments in favour or against a number of policy options and general features of the Methodology.
Women Water Champions: A compendium of 41 women stewards from the grassroots	Gender equality and social equity in water management provide a pathway to enhance efficiency, ingenuity, integrity, and sustainability, and yet, women are visibly missing from community leadership and decision-making around water.
Lessons from Evaluations: Ensuring Access to Safe and Clean Water Resources	To inform future initiatives, the Independent Evaluation Office (IEO) has undertaken a review of lessons from past evaluations of UNDP's initiatives for ensuring access to safe and clean water resources. The purpose of this paper is to provide evidence-based advice to UNDP country offices on 'what works (or doesn't) and 'how' regarding the design and implementation of such programmes. Includes examples from WOGP GoAL WaSH.

BRIEFS, FLYERS AND BROCHURES

Title	Description
Fast Facts: Human Rights Based Approach and Water Governance	UNDP promotes a human rights-based approach (HRBA) in its work to improve water resources management and access to water and sanitation. The document highlights the synergy between an HRBA and water governance. It provides examples of the Water Governance Programme's work with the right to water and sanitation.
Water integrity risks in the MENA Region – Priorities for action	National assessments conducted in Jordan, Lebanon, Morocco, Palestine and Tunisia clearly show that each face integrity risks and share a number of common challenges. This brief offers insights for policy makers on the priority areas to support capacity development to enhance integrity and improve water governance in the Middle East North Africa (MENA) Region.
UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS)	The Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) is a UN-Water initiative implemented by WHO. The objective of GLAAS is to provide policy- and decision-makers at all levels with a reliable, easily accessible and comprehensive analysis of WASH systems to make informed decisions for sanitation, drinking-water and hygiene. GLAAS collects data through country and external support agency (ESA) surveys and publishes reports summarizing WASH systems data every two to three years. Additionally, GLAAS, in collaboration with OECD and UNDP, monitors the means of implementation targets for Sustainable Development Goal (SDG) 6a and b.
Enabling Environment and Water Governance: A Conceptual Framework	As part of the ongoing UNICEF efforts to enhance WASH governance programming, the Accountability for Sustainability Programme developed a conceptual framework to unpack the concept of Enabling Environment for effective and sustainable WASH service delivery, linking it to the core water governance functions.
Indigenous peoples and water	Indigenous peoples and ethnic minorities suffer disproportionally from economic, social and political marginalization and human rights violations, including poor access to water and sanitation services. As custodians of many of the world's most fragile and important ecosystems their knowledge and participation is essential to ensure respect for their rights and to achieve equitable and sustainable water management. In this Issue Sheet the WGF explores the specific challenges of indigenous peoples related to water resources management and water governance. It also outlines the WGF activities related to the topic.
Integrity in water governance	Corruption squanders resources and impedes implementation of agreed policy goals for the common good. Combatting it requires structural approaches such as institutional reforms, not simply the removal of offenders. Building integrity as a core component of governance systems enables institutions to limit and prevent corruption and manage resources more effectively. In this Issue Sheet the WGF explores the integrity challenges for the water sector. It also outlines the WGF activities related to the topic.

Title	Description
Water Governance	Water governance is one of the most critical areas through which to improve the sustainable development of water resources and services. How societies choose to govern their water resources and services has profound impacts on people's livelihood and the sustainability of water resources. Access to water is, for many people, a matter of daily survival, or can help to break the vicious circle of poverty. In this Issue Sheet the WGF explores the different dimensions of water governance and the WGF activities.
Sanitation governance	Sanitation governance refers to the rules, roles and relations that make sanitation systems work (or not) – at what cost and for whom. Rural and urban sanitation systems differ, as well as those in high- and low-income areas. The appropriate governance structure ensures that the selected technology and all parts of the system work sustainably in the given setting.
The human rights to water and sanitation and the human rights-based approach	UN Member States have recognized the human rights to water and sanitation as part of binding international human rights law. In 2015, the right to sanitation was acknowledged as a distinct right, placing priority on its universal realization. The human rights-based approach stresses the correspondence between rights and obligations. Responsibilities and accountability, non-discrimination and disadvantaged groups are put in focus. In this Issue Sheet the WGF explores the links between the Human Rights to water and sanitation and water governance. It also outlines the WGF activities related to the topic.
Water integrity risks in the MENA Region – Priorities for action	National assessments conducted in Jordan, Lebanon, Morocco, Palestine and Tunisia clearly show that each face integrity risks and share a number of common challenges. This brief offers insights for policy makers on the priority areas to support capacity development to enhance integrity and improve water governance in the Middle East North Africa (MENA) Region.
Water Integrity in Morocco	The Moroccan government has multiplied efforts in recent years to counteract mismanagement and corrupt practices, including in the water sector. Despite these efforts, resources lost to corruption are considerable and still pose major challenges to effective governance of water in the country.
Water Integrity Risks in Tunisia	Tunisia has greatly increased its commitment in recent years to limit corruption and increase transparency, accountability and participation in governance by developing dedicated ministries and agencies for governance and anti-corruption. Still, a number of factors, including complex water management structures; lack of coordination and staff capacity in government and an arid climate create risks for unsustainable governance of water.
Water Integrity Risks in Palestine	Access to safe and sufficient drinking water is a critical problem for many people in Palestine. Water shortage, high population growth, weak infrastructure and fragmentation of water institutions pose major challenges to the water sector. Improving integrity and effective governance is crucial to sustain human development in the country.
Water Integrity Risks in Lebanon	Lebanon's water resources are under stress due to increasing demand and pollution that results from a growing population, rapid urban and economic growth, as well as the impacts of a changing climate. Water integrity and good governance are needed to reduce risks to sustainable and equitable development in the country.

Title	Description
Water integrity risks in Jordan	Jordan is one of the three most water scarce countries in the world. While the government is currently undergoing a process of governance reform to enhance transparency, accountability and participation, it still faces numerous challenges to address risks in the water sector. A summary of the findings and key recommendations of national water risk assessment performed in Jordan are presented in this brief.
WASH Accountability Mapping Tools	This brochure presents an overview of the WASH Accountability Mapping Tools, a set of methods developed for assisting groups in understanding accountability relations in their WASH context and planning improvement actions.
City-wide sanitation: the role of planning	In 2016 the World Water Week (WWW) brought together leading experts from around the world to discuss and share the latest experiences on planning urban sanitation in two sessions convened by WaterAid, UNDP-SIWI Water Governance Facility, GIZ, SuSanA, and the World Bank. This policy brief synthesis the key lessons and recommendations that grew out of that encounter, calling for more flexible and context-sensitive planning and for increased collaboration among involved stakeholders.
SDG 6: Clean Water and Sanitation	UNDP brief on clean water and sanitation.
SDG 14: Life Below Water	UNDP brief on life below water.
Wastewater governance: Balancing different interests	Responsible, effective wastewater management is needed to address global water crises. This requires careful balance of the often-competing interests of stakeholders, as what poses a risk to the environment and public health may be a valuable resource to farmers and industry. How do we manage these different interests from a policy and practical perspective?
Programming for sustainability in water services – a framework	This framework document was written under the collaboration between UNICEF and the UNDP-SIWI Water Governance Facility through the Accountability for Sustainability programme.
UN Water Climate Change Adaptation: The Pivotal Role of Water	WGP staff were members of the core writing team behind the UN-Water policy brief. We need more investment in improved hydrological data, institutions and governance, education and capacity development, risk assessment and knowledge sharing. Policies need to ensure the representation, participation, behavioral change and accountability of all stakeholders, including the private sector and civil society. Adaptation plans need to incorporate targeted strategies that assist lower-income populations – those who are disproportionately affected by climate change impacts – to navigate new conditions.
Source-to-Sea Framework for Marine Litter Prevention	The Framework highlights the central role of the river basin in preventing marine litter. Building a common understanding of both the sources and impacts of plastic pollution incentivizes cooperation between upstream and downstream actors, as well as coordination across sectors.
Indigenous people, water, and climate change	This policy brief was prepared following the momentous UNFCCC Conference of the Parties (COP25) outcome in which Parties adopted a two-year workplan for the Local Communities and Indigenous Peoples' Platform (LCIPP).

Title	Description
Starting at the source to save the sea: Look upstream to achieve SDG14	This brief illustrates the importance of upstream and in-land management and governance on the impacts of ocean health. It finds that SDG 14, Life Below Water, will not be realized without coordinated action across sectors, borders, and landscapes.
Towards win-win solutions for sanitation policy and climate action	Sanitation services are one of the most effective ways to reduce vulnerability to climate change, according to the International Panel on Climate Change. This brief describes some key links between climate action and sanitation services and suggests routes to more coherent climate and sanitation policies.
Guidelines for Councillors: When considering request for changes in tariff of water supply, sewerage and wastewater treatment	Educational materials developed for municipal councilors on water tariff setting in Bosnia & Herzegovina.
How does water get to your faucet?	Educational materials developed for citizens in Bosnia & Herzegovina on payment for water services.
Training Programme: Integrity and Accountability in Water	Integrity and accountability are critical to good governance of water resources and services. The programme pursues the goal of building capacity on participants to recognize vulnerable areas and provide tools to increase transparency and accountability.
Water and Ocean Governance Programme - Brochure	Our projects and programmes bring a diverse suite of actors together to jointly protect ecosystems and ensure the sustainable use of water and ocean resources to build equitable, inclusive and sustainable societies. Yet, as exemplified in this brochure, the work contributes to the achievement of all the SDGs.
Supporting water governance at country level	Evaluations have concluded that the GoAL WaSH programme has been able to provide prompt responses and high-quality advice and support to most project countries, which has enhanced capacities and increased options to improve water and sanitation governance.
GoAL WaSH flyer	This flyer gives a brief introduction to the GoAL WaSH programme.
Governance, Accountability and Learning for Water Sustainability (GoAL-WaterS)	Through strengthened governance and management frameworks and processes, GoAL-WaterS aims at contributing to more sustainable planning, allocation, use and protection of water, coastal and marine resources in cities, river basins, coastal and marine areas; and to ensure use and protection of freshwater and coastal resources in ways that benefit the livelihoods of vulnerable groups and small-scale food producers. This folder gives an introduction to the programme which aims to support at least 15 countries, between 2019-2023 to achieve more effective, equitable and sustainable freshwater and coastal resources management.
GoAL WaSH programme 10 years	The challenges of reforming legal and administrative structures in some of the world's vulnerable states are daunting. How do you support decentralization processes in countries with limited resources and capacities? How do you develop sustainable and affordable tariff systems in impoverished areas? These are some of the issues that the UNDP GoAL WaSH programme has addressed. The programme was established in 2008, to accelerate achievement to the water and sanitation Millennium Development Goals (MDGs) and continued towards the fulfilment of the Sustainable Development Goals (SDGs). Eighteen countries have been involved in the programme. This brochure presents the main achievements of the programme which came to an end in 2018.

