




















































Ministry of Foreign Affairs – (Department for Green Diplomacy and Climate)

Meeting in the Council for Development Policy on 24 February 2022

Agenda Item No. 3

- 1. Overall purpose:** For discussion and recommendation to the Minister
- 2. Title:** UNEP-DHI Centre (2022-26)
- 3. Presentation for Programme Committee:** 26 October 2021
- 4. Previous Danish support to UNEP-DHI presented to UPR:** Current phase (DKK 32m) presented to UPR on 12 June 2018.

UNEP-DHI Centre – Climate Action in the 2030 Agenda through Sustainable Water Management

<p>Key result examples:</p> <p>1) 193 countries are supported to submit data on Integrated Water Resources Management (IWRM, SDG target 6.5, indicator 6.5.1); and the protection and restoration of water-related ecosystems (SDG target 6.6, indicator 6.6.1).</p> <p>2) 20-25 countries assisted in identifying challenges and prioritizing solutions to develop national action plans, based on SDG data; and 5 decision support technology tools to achieve sustainable water management.</p> <p>3) 5 countries supported to develop water-related adaptation strategies and plans; and 10-12 countries provided technical assistance to increase climate resilience linked to impact areas (e.g. agriculture, energy, industry, urban development and human well-being).</p> <p>4) 6 countries supported to implement roadmaps/strategies for advancing IWRM; and 4-6 countries provided technical assistance to address ecosystem and pollution issues linked to impact areas (e.g. water quality/plastics, water-use efficiency and ecosystem health/services).</p> <p>5) USD 10.4 million in additional external financing attracted to support project implementation.</p> <p>Justification for support:</p> <ul style="list-style-type: none"> - Unsustainable water management practices constrain social and economic development and degrade natural ecosystems, impacting freshwater availability and quality, with ongoing climate change further exacerbating the situation. Climate change impacts in the form of extreme events, including floods and droughts, are unavoidable, are becoming more frequent, and more severe. - The programme will contribute to increased resilience and enhance the sustainability of water resource management in the beneficiary countries. - Denmark is globally recognized for its strengths in water management. - The programme is fully aligned with key priorities in the Danish strategy for development cooperation (2021). <p>Major risks and challenges for the project:</p> <ul style="list-style-type: none"> - Continuing COVID-19 pandemic affects implementation, resulting in the need for more cloud-based solutions and online engagement. - Implementation of the planned outcomes requires external funding, which will require a dedicated approach to fund-raising. 	<p>File No. 2020-45200</p>																		
	<p>Country Multilateral</p>																		
	<p>Responsible Unit GDK</p>																		
	<p>Sector Water and climate</p>																		
	<p>Partner UNEP-DHI Centre on Water and Environment</p>																		
	<p style="text-align: center;"><i>DKK million</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>2022</th> <th>2023</th> <th>2024</th> <th>2025</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Commitment</td> <td>60</td> <td></td> <td></td> <td></td> <td>60</td> </tr> <tr> <td>Projected disbursement</td> <td>15</td> <td>15</td> <td>15</td> <td>15</td> <td>60</td> </tr> </tbody> </table>		2022	2023	2024	2025	Total	Commitment	60				60	Projected disbursement	15	15	15	15	60
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	<p>Duration July 1st 2022 - June 30th 2026 (4 years)</p>																		
	<p>Previous grants DKK136.9 million since 2001</p>																		
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	<p>Head of unit Karin Poulsen</p>																		
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<p>Reviewed by CFO Rasmus Tvorup Ewald</p>																			
<p>Relevant SDGs</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tbody> <tr> <td> No Poverty</td> <td> No Hunger</td> <td> Good Health, Wellbeing</td> <td> Quality Education</td> <td> Gender Equality</td> <td> Water and Sanitation</td> </tr> <tr> <td> Affordable Clean Energy</td> <td> Decent Jobs, Econ. Growth</td> <td> Industry, Innovation, Infrastructure</td> <td> Reduced Inequalities</td> <td> Sustainable Cities, Communities</td> <td> Responsible Consumption & Production</td> </tr> <tr> <td> Climate Action</td> <td> Life below Water</td> <td> Life on Land</td> <td> Peace & Justice, strong Inst.</td> <td> Partnerships for Goals</td> <td></td> </tr> </tbody> </table>	 No Poverty	 No Hunger	 Good Health, Wellbeing	 Quality Education	 Gender Equality	 Water and Sanitation	 Affordable Clean Energy	 Decent Jobs, Econ. Growth	 Industry, Innovation, Infrastructure	 Reduced Inequalities	 Sustainable Cities, Communities	 Responsible Consumption & Production	 Climate Action	 Life below Water	 Life on Land	 Peace & Justice, strong Inst.	 Partnerships for Goals		
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<p>Strategic objective:</p>																			
<p>Supported country partners are implementing sustainable climate adaptation, nature management and pollution reduction actions based on improved water resources management.</p>																			
<p>Justification for choice of partner:</p>																			
<p>The UNEP-DHI Centre has been consistently recognized as providing high value technical assistance based on world leading expertise. The Centre is highly relevant for Denmark and UNEP and provides input and results that support their priorities and strategic direction. This project is an evolution of ongoing collaboration based on a tried and tested operating and execution model that has a strong track record of successful delivery.</p>																			
<p>Summary:</p>																			
<p>The programme is phase six of Danish support to the UNEP-DHI Centre. It builds on UNEP's mandate for supporting countries' reporting on SDG indicators 6.5.1 on IWRM and 6.6.1 on freshwater ecosystems. The reporting exercise is used as a platform for dialogue and action with and within countries on how to strengthen water resource management across sectors and stakeholders. These dialogues are underpinned by providing technical assistance and technology tools for water resource information management to address key water challenges and increase resilience and adaptation to climate change impact, protect natural ecosystems and reduce environmental pollution, using the globally recognized expertise of DHI.</p>																			
<p>Budget (DKK):</p>																			
<p>Outcome 1: Countries report to the UN on sustainable water management (SDG 6.5.1); and the protection and restoration of water-related ecosystems (SDG 6.6.1).</p>	9 million																		
<p>Outcome 2: Countries' water management and freshwater ecosystem challenges and solutions are identified and prioritized, based data from outcome 1.</p>	15 million																		
<p>Outcome 3: Country partners have specialized knowledge and skills and are implementing water-related climate adaptation strategies and plans, technology tools to address floods, droughts and coastal issues linked to impact areas e.g. agriculture, energy, industry, urban development, freshwater ecosystems and human well-being.</p>	18 million																		
<p>Outcome 4: Country partners have specialized knowledge and skills related to key water management challenges and are applying technology tools to address ecosystem and pollution issues linked to impact areas, e.g. water quality/plastics, water-use efficiency and ecosystem health/services.</p>	12 million																		
<p>Administration, monitoring and mid-term review</p>	6 million																		
<p>Total</p>	60 million																		

Programme Document

**UNEP-DHI Centre – Climate Action in the 2030 Agenda through
Sustainable Water Management
2022-2026**

Version for Council for Development Policy

February 2022

F2: 2021-45200

List of acronyms

Cap-Net	International Capacity Development Network for Sustainable Water Management
CEO	Chief Executive Officer
COVID-19	Corona virus disease 2019
CTCN	Climate Technology Centre and Network
DAC	Development Assistance Committee
DKK	Danish Kroner
GCF	Green Climate Fund
GDP	Gross domestic product
GEF	Global Environment Fund
GWP	Global Water Partnership
IMI	Integrated Monitoring Initiative
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for the Conservation of Nature
IWRM	Integrated water resources management
MDG	Millennium Development Goal
MEAL	Monitoring, evaluation, accountability and learning
MTS	Medium-term strategy
NbS	Nature-based solutions
NGO	Non-governmental organisation
ODA	Official Development Assistance
PSC	Programme support costs
SDG	Sustainable Development Goal
ToC	Theory of Change
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	US dollars
WWF	World Wide Fund for Nature

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1. Introduction

This programme document outlines the background, rationale and justification, objectives and management arrangements for development cooperation concerning UNEP-DHI Partnership – Centre on Water and Environment (UNEP-DHI Centre) – “Climate Action in the 2030 Agenda through Sustainable Water Management”, 2022-2026 as agreed between the parties: The United Nations Environment Programme (UNEP) and the Department for Green Diplomacy and Climate in the Ministry of Foreign Affairs of Denmark. The programme document is an annex to the Donor Agreement with UNEP and constitutes an integral part hereof.

The programme is phase six of Danish support to the UNEP-DHI Centre. This coming phase will continue the focus of work from phase five, but with adjustments to reflect increased needs and demands especially regarding implementing projects at country level, which, together with a general higher level of ambition for the partnership and strong strategic alignment, commensurate with an increase in funding from Denmark - from DKK 32 million to DKK 60 million. Funding from Denmark is specifically allocated to the work of UNEP-DHI Centre, rather than the pool of unallocated funding to UNEP, due to the Centre’s strategic importance to the relationship between Denmark and UNEP, and their shared development ambitions, which are partially realized through the work of the Centre.

The initiative builds upon UNEP’s mandate for supporting countries’ reporting on SDG indicators 6.5.1 on integrated water resources management (IWRM) and 6.6.1 on freshwater ecosystems. This is used as a platform for dialogue and action with and within countries on how to strengthen water resource management across sectors and stakeholders. These dialogues are underpinned by providing technical assistance and technology tools for water resource information management to address key water challenges and increase resilience and adaptation to climate change impacts, protect natural ecosystems and reduce environmental pollution, using the globally recognized expertise of DHI.

2. Strategic considerations

2.1 Context for the programme and development engagements

All countries, developing and developed, are becoming increasingly aware of the urgent need to pay much greater attention to managing their water, if demands from cities, agriculture, energy production etc. are to be met, and water-related climate hazards reduced in both scale and frequency. Climate resilient growth and poverty reduction in developing countries depend on the sustainable management of water resources. Key sectors that contribute to growth such as energy, agriculture, transportation, and fisheries depend on development and management of water. While our planet has enough freshwater to satisfy all current and foreseeable future demands, it is not always available at the times or in quantities or qualities and the places it is most needed. In many regions of the world, limited freshwater resources constrain social and economic development, especially for the most vulnerable communities in the developing countries. Unsustainable water management also degrades natural ecosystems and leads to biodiversity depletion. Pollution and continuing biodiversity loss, over many generations, have a negative impact on freshwater availability and quality, with ongoing climate change further exacerbating the situation. As recognised in the most recent UN climate assessment report from August 2021, not only are major changes in our climate accelerating, but the impacts in the form of extreme events, including flood and droughts, are becoming more frequent, more severe and are unavoidable.

In turn the abovementioned impacts have social, political, economic and environmental ramifications, both directly and indirectly. For example, conflicts over access to and use of water can take place on scales ranging from local (e.g. between farmers and cattle herders) to international (e.g. between multiple countries sharing the same water bodies). Poorer and more fragile countries are, of course, at greater risk. In terms of gender, women and girls may often be obliged to travel further to collect water for household use, which in turn impacts negatively on their opportunities to obtain an education and achieve economic development. Existing imbalances in gender and social

representation in decision-making on water resources development and management may further exacerbate inequalities of access to vital water resources and livelihoods.

These challenges are why efforts to sustainably manage water resources are considered so important, and have been included as part of the Sustainable Development Goals (SDGs) through a dedicated goal on water and sanitation – SDG 6. And they are why climate targets and accelerating actions under the Paris Agreement and SDG 13 on climate action, are also considered so important.

In 2018, the official SDG global status report on water resources management (coordinated by UNEP-DHI Centre on behalf of UNEP and with support from Denmark) highlighted that 60 percent of countries were not on track to achieve sustainable water management by 2030. In the most recent report from August 2021, a key finding from the more than 170 countries surveyed is that global efforts to address this situation need to double to achieve sustainable water management by 2030. This is a mammoth, but not insurmountable, task for many countries. While some countries appear to be making little-to-no progress, others have made impressive advancements over the last few years, demonstrating that meaningful progress is possible even in a relatively short space of time.

Country experiences have shown that accelerating progress towards SDG 6 and SDG 13 requires strengthened political will through advocacy and communication, better coordination across sectors and at all levels, increased and more transparent data and information collection and sharing, technical and human capacity building and dedicated financing. The theory of change (section 4) illustrates the steps that the Centre takes to address these barriers to progress.