SELECTED NEWS ITEMS

Title	Description
Integrity Pact Promotes Transparency around Pipe Replacement Contracts in El Salvador	The signing of Integrity Pacts around three tenders for pipe replacement in greater San Salvador forms part of an "Agreement on Technical Cooperation on Improving Integrity in the Management of ANDA" between the UNDP Water Governance Facility at SIWI and the National Water and Sewerage Administration of El Salvador (ANDA). The agreement supports ANDA to improve the management of the organisation through the lens of integrity. The work is supported by the Spanish Agency for International Cooperation and Development (AECID) and implemented in collaboration with cewas and the Foundation for Studies on the Application of Law in El Salvador (FESPAD).
Tajikistan water supply companies raise transparency and improve cooperation with consumers	Tajikistan water supply companies raise transparency and improve cooperation with consumers. In December 2015, Khujandvodokanal, the main water supply company in Tajikistan's second largest city, Khujand – inaugurated its first Public Advisory Council, and similar councils are being established in other large cities of Tajikistan. The Public Advisory Councils provide opportunities for companies to develop effective feedback mechanisms with their clients, facilitating timely consideration of complaints and proposals and more transparency and operational efficiency. They also improve water use practices among consumers. (supported by GoAL WaSH).
Integrity Pact Promotes Transparency around Pipe Replacement Contracts in El Salvador	The signing of Integrity Pacts around three tenders for pipe replacement in greater San Salvador forms part of an "Agreement on Technical Cooperation on Improving Integrity in the Management of ANDA" between the UNDP Water Governance Facility at SIWI and the National Water and Sewerage Administration of El Salvador (ANDA). An Integrity Pact – a tool developed by Transparency International – is an agreement between the government agency offering a contract and the companies bidding for it that they will abstain from bribery, collusion and other corrupt practices for the extent of the contract. To ensure accountability, Integrity Pacts also include a monitoring system typically led by civil society groups.
Liberian Senate passes Water Supply and Sanitation Act	The National Water Supply and Sanitation Commission Act, passed by the Liberian House of Senate on 29 August, institutes the Water and Sanitation Regulatory Agency in the country. Once operational, it will be responsible for issuing licenses and regulating tariffs and service standards in Liberia.
National WaSH Review conducted for the first time in Kyrgyzstan	In mid-August, an extended meeting of the Coordination Commission in the sphere of drinking water supply, sewerage and sanitation services in the Kyrgyz Republic was held in Bishkek.
Improving drinking water quality in Kyrgyzstan	The drinking water quality in rural areas in Kyrgyzstan is acute. About 33 per cent of water piped water services throughout the country do not meet sanitary standards, according to the Department of Disease Prevention and State Sanitary and Epidemiological Surveillance of the Ministry of Health. In order to strengthen the quality control of drinking water, especially in rural areas, the GoAL WaSH programme has supported a series of trainings for 65 sanitary specialists.
New regulation to reduce water pollution in Kyrgyzstan	Pollutants discharged into water bodies is a serious problem in Kyrgyzstan, especially in industrial and mining areas and regions without water treatment systems. Poor drinking water quality contributes to high infection rates and child mortality caused by diarrhoea. But should change that.

Title	Description
IMO Releases Ship and Port Emission Toolkits	the GEF-UNDP-IMO Global Maritime Energy Efficiency Partnerships (GloMEEP) Project finalized and published the Ship and Port Emission Toolkits, comprising of several guides aimed at assisting countries and ports, respectively, to conduct emissions assessments and develop strategies to reduce emissions. The Project also developed two new workshop packages, one on the prevention and control of shipping and port air emissions, and the other on the IMO data collection system for fuel oil consumption. Both these workshop packages were delivered to all beneficiary countries of the Project, training over 250 personnel from maritime and port administrations just this year.
An Island Without Water Strengthening climate-resilient management of water in Cabo Verde	As a small island state with limited rainfall and a dry tropical climate, Cabo Verde is already experiencing freshwater resource constraints. Climate models predict increasing aridity, shifting rainfall patterns and temperature increases. Changing climatic conditions for local communities will not only reduce the availability of water for household needs but will also negatively impact agricultural productivity.
Political cooperation across borders protects water resources in Drin Basin	High level representatives from the five Riparians virtually signed a joint statement today, thus endorsing the Strategic Action Programme (SAP) for the sustainable management of the Extended Drin Basin, directly benefiting its 1.6 million inhabitants. Shared among Albania, Greece, Kosovo*, Montenegro and North Macedonia (the five 'Riparians'), the Drin River Basin provides water resources for drinking, energy, fishing and agriculture, biodiversity, tourism and industry.
Side-event on 'Climate-resilient water management approaches' at COP25 - Jordan-Goal Wash presented	On 10 December 2019, the UN-Water Expert Group on Water and Climate, organised the side event "Climate-resilient Water Management Approaches" at the twenty-fifth session of the Conference of the Parties (COP25) to the United Nations Framework Convention on Climate Change (UNFCCC) in Madrid.
Turning the Tide in the Aral Sea Region: Uzbekistan is Looking Towards A Sustainable Future	In the Aral Sea region of Uzbekistan, people's health, food and jobs have vanished along with the lake. Once the fourth largest lake in the world, it has been shrinking since the 1960s due to water mismanagement. But the country is looking towards a sustainable future.
Welcome remarks by M. Abdoulaye Mar Dieye at Aral Sea conference	Welcome remarks by UN Assistant Secretary General and Special Advisor to the UNDP Administrator, M. Abdoulaye Mar Dieye, highlighted investments to restore the ecological and hydrological systems -- and increase water availability in the region, and the concept of making the Aral Sea region "an integrated zone of ecological innovations and technologies."
Joint publication by 2030 WRG (World Bank)-UNDP unveils innovative and sustainable partnership and financing models towards Gender and Water in agriculture and allied sectors in Maharashtra	The Chief Minister of Maharashtra, Shri Devendra Fadnavis, today launched the report 'Gender and Water in Agriculture and Allied Sectors', developed jointly by 2030 Water Resources Group, a public -private-civil society partnership hosted by the World Bank Group, and United Nations Development Programme, India.
Climate change reveals underlying threats to urban water	Fears of cities running out of water have become very real in several parts of the world, most recently in South Asia in places such as Karachi, Islamabad, Chennai, and Delhi. These crises reveal severe underlying problems with water resource management and distribution.

Title	Description
Why water governance is key to tackling climate change	The 2020 UN World Water Development Report looks at the complex interlinkages between water and climate. As climate change amplifies water-related extremes, it clearly demonstrates the importance of good water governance, write SIWI's Maggie White and Marianne Kjellén from UNDP, two of the experts who contributed to the report.
UN entities and private sector join forces to tackle invasive species and reduce emissions	A ground-breaking Global Industry Alliance (GIA) has been launched to tackle two of the most pressing environmental issues of our time – invasive species and greenhouse gas (GHG) emissions. The GIA brings together stakeholders in the private sector and the GloFouling Partnerships, a project led by United Nations entities to address the transfer of harmful aquatic species through biofouling.
Comoros takes action to improve integrated water resources management	The Government of Comoros is taking the next step towards the enforcement of integrated water resource management – IWRM.The revised water code will lay the foundations for the equitable use and protection of water resources and will allow for the framing of participative water development and decentralised water management on each of the three Comorian islands.
Climate-smart water management is fundamental for sustainable development	Nature-based solutions such as ecological infrastructure can help boost carbon sequestration and replenish water resources.
Diversity in both nature and knowledge	To meet global climate and water-related challenges, we need to look beyond western-centric perspectives on nature and on management of resources.
Nile women water leaders issue a joint statement	Women water leaders of the Nile basin states released today a unique joint statement in support of enhanced inclusive transboundary water cooperation
Forum Fisheries Ministers Sign Off on Key Global Environment Facility Report	Fisheries Ministers attending the 16th Forum Fisheries Committee Ministerial Meeting in Pohnpei, Federated States of Micronesia, last week signed off on a key report – the Strategic Action Programme for the Sustainable Management of Living Oceanic Resources by the Small Island Developing States of the Western and Central Pacific (the Strategic Action Programme or SAP) – for submission to the Global Environment Facility (GEF).
Gender in the Fieldof Water Resources: Facts, Opinions and Communications	As a result of the joint efforts, the participants of the event developed practical recommendations for ensuring gender equality in the field of water management, including the implementation of an educational program on gender issues, the introduction of a gender equality and non-discrimination policy in organizations, in the workplace, ensuring transparency in the process of promoting employees along the career path, and others.
Sustainable sanitation for health and dignity	Amidst a global pandemic, sanitation is more important than ever. Yet, there is too little priority given to this basic human right, and the conditions under which sanitation services are provided. This blog reflects on the recent World Toilet Day and how to finance sanitation in a more sustainable manner, e.g. by subsidizing services to the most vulnerable, rather than physical infrastructure in general. We need a focus on people, systems, and equity.

Title	Description
Climate change adaptation priorities help address everyday risks	This blog suggests that the most direct route for reducing vulnerability is to assist people in low-income areas address the multiplicity of everyday risks. This would entail more robust and inclusive sanitation and water services, which stand to improve COVID-19 recovery as well as to reduce inequality and related effects of climate change.
Public and private sectors compliance with industrial waste and water discharge in Uganda	Changes in policies, plans and strategies. Applying participatory knowledge exchanges to change how policy monitoring is done in the public and private sectors for compliance with industrial waste and water discharge in Uganda.
WASH standards at the community level in Uganda	New/further knowledge gained . Achieving improved WASH standards at the community level in Uganda by engaging Water User Committees and primary schools in water education.
GoAL WaSH Project presented results of implemented activities to its partners	Today UNDP's GoAL WaSH "Regulatory Framework for Tariff Setting in Water Supply and Sewage Services in Bosnia and Herzegovina" Project, funded by the Government of Sweden, presented the activities implemented so far as well as the Institutional Review of Water Supply Sector in BiH prepared by the World Bank.
UNDP holds workshop on drought management	An integrated system for drought management in Jordan is being implemented with technical and financial support from UNDP and the (GoAL WaSH) programme, funded by the Stockholm International Water Institute.
Eyes on the Ball – How to Navigate the Sea of SDG Indicators	The 2030 Agenda is holistic, integrated and universal. It is also extremely ambitious with important commitments not only to act, but also to monitor the action. Will countries be able to keep the vision on the goals while taking action on the ground?
Water governance: trends and needs for new capacity development	New forms of governance focusing on process-oriented societal co-steering through, for example, formal and informal networks, partnerships and dialogue, have emerged within the water sector.
Water, sanitation and hygiene and indigenous peoples: A review of the literature	The levels of sanitation and water services coverage, and health attainment, are low among indigenous peoples. This exclusion from basic service has not been sufficiently studied. This review has analysed 185 articles dealing with indigenous peoples and the water, sanitation and hygiene complex. The literature is dramatically skewed towards water resources, and overwhelmingly focused on conflicts, at the expense of basic sanitation and hygiene. More initiatives towards the acknowledgement of indigenous peoples' worldviews and institutions in all aspects of the water management cycle are needed. To this end, the development of effective intercultural dialogue mechanisms is crucial.
Swedish Water, sanitation and hygiene and indigenous peoples: a review of the literature 2	The levels of sanitation and water services coverage as well as health attainment are low among indigenous peoples. This exclusion from basic service has not been sufficiently studied. The present review has analysed 185 articles dealing with indigenous peoples and the water, sanitation and hygiene complex. The literature is dramatically skewed towards water resources, and overwhelmingly focused on conflicts, at the expense of basic sanitation and hygiene. More initiatives towards the acknowledgement of indigenous peoples' worldviews and institutions in all aspects of the water management cycle are needed. To this end, the development of effective intercultural dialogue mechanisms is crucial.

Title	Description
Flood risks management in the Democratic Republic of Congo	After the training, a consultative stakeholder forum was formed at the national level to discuss a framework for catchment protection, made of experts from the Ministry of Environment and Sustainable Development, the Ministry of Energy and Hydraulic Resources, REGIDESO, the Association des Usagers du Bassin de la Rivière Lukaya (AUBRL – River Basin Organization), the University of Kinshasa and Water Dream (NGO). The members of the forum took the Lukaya river basin in Kasangulu as an experimental catchment and focused on the design and implementation of a water resources management plan.
Developing a flood marking system in Nigeria	The training has led to the installation of flood marks as an adaptive measure for flood management. The approach has been included in the Federal Government of Nigeria national annual budget. The pilot phase of the project has kicked off in Kaduna state and will be replicated subsequently in all the 36 states of the country and in the federal capital. The approach was adopted to have a scientific means of quantifying the flood level over a given period of time. The collected data will help predict the likelihood of flood occurrence in the future, find out causes of upstream flooding and identify the vulnerability of an area to high level of flooding.
Arsenic water contamination information and mitigation practices shared with teachers and students in India	New/further knowledge gained. Arsenic water contamination information and mitigation practices shared with teachers and students in India.
Arsenic mitigation practices shared with social health activists and nurses in India	Arsenic contamination is a real challenge in many areas in India. SCaN conducted a series of training courses on arsenic mitigation technologies to accelerate and empower key stakeholders with the knowledge required to mitigate water quality issues. However, while arsenic is not found in surface water, its concentration is high in groundwater, making hand pumped water unsafe in areas where there are high concentrations of arsenic.
Changes towards efficient water use in paddy farming in the Deduruoya basin of Sri Lanka	The 'Parachute method' for seeding, together with alternative drying and wetting irrigation techniques (as opposed to traditional direct seeding and continuous flooding), were introduced to the farmers during the training. After Cap-Net Lanka's capacity development activity, most of the farmer leaders were able to train members of their respective farmer societies and established pilot cultivation programs using selected farmers from their societies. Leaders from the Ibbagamuwa Farmer Society witnessed a 50% increase in their paddy harvest by putting into practice what they learned in the program.
Sri Lanka: student innovates with a smart water pipe cleaner to help decrease the level of water pollution	Cap-Net Lanka conducted the Aqua Republica Program at the University of Rajarata aiming to provide school children access to a computer-based knowledge management tool for sustainable water management. Aqua Republica is a software based on an experiential approach, which showsreal life scenarios in watershed management and their outcomes. Through this program school children can come up with their own solutions to common water problems that they face in their day-to-day lives.

Title	Description
Safe water usage and water source protection in the central hilly area of Sri Lanka	Given the abundance of these springs, uncontrolled pollution, unregulated use with faulty or non-existent meters is threatening their sustainability. During Cap-Net Lanka's program, CBO leaders learned about the economic value of water and its finite nature. After the training, five CBOs from Badulla district fixed their water meters and established a water tariff system. Furthermore, six water CBOs took actions to clean various water springs, plant trees and fix fences covering the catchment of the springs. Also, a water reuse mechanism has been established by the members of three water CBOs. Overall, CBOs have witnessed a significant reduction in monthly tariff readings while ensuring their communities' safe water usage.
Food tower' to grow vegetables in rural areas from Bangladesh which have saline water	Developing a climate-adaptive solution called 'Food tower' to grow vegetables in rural areas from Bangladesh which have saline water. Latifa Begum. Their small homestead land could not grow food due to the increasing salinity of the water available. This forced them to consume a diet based on burned chilli and coconut mix, in turn causing illness and malnutrition. Salah invited them to a training session on climate-resilient technologies focused on cultivating vegetables through food towers, innovative vertical structures filled with soil that allows growing vegetables in places with scarce land and high-water salinity.
WASH and Climate Change: Working with civil society and the local government from Bangladesh	Eager to share these possible solutions with communities, Mahbub, along with the ASDB, organized consultation meetings to raise the awareness of government officials, development practitioners and local community members on the climate change, water and health nexus. The meetings brought clarity and solutions: the ASDB and Mahmud started a project called 'Safe Ground Water', to advocate for the protection of water supply. Thanks to the project, the local government was prompted to end trade licenses with companies that were negatively impacting ground water supply systems in those districts.
Raising awareness on river pollution in Malaysia	After the workshop, monthly river clean-ups took place, together with a recycling corner in the community centre and monthly recycling drives. Communities are more aware of river pollution and its prevention, and the importance of separating, recycling and reducing waste. Batu river clean-up activities continue to see increased numbers of participants and apartment complexes are reaching out to the consultants to carry out recycling drives at the premises.
Mercury pollution awareness in Kazakhstan	With support from the Ministry of Energy of the Republic of Kazakhstan and UNDP, the Cooperation for Sustainable Development Center organized a training, 'The role of Central Asian women in IWRM and preventing the effects of mercury pollution on the health of women and children'. After the training, an engineer ecologist at KazTransOil, included the topic in an environmental training course delivered to her staff, whom are now aware of the dangers of mercury and handle mercury-containing waste more responsibly.
Integration of women in India's WASH	Following the training in Integration of women in India's water, sanitation and hygiene (WASH), the council build toilets and made the village open-defecation free, supported Srabani, a former ward worker, and her community members with the knowledge to access subsidies to purchase toilets and fostered women's mass participation.

Title	Description
Lerma River Basin Water Plan: IWRM into practice in Mexico	The Lerma River basin is one of the most important basins in Mexico, but given population and demand increase, the ecosystem and basin resources are in great threat. Shortly after the course, Ana Karen joined the Regional Office of the National Water Commission in the State of Mexico (CONAGUA), as part of the team preparing a Water Plan for the Lerma River Basin.
Developing reusable sanitary pads for marginalized and vulnerable women groups in Costa Rica	After the workshop, Ana, inspired by these new ideas, began making a prototype of the sanitation pads, to distribute them to imprisoned women in her country. It took almost a year of testing, adapting materials and sizes to reach the most suitable product. Together with REDICA and ACCEDER, Ana and Damaris identified an organization that worked with women graduates who were being integrated back into society and distributed the pads to the women's homes.
Argentina: Partnerships to solve solid urban waste challenges	Fostering partnerships with academia and the private sector in Argentina to solve solid urban waste challenges. Development of internationally certified biodegradable and ecological industrial bags. Urban waste pollution has become an increasing threat in Mendoza, Argentina. Plastics and other solid materials are incorrectly disposed of threatening existing water sources. Arg Cap-Net identified the issue and conducted the 'Environmental Legal Framework for Waste Management and Production' seminar.
Management of Watersheds in the Chilean Valley of Itata	The skills gained in the course allowed Sebastián to coordinate the preparation and negotiation of the Voluntary Agreement for the Management of Watersheds in the Chilean Valley of Itata. The main problems and challenges of the Itata river basin were related to the scarcity of water for human consumption and productive activities, the contamination of the environment, the deficit of sewage connections, and the vulnerability of the area to floods and forest fires.
Strengthening environmental studies in Bolivia	Katia Vargas Antelo participated 'Water Funds: Key elements for design and sustainability' training, as technical staff member in the Municipal Government of Tarija, Bolivia. Thanks to the training, she was able to participate proactively in the formulation of the environmental study of the external damping zone of the biological reserve of the Cordillera de Sama.

SELECTED VIDEOS

Title	Description
Saving Tuna (22min)	The United Nations Development Programme (UNDP) film Saving our Tuna won the prestigious Gold Remi Award in the documentary category last weekend, at the 48th Annual Worldfest International Film Festival, the oldest independent film festival in the world. The 22-minute film examines the $5 billion a year tuna industry and the technology used to both catch the fish and keep the catch in check. More than 4.5 million tons of tuna are caught each year in a business that is an economic lifeline for Pacific island countries. But the world's insatiable appetite for this valuable resource is threatening its very future. Saving our Tuna examines rich fishing grounds, where fleets of fishing vessels equipped with sonar, and sophisticated satellite tracking devices are catching millions of tons of tuna, making it the third most harvested fish in the ocean.
Saving Our Tuna - UNDP-Discovery Channel Documentary	

Title	Description
Every Drop Matters Films	Four films to highlight a selection of the project results. A 30-minute film, which focuses on activities within Sri Lanka, was submitted to children's film festivals.
World Water Day	The World Water Day 2015 campaign for a dedicated SDG on water - UNDP led the UN-Water 2015 World Water Day campaign with main events in New Delhi and New York, development of a learning pack, production of short and long films on water and development and unprecedented outreach exposing 2.5 billion people to the World Water Day messages via social media. The culmination was the adoption of Agenda 2030 in September which included a dedicated Sustainable Development Goal on Water.
Realizing human rights to water and sanitation	Between 2010 and 2014, Forum Syd implemented two projects – Tushirikishe Jamii and Jua Jimbo – to help empower marginalized communities in several counties in Kenya, to support them in demanding their human rights to water supply and sanitation. Forum Syd and the UNDP Water Governance Facility at SIWI (WGF) jointly commissioned a case study to document the results of the Tushirikishe Jamii and Jua Jimbo projects to better understand the accountability mechanisms that can improve service delivery of water and sanitation. Two of the communities that took part in the projects were Molo and Menengai West in Nakuru County. This video presents their story.
Role of Sanctions and Rewards in enhancing water and sanitation service delivery in Kenya	Do politicians and service providers respond better to being sanctioned for poor performance, or rewarded for a job well done? This video presents the experience of Molo and Menengai West, two communities in Nakuru County, Kenya.
GoAL WaSH project in the Philippines	Achieving the SDGs through the Integrated Safe Water, Sanitation and Hygiene Approach – iWaSH Governance.
CapTec Promotional Video	Improving water management and sustainability through new technologies such as smart-phone sensors, satellite imagery, drones in agricultural systems in real-time, and innovative learning platforms.
GoAL WaSH in Bosnia and Herzegovina	Establishing a legislative and institutional framework for the water supply and sewerage sector, including water tariffs.
GoAL WaSH project in Paraguay	Water supply and sanitation plans for six districts in the Western region of Chaco. The Chaco region is a large geographic area that is sparsely populated. Many of those living in the region are indigenous people. The Chaco region suffers from reoccurring droughts and flooding and has the highest level of unserved people in the country.
8th World Water Forum 'Voice of the Citizens' video competition	Several videos produced through WGF were selected (link) and one on water resources management on Cabo Verde (link) and displayed at the Forum.
Role of Sanctions and Rewards in enhancing water and sanitation service delivery in Nakuru county, Kenya	UNDP-SIWI Water Governance and Forum Syd jointly commissioned a case study to better understand the accountability mechanisms that can improve service delivery of water and sanitation. Two of the communities that took part in the projects were Molo and Menengai West in Nakuru County.
SIKABI – United through the JAAR: How we handle water in the three communities (Panama)	This participatory video has been developed as a way for the local water committees and the communities in the Ngäbe Buglé area in Panama, to clarify what needs to be done – by the committees and the water users – in order to manage their shared water scheme.