International support to developing countries is vital. In terms of the three main partners under this agreement, all see to make a meaningful contribution, with the Medium-term Strategy of UNEP, the development cooperation strategy of Denmark, and the strategy for DHI all aiming to help address water and climate related issues. More specifically:

- 1) [UNEP’s Medium-term Strategy \(MTS\) \(2022-2025\)](#) aims to accelerate progress on the 2030 Agenda, through advocacy and support for climate action, nature action, and pollution action. [UNEP’s Freshwater Strategy](#) is used to align and coordinate the organization’s freshwater work relevant to the implementation of the MTS.¹
- 2) [Denmark’s strategy for development cooperation \(2021\) “The World We Share”](#) aims to achieve a more secure and sustainable world that is free of poverty, which includes an ambition to promote action in the fields of climate, protection of nature and the environment. Management of, and access to, water resources are seen as a key issue to be addressed in the fight to stop negative climate change impacts and restore balance to the planet.
- 3) DHI’s new strategy (2021) aims to promote sustainable development for its partners and the planet, by using its world-leading knowledge and technology to improve water management and protect water-related ecosystems based on SDG 6 on water and SDG 13 on climate.

The programme described in this document seeks to combine the elements from each of the three partners’ strategies that complement and combine into shared ambitions that can be realized through the work of the UNEP-DHI Centre (see section 2.2 below).

¹ Denmark’s proposed support to UNEP (DKK 200m for 2022-26) described in the organisations strategy for UNEP is also fully aligned with the UNEP MTS. UNEP-DHI are supporting UNEP to update the 2017-2021 strategy to the period 2022-2025

2.2 Overarching Strategic Considerations

There are a number of overarching strategic considerations that have been taken into account in the formulation of this programme document and will be important ongoing considerations during implementation. The most important include:

- **Attribution and the Theory of Change:** It should be recognized that while the UNEP-DHI Centre can influence the development objective, it cannot control or assume direct responsibility for country successes (or failures) given multiple influencing factors and associated challenges with attribution. The Theory of Change is used to describe the development landscape, including the UNEP-DHI Centre's role, contribution etc.
- **Evolution with ambition:** While this phase of the collaboration represents a continuation from the previous, the level of interest, expectation and support for the UNEP-DHI Centre from UNEP, Denmark and DHI is notably high. The work approach has been shown to deliver the desired results, and there is a shared ambition to do more.
- **Exploring linkages with UNEP Partnership on Climate and Development:** While all partners recognize the strengths and differences between the UNEP Partnership on Climate and Development and the UNEP-DHI Centre, there are areas of common interest, which will be further explored with a view to developing closer collaboration.
- **Cross-cutting development priorities:** There are a number of priorities which will require consideration during implementation. These include support to youth, gender mainstreaming and human rights (see box below), nature-based solutions (NbS), private sector engagement (while respecting UNEP's position), and contributions to UNEP's source-to-sea and peace and security work.
- **Strategic partnerships and financing:** Partnerships are needed to avoid duplication, strengthen outcomes and impacts, and attract additional financing to support the work of the Centre. This latter point is of particular importance as the budget in this programme document is recognized as being insufficient to cover all expected costs to deliver the expected work (see supplementary results indicators in the Results Framework in section 5).

Gender and the UNEP-DHI Centre

There is a close relationship between various aspects of water use and management with important gender-related issues. While there are many actors championing the need for positive change, the UNEP-DHI Centre has an important role to play as mainstreaming gender considerations into water resources management is vital for successful implementation of IWRM. Gender has become a special focus area for the Centre, particularly in relation to the SDG 6 monitoring work and project implementation.

Examples of the Centre's contributions include support to UNEP in monitoring gender mainstreaming in water management as part of the official SDG 6.5 monitoring and reporting, and direct contributions to various awareness-raising and training initiatives linked to gender and water issues. A dedicated publication ([Advancing towards gender mainstreaming in water resources management](#)) drawing on these experiences was published in September 2021 (collaboration between GWP and UNEP-DHI). A learning exchange on gender mainstreaming with national government representatives and other stakeholders (attended by approximately 200 participants) was used as an event for the official launch of the publication.

The Centre has also established a successful collaboration with UN Women, the custodian agency of indicators under SDG target 5 on gender equality. UN Women took part in the learning exchange on gender in September 2021 and UNEP-DHI provided inputs to [UN Women's Gender Snapshot for 2021](#), drafting the inputs on SDG 6. The collaboration is continuing on other initiatives. UNEP-DHI is also providing active inputs to UN-Water's Integrated Monitoring Initiative (IMI-SDG6) Gender working group, outlining future gender work in relation to SDG 6 monitoring efforts.

Some of these efforts are captured on the Centre's dedicated [webpages](#). In the new phase, the continued focus on measuring gender mainstreaming in SDG 6.5 monitoring and reporting will continue to provide the Centre with a platform from which it can offer its active support.

2.3 Justification

The programme outlined in this document is concerned with using SDG monitoring and reporting experiences to promote country progress through the work of the UNEP-DHI Centre. Established in 1996, and co-funded by Denmark since 2001, the UNEP-DHI Centre is a UNEP “centre of expertise”, dedicated to improving the management, development and use of freshwater resources. The UNEP-DHI Centre is a product of the long-term collaboration between UNEP, the Danish Ministry of Foreign Affairs and DHI, and has been consistently recognized as providing high value technical assistance based on world-leading expertise and technologies. The scope of work of this programme represents a further strengthening of ongoing collaboration between Denmark and UNEP.

The Centre is hosted by DHI, an independent, international advisory and research organization established in Denmark and now with over 1,000 staff in more than 25 countries. Operating as a foundation on a not-for-profit basis, DHI is best known for its cutting-edge water management expertise and technologies that are linked to advances in hydrological modelling, cloud computing, earth observation and growth in the use of smart phones in water management.

The UNEP-DHI Centre aims to help address developing countries’ water resources assistance needs, on a demand-driven basis. Immediate considerations for determining the Centre’s engagement include whether:

- 1) The requested assistance is in harmony with what the Centre is expected to be doing as determined by the agreed programme document and associated theory of change and results framework, as well as geographical balance/focus and estimated development impact.
- 2) The Centre has the appropriate skills and tools and is best placed to assist, together with our partners. If the Centre is not the appropriate partner or there is a better partner, efforts will be made to identify and propose alternative possibilities.
- 3) The cost and available funding to support the required assistance is available. For example, the Centre does not directly finance country projects, but may work with the country to identify and access available funding.
- 4) Conditions imposed by various funding organizations can be met by the Centre. These conditions include demands for technology transfer (e.g. CTCN), transformative interventions (e.g. GCF), implementation lead by local partners (e.g. GEF), support to all UN Member States (e.g. UN-Water) etc.

The priorities of the Centre are shaped by UNEP’s Medium-Term Strategy, related Programme of Work, and Freshwater Strategy, and aligned with the development cooperation strategy of the Government of Denmark (2021). Periodic evaluations/reviews (such as the most recent, which is summarized in section 2.4 below), consistently confirm that the work of the Centre is in broad compliance with the spirit of the six OECD Development Assistance Committee (DAC) criteria of relevance, impact, effectiveness, efficiency, coherence and sustainability.

As recognized in the most recent review, the Centre is highly relevant for all three partners and provides input and results that support their priorities and strategic direction. This programme can be considered an evolution of ongoing work based on a tried and tested operating and execution model that has a strong track record of successful delivery. The policy and technical work of UNEP-DHI Centre is focussed on three inter-related and complementary areas:

- 1) Water Management Action: Supporting implementation of IWRM at all levels and assisting countries towards achievement of SDG 6 targets.

- 2) **Climate Action:** Building climate resilience in countries through design and implementation of advanced science-based tools for effective planning and management of floods, droughts, and water scarcity.
- 3) **Environment Action:** Policy advice, science-based assessments, and decision-support tools to protect and restore freshwater ecosystems, improve their management under changing conditions and combat water pollution from source to sea.

The quality and relevance of the work of the UNEP-DHI Centre has resulted in it becoming a core resource for UNEP’s work on freshwater issues. The Centre has attained global recognition for its work in promoting sustainable water resources management and supporting the water-related SDGs. While the Centre collaborates with a variety of partners including IUCN, GWP, UNDP Cap-Net and many others, the comparative advantage of the Centre is its ability to combine UNEP’s mandate with DHI’s world-leading knowledge and technology to help address climate and water-related issues.

This programme is fully aligned with the Danish Strategy for Development Cooperation “The World We Share” (2021). One of the key pillars of this strategy is the fight for climate, nature and the environment. Climate change adaptation and water resource management, as well as strengthened biodiversity and promotion of nature-based solutions, play a critical part in this regard. Improved water resource management is a condition for poverty reduction, economic development and protection of critical ecosystems and sufficient water for households and livelihoods are basic to human development.

2.4 Lessons learned

Review findings and recommendations

This sub-section summarises the most recent review of the UNEP-DHI Centre undertaken by an external expert. This review was particularly valuable as it assessed the Centre and its work with a view to providing specific guidance to this next phase of collaboration. The review was initiated July 2020, and the final report was submitted in September 2020. The full review and accompanying presentation can be viewed [here](#).

Summary review findings:

- **Strategic relevance:** The review finds that the Centre is highly relevant for all three partners and provides input and results that support their priorities and strategic direction.
- **Operating model:** Strengths of the operating model include a great degree of agility, flexibility and effectiveness inherent in the combination of a lean structure and the ability to tap into the considerable technical expertise and management structure of DHI. UNEP gives legitimacy and political clout to the Centre, lending credibility to its work. This model means the Centre is able to punch above its weight as its work is highly reputed generating a robust demand for its expertise. Partners interviewed confirmed the pertinence and advantages of the partnership model.
- **Scope of work:** Work plans are used as flexible instruments developed annually based on the results framework thus ensuring a clear alignment with the expected results. Biannual progress reports allow partners to monitor the implementation and are provided alongside financial reporting in July and January. The Centre is involved in a broad range of activities and with many different partners. The Centre delivers on what is in the agreement and according to the results framework.
- **Governance structure:** The hosting and administrative arrangements seem to be working well, though the issue of the funding of a full time Chief Manager post needs further detailed discussions amongst the partners. The Advisory Board seems to function to the satisfaction of all partners, with its role being complemented by the newly established UNEP Denmark Partnership Committee that will constitute a new forum for high-level forward-looking engagement to ensure the continued strategic relevance of the work of the Centre, and that of the parallel UNEP Partnership on Climate and Development.

Summary of key review recommendations of particular note and action taken:

- **Programmatic Approach:** Recognizing that the support from Denmark provides stable, longer-term core financing, the review recommended a more programmatic approach whereby outcomes, impacts, aims and objectives would be agreed upon in this document, with less emphasis placed on defining detailed activities and very specific outputs. The rationale for the suggestion is that this flexible approach would provide all main partners (UNEP, Danish Ministry of Foreign Affairs and DHI) with a greater degree of freedom in directing the work of the Centre based on evolving and emerging needs, thereby further increasing the relevance and value of the Centre for their strategic interests.

It has been agreed between the partners that the main challenge with fully adopting this recommendation is that a comparative lack of definition leaves scope for misalignment of expectations between partners, and does not capture the need of all partners for specific indicators that can be used for quickly tracking progress and for their own internal monitoring and reporting purposes. This recommendation is addressed at the output level, maintaining a three-step programmatic approach, as follows (elaborated in sections 3 and 5):

Step 1: The Centre supports UNEP's role in assisting countries with official SDG-related monitoring and reporting on sustainable water management and freshwater ecosystem status.

Step 2: Data from the above is used to identify problems and prioritize solutions, which in turn is used to develop actionable information products and decision support tools that address key issues.

Step 3: Implementing projects at country level focussed on climate, ecosystems, and pollution issues that draw on the abovementioned information and utilize the decision support tools to support climate-related sustainable water management.

These steps have a number of targets that are measurable but quite generally defined to provide the required flexibility. As is current practice, annual work plans are used to define more specific focus with detailed reports being prepared and shared every 6 months to track progress.

- **Full time UNEP Chief Manager:** Recognizing the considerable responsibility and high value in ensuring full integration into UNEP's relevant technical work, the review recommended that the partners ensure that the position of the UNEP employed Chief Manager of the Centre be reverted to a fulltime position, and that it should be a UNEP staff position.
- **Private Sector Engagement:** In the previous phase, and in alignment with the ambitions of the former Danish development cooperation strategy, emphasis was placed on engagement with the private sector. This was not well defined in the previous programme document, based on a common understanding between the partners that this was something to be further discussed and explored, with guidance from the Centre's Advisory Board (see section 7).