Title	Description
Investing in Ocean Futures: Finance and Innovation for the Blue Economy - Address by UNDP Administrator	On UNDP's commitment to engage with the ocean business and investment community to address the complex sustainable development challenges related to oceans.
Drought management strengthened in Jordan - Interview with Head of Water Strategies Division at the Ministry of Water and Irrigation in Jordan	This short film presents what has been done to support drought management in Jordan, first through the GoAL WaSH programme, and during the last year within the framework of the GoAL-WaterS programme. Jordan is the second most water scarce country in the world, which poses challenges to growth and development.
Drin #1: The Shared Vision for the Drin Basin - Coordinated Action for a Sustainable Future	From signing of the Drin Memorandum of Understanding in 2011, to the development of the Strategic Action Programme in 2019, GWPMed has supported coordinated action in the Drin Basin for #10years. Watch this video for an overview of our work in #transboundarycooperation in the Drin Basin, including the recent GEF UNDP Drin Project. The Project is financed by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the Global Water Partnership - Mediterranean (GWP-Med), in partnership with the United Nations Economic Commission for Europe (UNECE).
Drin #2: Constructed Wetland Pilot Activity - a solution to sewage treatment in rural areas	Inaugurated in November 2018, this Constructed Wetland is the first of its kind in Kosovo. The Constructed Wetland is a nature-based solution that offers a low cost, efficient and easy to maintain solution to wastewater treatment in rural areas. Read more about the Constructed Wetland on the Drin Project website: http://bit.ly/2w4siTE This is 1 of 6 Pilot Activities under the GEF Drin Project, implemented by UNDP and executed by GWP-Med, in partnership with UNECE.
Drin #3: Activities under the GEF UNDP Drin Project	Watch this video for a summary of the different activities under the GEF UNDP Drin Project, which enables transboundary cooperation and integrated water resources management in the extended Drin Basin. The Project is implemented by UNDP and executed by GWPMed, in partnership with the UNECE.
Drin #4: Lake Ohrid Watershed Management Plan Pilot Activity	Under the #GEF #UNDP Drin Project, in partnership with institutions in Albania and North Macedonia, GWPMed is developing the Lake Ohrid Watershed Management Plan. This is only the second joint water management plan in Western Balkans, which aims to sustainably manage Lake Ohrid in accordance with the European Union Water Framework Directive. The Project is financed by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) and executed by the Global Water Partnership - Mediterranean (GWP-Med), in partnership with the United Nations Economic Commission for Europe (UNECE).
Women Water Champions	Four videos interviewing women from the Women Water Champions initiative, an initiative by National Water Mission, Ministry of Jal Shakti, the Government of India, UNDP India and SIWI to underscore the critical role of women in water conservation and management & promote women's leadership in water governance.
The Drin Animated Story, episode 3: Biodiversity Degradation of the Drin basin water system	How has the Drin's "natural infrastructure", been affected by human activities? The final episode of the Drin Animated story explains how the Drin river's biodiversity, ecosystems, habitats as well as the benefits they provide for the Drin's inhabitants been impacted. Biodiversity degradation has been identified as the fourth transboundary problem under the GEF project implemented by UNDP and executed by GWP-Med.
The Drin Animated Story: - Introduction: the Drin Basin Water System	A series of animation videos will take you on a journey through the Drin's complex water system and the challenges it faces; these were identified though the joint efforts to enhance transboundary cooperation implemented by the Drin Riparians with the assistance of the GEF/UNDP/GWP-Med Drin Project.

Title	Description
The Drin Animated Story, episode 1: Variability of hydrological and sediment transport regime.	Two years of co-coordinated scientific work condensed in a 3-minute animated video: we are proudly presenting Episode 1 of the Drin Animated Story! Watch and learn more about the key transboundary challenges facing the Drin river basin. Episode 1 takes you on a journey through the Drin's complex hydrological system, resembling the human vascular system, analysing the challenges it faces. The analysis was undertaken through the GEF Drin project, implemented by UNDP and executed by GWP-Med, using input from scientists, stakeholders, experts, governments and institutions to develop the Drin Transboundary Diagnostic Analysis, over a period of nearly two years.
The Drin Animated Story, episode 2: Deterioration of Water Quality in the Drin basin	What are the key sources of pollution in the Drin basin, threatening humans and ecosystems alike? Episode 2 of the Drin Animated Story illustrates the hidden 'journey' of harmful pollutants, often unseen to the naked eye, but with a profound and lasting impact on people, nature and economic prospects. Following a systematic methodology, the Transboundary Diagnostic Analysis that was developed under the GEF funded project, implemented by UNDP and executed by GWP-Med, identified deterioration of water quality as one of the four transboundary issues that the Drin is facing.
CapNet Stories of Change	Cap-Net Stories of Change bring to the surface transformational change happening in the communities
Let's use water rationally	This video has been developed within the "Regulatory Framework for Tariff Setting in Water Supply and Sewerage Services in Bosnia and Herzegovina" Project, financed by Sweden and implemented by the UNDP in Bosnia and Herzegovina.
Every drop of water is precious	Untreated wastewater has serious implications for the public health, environment and access to safe and clean water. In Bosnia and Herzegovina less than 10% of wastewater is treated. GoAL WaSH supports water utilities in BiH to set up adequate tariffs for wastewater treatment so clean water is secured for all.
For every drop to find its way to consumers	Regulatory Framework for Tariff Setting in Water Supply and Sewerage Services in BiH" Project aims to contribute to sustainable development of utility companies that are providing high quality water supply, wastewater collection and sanitation services to citizens while preserving a healthy environment and strengthening the social protection and inclusion system.
UNDP Independent Evaluation Office: Reflections - Ensuring Access to Safe and Clean Water Resources	To inform UNDP on its environment and nature-based initiatives, this reflections paper offers evaluation lessons from UNDP initiatives that ensure access to safe and clean water resources.
What is the role of water resources in Bosnia and Herzegovina in adapting to climate change?	On average, public water systems in BiH estimate that they are able to bill less than 50% of the abstracted water (such bills do not always get paid). Unfortunately, more than 50% falls into the category of the so-called non-revenue water. This is primarily the water that leaked through the pipes before reaching users, but also the water the consumption of which is not properly registered such as due to faulty water meters and also due to the unauthorized connections to the water supply system.
GoAL WaSH in Kyrgyzstan	Developing transboundary water policy and accelerating national cooperation between the governments of Kazakhstan and Kyrgyzstan.
Realizing human rights to water and sanitation	Between 2010 and 2014, Forum Syd implemented two projects – Tushirikishe Jamii and Jua Jimbo – to help empower marginalized communities in several counties in Kenya, to support them in demanding their human rights to water supply and sanitation. Forum Syd and the UNDP Water Governance Facility at SIWI (WGF) jointly commissioned a case study to document the results of the Tushirikishe Jamii and Jua Jimbo projects to better understand the accountability mechanisms that can improve service delivery of water and sanitation. Two of the communities that took part in the projects were Molo and Menengai West in Nakuru County. This video presents their story.

Title	Description
Role of Sanctions and Rewards in enhancing water and sanitation service delivery in Kenya	Do politicians and service providers respond better to being sanctioned for poor performance, or rewarded for a job well done? This video presents the experience of Molo and Menengai West, two communities in Nakuru County, Kenya.
GoAL WaSH project in the Philippines: Impact of iWaSH on Aroroy, Masbate	It is estimated that 7 million Filipinos still defecate in the open. Additionally, there are 323 municipalities in the Philippines who continue to have no sustained access to safe water, sanitation and hygiene. These municipalities are difficult to access and are clearly left behind in terms of achieving SDG 6.
GoAL WaSH project in Paraguay: Participatory water and sanitation plans for rural and peri-urban communities in the Chaco region	With support of GoAL WaSH, six technical units for water supply and sanitation have been set up in the Chaco region. These units, including both technical and social expertise, are providing support to communities on water and sanitation management issues.
GoAL WaSH in Bosnia and Herzegovina: Regulatory Framework for Tariff Setting in Water Supply and Sewerage Services	Weak economic governance and poor infrastructure, caused by years of bad maintenance in Bosnia and Herzegovina's water sector, is preventing satisfactory delivery and long-term sustainability of water services. The key long-term challenge in Bosnia and Herzegovina's water sector is the lack of financial sustainability of water utility companies.
Transparency and Accountability of Rural Administrative Associations of Aqueducts in Costa Rica	In this video we learn about the rural water committees in Costa Rica and how they work. The video was developed as a tool to strengthen the transparency and accountability in community water management in the country.
Las Lolas - Women's leadership in community water management	In this video we learn how the women in the community Las Lolas, Ecuador, have organized themselves and are now running the community water system with great success. By building their own and the other women's capacities they are leading the way and breaking traditional gender roles, while providing high quality water services to their community.
La Pandura watershed: A Community Development Effort	This is the story of community work to buy parts of the La Pandura micro-catchment in San Juan Guarita municipality, Lempira Province in Honduras, presented in a dialogue between Doña Blanca and Don Miguel. It is a valuable experience of the Economic Governance of Water and Sanitation Joint Programme in Honduras, supported by the MDG-F (mdgfund.org/). The experience has been captured through the knowledge management plan for the Democratic Economic Governance thematic area (watergovernance.org/DEG-KM).
United through the JAAR: Community water management in Panama (Short video)	This participatory video has been developed as a way for the local water committees and the communities in the Ngäbe Buglé area in Panama, to clarify what needs to be done - by the committees and the water users - in order to manage their shared water scheme. The video has been developed through the Knowledge Management Plan in support of the Democratic Economic Governance Joint Programmes supported by the Spanish Millennium Development Goals Achievement Fund (mdgfund.org). The language spoken is the vernacular Ngäbere
United through the JAAR: Community water management in Panama (Long video)	

Title	Description
SolutionsScapes - India	Knowledge Platform (SolutionsScapes) – rolling out and expanding the membership; initiating discussions, identifying solutions and bet practices and promoting innovative solutions through a query based process; generating new ideas for collaborative programming among various organisation.
Ocean Innovation Challenge: Our 2021 In Retrospect	2021 has been a productive year for the OIC which was marked by the launch of the first cohort of ocean innovators combatting marine plastics and nutrient pollution, high-level World Oceans Day celebration, among others.
A Conversation with the UNDP 2020 Ocean Innovators	Our Ocean is connected to nearly all elements o human survival. 97% of Earth's water is in the ocean. The Ocean provides one half o the oxygen we breathe. If the ocean were a country, it would be the world's fifth largest economy. For us humans, the ocean is life. But the health of the ocean is in serious trouble. We are allowing some 10 million tonnes of plastic waste to enter the ocean every year. Threatening species, ecosystems and our own health. Climate change represents an existential threat to many oceans ecosystems species. We have lost one-fifth of all coral reefs and mangroves and nearly one third of all seagrass beds. The damage might be underwater and out of sight but the consequences are already affecting all of us. A threat to our ocean is a threat to our climate, our global economy and our food supply.
UNDP Ocean Innovators 2020 - Marine Pollution Reduction SDG14.1	UNDP has selected its first cohort of nine Ocean Innovators offering solutions that cut across a wide range of technological, policy, regulatory and other innovative approaches to reducing marine pollution. Get to know each of our innovators.
Key messages on ocean	UNDP Ocean Advocate Cody Simpson takes us through the significant role of the ocean to mankind and why 'the ocean is too big and too important to fail'.

ANNEX 6: CAP-NET AFFILIATED NETWORK OVERVIEW

	Network	Geographic Coverage	Focus area	Member affiliation	Host institution	Interventions (response)	Funding	Network Manager	Contact information	Website
1	**Aguajaring**	ASEAN: Brunei, Burma (Myanmar), Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam. (Timor-Leste discussions done up to some level)	Water Security and Sustainability	Country networks	ASPEC Green Tech	Revive the network mainly through regional level capacity development programmes	Cap-Net, fees for forums workshops and personal donations (very low)	Dr. Low Kwai Sim Datuk Ir. Abdul Kadir Mohd Din	Aspec.greentech@gmail.com; aguajaring.org@gmail.com	https://aguajaring-sea.org/
2	**AGW-NET**	Africa	Groundwater	Research institutes, gov institutions, NGOs and experts	PNES	Integration of Groundwater Management in Transboundary Basin Organizations	Cap-Net, BGR, IGRAC	Dr Kawawa Banda	kawawa.banda@unza.zm	http://www.agw-net.org
3	**Arg Cap-Net**	Argentina	IWRM	21 institutions	Universidad Nacional del Litoral	Training activities for decisions makers, professors, professionals, students and public in general.	Cap-Net support and own resources	Ms. Mariana Romanatti and Mr Mauro Epelbaum	secretariaargcapnet@gmail.com; mauroepelbaum@yahoo.com.ar; mromanatti@gmail.com	http://www.argcapnet.org.ar/
4	**AWARENET**	Jordan, Palestine, Syria, Lebanon, Morocco, Mauritania, Algeria, Tunisia, Libya, Sudan, Somalia, Egypt, Saudi Arabia, Yemen, Oman, Qatar, Bahrain, Kuwait, the Comoros, Iraq, Djibouti, United Arab Emirates	IWRM	Research institutes, training centers, government institutions, NGOs and experts	UNESCWA	Groundwater management; Water Integrity	UNESCWA	Ms. Dima Kharbotli	secretariat@awarenet.info	http://www.awarenet.info/
5	**Cap-Net Bangladesh**	Bangladesh	IWRM and Climate Change	Individuals	BCAS	water management, water supply and	Cap-Net and BCAS	Md. Nasir Uddin	ahamedn00@gmail.com	http://www.capnet-bd.org/

	Network	Geographic Coverage	Focus area	Member affiliation	Host institution	Interventions (response)	Funding	Network Manager	Contact information	Website
						sanitation, response to climate change				
6	**Cap-Net Brasil**	Brazil	IWRM	Individuals	TBD	need revival of the network	Cap-Net	Ms. Ana-Virginia Machado	annav.machado @gmail.com	Under Construction
7	**Cap-Net Lanka**	Sri Lanka	IWRM	Individuals	Postgraduate Institute of Agriculture	Consulting the potential partners at planning stage is crucial in responding to the actual demand	Cap-Net	Dr. Selvarajah Pathmarajah	capnet.lk@gmail.com; spathma@pdn.ac.lk	http://www.capnetlanka.lk/
8	**Cap-Net Pakistan**	Pakistan	IWRM and Water conservation	Institutions	Hisaar Foundation	Establishment of Panjwani Hissar Water Institute	Cap-Net	Ms. Sanaa Baxamoosa	sanaa.baxamoosa@hisaar.org	Under Construction
9	**CAR@WAN**	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan Afghanistan and Mongolia	Sustainable water resources	Individual - members and partner institutions	Center Cooperation for Sustainable development	Based on regular need assessments, various activities are planned in countries as well as in regional level.	Cap-Net and partners	Ms. Vera Mustafina	carawan.network @gmail.com	http://www.caravan-net.org
10	**Caribbean WaterNet**	Caribbean: Bahamas, Barbados, Belize, Dominican Republic, Guyana, Haiti, Jamaica, Antigua and Barbuda, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines	IWRM; Drought andFlood; SIDs	Institutions and Individuals	UWI	Drought and flood risk management trainings in response to growing threats of climate change	Cap-Net, UWI, GWP-C, CWWA, CCCCC, Various state Ministries	Dr. Ronald Roopnarine	rav_33@hotmail.com	http://caribbeanwaternet.org/
11	**CB-HYDRO NET**	Congo Basin Angola, Burundi, Central African Republic, Democratic Republic of Congo,	IWRM and Climate Change	Institutions and Individuals	CRREBaC	Catchment-based approach to flood disaster management in	Cap-Net, CRREBaC	Dr. Raphael Tshimanga	cbhydronet@gmail.com	http://crrebac.org/en/cb-hydronet/

	Network	Geographic Coverage	Focus area	Member affiliation	Host institution	Interventions (response)	Funding	Network Manager	Contact information	Website
		Cameroon, Republic of Congo, Rwanda, Tanzania and Zambia. Chad and Gabon (potential members)				the context of climate change				
12	**CKNet-INA**	Indonesia	Infrastructure, water and environment management	Individuals and institutions	Universtias Kristen Krida Wacana (UKRIDA).	Individual CD programs should be derived from the institutional and organizational CD programs to be more impactful.	Host organization Inkind, Cap-Net, and Government of Netherlands project funds.	Ms. Anastasia Wardanin	anastasia.wardaningrum@gmail.com	http://www.cknet-ina.org/
13	**LA-WETnet**	Latin America región: Argentina, Bolivia, Brasil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panamá, Paraguay, Perú, Dominican Republic, Uruguay, Venezuela	IWRM	Both individuals and institutions	Cultura Ambiental	Members of LA WET net must consult the institutions that manage water in their countries, departments, or cities to determine the needs	Cap-Net, Partners	Mario Schreider and Marta Paris	mschreider@gmail.com; parismarta@gmail.com	https://lawetnet.org/
14	**MyCDNet**	Malaysia	IWRM	Individuals and institutions	ASPEC Greentech	Based on current national focus in water management - 5 year development plan	Cap-Net, Trainings fee occasionally	Dato' Ir. Lim Chow Hock	limchowhock@gmail.com; aliciab.lyf@gmail.com	http://mycdnet.org/
15	**NBCBN**	Nile Basin: Tanzania, Uganda, Rwanda, Burundi, the Democratic Republic of the Congo, Kenya, Ethiopia, Eritrea, South Sudan, Republic of the Sudan , and Egypt	IWRM: Research; Innovative technologies	Water sector Professionals and other related sectors in the Basin to collaborate, exchange ideas, best	NBCBN	Climate Change; Water diplomacy; Ecosystems and wetlands management; Water scarcity; Transboundary collaboration; all under umbrella	Cap-Net, IHE-Delft (DGIS)	Dr. Amel S. Azab	nbcbn-sec@nbcbn.net	www.nbcbn.net

	Network	Geographic Coverage	Focus area	Member affiliation	Host institution	Interventions (response)	Funding	Network Manager	Contact information	Website
				practices & lessons learned		of enhancing communication among basin countries.				
16	**NILE_IWRM**	Nile Basin: Tanzania, Uganda, Rwanda, Burundi, the Democratic Republic of the Congo, Kenya, Ethiopia, Eritrea, South Sudan, Republic of the Sudan , and Egypt	Climate change and integrated water resources management	Open	AFID	SDG6 formulation	Cap-Net	Dr. Callist Tindimugaya	callist_tindimugaya@yahoo.co.uk	http://www.nileiwrm-net.org/
17	**PHIL CAP-NET**	Philippine	Sustainable water management	Individuals	Phil CapNet	water conservation	Cap-Net	Ms. Bidin Soriana	bidin.s@gmail.com	http://www.philcapnet.com/
18	**REDICA**	Panama, Costa Rica, Honduras, El Salvador and Guatemala, Dominican Republic and Cuba, Nicaragua and Belize	Climate change and integrated water resources management	Individuals and Institutions	Universidad Braulio Carrillo (UBC)	SDG 6.4 Monitoring training workshop and women and WASH training topics	Cap-Net, partners leverage funding	Ms. Liliana Arrieta	liliarrietaq@gmail.com	http://redicanetwork.com/
19	**REMERH**	Mexico	Climate change and integrated water resources management	Individuals and Institutions	UANL	Integrating IWRM concepts in academic software development; Enhance awareness of water as an economic good	Cap-Net	Dr. Carlos Diaz Delgado	cdiazd@uaemex.mx	http://remerh.mx/
20	**ScaN**	South Asia (India, Bangladesh, Nepal, Sri Lanka, Bhutan, Maldives)	IWRM	Individuals	SaciWATERs	Aim is to support, strengthen and promote co-operation among regional capacity building	Cap-Net and SaciWATERs, other donors	Dr Sreenita Mondal	sreenita@saciwaters.org	www.saciwaters.org/scan/index.html

	Network	Geographic Coverage	Focus area	Member affiliation	Host institution	Interventions (response)	Funding	Network Manager	Contact information	Website
						institutions in IWRM				
21	**WA-NET**	West Africa	IWRM	Regional capacity building institutions	NWRI	Climate Change Resilience: Access to Water Supply and Sanitation	Cap-Net	Prof. G. Anornu	anoprof@hotmail.com	www.wa-netofficial.org
22	**Watercap**	Kenya	Innovative technologies; Climate change and integrated water resources management	Individuals	WaterCap	AquaRepublica: higher demand for 'tangible or applied' as opposed to awareness – more of how it's done than what to be done. Involvement of youth in IWRM	Cap-Net	Ms. Jackline Ndiiri	jacklinendiiri@gmail.com	http://www.watercap.org/
23	**WaterNet**	SADC	IWRM	Capacity building institutions	WaterNet	Education (Master's programme) continuous professional development; collaborative research, and knowledge management and outreach	EU, DGIS, Danida	Dr. Jean-Marie Kileshye Onema	jmkileshye-onema@waternetonline.org	http://www.waternetonline.org/

ANNEX 7: WATER AND OCEAN THEMATIC MESSAGES TO COP26

UNDP internal substantive thematic messaging and talking points in preparation for the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow on 31 October – 13 November 2021.