Having considered the various discussions, the Centre's experiences, and following interviews with selected Danish embassies, the review questioned the priority given to private sector engagement in view of the Centre's role vis-à-vis UNEP and associated objectives. This topic was most recently considered at the UNEP – Denmark Partnership Committee in 2021, where participants concluded that, while the private sector has an important development role, UNEP is not in a position to show what could be perceived to be favouritism towards private sector actors.

For this new phase, stronger emphasis will not be placed on private sector engagement. However, where obvious opportunities present themselves, and when clear that UNEP's position on private sector engagement will not be compromised, the Centre will look to engage. One example being the further development by the Centre of the "Match! – Water solutions portal", in collaboration with partners such as UNEP Partnership on Climate and Development and the UNFCCC's Climate Technology Centre and Network (CTCN), which aims to promote private sector solution providers of water technologies and connect them with their target audiences

(<https://www.matchwatersolutions.com/>). In this new phase attention will be given to ensuring the portal is further promoted and disseminated, and that experiences are gathered to enhance the contents.

Salient results from previous phases

Since its inception, and with support from Denmark, the UNEP-DHI Centre has been constantly evolving and adapting to meet new demands and circumstances. The following chronologically describes some of the key highlights of the Centre's work in recent years. All mentioned activities have been undertaken with support from Denmark and under the guidance and direction of UNEP. Partnering with other actors within and beyond the water sector has been, and will continue to be, an important part of the Centre's *modus operandi*.

Up to 2015 the focus of the Centre was on encouraging countries to understand and adopt sustainable water management practices, through IWRM. IWRM is an approach that helps to balance competing water demands from across society and the economy, without compromising the sustainability of vital ecosystems. This is achieved through coordinated policy and regulatory frameworks, management arrangements and financing at global, regional, national and transboundary levels.

During the period of the Millennium Development Goals (MDGs), the Centre was able to assist more than 60 developing countries with revising or developing new water-related policies, laws and plans, as well as their institutional frameworks. By the end of the MDGs, and with significant efforts from the UNEP-DHI Centre, decision makers and practitioners in developing countries had understood the importance of taking an integrated approach to water management, universities began to run IWRM courses, and donors were channelling millions of US Dollars to support "IWRM"-oriented projects.

In the period 2013-2017, the UN called upon the Centre to provide technical support to the discussions on a new set of universally relevant Sustainable Development Goals (SDGs) to replace the MDGs. Many countries requested a dedicated water goal, broader than water supply and sanitation that would include the state of freshwater ecosystems and address water resources management. A number of experts claimed that governance and water management were nebulous concepts that would be impossible to meaningfully measure and follow up. The Centre took on the task and coordinated a specialist group which proposed a methodology for SDG target 6.5 on water management that was simple, but at the same time robust and practical. UN experts and representatives from national statistical offices reviewed and adopted the proposed methodology, and in 2017, more than 170 countries chose to apply the methodology to report through the Centre on the status of their water resources management, making IWRM one of the best reported SDG targets.

In 2018-2022, the period of the previous phase, the focus of the Centre shifted to become more action-oriented. It was clear that simply monitoring and reporting on water-related SDGs was not sufficient to help countries make progress. At the same time there was a clear shift away from talking about climate change impacts as something in the future to something that was increasingly felt here and now, with water issues having a central role. In response to this the Centre adopted a new approach to its work consisting of three elements:

1: Continued and enhanced support to countries with SDG monitoring and reporting.

Despite COVID-19 challenges, UNEP-DHI Centre received and processed water management data from more than 170 countries in 2020 as part of the second round of global reporting. More than 60 in-country, multi-stakeholder reporting workshops with approximately 2400 participants were supported, which helped to ensure a range of opinions were taken into account. Once again, this was one of the best reported SDG targets. At the same time, the Centre supported UNEP in a collaboration with the European Commission and Google using satellite data to measure the status of freshwater ecosystems in support of SDG target 6.6. The Centre then went on to win a competitive bidding process to both host the monitoring platform and provide closer technical support to the platform's maintenance and further development, as well as country reporting. As a result, more than 180 countries reported on the state of their freshwater ecosystems in 2020.

2: Countries' challenges and solutions identified and prioritized based on SDG monitoring and reporting.

All countries reporting on water management receive a “scorecard”, which shows SDG progress and details areas of success, as well as those requiring special attention. In recognition of the important role of the private sector, the Centre developed the Match! Water Solutions Portal in collaboration with UNEP Partnership on Climate and Development and the UN Climate Technology Centre and Network (CTCN). Match! puts people with water problems in touch with solution providers. Recorded numbers of users and participants for these various products and events ran into the tens of thousands of people from all continents and a range of expertise.

In addition to the above, the Centre collaborated with the Global Water Partnership to create the SDG6 Support Programme (a long-term strategic, programmatic initiative), which now guides countries on how to identify solutions, develop action plans, mobilize stakeholders and find funding sources for activities that will promote progress towards the water-related SDGs. General guidance is made publicly available to all countries, with direct assistance provided to 22 countries based on a combination of demand and selected screening criteria.

Communication of the above was geared towards knowledge sharing and sensitization on key issues through media such as official global and regional UN reports and specific online information portals, as well as webinars and online training courses on cross-cutting issues such as climate, gender and nature-based solutions.

3: Decision support tools and technical assistance to countries to address climate change and other key issues.

Tool development and technical assistance is guided by the key challenges and solutions identified and prioritized as described above. Tools of special note include the UN Convention to Combat Desertification's Drought Toolbox, the Flood and Drought Tools Portal, the Freshwater Ecosystem Explorer, the Cascade platform for climate and water resources planning and management and a new tool for monitoring freshwater sources of marine plastic litter. All tools developed are made freely available and are typically maintained for a period of least 5 years.

Since 2018, the Centre has developed and carried out capacity building webinars and training courses for thousands of participants in over 100 countries and leveraged more than USD 5 million of additional funding for target in-country action from entities such as African Development Bank, European Union, European Space Agency, UK Government, Green Climate Fund, Global Environment Facility, Climate Technology Centre and Network and Swiss Development Cooperation to provide direct technical assistance, drawing on DHI's leading knowledge and technologies in the following countries: Bangladesh, Cambodia, Ethiopia, Ghana, Guinea, Kenya, Laos, Mongolia, Myanmar, Senegal, Somalia, Togo, and Tunisia (13 in total). In several of these countries longer-term partnerships are in the process of being forged, providing an opportunity for longer-term engagement. This model can be carried over and expanded upon in the coming phase, and also offers scope for engaging with various Danish embassies and their water programmes including strategic sector cooperation on water issues.

The Centre's long-term target is to help countries achieve sustainable water management, which is a massive challenge given the scale of the challenge. However, from 2017 to 2020 the global status of sustainable water management increased from 49 % to 54 % (5%) in a relatively short period of time (measured as part of SDG 6.5.1). Beneath this modest global number are cases where positive change is taking place. For example, in the 22 countries who were able to report real and rapid progress. The Centre will aim to help countries consolidate and accelerate gains in the coming phase.

Demand for the Centre's services, from both the UN and member states, has increased significantly in recent years due to the relevance of knowledge and technical tools, as well as the quality of its work. A deliberate strategy by the Centre's management team to build on DHI and UNEP's respective strengths and mandates to advance the impact and outreach of its work has also been a significant contributing factor.

In conclusion, the major lessons learned from the Centre's previous work can be summarised as: in earlier phases, the Centre focused on generic IWRM advice – e.g. in the form of awareness-raising, general guidelines and

development of methodologies. In more recent phases, the systematic IWRM progress monitoring, starting in the MDG era and continued in the current SDG monitoring, has allowed the Centre to identify specific needs and priorities of countries and organisations. Concurrently, the importance of IWRM in climate change adaptation has only risen with ever more alarming IPCC reports on climate change and has made countries increasingly willing to engage in IWRM interventions. This identification of specific stakeholders with specific IWRM needs has allowed the Centre to become more focused and problem-solution oriented in its work with stakeholders. Working increasingly directly with stakeholders as recipients of tools and services has also led to a realisation of the need for specific sustainability plans to enhance long-term sustainability of the Centre's services. These lessons have contributed to forming and shaping action-oriented outcomes 3 and 4 of the current phase.

2.6 Institutional capacity building and sustainability

The history of development aid abounds with examples of services and tools that were implemented in recipient organisations for as long as the intervention lasted but were soon abandoned because there was no (or an unsuccessful) plan for anchoring the skills or assets within the recipient organisation in the long term. As a provider of, among others, decision support tools for water resources management, this trap is also relevant for the Centre and therefore merits some consideration.

By the nature of time-bound interventions, it is not possible for a provider to control and guarantee the long-term fate of services and tools nor maintain institutional capacity. However, the Centre has identified the following aspects that will be given priority in its collaboration with countries and recipient organisations:

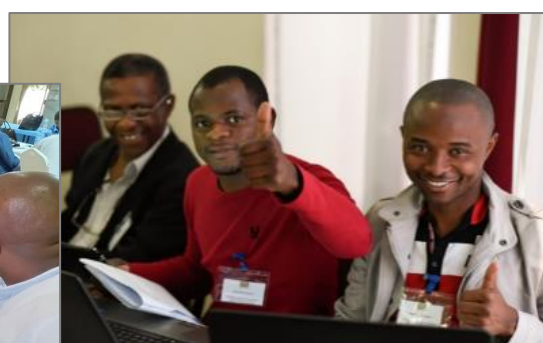
- **Long-term partnerships:** Where possible, the Centre will seek collaborations that run for an extended period and cover more than just a particular intervention (this includes seeking continued collaboration with beneficiaries from the current and previous phases). If a strategic partnership can be established, there are better opportunities to continue sustaining an otherwise time-bound intervention. Broad stakeholder engagement, institutional buy-in, and co-financing are often necessary preconditions for international financing of interventions.
- **Linking to other capacity building activities:** The Centre will seek to identify and collaborate with other capacity building initiatives in the country that could contribute to leveraging the capacity building effort by the Centre – and vice versa. Danish Embassies may be an entry point to assist in this process – or may be a vehicle in their own right for establishing a more consolidated capacity building programme. The Centre's close relations to the UN-family through UN-Water, the Global Water Partnership and Cap-Net are other avenues that will be exploited.
- **Tailor-made interventions:** In designing tools and services, particularly decision support tools, emphasis will be given to working with the beneficiaries (e.g. government agencies) to ensure that the tools are suitable for the local context. It will be ensured that training is given to the most appropriate individuals, is recorded and shared whenever possible. To ensure the right people are trained, desired trainee profiles will be prepared in advance and discussed with the decision-makers assigning trainees.
- **Preparing sustainability plans:** The Centre will continue a practice that has already begun and offer the possibility of a sustainability plan to ensure the longevity of the intervention. Such plans are case specific and may include details on training, recommendations for further development, ideas for upscaling and further financing, etc. Sustainability plans will also be part of the Centre's system for monitoring, evaluation, accountability and learning (MEAL, see section 8).
- **Evaluation of interventions:** After completion of an intervention, an evaluation will be carried out to learn what worked and what could be improved. This includes evaluation of training by questionnaires to trainees but could also include impact assessment of the training sometime after the training, in accordance with procedures and formats to be described in the MEAL system to be prepared (section 8).

Capacity building and sustainability are not only beneficial for recipient organisations – the Centre also has a direct interest in strong recipient organisations. For the Centre to achieve the financial targets of the next Phase, significant additional funding is needed, and strong and capacitated organisations are more likely to show ownership of interventions and provide co-financing for the Centre’s activities.

Institutional Capacity and UNEP DHI-Centre

Building and maintaining institutional capacity is an important consideration in all project interventions. To start with, it is important to ensure that the proposed tools and assistance are suitable and localized for the context. This is typically done in dialogue with local partners, including the direct beneficiary organizations.

Specific training is invariably part of the assistance provided and advances in information technology have offered new opportunities for support. For example, in training sessions more experts can make contributions online and the sessions themselves can be recorded for future reference. Furthermore, the Centre has the ability to offer further online training post-project, free to countries and at a relatively low cost the Centre. This was the case recently in a project where the Kenyan authorities wanted even more people to be trained in the use of a particular tool.



In some cases, beneficiary organizations are unable or unwilling to host and maintain the tools on their own servers. In such instances, the Centre can arrange to host and maintain the tools after the project is completed to ensure that they remain available and up-to-date. If/when the beneficiary decides to take over the hosting, the Centre is on hand to support the transfer.