THEMATIC AREA: WATER

1. Please add **key messages** for your thematic area for 2021 below.

A. Many impacts of climate change are felt through water: "Water is to adaptation what energy is to mitigation."[68]

a. Changing precipitation patterns are already impacting agriculture, livelihoods as well as ecosystems, and biodiversity. Climate change is further expected to increase global water demand, **intensifying competition for water resources** as the timing, quantity, and quality of available water changes. [69] Further, rising sea levels threatens communities across the globe while 40% of the world's population living in high-risk water areas, and billions of people face water insecurity – a figure that is now rising.[70]

b. The 2016 UNFCCC Synthesis Report[71] identified water as the number one priority for adaptation action. In the initial round of (I)NDCs, more than 80% of the parties included adaptation, and of those nine in ten parties included water as a priority sector. This demonstrates the importance of water management for climate change adaptation.[72]

c. The 2020-2021 round of NDC updates have a stronger overall focus on adaptation and NAPs, and include more time-bound, quantitative adaptation targets. **Terrestrial and wetland ecosystems and freshwater resources; coastal areas and sea level rise as well as disaster risk management have remained a priority**. Countries also improved linkages of adaptation efforts with the SDGs and elaborated more specific synergies and co-benefits between adaptation and mitigation.[73]

d. As global warming alters the hydrological cycle, evaporation and rainfall become increasingly intense. **Continuously rising temperatures will further increase the water demand in food and energy production, with critical effects on societies' water, food and energy security**.[74]

B. Climate change adaptation and related water action is underfinanced and poorly targeted.[75]

[68] World Bank (2016). High and Dry: Climate Change, Water, and the Economy. Washington, DC. (http://www.worldbank.org/en/topic/water/publication/high-and-dry-climate-change-water-and-the-economy), p. vii; UN-Water (2019). Climate Change and Water: UN-Water Policy Brief. Geneva. (https://www.unwater.org/publications/un-water-policy-brief-on-climate-change-and-water/), p. 16.

[69] Timboe, *et al* (2019). Watering the NDCs: National Climate Planning for 2020—How water-aware climate policies can strengthen climate change mitigation & adaptation goals. Corvallis, Oregon. (https://www.wateringthendcs.org/).

[70] https://www.water-climate-coalition.org

[71] Water was the number one priority area for adaptation action among the 137 countries including adaptation in their indicative NDCs. See UNFCCC (2016). Aggregate effect of the intended nationally determined contributions: an update. (https://unfccc.int/sites/default/files/resource/docs/2016/cop22/eng/02.pdf).

[72] Global Water Partnership (2018). Preparing to Adapt: The Untold Story of Water in Climate Change Adaptation Processes. (www.gwp.org).

[73] UNFCCC (2021). Nationally determined contributions under the Paris Agreement. Synthesis report by the secretariat. (https://unfccc.int/sites/default/files/resource/cma2021_02_adv_0.pdf)

[74] The Headline Statements from the Summary for Policymakers of the IPCC AR6 suggest: "*Continued global warming is projected to further intensify the global water cycle, including its variability, global monsoon precipitation and the severity of wet and dry events*." IPCC (2021). Summary for Policymakers. (https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf)

[75] Mason, *et al* (2020). Just add water: a landscape analysis of climate finance for water. London. (https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/just-add-water-a-landscape-analysis-of-climate-finance-for-water.pdf)

a. Only 5% of global climate finance currently flows into adaptation action.[76] While an important proportion (43%, representing US$11 billion in 2018), was directed to water and wastewater management, **the level of investment is insufficient to match the level of priority indicated by countries**. [77]
b. The poorest and most vulnerable are disproportionately exposed to climate risks and shocks, along with the many deprivations that constitute the multiple dimensions of poverty. Yet, **few LDCs are among the top- recipients of international public climate finance for water**.[78]

C. The role of water management in mitigation action remains undervalued, to the extent that the achievement of the Paris Agreement mitigation targets may be hampered. [79]

a. "Collectively, GHG emissions [from water and wastewater treatment and supply; emissions from wastewater and faecal sludge; decomposing materials in reservoirs and emissions from surface water bodies; degradation of wetlands; rice paddy irrigation regimes] might cause **more than 10% of global anthropogenic GHG emissions**, rendering water security a potentially vital element of global climate mitigation activities and strategies."[80]
b. Water management supports carbon sequestration, and most wetlands constitute net carbon sinks.[81] 16% of the newly submitted NDCs refer to **wetlands as a mitigation strategy**.
    i. Peatlands: While covering 3% of the earth's land surface, they contain nearly one-third of the land-based carbon. This equates to double the amount of carbon locked in the biomass of global forests.[82] **The carbon stored in peatlands depends on factors such as the water table and vegetation cover**. Other types of wetlands (forested wetlands, salt marshes and mangroves), while not containing as large carbon stocks as peatlands, can have higher carbon sequestration *rates* rendering them promising subjects of interests for advanced climate action. [83]
    ii. Rice paddies constitute the largest artificial wetland type and a source of GHG emissions: Rice cultivation accounts for at least 2.5% of the global emissions due to CH4 and N2O that form under anaerobic conditions in flooded rice paddies. **Emissions from rice cultivation can be greatly reduced by different flooding techniques**.[84]

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[76] In 2017/2018, of the 574 billion USD annual average; 532 billion went to mitigation, 30 to adaptation, and 12 to multiple objectives. CPI (2020). Updated View of the Global Landscape of Climate Finance 2019 (https://www.climatepolicyinitiative.org/wp-content/uploads/2020/12/Updated-View-on-the-2019-Global-Landscape-of-Climate-Finance-1.pdf) – page 12.

[77] Mason, *et al.*(2020). Just add water: a landscape analysis of climate finance for water. London. (https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/just-add-water-a-landscape-analysis-of-climate-finance-for-water.pdf).

[78] "The relatively limited representation of LDCs may be related to their lower receipt of loans, which dominate overall climate-related development finance flows. However, on other measures there still appears to be little relationship between flows and need, including whether recipient countries themselves identify water as a vulnerable or priority adaptation sector in NDCs" Mason, *et al* (2020). Just add water: a landscape analysis of climate finance for water. London. (https://washmatters.wateraid.org/sites/g/files/jkxoof256/files/just-add-water-a-landscape-analysis-of-climate-finance-for-water.pdf), p. 9.

[79] SIWI, UNDP, PIK and SRC (forthcoming 2021). Achieving the Paris Agreement Mitigation Targets through Water [under production].

[80] Kerres, *et al.* (2020). Stop Floating, Start Swimming: Water and climate change – interlinkages and prospects for future action. Bonn and Eschborn, Germany, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. (https://everydrop-counts.org/imglib/pdf/Water%20Climate%20Report%202020.pdf) – page 111.

[81] The GHG footprint of wetlands has been subject to discussions. Wetlands are the largest contributor to natural CH4 emissions (more than 75%) and draining natural wetlands could thus be an effective strategy to reduce CH4 emissions. However, this doesn't reflect the whole picture: While CH4 emissions tend to decline after the drainage of a wetland, the subsequent release of CO2 and the loss of potential prospective sequestration services eventually turn drained wetlands into net sources of GHG emissions. In this connection, peatlands have a particularly high mitigation potential, since they cause less than a quarter of all CH4 emissions emitted by wetlands, while being carbon pools of global significance. Kerres, *et al.* (2020). Stop Floating, Start Swimming– Page 121.

[82] Crump, J., Ed. (2017). Smoke on Water – Countering Global Threats from Peatland Loss and Degradation. A UNEP Rapid Response Assessment., United Nations Environment Programme/United Nations Human Settlements Programme/GRID-Arendal (UNEP/UN-Habitat/GRID-Arendal).

[83] Kerres, *et al.* (2020). Stop Floating, Start Swimming – Page 121.

[84] Kerres, *et al.* (2020). Stop Floating, Start Swimming – Page 131.

c. The **water and wastewater treatment 'sector' has an untapped potential for reducing greenhouse gas emissions** and bringing development benefits globally:
   i. Processes for purifying, supplying and treating water and wastewater are highly energy-intensive, estimated to consume some 4% of global electricity production in 2018.[85] This can be reduced by improving both water and energy use efficiency in the sector.
   ii. Significant levels of methane and nitrous oxide emissions are emitted from untreated wastewater and faecal sludge. Globally, it is likely that over 80% of wastewater is released to the environment without adequate treatment.[86] This GHG contribution can be reduced by expanding wastewater treatment and by improving the processes involved.[87]
   iii. Existing water infrastructure is aging and increasingly inefficient. Rehabilitation efforts provide an opportunity for higher water efficiency and integration of nature-based solutions.

d. **The world's energy systems are inextricably linked with water systems.** It is estimated that by 2035, the world's energy consumption will have increased by 35%, in turn increasing water use by 15%.[88] **Changing the 'energy mix' has important water implications**.
   i. Of the total 188 Parties that had submitted NDCs as of early December 2020, 134 included quantified renewable energy targets. When countries specified renewable technologies, **hydropower** was the most frequently identified one (IRENA, 2021). [89] When countries rely on hydropower as their primary source of electricity production, energy security can be compromised by drought or water siltation.
   ii. 43% of total freshwater withdrawals in Europe have been ascribed to power plant cooling (UN, 2014). In the US, thermoelectric power plants account for nearly 50% of all freshwater withdrawals (Pacific Institute)
   iii. Water was rarely mentioned with mitigation in the recent NDC update. However, **emission reduction for or through water was considered in the energy sector** (hydropower, hydrogen, solar water heaters in buildings), agriculture (solar water pumping, distribution), land use (wetlands, peatlands), and the waste sector (wastewater treatment and reuse).

e. **The relationship between climate change mitigation measures and water is a reciprocal one**:[90] "Mitigation measures [such as sustainable agriculture or hydropower] can influence water resources and their management. On the other hand, water management policies and measures can have an influence on greenhouse gas (GHG) emissions and, thus, on the respective sectoral mitigation measures…." [91]

D. Adaptation and mitigation go together, and rely on <u>policy integration, poverty reduction and sustainable water management</u> for success.[92]

a. Climate change is dramatically affecting the water cycle, making droughts and floods more extreme and frequent and decreasing the natural water storage in ice and snow. **The water cycle, on the other hand, also affects the climate.** This is why actions that promote the natural water cycle (such as

[85] International Energy Agency (2018). World Energy Outlook 2018. Paris: France. (https://doi.org/10.1787/weo-2018-en)

[86] WWAP (United Nations World Water Assessment Programme) (2017). The United Nations World Water Development Report 2017. Wastewater: The Untapped Resource. Paris. (http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/2017-wastewater-the-untapped-resource/)

[87] Kerres, *et al.* (2020). Stop Floating, Start Swimming

[88] The World Bank (2014). "Will Water Constrain Our Energy Future?"https://www.worldbank.org/en/news/feature/2014/01/16/will-water-constrain-our-energy-future.

[89] Hydropower remains by far the largest source of renewable electricity, supplying around 16% of global power in 2019 – roughly three times the generation of wind power and six times that of solar (https://energymonitor.ai/tech/can-hydropower-be-part-of-a-clean-energy-future).

[90] UN-Water (2019). Climate Change and Water: UN-Water Policy Brief. Geneva. (https://www.unwater.org/publications/un-water-policy-brief-on-climate-change-and-water/), p. 13, citing Bates *et al,* 2008.

[91] Bates, *et al.* (2008). Climate Change and Water. Technical Paper of the Intergovernmental Panel on Climate Change. Geneva, IPCC Secretariat. – Page 117.