A more recent development is that the Centre has started to work with project partners to develop sustainability plans. The contents of these plans are case specific but are typically owned by the recipients and are geared towards ensuring the longevity of the assistance provided, and may cover issues such as those mentioned above, as well as future improvements and recommendations, and options for upscaling and access to additional financing.

3. Programme objective and outcomes

The development objective of the programme cooperation among the parties is “Supported country partners are implementing sustainable climate adaptation, nature management and pollution reduction actions based on improved water resources management”.

Realization of the development objective will primarily be measured using SDG indicator 6.5.1 on the status of IWRM. UNEP is the official Custodian Agency for the 6.5.1 indicator (the status of which is measured on a scale of 0-100), and the Centre is directly responsible for carrying out monitoring and reporting on the indicator under UNEP’s guidance.

The work approach will involve a continuation and further strengthening of the current three-step process, which can be directly linked to desired outcomes as outlined below. The “new to this phase” rows highlight the main differences to the previous phase as a result of increased resources and changing demands and needs.

<p><u>Step 1 - SDG data monitoring & reporting:</u> UNEP-DHI Centre provides direct technical support to two of the three water-related SDGs for which UNEP is the official Custodian Agency. The work involves working with countries to assess the state of their water management and ecosystems, with data being received from over 185 countries in the past 5 years.</p>	<p><u>Outcome 1 – Linked to global SDG data reporting:</u> Is about countries reporting data to the United Nations on a periodic basis and in line with agreed global reporting timelines on the status of: a) sustainable water management (SDG target 6.5, indicator 6.5.1); and b) the protection and restoration of water-related ecosystems (SDG target 6.6, indicator 6.6.1).</p>
<p>New to this phase: In the face of competing development demands, the Centre will need to increase its efforts to help countries maintain their focus on monitoring and reporting the state of their water resources and its management. Also, greater attention will be given to the newly acquired role of supporting the development and maintenance of the Freshwater Ecosystems Explorer (6.6.1 app) together with Google and other partners.</p>	
<p><u>Step 2 - Transforming SDG data into actionable information and decision support tools:</u> UNEP-DHI Centre builds on the above monitoring work to determine status and issues, identify and prioritize actions, and develop and disseminate decision support tools that promote sustainable water management. Building on this, selected countries will be offered assistance via the SDG6 Support Programme, which helps countries develop action plans to accelerate progress.</p>	<p><u>Outcome 2 – Linked to the identification of challenges and solution-oriented tools made freely available:</u> Is about countries’ water management and freshwater ecosystem challenges and solutions being identified, prioritized and communicated based on the monitoring and reporting of: a) SDG target 6.5, indicator 6.5.1 (sustainable water management); and b) SDG target 6.6, indicator 6.6.1 (protection and restoration of water-related ecosystems). Decision Support tools that can address challenges are made freely available.</p>
<p>New to this phase: The Centre will look to further leverage its close relationship with DHI to make more of DHI’s leading technical water tools freely available for a broader audience. Closely linked to this is the ambition to make tools developed in Step 3 available and relevant for a greater number of countries. The format is envisioned to be some kind of “toolbox”. In addition to this will be online solutions such as Global Wetlands Watch, which will use earth observation data to monitor and protect some of the planets most important and fragile resources.</p>	
<p><u>Step 3 – Implementing projects at country level focussed on climate, ecosystems, and pollution issues:</u> Building on step 2, UNEP-DHI Centre works with national governments and regional authorities to formulate and implement projects that promote sustainable water resources</p>	<p><u>Outcome 3 – Linked to Climate Action:</u> Is about increased country resilience to climate change and extreme events, through direct expert assistance in projects at country level. This involves the application of specialized knowledge, skills and technology tools to address floods, droughts, and coastal issues linked to impact areas e.g. agriculture,</p>

<p>management, by drawing on UNEP and DHI's complementary strengths (+partner network).</p>	<p>energy, industry, urban development, freshwater ecosystems and human well-being.</p>
<p>(Note: This work is divided between two separate but related outcomes (3 and 4). The rationale for this division is that the “climate” area is much larger and requires special attention.)</p>	<p><u>Outcome 4 – Linked to Ecosystem and Pollution</u> Action: Is about increased country ability to understand and address key water management challenges, through direct expert assistance in projects at country level. This involves the application of specialized knowledge, skills and technology tools on ecosystem and pollution issues linked to impact areas e.g. water quality/plastics, water-use efficiency and ecosystem health/services.</p>
<p><u>New to this phase:</u> All three partners have a strong desire to see the Centre further increase its demand-driven work in assisting countries implement solutions. There will be expanded efforts to attract additional external financing to support the work (see supplementary results indicator on attracted/leveraged financing). This will require some form of dedicated resource mobilization strategy and strengthened strategic partnerships. Efforts will be made to explore opportunities to support the water-related activities of selected Danish embassies in Africa and Asia. The strategy is not a single document but an active and multifaceted approach that involves dialoguing and working with various partners (e.g. UN partners, NGOs, Danish embassies, DHI departments etc.) to identify collaboration and funding opportunities. In addition, a “funding opportunities” note that identifies and evaluates various funding sources will be periodically updated.</p>	

4. Theory of change

The diagram below illustrates the linkages between the proposed outcomes (described in section 3 and further specified in the Results Framework in section 5), the development objective, the global agenda for sustainable development, and the strategic aims of inclusive green growth, peace and stability, partnerships, engagement and coordination.

The links from the development objective to the expected impacts, outcomes and outputs are established in figure 1 below. The horizontal arrows at the action and output levels indicate the support through the Water SDG towards the other SDGs in Agenda 2030, the 2015 Global Climate Agreement and the Sendai framework on disaster risk reduction. As mentioned above, a carefully managed partnership approach is required to leverage the comparative advantages of the Centre and maximize its contribution towards joint achievement of the expected impacts.

Figure 1: Theory of Change

High-level impact	Climate resilient water resources management supports sustainable development		
Assumptions	<ul style="list-style-type: none"> a. Supported countries share their water resources management experiences and results with other countries b. The water resources management practice of supported countries is recognized as 'best practice' and adopted universally 		
Development objective	Supported country partners are implementing sustainable climate adaptation, nature management and pollution reduction actions based on improved water resources management		
Assumptions	<ul style="list-style-type: none"> c. Supported countries prioritize and invest in sustaining the technical management capacity obtained through the Programme d. Supported countries prioritize climate, nature and pollution management action over other potentially competing objectives 		
Outcomes	Countries report to the UN on sustainable water management; and the protection and restoration of water-related ecosystems	Countries' water management and freshwater ecosystem challenges and solutions are identified, prioritized and communicated	Country partners have specialized knowledge and skills and are implementing water-related adaptation strategies and plans, and technology tools to address floods, droughts and coastal issues linked to impact areas Country partners have specialized knowledge and skills related to key water management challenges and are applying technology tools to address ecosystem and pollution issues linked to impact areas
Outputs Based on needs, demands and available resources	Step 1 outputs: <ul style="list-style-type: none"> - Official UN monitoring methodologies periodically revised and approved - Approved and quality assured SDG data from countries 	Step 2 output examples: <ul style="list-style-type: none"> - SDG result information portals and official reports - Open online capacity building training courses and other sensitization and guidance products - Open online technical tools and to support issue sensitization, quantification and decision making - National SDG-related Action Plans or similar 	Step 3 output examples: <ul style="list-style-type: none"> - National water-related adaptation strategies and plans - Tailored technical tools to help regional and national authorities make more informed decisions - Tailored online/face-to-face training to support local capacity development - Requested technical reports and/or similar - Country or regional authority driven project proposals or similar
Action Guided by key enabling actions identified in UN SDG monitoring and reporting	Step 1: Support to UN SDG monitoring and reporting on water management and freshwater ecosystems (SDGs 6.5 & 6.6) Value: Knowledge base of status from global to local levels established and maintained Geographical scope: Global Direct beneficiaries: <ul style="list-style-type: none"> - UN member states - Relevant regional authorities - Selected national authorities - Organizations involved in development issues 	Step 2: Transforming SDG data into actionable information and decision support tools Value: Key challenges are identified, with solutions developed and disseminated Geographical scope: Global/ regional Direct beneficiaries: <ul style="list-style-type: none"> - Relevant regional authorities - Selected national authorities - Organizations involved in development issues 	Step 3: Implementing on-the-ground projects focused on water-related climate, ecosystem and pollutions issues (to be defined and using additional donor funding as yet unsecured) Value: Direct project assistance to a limited number of countries/ regions based on key issues on a demand-driven basis Geographical scope: Regional/ national/ local (depending on demands) Direct beneficiaries (expected): <ul style="list-style-type: none"> - Relevant regional authorities - Selected national authorities - Local stakeholders (e.g., communities/civil society groups, farmer, fisher and forestry organizations, industries etc.)
Barriers	Based on UN SDG monitoring and reporting findings: <ul style="list-style-type: none"> - Political will - Lack of understanding of the importance of sustainable water management and the value of ecosystems - Limited cross-sectoral coordination and management activities - Insufficient financing - Weak capacity of institutions and limited capacity of professionals - Insufficient monitoring, and data- and information-sharing - Outdated or ineffective legal frameworks 		
Problem	Unustainable management of water resources in the face of climate change has serious social, political, economic and environmental impacts that threaten sustainable development		
Key points of note:	<ul style="list-style-type: none"> a. Barriers are addressed in a cross-cutting manner between the three action steps, but on varying geographical scales and with adjusted emphasis. b. Beneficiaries change between the three action steps as the focus of work becomes more specific i.e. moving from global monitoring in step 1 to assisted interventions in step 3. c. Step 3 is primarily supported by additional leveraged funding from other sources, which are as yet unsecured. d. The guiding criteria for the selection of projects in step 3 include considerations such as country demands and needs, the availability and conditions of donor funding, the Centre's capacity and ability to assist. e. Partnerships with organizations with complementary interest and skills are important for being able to provide more holistic assistance, leveraging assistance and avoiding a duplication of efforts. f. The work is focussed on providing technical support to UNEP's mandate and role vis-à-vis UN Member States, and not on activities covered by other UN agencies and NGOs. However, synergies and areas of common interest and/or scope to support good work by organizations are welcomed. 		

The point of departure for the theory of change is that if countries report to the UN on their water resources management and protection status (Outcome 1), it will create the necessary knowledge base to help identify and prioritize freshwater and ecosystem challenges at country level and find solutions to these issues (Outcome 2). This requires a sufficient number of countries to be interested in learning from and acting upon their progress monitoring and willing to engage in processes to improve their water resources management. Judging from the comments in countries' reporting on SDG 6.5.1, such interest is present. The Centre's strong network with national and regional water management organisations will facilitate such dialogue with interested countries. Furthermore, the Centre's close links to UN-Water members, Cap-Net and Global Water Partnership, with their networks at country level, will be instrumental in engaging countries.

Working with countries (national governmental or regional organisations) to increase their capacity to adapt to water-related climate change (Outcome 3) and increase their capacity to address ecosystem and pollution issues (Outcome 4) will strengthen partner countries' ability to implement improved water resources management that adapts to climate change, protects ecosystems and controls pollution (development objective). Enhanced climate change adaptation and improved natural resource management and pollution control will reduce the vulnerabilities of country citizens, especially those highly dependent on water and natural resources for sustaining their livelihoods. Where relevant and possible, the Centre will take a gender-sensitive approach to delivering solutions and services, with a view to contributing to reducing gender-related vulnerabilities, particularly to women and girls. The sphere of influence of the Programme is through the capacity strengthening of relevant water management institutions in those countries that choose to collaborate with the Centre. Whether these countries will actually implement such improved management practices depends on the political will to prioritize and invest enough in water management to make it happen (assumption c). Many developing countries are under-investing in nature and water management, as evidenced by SDG 6.5.1 monitoring results. It also depends on the trade-off and understanding of the interplay between water and climate action on the one hand and other – sometimes competing and conflicting – societal objectives on the other. In countries with strong vested interests in status quo as regards natural resources management, this could be a serious challenge (assumption d).

Moving along the cause-effect chain from the development objective (*“Supported country partners are implementing sustainable climate adaptation, nature management and pollution reduction actions based on improved water resources management”*...) to the expected high-level impact (*“Climate-resilient water resources management supports sustainable development”*) requires a universal application of water resources management along the lines adopted by the supported countries. For that to happen, supported countries are assumed to share their water resources management experiences and results with other countries (assumption a). Furthermore, it hinges on other countries recognizing such management practices as 'best practice' and actually showing willingness to adopt them (assumption b).

Climate-resilient water resources management is a necessary but not sufficient condition to obtain sustainable development. However, it is beyond doubt that climate-resilient water resources management *does* in fact support sustainable development. As apparent in the SDG framework, sustainable development is a multi-faceted goal, and water management is a contributing factor for several of the SDG goals (e.g. goal 2 on food production, goal 6 on water and sanitation, goal 11 on sustainable cities, goal 13 on climate action, goal 14 on life below water, and goal 15 on land use). The Centre's contribution to achieving climate-resilient water resources management at a global scale is important, yet limited, but due to UNEP's mandate and role in the international water agenda, there is probably no better platform for the Centre to pursue this from than a partnership with UNEP.

5. Summary of results framework

Progress will be measured through UNEP-DHI Centre’s monitoring framework focusing on a limited number of key outcomes and corresponding outputs and their associated indicators. The following is a summary of the results framework in annex 3. Where appropriate, gender-disaggregated indicators have been included at output level.

Programme title		UNEP-DHI Centre – Climate Action in the 2030 Agenda through Sustainable Water Management
Development objective		Supported country partners are implementing sustainable climate adaptation, nature management and pollution reduction actions based on improved water resources management
Impact Indicator		SDG core indicator 6.5.1 on the degree (zero – 100) of integrated water resources management (IWRM) implementation in countries
Baseline	2020	The global average for the degree of IWRM implementation in the SDG Baseline study was 54 out of 100, corresponding to ‘medium-high’. (For the purpose of long-term monitoring, it could be noted that the baseline of 2017 was 49, corresponding to ‘medium-low’)
Target	2030	Long term target (2030) is all countries in the “full implementation” of IWRM quartile (score 75 - 100) (SDG target 6.5); progress towards the target is monitored every 3 – 4 years.
Outcome 1: Countries report to the UN on sustainable water management (SDG 6.5.1); and the protection and restoration of water-related ecosystems (SDG 6.6.1)		
Outcome indicator		Number of countries reporting in <u>3rd reporting period</u>
Baseline	2022	>170 countries submitted data for the <u>2nd SDG Global Reporting period</u>
Target	2026	>180 country submit data for <u>3rd SDG Global Reporting period</u>
Outcome 2: Countries’ water management and freshwater ecosystem challenges and solutions are identified and prioritized based data from outcome 1		
Outcome indicator		Number of countries assisted in identifying challenges and prioritizing solutions, or number of people using challenge and solution knowledge products (as appropriate)
Baseline	2022	No countries have been assisted No knowledge products have been developed/enhanced/disseminated
Target	2026	a) 20-25 countries assisted in identifying challenges and prioritizing solutions b) 5 challenge and solution knowledge tools developed/enhanced and disseminated c) 4500 users of new/enhanced challenge and solution knowledge products
Outcome 3: Country partners have specialized knowledge and skills and are implementing water-related adaptation strategies and plans, and technology tools to address floods, droughts and coastal issues linked to impact areas e.g. agriculture, energy, industry, urban development, freshwater ecosystems and human well-being.		
Outcome indicator		Number of countries supported to build upon IWRM to advance national adaptation planning and build long-term response options and early warning systems for droughts and floods; or number of people using technical and policy guidance products (as appropriate)
Baseline	2022	No countries supported to develop water-related adaptation strategies and plans No new policy or technical guidance products have been developed/enhanced/disseminated No countries have been supported with technology and tools
Target	2026	a) 5 countries supported to develop water-related adaptation strategies and plans b) 4-6 policy or technical guidance products with 3000 users c) 10-12 countries supported with technology and tools
Outcome 4: Country partners have specialized knowledge and skills related to key water management challenges and are applying technology tools to address ecosystem and pollution issues linked to impact areas, e.g. water quality/plastics, water-use efficiency and ecosystem health/services.		

Outcome indicator		Number of countries supported with technology tools, or number of people using technical and policy guidance (as appropriate)
Baseline	2022	No policy or technical guidance products have been developed/enhanced/disseminated No countries have been assisted
Target	2026	a) 8-10 countries assisted with technology and tools b) 4-6 policy or technical guidance products with 3000 users
Supplementary result indicator		
Result		Additional financial resources attracted/leveraged to support work (beyond the programme budget)
Result indicator		Contracts/agreements, additional resources acquired that are attributable to UNEP-DHI's engagement
Target	2023	4 million \$
Target	2026	10.4 million \$

6. Summary inputs/budget

This section contains a summary of budget information, while annex 5 provides more detail.

A total of DKK 60 million, equivalent to approximately USD 9.3 million (based on USD 1: DKK 6.45), covering a period of four years will be made available from the Government of Denmark to UNEP to support the work of UNEP-DHI Centre for the engagements described in this document. The transfer of funds will be detailed in the Donor Agreement between UNEP and the Danish Ministry of Foreign Affairs. Funding from the Danish Ministry of Foreign Affairs will be transferred to UNEP in four equal annual installments.

Overall budget	Total DKK
Outcome 1: Countries report to the UN on sustainable water management (SDG 6.5.1); and the protection and restoration of water-related ecosystems (SDG 6.6.1)	9,000,000
Outcome 2: Countries' water management and freshwater ecosystem challenges and solutions are identified and prioritized, based data from outcome 1	15,000,000
Outcome 3: Country partners have specialized knowledge and skills and are implementing water-related adaptation strategies and plans, technology tools to address floods, droughts and coastal issues linked to impact areas e.g. agriculture, energy, industry, urban development, freshwater ecosystems and human well-being.	18,000,000
Outcome 4: Country partners have specialized knowledge and skills related to key water management challenges and are applying technology tools to address ecosystem and pollution issues linked to impact areas, e.g. water quality/plastics, water-use efficiency and ecosystem health/services.	12,000,000
Administration, monitoring and mid-term review	6,000,000
Total	60,000,000

Funding flows from the Danish Ministry of Foreign Affairs to UNEP in Nairobi where UNEP related staff costs, costs for reviews and terminal evaluation and "Programme Support Costs" (PSC) are deducted. The remaining funds flow from UNEP to DHI. Upon finalization of the programme, unused funding and any interest accrued will be returned by UNEP to the Danish Ministry of Foreign Affairs, unless otherwise agreed.

DHI will make an estimated contribution of approximately USD 650,000 through a 10% discount on its staff cost rates amounting to 10 % discount on breakeven costs. In many cases, where the activities of the Centre have synergies with DHI's strategic priorities, DHI's in-kind contribution is expected to be greater than that noted above. The inputs of DHI staff will be accounted for based on the actual breakeven costs of the individual staff members engaged in the work.

UNEP will make an estimated contribution of approximately USD 770,000 primarily through a reduction in administrative fees (Programme Support Costs (PSC) and an in-kind contribution of staff time that will be drawn upon to assist the programme in achieving its ambitions.

Given that the funding made available through the three partners is recognized as being insufficient to cover all expected costs to deliver the expected work, it is estimated that an additional USD 10.4 million in additional/leveraged funding will be required from other sources. The full programme, including partner contributions and leveraged funding, is estimated to have a value of USD 19.7 million/DKK 127.2 million.

7. Institutional and management arrangements

This document is an annex to a bilateral Donor Agreement between the Danish Ministry of Foreign Affairs and UNEP that describes the management arrangements. A separate project cooperation agreement (PCA) will be made between UNEP and DHI as the Host Organization for the Centre.

A Framework Agreement between UNEP and DHI outlines the nature of the long-term collaboration between the two organizations to be undertaken via the UNEP-DHI Centre. The Centre has an Advisory Board, composed of high standing representatives - one from UNEP, one from the Danish Ministry of Foreign Affairs and one from DHI, as well as 2-4 high standing individuals from strategically relevant organizations or with strategically relevant backgrounds, who serve in their personal capacity. Meetings of the Advisory Board, which occur at least annually, provide a platform for taking stock of the progress in the activities described, and the development of a proposal for a new framework for continued core funding.

Strategic oversight is also provided by the UNEP – Denmark Partnership Committee, composed of executive level representatives from UNEP, the Danish Ministry of Foreign Affairs, the host organization of the UNEP Partnership on Climate and Development and DHI. Meetings of the Partnership Committee, which occur at least annually, provide a platform for dialogue on matters related to strategic planning, coordination and collaboration. This partnership platform is important for ensuring a coordinated approach on shared engagements, with a view to pursuing synergies within the water-related climate change and environment area of work.

UNEP receives a significant amount of support from the Danish MFA through various initiatives and there are good opportunities for synergies and cooperation across this Danish support. In order to foster these synergies, an internal, multilateral contact group for UNEP will be established and facilitated by the Danish MFA. The aim of the contact group is to share knowledge, monitor results and more actively apply Danish experience with UNEP. Relevant departments in the Ministry of Foreign Affairs, the Ministry of Environment, the Permanent Representation in Nairobi, as well as other relevant bilateral Danish Missions, will participate in the contact group.

8. Monitoring, evaluation, accountability and learning

Previous review reports have encouraged the Centre to adopt more comprehensive processes and tools for monitoring and evaluation of its work, focusing on measuring impacts and lessons learned. This serves a dual purpose of demonstrating and documenting accountability, both internally towards the founding partners (UNEP, Ministry of Foreign Affairs of Denmark, and DHI) and externally towards the public and other stakeholders.

The Centre has learned lessons from previous work (for example, the formulation of outcomes 3 and 4 is the result of lessons learned from experiences from previous programme cycles) but is acknowledged that this could take a more structured and consistent shape.

The challenge is to develop a monitoring, evaluation, accountability and learning (MEAL) system that strikes the right balance between a) being a useful tool for collecting and presenting information that documents the Centre's results and impact and can inform adjustment and development of the Centre's work, even during implementation,

and b) not being overly burdensome and demanding in terms of resources to apply it. In the initial period of the new phase, the Centre will develop, with internal resources or through an external consultant, a lean MEAL system describing what results will be measured and how they will be measured. Issues to be covered in the MEAL system include, e.g. sustainability plans for interventions (Section 2.6), indicators (gender-disaggregated where applicable), sources of data, means of verification, who is responsible for monitoring, and format for reporting. It is suggested to take stock of the system and lessons learned at two steps in the programme cycle: after 1 year and after 3 years.

9. Financial management, planning and reporting

While the outputs and outcomes form the operational framework for the Centre, rolling annual work plans capturing the longer duration of activities will provide the required detail on specific activities. For the purpose of this programme, annual work plans based on the agreed outputs and outcomes within this programme document will be agreed between UNEP and DHI, with consideration of inputs from the Advisory Board, as is the current practice.

Management processes are determined by a combination of the contractual terms and conditions of the agreements between UNEP and DHI, and DHI's ISO certified business practices. The UNEP employed Chief Manager of UNEP-DHI Centre provides oversight on UNEP's behalf, and reviews all reports before formal submission and approval. Daily programme management is the responsibility of the DHI employed Deputy Chief Manager, who works under the guidance of the UNEP employed Chief Manager. Financial aspects and record keeping is handled by DHI as the host institution.

UNEP-DHI Centre will produce half-yearly progress and financial reports for UNEP. The programme accounts for UNEP-DHI Centre, hosted by DHI, will be subject to an annual audit carried out by qualified independent accountants. Progress and financial reports by UNEP-DHI Centre will be shared with the Danish Ministry of Foreign Affairs.

UNEP shall provide the Danish Ministry of Foreign Affairs with the following reports prepared in accordance with UNEP's accounting and reporting procedures:

- a) A progress report on the status of progress against the results framework in this Programme Document, and including an estimate of leveraged funding and resource use across the main work areas, every February for the duration of the Agreement.
- b) A financial report on the status and use of funding against the UNEP budget lines specified in this Programme Document (budget table in Annex 5, page 37), every February for the duration of the Agreement.
- c) A final progress report summarizing the result of activities against the results framework in this Programme Document, and including an estimate of leveraged funding and resource use across the main work areas, within six months after the date of completion or termination of the Agreement.
- d) A final financial report on the status and use of funding against the UNEP budget lines specified in this Programme Document, within six months after the date of completion or termination of the Agreement.

The programme will be subject to a mid-term evaluation organized by UNEP. The terms of reference will be developed in accordance with directions from UNEP with inputs from the Danish Ministry of Foreign Affairs and DHI. It is expected that the mid-term review will have a specific focus on assessing the Centre's enhanced focus on country implementation, monitoring of impacts and implementation of the MEAL system. The results of the mid-term review will guide the Centre in its alignment with Denmark's development cooperation strategy, UNEP's Medium-term Strategy and Freshwater Strategy, and in preparation of a subsequent collaboration agreement concerning the UNEP-DHI Centre.