[92] Timboe, *et al* (2019). Watering the NDCs: National Climate Planning for 2020—How water-aware climate policies can strengthen climate change mitigation & adaptation goals. Corvallis, Oregon. (https://www.wateringthendcs.org/)

conservation of forests, watersheds and water-based ecosystems, land use that promotes infiltration of water etc.) are critical for addressing climate change.

b. To effectively address both **water and climate challenges, we must tackle them together**:[93] Nature-based solutions play an important role in promoting water security while absorbing emissions, thus helping countries towards their climate goals. "Water action is the best answer to climate change."[94]
c. With the revision of NDCs, countries continued to strengthen water-related aspects (especially for adaptation), but rarely consider tradeoffs between mitigation and adaptation actions.**Countries need to be aware of both explicit and implicit water commitments** across and within sectors, as well as cross mitigation and adaptation measures. Indeed, 79% of the new and enhanced NDCs reviewed by UNFCCC included freshwater strategies.
d. The new or revised NDCs continued **strengthening disaster risk management and early warning** systems.
    i. By 2050, up to 2 billion people may be vulnerable to flood disasters due to rising populations in flood-prone lands, climate change, deforestation, loss of wetlands and rising sea levels. (UNESCO, 2012)
    ii. Droughts accounted for 5% of natural disasters, affecting 1.1 billion people, killing 22,000, and causing US$100 billion in damage between 1995 and 2015. (UNISDR, 2015)
    iii. 3.2 billion people live in agricultural areas with water shortages or scarcity, of whom 1.2 billion people live in severely water-constrained agricultural areas. (FAO, 2020).
    iv. **Climate change may exacerbate, multiply or expose underlying risks** and threats to water and livelihood systems.[95]
e. **Low-income populations are disproportionately exposed** to all kinds of risks and shocks,[96] forming part of the many deprivations of multi-dimensional poverty. Women and children may be additionally vulnerable due to lacking autonomy in many societies.
    i. The **silent 'everyday' crisis** of the persistent suffering and loss imposed by inadequate water, sanitation and hygiene in many communities may be overlooked. The presentation of THE SCALE OF WATER-RELATED DISASTERS[97] shows that while in recent decades there have on average been 75,000 deaths per annum from war/conflict, 56,000 from earthquakes and epidemics, 6,000 from flooding and 1,100 from droughts; there are **some 780,000 (mostly children's) lives lost to diarrheal disease every year**.
f. The most direct route for reducing vulnerability to climate change can be to assist people in low-income settings address the multiplicity of risks.[98] "**Greater equality in water/climate action (and more generally) not only helps alleviate poverty, but also builds resilience to the effects of climate change as well as every-day crises."**[99]
    i. Women and girls are responsible for water collection in 8 out of 10 households with water off premises, which means reducing the population with limited drinking water services will have a strong gender impact. (WHO and UNICEF, 2017)

[93] White, M. and M. Kjellén. (2020). "Why water governance is key to tackling climate change." SIWI NEWS Apr 02, 2020, https://www.siwi.org/latest/why-water-governance-is-key-to-tackling-climate-change/.

[94] https://www.water-climate-coalition.org/

[95] Kjellén, M. (2019). "Climate change reveals underlying threats to urban water." UNDP / Blog, July 10, 2019 (https://www.undp.org/content/undp/en/home/blog/2019/climate-change-reveals-underlying-threats-to-urban-water.html).

[96] Hallegatte, S., M. Bangalore, L. Bonzanigo, M. Fay, T. Kane, U. Narloch, J. Rozenberg, D. Treguer and A. Vogt-Schilb (2016). Shock Waves : Managing the Impacts of Climate Change on Poverty. Washington, DC. , The World Bank Group. (http://hdl.handle.net/10986/22787)

[97] Ligtvoet, *et al* (2018). The Geography of Future Water Challenges. https://www.pbl.nl/en/publications/the-geography-of-future-water-challenges.

[98] UNESCO / UN-Water (2020). The United Nations World Water Development Report 2020: Water and Climate Change. Paris. (https://www.unwater.org/publications/world-water-development-report-2020/); Kjellén, M. (2021). "Climate change adaptation priorities help address everyday risks." UNDP / Blog, March 1, 2021, (https://www.undp.org/content/undp/en/home/blog/2021/climate-change-adaptation-priorities-help-address-everyday-risks.html)

[99] UNESCO / UN-Water (2020). The United Nations World Water Development Report 2020: Water and Climate Change. Paris. (https://www.unwater.org/publications/world-water-development-report-2020/), p. 151.

ii. Lost time gathering water significantly reduces productive farming time for women in parts of the developing world. With safe water nearby, it's estimated that women could feed 150 million of the world's hungry (HDR 2015)

2. Please include any relevant country examples for your thematic area below.

Country examples have been highlighted in the following stories on water and climate change:

Maldives (07/2021): PROTECTING THE LIFELINE: The Maldives' supply of freshwater is under threat, but there are reasons for hope

North Macedonia and Albania (04/2021): A TALE OF A RIVER RETURNING HOME: In the Balkans, reducing flood risks and cleaning up the Sateska River supports climate resilient lives and livelihoods around Lake Ohrid

Nepal (03/2021): SCALING MOUNTAINS: Nepal's aspirations for a climate-resilient sustainable future

Costa Rica (03/2021): COMBATING CLIMATE CHANGE AND COVID-19: In Costa Rica a UNDP-supported project funded through the GEF's Special Climate Change Fund is guaranteeing access to clean water.

Somaliland/Somalia (07/2020): RESILIENCE ON THE FRONTLINES: In Somaliland, COVID-19 is just the latest challenge for people already facing the worst effects of climate change

Bhutan (03/2020): WATER AND CLIMATE CHANGE: World Water Day is about water and climate change – and how the two are inextricably linked.

Ghana (09/2019): Ending the dry season with sustainable water management

Work under the UNDP Climate Promise:

- Nigeria – whose new pledge will include climate responses for e.g. water, forestry and other nature-based solutions, in a gender-responsive manner. A Situation Analysis and Draft National Climate Resilience Water Management Plan of Nigeria has been supported in coordination with the NDC Partnership.
- Cabo Verde – Engagement and capacity building platform for water management, sanitation – (also focusing on WASH under COVID recovery)
- Niue - Capacity building for NDC coordinating institutions on climate, water and food security linkages
- Sierra Leone - Assessment of the impact of mitigation and adaptation measures on the water sector
- Burundi – gender analysis for water resources
- Mali, Nigeria and South Sudan are adding Nature-Based Solutions - wetlands, peatlands, coastal ecosystems.
- Sri Lanka - Formulate mitigation potentials of adaptation sectors for water and irrigation
- Tunisia – Assessed private sector investment potential for the coastal water sector
- Uganda – Cost-benefit analysis of adaptation and mitigation actions including NBS such as wetlands & elaborate domestic financial instruments for NDC implementation
- Uganda - Cost-benefit analysis of adaptation and mitigation actions including NBS such as wetlands & elaborate domestic financial instruments for NDC implementation
- Tunisia - Assessed private sector investment potential for the coastal water sector
- Cote d'Ivoire - Water sector analysis on risks & vulnerability, economic impacts, costs of adaptation.

3. How does UNDP support ambition in your thematic area?

UNDP's Water and Ocean Governance Programme (WOGP) consistently applies a climate focus in supporting water governance reform, principally at the level of transboundary water management (in collaboration with GEF-International Waters) with ecosystem-based approaches. Also in collaboration with GEF, UNDP's water and coastal resilience programmes (part of Climate Change Adaptation) have enhanced access to drinking water for over 2.3 million people and protected over 16,000 km of coastline have been protected.

With support from the Green Climate Fund (GCF), UNDP Climate Change Adaptation is running a range of projects to improve water security: These include projects addressing water resources management and small-holder productivity like Strengthening the resilience of smallholder agriculture to climate change-induced water insecurity in the Central Highlands and South-Central Coast regions of Vietnam and Enhancing Adaptive Capacities of Coastal Communities, especially Women, to Cope with Climate Change-Induced Salinity in Bangladesh. Major WASH-focused interventions in SIDS include Strengthening the climatic resilience of the drinking water sector in the South of Haiti, Addressing Climate Vulnerability in the Water Sector in the Marshall Islands, and Supporting Vulnerable Communities in Maldives to Manage Climate Change-Induced Water Shortages.

Since water is often insufficiently considered in climate planning, UNDP and partners have developed a set of sectoral checklists to help climate change professionals and decision-makers to identify water-related issues of importance to their climate work. These are collected in the publication on Water Interactions for Consideration in NDC Enhancement[100] and have been made available e.g. by way of a webinar series on "Water and Climate Coordination". Further guidance is being developed with the World Resources Institute (WRI).

THEMATIC AREA: OCEANS

1. **Please add key messages for your thematic area for 2021 below.**

The impacts of climate change on the ocean

The ocean is one of the largest carbon reservoirs on Earth, holding about 50 times more carbon than the atmosphere. Primary production in the ocean produces about one half of the earth's oxygen with the remainder coming from terrestrial plants. The ocean and marine ecosystems are being impacted by climate change in four major ways:

a. **Ocean warming** – the ocean absorbs 93 percent of the additional energy added to the earth-atmosphere-ocean system due to anthropogenic climate forcing. As a result, the surface ocean has warmed by 0.11 deg C per decade with some coastal areas warming by as much as 0.2 – 0.4 deg C per decade due to their limited depth. In addition, reflecting climate change's contribution to an increase in extreme events, the number of days with 'marine heat waves' has doubled in the last fifty years. Warming (which causes coral bleaching) combined with ocean acidification and other stressors is projected to eliminate 70 to 90 % of coral reefs by 2040 and as much as 99% by 2100.The migrations of many fish stocks for feeding and spawning are very temperature dependent so concerns exist regarding whether and how various stocks will respond to warming.
b. **Ocean Acidification** – the ocean has absorbed about 30% of cumulative anthropogenic CO_2 emissions; CO_2 dissolves in the ocean to form carbonic acid which causes the ocean to acidify; average ocean pH (a measure of acidity which uses a logarithmic scale) has already dropped 0.1 units (30%) and is projected to drop an additional 0.3-0.4 units (250%) under high emission scenarios; this would likely be the most rapid increase in ocean acidity in the history of the planet; over geologic time, ocean acidification events have in many cases been associated with marine mass extinctions. Lowered pH affects the capacity of many shell-forming marine organisms, from the smallest phytoplankton to corals and shelled molluscs, from fixing their shells, threatening their very existence. Acidification also negatively impacts the metabolic functioning and behavior of many marine species.
c. **Ocean deoxygenation** – As the ocean warms, its capacity to hold dissolved gases decreases. Already due to the warming to date, the ocean has lost 2% of its oxygen. Under BAU scenarios, the ocean could lose as much as 7% of its oxygen with potentially significant negative impacts on oxygen-consuming marine organisms, particularly highly active species such as tuna and sharks, and could lead to mass migrations of species to higher oxygen waters.

[100] UNDP-SIWI Water Governance Facility *et al.* (2020). Water Interactions for Consideration in NDC Enhancement & Implementation. Sectoral Checklists to Help Climate Change Professionals and Decision-Makers to Identify Water-Related Issues. Stockholm. (https://www.ndcs.undp.org/content/ndc-support-programme/en/home/impact-and-learning/library/water-interactions-to-consider-for-ndc-enhancement.html)

d. **Sea level rise (SLR)** – As the ocean warms, it expands and sea level rises; this SLR is furthered by increased ice loss from Antarctica and Greenland as well as the continued melting and run-off from continental glaciers. Global mean sea level rose by 7-18 cm. between 1900 and 1990, has risen an additional 8 cm since 1993 and appears to be accelerating. Sea level increase projections for 2100 range from 29-59 cm. (low emission scenario) to 61-110 cm. (high emission scenario).Many coastal ecosystems such as coral reefs, mangroves and seagrass systems, may not be able to adapt to these rapid rates of SLR.