10. Risk management

The main risks associated with the work can be divided into contextual, programmatic and institutional categories. Likely risks with notable impacts are the ones that require special attention, which in some cases may serve to influence programme design and implementation. The main risk factors, including consideration of likelihood, impact, and the risk response are included in annex 4. Monitoring and reporting of risks will be incorporated in the periodic reporting, when relevant, and will also be included as a discussion point in Advisory Board meetings when appropriate.

Annex 1: Context Analysis

1. Overall Development Challenges, Opportunities and Risks

As recognized by the Rio+20 Outcome Document, water generated by ecosystems is at the core of sustainable development and is critical for socio-economic development². Freshwater is a finite resource with growing demands from competing uses. Up to two thirds of the World's population are projected to live under water stress by 2025³. Furthermore, water use for domestic purposes, agriculture and industry are all generating wastewater and causing increased pollution⁴.

These concerns, linked to development issues, climate change, and stability, led to a dedicated SDG on Water (SDG 6) approved by UN Member States in September 2015 as part of Agenda 2030⁵. The substantive targets under SDG 6 (i.e. Targets 6.3 – 6.6) address water pollution, water quality, competing uses, water use efficiency, water governance and water related ecosystem services. These are all core to UNEP's global mandate.

Apart from the dedicated SDG on water, the dependence on adequate, reliable and clean water resources is fundamental and evident throughout the 2030 Agenda. Most of the water-related interlinkages are synergistic, so that the targets in SDG 6 reinforce and supports targets in the other SDGs, but there are also water-related trade-offs that need careful attention when implementing the 2030 Agenda⁶. Of particular importance is the impact of water-related disasters (floods and drought, linked to climate change⁸) addressed in SDG 11 on sustainable cities and SDG 13 on climate.

This programme builds on the strong role and mandate of UNEP-DHI Centre for assisting UNEP with country support with reporting on SDG Target 6.5 on IWRM implementation. In the previous phase this partnership has been further strengthened by using the Centre's skills to support similar work linked to SDG Target 6.6 on freshwater ecosystems. In this new phase the Centre will begin to support UNEP's work with countries on Target 6.3 on water quality. This role will be used as a platform for a dialogue with and within countries on how to strengthen water resources management across sectors and stakeholders at national, regional and city level, including the private sector.

2. Political Economy and Stakeholder Analysis

Water resource development and management has been a constant challenge for humankind. Initially, the main challenge would primarily have been one of access. However, as populations have grown and societies have increased in sophistication and resource consumption has become unsustainable, the challenges and their complexity have correspondingly increased. At the same time, the value of water has also risen tremendously, due to its finite availability and its multiplicity of uses for domestic, energy, agriculture/aquaculture and industrial purposes. Stories of conflict between water users at every imaginable geographical scale and development context are far from rare. In addition to this are direct links to socio-economic, political and environmental challenges such as child mortality, gender equality, migration, resource competition and biodiversity loss. The growing impacts of climate change on the hydrological cycle serve to provide additional fuel to the proverbial fire.

The aim of UNEP-DHI Centre is to promote sustainable water management through Integrated Water Resources Management (IWRM). IWRM is an approach that helps to balance competing water demands from across society and the economy, without compromising the sustainability of vital ecosystems. This is achieved through coordinated policy and regulatory frameworks, management arrangements and financing. In very simple and practical terms, for the Centre this involves issue sensitization and action advocacy, complemented by technical support to planning, measuring and managing.

Some of the challenges the Centre faces when undertaking its work to assist countries can include weak local capacity to absorb and sustain assistance, a lack of political will to cooperate internationally, and a low level of cooperation between intergovernmental agencies. While there are numerous ways that these challenges can be solved or reduced, there are others which can be more difficult. Foremost of these is probably political instability – with Myanmar, Somalia and Sudan being amongst the most recent examples. In the case of Myanmar, the Centre was asked by the UN to stop engagement. In

² UN General Assembly (2012), The Future We Want: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E

³ UN Water (2016), World Water Development Report - Water and Jobs: <http://unesdoc.unesco.org/images/0024/002440/244040e.pdf>

⁴ <http://www.un.org/waterforlifedecade/scarcity.shtml>, <http://www.fao.org/3/a-aq444e.pdf>

⁵ <https://sustainabledevelopment.un.org/post2015/transformingourworld>

⁶ E.g. water demands for economic growth, food, biofuel, hydropower. UNEP-DHI led the preparation of a UN-Water Analytical Brief on interlinkages, <http://www.unwater.org/publications/water-sanitation-interlinkages-across-2030-agenda-sustainable-development/>

⁷ <https://www.unwater.org/app/uploads/2016/08/Water-and-Sanitation-Interlinkages.pdf> (see annex 1)

⁸ 2018 report from World Economic Forum, <http://reports.weforum.org/global-risks-2018/global-risks-landscape-2018/#landscape>

Somalia, travel remains very challenging. While in Sudan, a military coup meant that project preparation was put on hold. However, despite the challenges in working in these types of countries, it is recognized that these are also the ones that are most in need of the kind of help the Centre can provide.

While as a single actor, the Centre has very little chance of effecting any kind of change of real significance on a macro scale, the reality is that the Centre operates in a landscape populated by numerous other organizations with similar interests and ambitions with which it can partner to achieve greater outcomes and impacts. Given that there are few if any organizations with the same technical skills and profile as the Centre, making partnerships is usually not an issue. The most important partner for the Centre is the UNEP's Freshwater Ecosystem Unit within the Ecosystems Division, which has been the Centre's main anchor point within UNEP since its foundation in 1996. The table below includes other the key partners organized in groups, with comments on what are regarded to be their main interests in partnering, as well as their expected contributions to the work.

Key partner groups	Main interests in partnering	Expected contributions
Various parts of UNEP working with freshwater issues (e.g. UNEP GEF team, Global Programme of Action, Regional Offices, Climate & Security Unit, Climate Adaptation Unit, Nature and Climate Branch, Science Division etc.)	Support from the Centre to be able to exercise UNEP's mandate to assist countries with water-related management, climate and nature issues ranging from international and regional policy to regional and national action.	Guidance on the focus of work; access to funding; assistance with defining actions; partner contacts; support with implementation and follow-up
Other UN bodies including UN-Water, World Meteorological Organization, Climate Technology Centre and Network, Convention to Combat Desertification, Economic Commission for Europe etc.	Technical assistance in the form of specialized knowledge or cutting-edge tools linked to the water-related issues that they work with. On occasion, the work of the Centre can be used to support the institutional ambition of somehow collaborating with UNEP.	Contextual understanding; access to funding; partner networks; technical knowledge
Development partners such as IUCN, Global Water partnership, The Nature Conservancy, World Resources Institute, Copenhagen Climate Centre, Stockholm International Water Institute	Complementary skills based on shared ambitions; technical understanding; country contacts; in-kind financial contributions; donor access; geographical coverage	Complementary skills based on shared ambitions; technical understanding; country contacts; in-kind financial contributions; donor access; geographical coverage; support with sustaining interventions
National and regional government representatives from water dependent agencies, such as local/urban authorities, ministries, river basin organizations and development authorities	Support with monitoring and reporting on water-related SDGs as well as regional targets. Access to financing and technical assistance to address water-related management, climate and nature issues that they are struggling with	Demand for assistance; contextual knowledge; skills and resources; support in helping to plan, execute and sustain interventions
Danish partners including the Danish Ministry of Foreign Affairs and various Danish embassies, the Danish Trade Council (Exportrådet), Dansk Industri, and DANVA (Danish organization for water utilities).	Domain knowledge; network of contacts; collaboration in fields of shared interest; technical support	Domain knowledge; network of contacts; collaboration in fields of shared interest; contextual understanding
Potential donors/funding sources such as the Green Climate Fund, Global Environment Facility, Adaptation Fund international/national government development cooperation agencies (e.g. European Union, UK, Sweden, Switzerland, Netherlands, Germany etc.)	For many of these partners, interaction with the Centre would be indirect and through UNEP or other UN partners. However, the Centre and DHI are well-known and have an excellent reputation as a reliable partner with high quality, high value skills that can help to provide a low risk/high return outlet for funding	Funding to be able to deliver on this programme's development objective.

The ultimate beneficiaries of the assistance provided by the Centre will be the people, including urban citizens, in recipient developing countries, all included in the DAC List of ODA Recipient Countries. Assistance provided and geographical scope will be influenced by country demand, scale of needs, potential for impact, Danida and UNEP's focus, and availability of financing, as well as broader partnership opportunities. Examples of countries of particular interest include, but are not limited to, China, Ethiopia, Ghana, India, Indonesia, Kenya, South Africa, Somalia, Sudan, Tanzania, Thailand, Uganda and Vietnam.

3. Fragility, Conflict and Resilience

The World Bank in a recent report⁹, emphasize that the impacts of climate change will be channeled primarily through the water cycle with grave and uneven consequences for economic growth, migration and civil conflict. Water is a vital factor of production, so diminishing water supplies can translate into slower growth that cloud economic prospects. Some regions could see their growth rates decline by as much as 6 percent of GDP by 2050 as a result of water-related losses in agriculture, health, income, and property—sending them into sustained negative growth. Changes in water availability and variability can induce migration and ignite civil conflict¹⁰. Food price spikes caused by droughts can inflame latent conflicts and drive migration. Where economic growth is impacted by rainfall, episodes of droughts and floods have generated waves of migration and statistical spikes in violence within countries. In a globalized and connected world, such problems are impossible to quarantine¹¹. And where large inequities prevail, people move from zones of poverty to regions of prosperity which can lead to increased social tensions. This is why improved water management is crucial in determining whether the world achieves the Sustainable Development Goals (SDGs) and aspirations for reducing poverty and enhancing shared prosperity.

In recognition of the broad value and significant threats to freshwater, the World Economic Forum's annual Global Risks Reports have consistently ranked "water crises" as amongst the greatest risks to economies, environments and people¹². Other risks that made the list are inextricably tied to water management, access, sanitation, equity, health and ecosystems. They include: extreme weather events; failure of national governance, state collapse or crisis; rapid and massive spread of infectious diseases; and failure of climate change adaptation. Interstate conflict with regional consequences is the biggest risk in terms of likelihood.

A main focus of the proposed programme is to promote integrated approaches to water resources management (IWRM) as a basis for participatory dialogue between all stakeholders, including right holders and duty bearers, via collection and monitoring of data. The unpredictability of extreme weather events is a significant compounding factor for the ability to cope with climate change. This programme will build on tools for drought and flood management and early warning, developed by the UNEP-DHI Centre over the past years. Applying these tools can help increase the resilience of vulnerable countries and communities.

4. Human Rights, Gender, Youth and applying a Human Rights Based Approach

On 28 July 2010, through [Resolution 64/292](#)¹³, the United Nations General Assembly explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realization of all human rights. The Resolution calls upon States and international organizations to provide financial resources, help capacity-building and technology transfer to help countries, in particular developing countries, to provide safe, clean, accessible and affordable drinking water and sanitation for all.

The provision of clean drinking water and access to safe sanitation cannot be solved in isolation, but must be seen in a water resources management context¹⁴. Drinking water is one of many competing uses of water resources, all water is generated by functioning ecosystems as part of the hydrological cycle, and upstream wastewater becomes downstream water intakes. This intricate linkage is clearly articulated in the Outcome Declaration from Rio+20 and is incorporated into Agenda 2030. The outcomes and outputs of this programme directly contribute to equitable sharing of sustainable water resources, from helping countries identify their weaknesses and how they can be addressed, to providing technical guidance and appropriate solutions to address some of their most pressing challenges.

⁹ <http://www.worldbank.org/en/topic/water/publication/high-and-dry-climate-change-water-and-the-economy>

¹⁰ https://www.unesco.nl/sites/default/files/dossier/climate_change_water_stress_conflict_and_migration_0.pdf?download=1

¹¹ <https://openknowledge.worldbank.org/bitstream/handle/10986/26207/W16005.pdf?sequence=2&isAllowed=y>

¹² <https://www.weforum.org/agenda/2015/01/why-world-water-crises-are-a-top-global-risk/>

¹³ <http://www.un.org/es/comun/docs/?symbol=A/RES/64/292&lang=E>

¹⁴ <http://www.unwater.org/publications/water-sanitation-interlinkages-across-2030-agenda-sustainable-development/>

The importance of involving both women and men in the management of water and sanitation and access related questions has been recognized at the global level, starting from the 1977 United Nations Water Conference at Mar del Plata.