The above stressors either individually or collectively can impact the health and functioning of marine ecosystems in other ways, including:

a. **Harmful algal blooms and pathogenic organisms may increase risk to coastal communities**. Harmful algal blooms and pathogenic microbes (e.g. Vibrio) may display changes in their range and occurrence in coastal areas in response to both climatic (ocean warming, marine heatwaves, oxygen loss) and non-climatic drivers, including increased riverine nutrients run-off, coastal pollution and excessive algal growth.
b. **Heat stress inducing large-scale ecosystem decline**. Coastal ecosystems structured by warm-water corals, rooted vegetation (seagrasses, mangroves and saltmarsh) and seaweed are particularly sensitive to marine heat waves. Coral bleaching occurs when the coral (animal) loses its symbiotic algae due to heat stress.
c. **Climate interactions with other human pressures**. Coastal seas are facing the most diverse range of human pressures and uses. For example, the rate of pollution and land-use change is greatest near the coast – through agriculture, aquaculture, settlement, port development and tourism – affecting the ability of coastal ecosystems to accumulate carbon, and potentially releasing large amounts of CO2 from coastal sediments.

The role of the ocean in climate change mitigation and adaptation

As summarized above, anthropogenic CO_2 emissions are driving four major impacts on the ocean. By far the most important factor which will minimize each of these impacts of climate change on the ocean would be achievement of the Paris Agreement targets of limiting the increase in global warming to 'well below 2°C', with a goal to keep it to 1.5°C.Beyond this, a number of ocean-related strategies and approaches can support climate change mitigation and adaptation:

a. In its 2020 report, "The Ocean as a Solution to Climate Change: 5 Opportunities for Action", the High Level Panel on a Sustainable Ocean Economy identified a suite of ocean-based mitigation options that could **reduce GHG emissions by 4 billion mt/yr CO_2e by 2030 and over 11 billion mt/year by 2050**, or about 21% towards the 1.5 deg C pathway. These included ocean-based renewable energy, ocean-based transport, coastal and marine ecosystems; fisheries, aquaculture and dietary shifts; and seabed carbon storage. Nearly half of the potential for climate mitigation would derive from a dramatic expansion of ocean-based renewable energy, particularly offshore wind, by 2050.
b. **Protect and restore key 'blue carbon' ecosystems.** Some coastal ecosystems, especially mangroves and seagrasses, hold and can sequester far more carbon per square hectare than comparable terrestrial ecosystems such as rain forests. Protection and enhancement of such ecosystems can make small but important 'nature-based' contributions to overall climate mitigation efforts.
c. **Create climate-smart, innovative and networked Marine Protected Areas (MPA)**. There are currently 187 countries with marine protection having either single, grouped or truly networked MPAs. Reviews of effectively managed MPAs have shown that they increase biodiversity, size and abundance of species if they have had high levels of protection, are ecologically coherent, have high connectivity, are distant from human activities and have been established for some years. Highly protected MPAs can also provide co-benefits of food provision and protection of carbon stores in addition to biodiversity protection.
d. **Reduce fisheries subsidies and IUU fishing**. Fisheries account for about 1.2 percent of global oil consumption, about the same as that consumed by the Netherlands.One of the largest components (about US$9.1 billion or 22%) of destructive fisheries subsidies that promote illegal, unregulated and unreported (IUU) fishing is subsidies to fishing vessel fuel costs.Efforts are ongoing through the WTO to address the fisheries subsidies issue; clearly elimination or significant reduction in such subsidies would both reduce the sector's carbon footprint and contribute to reducing IUU fishing.

e. **Consider sub-seabed carbon capture and storage (CCS) for greenhouse gas removal**. Even under the most optimistic scenarios, several gigatons of CO_2 will need to be removed each year from the atmosphere to meet the net zero requirements of the Paris Agreement. Sub-seabed CO_2 storage could make a significant contribution to achieving net zero, especially for coastal nations without large onshore storage capacity but with suitable marine geological formations and appropriate infrastructure (such as used for oil and gas fields). However, storing large volumes of CO_2 in rock formations beneath the seabed must avoid leakage and associated negative impacts on the marine environment. Geological surveys for storage integrity, reliable seepage detection and monitoring techniques and environmental impact modelling and assessments are all essential.

f. **Reduce other anthropogenic stressors**. Reduction of non-climate change anthropogenic stressors on marine ecosystems (e.g. pollutants, eutrophication, tourism, overfishing, and introduction of alien species) helps to maintain biological biodiversity and protects trophic and reproductive functioning, this in turn can enhance the climate resilience of these ecosystems.

g. **Utilize smart marine spatial planning to enhance the multiple uses of the marine environment.** Understanding the distribution of marine habitats, and the multiple uses of the marine environment, is key to effective marine spatial planning and making the best and most sustainable use of the ocean. Transitioning towards this spatially-led decision-making process requires a distinction between areas that are important for biodiversity (species-rich, functionally diverse or important for an iconic aspect of biodiversity) and areas that are important for ecosystem services (e.g. recreation services, flood protection and food and energy provision). For example, the introduction of very large wind farms will displace fishing activity, as well as cause increased mixing around the structures. This can alter local primary production, affecting the biological carrying-capacity of the region and the ability to absorb CO_2 from the atmosphere.

h. **Prioritise ocean finance and leverage of co-benefits**. Ocean finance, a term used for mechanisms to invest in different sectors of the blue economy, can play a critical role in helping achieve a sustainable ocean economy. This requires a financial regime that acknowledges climate and ocean risk, including at central bank level, and incentivises sustainable ocean finance. Current investments fall well below what is required. Innovation also means development of new capital market instruments, such as blue bonds, and finance and insurance concepts for coastal zone resilience and blue infrastructure, integrating nature-based solutions. Blue carbon projects can provide an important contribution to the delivery of market-based approaches.

Support better inclusion of the ocean in the UNFCCC process.

The ocean is an extensive and important part of the biosphere and hydrosphere, and so falls under the remit of the UNFCCC's aim to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. There has been some progress on inclusion of the ocean in UNFCCC processes, but more can be achieved:

a. There needs to be **adequate access to ocean science**, sufficient engagement in the relevant ocean-climate discussions and **enhanced coordination and cooperation among and with UN bodies** as well as through strengthened ocean-climate finance action via the Green Climate Fund.

b. The Chair of the UNFCCC Subsidiary Body for Scientific and Technological Advice convened the first official Ocean and Climate Dialogue (December 2020), on how to strengthen adaptation and mitigation action on ocean and climate change within the UNFCCC, the report will be formally shared during COP26. **A mandate for an annual Ocean and Climate Dialogue would better inform the UNFCCC process**.

c. **Revise UNFCCC Parties' Nationally Determined Contributions (NDCs) and National Adaptation Plans** to address the **broader context of ocean-based actions for both mitigation and ecological adaptation.** Blue Carbon opportunities are increasingly recognised in NDCs and include efforts to protect and preserve wetlands and nature-based solutions, as well as protecting and restoring marine and coastal ecosystems as cost-effective means of addressing climate change and biodiversity.

d. **Global climate indicators can inform the UNFCCC and the Global Stocktake**. Of the seven World Meteorological Organization Global Climate Indicators there are four that are specifically relevant to the ocean (ocean heat content, ocean acidification, sea level, and sea ice extent). Adoption of these in the Global Stocktake would help to harmonise ocean actions more fully within the UNFCCC process and can put us on track to prevent dangerous anthropogenic interference in the whole "climate system".

2. Please include any relevant country examples for your thematic area below.

- The UNDP project "**Restoring Marine Ecosystem Services by Restoring Coral Reefs to Meet a Changing Climate Future**", financed by the Adaptation Fund, is increasing climate resilience at both regional and local levels by implementing **coral reef restoration with thermally tolerant corals** as adaptation to climate change. Working in Seychelles and Mauritius, the project will support: i) development of a sustainable partnership and community based approach to reef restoration, ii) establishment of coral farming and nursery facilities, iii) active restoration of degraded reefs; iv) improved understanding and knowledge management of using coral reef restoration as an adaptation to climate change; v) sharing regionally and globally the experienced learned in sustainable coral reef restoration, and vi) training to build capacity for long-term sustainable coral reef restoration.

- **The Global Maritime Energy Efficiency Partnerships project (**GloMEEP**) was a recently completed GEF-UNDP-IMO project aimed at supporting the uptake and implementation of energy efficiency measures for shipping, thereby reducing greenhouse gas emissions from shipping and the associated contribution of the sector to climate change impacts on the ocean**. **GloMEEP supported ten Lead Pilot Countries of the project to implement these measures, through:1.** Legal, policy and institutional reforms; 2. Awareness raising and capacity-building activities; and 3. Establishment of public-private partnerships to support low carbon shipping. The Lead Pilot Countries (LPCs) of the GloMEEP project included Argentina, China, Georgia, India, Jamaica, Malaysia, Morocco, Panama, Philippines and South Africa.

- The recently approved UNDP-GEF PROCARIBE project, working in nearly 20 countries of the Caribbean region, will support the integration of **coastal and marine natural capital/blue carbon in 2025 NDC's** in at least 5 countries. The project will also support at least 8 countries in their **Blue Economy and Marine Spatial Planning** efforts, including the identification of climate change mitigation and adaptation opportunities including blue carbon.

- UNDP, through its mobilization of climate change mitigation financing from the GEF, GCF and other sources, maintains **the largest climate change mitigation portfolio in the UN system, cumulatively valued at some US$2 billion** in grant finance. Since at a global level, every ton of CO_2 mitigated through renewable energy, energy efficiency, carbon sequestration and other measures contributes to reducing the impacts of climate change on the ocean, UNDP's Climate Change Mitigation portfolio represents a **sizeable contribution to overall efforts to protect the ocean from the impacts of climate change**.

3. How does UNDP support ambition in your thematic area?

UNDP's Ocean Governance Programme assists countries in advancing climate resilient, integrated, ecosystem-based management of marine ecosystems at all levels – local, national, regional and global. This is achieved through a range of ocean strategic planning and implementation approaches, including Marine Spatial Planning, Marine Protected Areas, Large Marine Ecosystem approach, Integrated Coastal Management and Locally Managed Marine Areas. To date, UNDP has supported joint, multi-country strategic planning processes in 14 of the world's 64 Large Marine Ecosystems, covering 94 countries that share these systems. In some regions, such as the Caribbean, UNDP is supporting enhanced incorporation of ocean-related climate mitigation and adaptation opportunities in Nationally Determined Contributions (NDCs). In partnership with the GEF and IMO, UNDP is supporting the GloFouling Partnerships project, which, by assisting governments and the shipping industry to reduce the 'biofouling' of ship hull exteriors, is helping to reduce the carbon footprint of the sector as a fouled ship hull can dramatically increase the fuel consumption of these large vessels.