The United Nations Environment Programme (UNEP) is committed to promoting gender equality and women's empowerment across all policies and programmes. UNEP's Policy and Strategy on Gender Equality and the Environment¹⁵ is underpinned and informed by the UN System-wide Action Plan on Gender Equality and the Empowerment of Women. This is and is closely linked with the SDGs, which aim to achieve gender equality and empower all women and girls.

There is a close relationship between various aspects water use and management with important gender-related issues. While there are also many expert actors championing the need for positive change, the UNEP-DHI Centre also has a role to play as mainstreaming of gender considerations into water resources management is vital for successful implementation of IWRM. Gender has become a special focus areas for the Centre, particularly in relation to the SDG 6 monitoring work and project implementation.

The proposed development engagement, in particular outcomes 1 and 2 focused on integrated water resources management, promote transparency and thus opportunities for strengthening participation, including of women and youth, accountability and non-discrimination. The tools developed and implemented under components 3 and 4 will help strengthen gender equality by addressing water-related issues that are currently gender biased (such as water access, water use, pollution, resilience to floods and drought).

The programme will help in providing a clear status of women's and broader civil society engagement in water management, which can then be further highlighted in special thematic reports that can be used to sensitize and guide action. Moreover, facilitated in-country dialogues during implementation work will help strengthen the conditions for Human Rights Based Approaches to participatory dialogues between right holders (rural and urban citizens including farmers, households, vulnerable groups, and private sector actors) and duty bearers (water managers at multiple levels).

5. Inclusive sustainable growth, climate change and environment

The 2030 Agenda for Sustainable Development (Transforming Our World) agreed by all countries states: "We recognize that social and economic development depends on the sustainable management of our planet's natural resources. We are therefore determined to conserve and sustainably use oceans and seas, freshwater resources, as well as forests, mountains and drylands and to protect biodiversity, ecosystems and wildlife." "We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations."¹⁶

Freshwater plays a fundamental role in support of the environment, society and the economy. Ecosystems such as wetlands, rivers, aquifers and lakes are indispensable for life on our planet and are vital for directly ensuring a range of benefits and services such as drinking water, water for food and industry including energy, habitats for aquatic life, and natural solutions for water purification and buffering floods and bridging drought periods, among many others. Managed well to address competing demands and ensure their resilience in the face of climate change, disasters and conflict, freshwater ecosystems contribute to mitigating risks, and promoting stability and trust-building measures. As such, they are essential for sustainable development, peace and security, and human well-being¹⁷. Goal 6 targets provide protection from overuse, pollution and other pressures, to safeguard the health of ecosystems and the water-related services they provide¹⁸.

During the negotiations of Agenda 2030, the climate change impacts on water were separated from the water goal and transferred to SDG 11 on sustainable cities and SDG 13 on climate. Climate change and extreme events were also separately addressed in the 2015 Climate Accord and the Sendai disaster Risk Framework¹⁹. However, water is the primary medium through which we will feel the effects of climate change, and women and vulnerable groups bear the brunt of the adverse impacts. Water availability is becoming less predictable in many places, and increased incidences of flooding threaten to destroy water points and sanitation facilities and contaminate water sources. In some regions, droughts are exacerbating water scarcity and thereby negatively impacting people's health and productivity.

The UNEP-DHI Centre draws on the strong expertise and experience at DHI, to provide technical assistance that supports UNEP's global mandate in in the field of water, environment and development, working with partners in a large number

¹⁵ https://wedocs.unep.org/bitstream/handle/20.500.11822/7642/-Gender_equality_and_the_environment_A_Guide_to_UNEPs_work-2016Gender_equality_and_the_environment.pdf?sequence=3&isAllowed=y

¹⁶ <https://sustainabledevelopment.un.org/post2015/transformingourworld>

¹⁷ <https://www.unenvironment.org/resources/publication/un-environments-freshwater-strategy-2017-2021>

¹⁸ <http://www.unwater.org/publications/water-sanitation-interlinkages-across-2030-agenda-sustainable-development/>

¹⁹ <https://www.unisdr.org/we/coordinate/sendai-framework>

of Member States. This technical assistance is scaled up through additional funding from the Global Environment fund (GEF), the Green Climate Fund (GCF), the Climate Technology Centre and Network (CTCN) and other funding sources.

6. Capacity of public sector, public financial management and corruption

The programme supports the implementation of UNEP's Freshwater Strategy. UNEP is uniquely positioned to contribute to the global freshwater agenda and support Member States, as the leading authority that sets the global environmental agenda and serves as an authoritative advocate for global environmental stewardship. UNEP is a well-established, trusted and impartial convening organization for numerous environmental issues. UNEP informs and guides the implementation of international environmental agreements, many of which are also administered by UNEP. At the United Nations Conference on Sustainable Development in 2012 (Rio+20), the role of UNEP was strengthened, with Member States asking for the establishment of universal membership by the General Assembly. Member States simultaneously confirmed UNEP as the programme "that promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system".

UNEP is firmly committed to preventing and detecting fraudulent and corrupt practices. UNEP operations are consistent with the applicable provisions of the UN Charter, the Standards of Conduct for the International Civil Service, the applicable provisions of the United Nations Staff Rules and Regulations, and the UNEP Financial Rules and Regulations and Procurement Manual. UNEP will use reasonable efforts to ensure that the utilization of the Contribution conforms to the highest standard of ethical conduct and that every part of the Organization, as well as all individuals acting on behalf of UNEP, observe the highest standards of ethics and integrity.

UNEP, in accordance with its regulations, rules and directives, will ensure that any allegations of fraud and corruption in connection with the implementation of the Project are addressed. UNEP will, in a timely manner and in accordance with its regulations, rules, policies and procedures, provide information to the Danish Government of any substantiated allegations of fraud or corruption, along with details of actions taken by UNEP to address such allegations.

The UNEP-DHI Centre is administratively hosted by DHI and all financial reporting of activities carried out by DHI staff undergoes independent auditing as part of the reporting procedure. Design of interventions supporting Member States will be based on evaluations of their capacity at relevant levels of the public sector for policy making, enforcement and service delivery as well as budgetary accountability.

7. Matching with Danish strengths and interests, engaging Danish actors and seeking synergies

One of the key pillars of Denmark's new strategy for development cooperation (2021) "The World We Share" is the fight for climate, nature and the environment. Climate change adaptation and water resource management as well as strengthen biodiversity and promotion nature-based solutions play a critical part in this regard. Denmark is globally recognized for both public and private sector strongholds in water. The current programme will strengthen partnerships with private sector stakeholders, including from Denmark. From the stakeholder analysis in section 2, several Danish stakeholders are listed as potential partners. Initial consultations with most of them have been conducted in preparation of the current programme.

UNEP's activities related to water⁴⁰ align with Agenda 2030, focusing on pollution, integrated water resources management, ecosystems and disasters. UNEP is the custodian agency for three of the core indicators under SDG 6. The UNEP-DHI Centre has the responsibility of assisting the monitoring and reporting of SDG target 6.5: "By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate". This target directly underpins the other water-related sustainable development goals and targets, and the data reported by countries gives an excellent starting point for identifying key water issues and how they might be addressed and provides an entry point to addressing system change and private sector engagement. Furthermore, the principles of IWRM look to reconcile various uses and user groups, reducing risk of conflict and enabling increased resource use efficiency, thereby supporting inclusive green growth and stability.

This development engagement seeks to align the work of the UNEP-DHI Centre over the coming years with UNEP's latest Freshwater Strategy (2017-2021) and with Danida's Strategy for Development Cooperation "The World We Share", utilizing DHI's expert knowledge and cutting-edge technologies in the field of water management, to better assist countries in achieving the cross-sectoral water-related Sustainable Development Goals (SDGs). Strategic partnerships will be formed and further developed and synergy will be sought in countries where preferably both UNEP and Danida have existing engagements such as strategic sector cooperation and posted government-to-government advisors and/or country programmes.

The Centre is part of the international climate architecture as a member of the UNFCCC's Climate Technology Centre and Network (CTCN) consortium. In this role it provides expert technical assistance in response to requests from developing countries in developing and implementing projects and accessing financial support for climate change adaptation plans and technologies related to water, as aligned with national adaptation plans, technology needs assessments, Nationally Determined Contributions etc.

There is a massive financial gap between the estimated funds required to achieve the SDGs, compared to current government spending levels, including ODA, and the need for technology solutions also beyond those developed by the Centre. Particular emphasis will be given to making data and monitoring reports linked to and building from SDG indicator 6.5.1 relevant to both policy makers in countries and to private sector investors and solution providers and thus strengthen private sector engagement, including from Denmark e.g. in collaboration with the Trade Council.

Annex 2: Partner Assessment

This annex focuses on the choice of partners i.e. UN Environment Programme and the UNEP-DHI Centre on Water and Environment.

Criteria for selecting programme partners

The UNEP-DHI Partnership - Centre on Water and Environment (UNEP-DHI Centre) between UNEP, DHI and Danida:

- Is well established, well-functioning and located in Denmark. It has a clear and strong value proposition in the diverse and fragmented international water architecture by strategically linking the global mandate of UNEP with the globally recognized expertise of DHI. It is a partnership in accordance with SDG17 and in line with relevant Danish and UNEP's strategies. It builds on UNEP's global legitimacy, convening power and objective of providing science and expert-based input to policymaking and SDG-implementation, which is further strengthened by the expertise of DHI.
- It brings agility and flexibility to the implementation capacity of UNEP in the water area also prioritized in the Danish development cooperation strategy.
- The Centre is part of the international climate architecture. As a member of the UNFCCC's Climate Technology Centre and Network (CTCN) consortium, the Centre cooperates with, for example, the Global Environment Facility, the Green Climate Fund and UN Member States. It provides expert technical assistance in response to developing country support requests that are aligned with national adaptation plans, technology needs assessments, and Nationally Determined Contributions.
- UNEP-DHI Centre has demonstrated ability to deliver high quality support in collaboration with a broad network of partners, and leveraged funding. Strategic partnerships will be scaled up in the current programme.
- It is ready to break new ground exploring modalities and platforms for best engaging private sector – investors and solution providers – including from Denmark, in achieving the water related SDGs where Denmark has global strongholds in both the public and private sector.
- The results framework and planned monitoring have been strengthened and are well aligned with Danida's development objectives.

3. Brief presentation of partners

The United Nations Environment Programme (UNEP) is an agency of United Nations that promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system, and serves as an authoritative advocate for the global environment. UNEP is an active member of UN-Water – a body given the mandate to coordinate the efforts of UN entities and international organizations working on water and sanitation issues.

UNEP-DHI Centre has been in operation since 1996 and has been co-funded by UNEP, Danida and DHI since 2001. The Centre has become a core resource for UNEP's work on freshwater issues and in delivering its Programmes of Work and Freshwater Strategies. This has been achieved by drawing on DHI's expertise in water and programme implementation, and engaging a broad network of other partners.

The host of the Centre, DHI, is an independent, international advisory and research organization established in Denmark and today represented in all regions of the world with a total of more than 1,000 staff in 25 countries. DHI operates on a not-for-profit basis with affiliation to the Danish Academy for Technical Sciences (ATV) and is an approved Technological Service Institute²⁰.

²⁰ A network of independent Danish research and technology organisations under the auspices of the Danish Ministry of Science, Innovation and Higher Education.

4. Summary of key partner features

Partner name What is the name of the partner?	Core business What is the main business, interest and goal of the partner?	Importance How important is the programme for the partner's activity-level (Low, medium high)?	Influence How much influence does the partner have over the programme (low, medium, high)?	Contribution What will be the partner's main contribution?	Capacity What are the main issues emerging from the assessment of the partner's capacity?	Exit strategy What is the strategy for exiting the partnership?
United Nations Environment Programme (UNEP)	The United Nations Environment Programme (UNEP) is an agency of United Nations that promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system, and serves as an authoritative advocate for the global environment.	Low. UNEP had a total income of USD501.7million in 2020 (last accounts available).	High. UNEP is directly involved in the formulation of the initiative. The expected outputs and impacts are in direct support of UNEP's Freshwater Strategy and broader interests.	UNEP will provide oversight of implementation, including guidance on specific focus and content. There is also an in-kind financial contribution, as specified in the budget, an in-kind expertise.	Strength: Global legitimacy and convening power, subject matter knowledge, globally recognized and appreciated role. Weaknesses: Limited financial and resulting limited human capacity and limited country presence. Opportunities: This initiative can help to raise UNEP's profile and attract further financial support, also in the role of implementing agency. Threats: Need to be able to better profile good work and quantify impacts to funders.	No special requirements after end of contract.
DHI	DHI is a not for profit international software development and engineering organization specialized in hydrological modeling software and advisory services. Headquartered in Denmark, DHI has about 25offices throughout the world and approximately 1000 employees. While independent, DHI is associated with the Danish Academy of Technical Sciences and maintains a partnership with the United Nations Environment Programme	Low. DHI had a revenue of about Euro115 million in 2020 (last accounts available).	Medium. DHI is directly involved in the formulation of the initiative.	As host of the UNEP-DHI Centre, DHI will lead implementation, providing the core of technical expertise, ensuring that all obligations are met, and initiating appropriate action should unforeseen challenges arise. There is also an in-kind financial contribution, as specified in the budget.	Strength: Danish organization with globally recognized expertise, and an international reach. Weaknesses: Limited understanding of the full 2030 Development Agenda. Opportunities: This initiative can be used to help leverage additional resources to engage DHI expertise, and other skilled experts to the benefit of UNEP and recipient countries. Threats: DHI operates in a commercial and competitive environment	No special requirements after end of contract.

					where innovation can quickly make some organizations irrelevant.	
UNEP-DHI Centre	<p>Hosted by DHI, the UNEP-DHI Centre has been in operation since 1996 and has been co-funded by UNEP, DHI and Danida since 2001.</p> <p>The Centre is a core resource for UNEP's work on freshwater issues and delivering on delivering its programmes of work and freshwater strategies in support of water related SDGs.</p>	<p>High. While the Centre has typically been able to leverage additional funding above and beyond the core funding provided by Danida. Without core funding operations would be very challenged.</p>	<p>UNEP-DHI Centre has taken lead in developing the programme in accordance with the development objectives of the programme partners (Danida, UNEP and DHI).</p>	<p>UNEP-DHI Centre will deliver against the results framework of the product document in accordance with development objectives of the programme partners (Danida, UNEP and DHI).</p>	<p>Strength: Draws on DHI's unique domain knowledge and technical tools to support UNEP's global mandate and Danida's development objectives.</p> <p>Weaknesses: Reliant on country demand, emerging opportunities and the availability of DHI staff to be able to deliver.</p> <p>Opportunities: This initiative can be used to help leverage additional financial and human resources, including in Denmark.</p> <p>Threats: DHI's survival is dependent on its success in a highly competitive commercial environment</p>	<p>Some activities will continue well beyond the current phase of support to the Centre and will require financing beyond the life of the programme. The Centre constantly works on securing it's long term financial sustainability</p>

Annex 3: Results Framework

Programme title		UNEP-DHI Centre – Climate Action in the 2030 Agenda through Sustainable Water Management
Development objective		Improved sustainable water management underpins the development of solid and sustainable climate, nature and pollution actions
Impact Indicator		SDG core indicator 6.5.1 on the degree (zero – 100) of integrated water resources management (IWRM) implementation in countries
Baseline	2020	The global average for the degree of IWRM implementation in the SDG Baseline study was 48 out of 100, corresponding to ‘medium-low’. (For the purpose of long-term monitoring, it could be noted that the baseline of 2018 was 48, corresponding to ‘medium-low’)
Target	2030	Long term target (2030) is all countries in the “full implementation” of IWRM quartile (score 75 - 100) (SDG target 6.5); progress towards the target is monitored every 3 – 4 years.
Outcome 1: Countries report to the UN on sustainable water management (SDG 6.5.1); and the protection and restoration of water-related ecosystems (SDG 6.6.1)		
Outcome indicator		Number of countries reporting in <u>3rd reporting period</u>
Baseline	2022	>170 countries submitted data for the <u>2nd SDG Global Reporting period</u>
Target	2026	>180 country submit data for <u>3rd SDG Global Reporting period</u>
Output 1.1		
Output indicator		Revised official methodology for 3 rd Global Monitoring of SDG indicators 6.5.1 and 6.6.1
Output indicator		Official methodology for 3 rd Global Monitoring of SDG indicators 6.5.1 and 6.6.1 approved and in place
Baseline	2022	2 nd official Global Methodologies approved by UN and in place
Target	2024	3 rd official methodologies revised, approved by UN and in place, with appropriate gender-disaggregated indicator(s)
Output 1.2		
Output indicator		3 rd Global Monitoring and Reporting Framework for SDG indicators 6.5.1 and 6.6.1 rolled out to all countries with appropriate support
Target	2024	Number of countries supported in <u>3rd reporting period</u> >100 countries reports supported
Target	2026	193 country reports supported
Outcome 2: Countries’ water management and freshwater ecosystem challenges and solutions are identified and prioritized based data from outcome 1		
Outcome indicator		Number of countries assisted in identifying challenges and prioritizing solutions, or number of people using challenge and solution knowledge products (as appropriate)
Baseline	2022	No countries have been assisted No knowledge products have been developed/enhanced/disseminated
Target	2026	a) 20-25 countries assisted in identifying challenges and prioritizing solutions b) 5 challenge and solution knowledge tools developed/enhanced and disseminated c) 4500 users of new/enhanced challenge and solution knowledge products
Output 2.1		
Output indicator		Country roadmaps, strategies or similar aimed at strengthening action in countries, built on SDG monitoring
Target	2022	Number of countries with roadmaps, strategies or plans, built on 6.5.1 monitoring 5 countries
Target	2023	10 countries
Target	2024	15 countries
Target	2025	20 countries
Target	2026	20-25 countries
Output 2.2		
Output indicator		Official reports on SDG indicators 6.5.1 and 6.6.1 based on Global Monitoring and Reporting
Target	2026	3 official reports developed and disseminated 3 Global reports used by +1000 users

Target	2026	2 Regional reports used by +500 users
Output 2.3		
Output 2.3		Decision support tools to identify challenges and solutions to improve water resources management
Output indicator		5 tools developed/enhanced and disseminated
Target	2022	6.5.1 Data Portal on IWRM status maintained and enhanced with an additional +1000 new users
Target	2023	Match - Water Solutions Portal (including private sector solutions) maintained and enhanced with +500 new users
Target	2024	6.6.1 Freshwater Ecosystems Explorer app maintained and enhanced with an additional +500 new users
Target	2025	6.3.2 Data platform developed to support UNEP and countries with monitoring and reporting on water quality +500 users
Target	2026	Module based Decision Support Tools that address sustainable water resources management challenges (tools based on DHI's cutting edge technology made freely available) +500 users
Outcome 3: Country partners have specialized knowledge and skills and are implementing water-related adaptation strategies and plans, technology tools to address floods, droughts and coastal issues linked to impact areas e.g. agriculture, energy, industry, urban development, freshwater ecosystems and human well-being.		
Outcome indicator		Number of countries supported to build upon IWRM to advance national adaptation planning and build long-term response options and early warning systems for droughts and floods; or number of people using technical and policy guidance products (as appropriate)
Baseline	2022	No countries supported to develop water-related adaptation strategies and plans No new policy or technical guidance products have been developed No countries have been supported with technology and tools
Target	2026	c) 5 countries supported to develop water-related adaptation strategies and plans d) 4-6 policy or technical guidance products with 3000 users e) 10-12 countries supported with technology and tools
Output 3.1		
Output 3.1		Adaptation strategies and plans, building on IWRM developed to advance and build long-term response options and early warning systems for droughts and floods
Output indicator		Number of countries supported to develop water-related adaptation strategies and plans
Target	2023	1 country supported to develop water-related adaptation strategies and plans
Target	2024	2 country supported to develop water-related adaptation strategies and plans
Target	2025	3 country supported to develop water-related adaptation strategies and plans
Target	2026	5 country supported to develop water-related adaptation strategies and plans
Output 3.2		
Output 3.2		Policy or technical guidance products to mitigate risks and promote resilience, developed and disseminated
Output indicator		Number of policy or technical guidance products and users
Target	2023	1 policy or technical guidance product with 500 users
Target	2024	2 policy or technical guidance products with 1000 users
Target	2025	3 policy or technical guidance products with 1500 users
Target	2026	4-6 policy or technical guidance products with 3000 users
Output 3.3		
Output 3.3		Technology tools to mitigate risks and promote resilience applied in countries
Output indicator		Number of supported countries supported
Target	2023	2 countries supported with technology tools
Target	2024	6 countries supported with technology tools
Target	2025	8 countries supported with technology tools
Target	2026	10-12 countries supported with technology tools
Outcome 4: Country partners have specialized knowledge and skills related to key water management challenges and are applying technology tools to address ecosystem and pollution issues linked to impact areas, e.g. water quality/plastics, water-use efficiency and ecosystem health/services.		

Outcome indicator		Number of countries supported to implement roadmaps and strategies aimed at IWRM implementation; No of countries with technology tools, or number of people using technical and policy guidance (as appropriate)
Baseline	2022	No countries supported to implement roadmaps and strategies aimed at IWRM implementation; No policy or technical guidance products have been developed; No countries have been assisted
Target	2026	a) 4-6 policy or technical guidance products with 3000 users b) 5 countries supported in implementing roadmaps and strategies aimed at advancing IWRM c) 8-10 countries assisted in applying technology tools to address key water-related issues
Output 4.1		Policy or technical guidance products to address key water related issues
Output indicator		Number of policy or technical guidance products and users
Target	2023	1 policy or technical guidance product with 500 users
Target	2024	2 policy or technical guidance products with 1000 users
Target	2025	3 policy or technical guidance products with 1500 users
Target	2026	4-6 policy or technical guidance products with 3000 users
Output 4.2		Implementation of roadmaps and strategies aimed at advancing IWRM
Output indicator		Number of countries supported to implement roadmaps and strategies aimed at advancing IWRM
Target	2023	2 countries supported to implement roadmaps and strategies aimed at advancing IWRM
Target	2024	4 countries supported to implement roadmaps and strategies aimed at advancing IWRM
Target	2025	5 countries supported to implement roadmaps and strategies aimed at advancing IWRM
Target	2026	6 countries supported to implement roadmaps and strategies aimed at advancing IWRM
Output 4.3		Technology tools to address key water-related issues applied in countries
Output indicator		Number of countries supported
Target	2023	2 countries supported with technology tools
Target	2024	4 countries supported with technology tools
Target	2025	6 countries supported with technology tools
Target	2026	8-10 countries supported with technology tools
Supplementary result indicator		
Result		Additional financial resources attracted/leveraged to support work (beyond the programme budget)
Result indicator		Contracts/agreements, additional resources acquired that are attributable to UNEP-DHI's engagement
Target	2023	5 million \$
Target	2026	10.4 million \$

Annex 4: Risk Management Matrix

Below are the main current contextual, programmatic and institutional risks. Monitoring and reporting of risks will be incorporated in the periodic reporting, when relevant, and will also be included as a discussion point in Advisory Board meetings when appropriate.

Contextual risks

Risk Factor	Likelihood	Impact	Risk response	Background to assessment
Political will: The water-related Sustainable Development Goals prove difficult to implement in some geographies, due to a lack of political will resulting from other priorities.	Likely in some geographies	Major	Focus on issue sensitization and guidance to support self-help action (step 2 in ToC). Where direct assistance is to be considered (step 2 action plans and step 3), a sufficient level of political will and available country resources to achieve desired impacts will be established before engagement commences.	Forthcoming UNEP report coordinated by UNEP-DHI, “Progress on Integrated Water Resources Management – Tracking SDG 6 series: global indicator 6.5.1 updates and acceleration needs” (UNEP & UN-Water 2021)
COVID-19 Pandemic: Ongoing challenges limits general ability to travel to and from some geographies, which in turn hinders the Centre’s ability to implement its work effectively	Uncertain	Moderate	Online meetings, workshops, and trainings, and information made readily available. Online tools made available and maintained via cloud services. Using local regional consultants for support at country level, where necessary.	UNEP-DHI experience from Bangladesh and Cambodia where ongoing and planned work was severely interrupted at the start of the pandemic. UNEP-DHI experience from Somalia and Kenya where a combination of online solutions and support from skilled local consultants was applied.
Conflict: National or regional conflicts (e.g. political, trade, religious, resources etc.) limit the ability of the Centre to engage and provide assistance.	Likely in some geographies	Moderate	In certain instances, it can be necessary to avoid or withdraw support from selected geographies until it is considered safe to engage. However, UNEP has indicated a strong desire to play a greater role in promoting peace and stability to help resolve some national and international disagreements can mean that the Centre is called upon to provide support.	UNEP-DHI Centre previous experience, most recently in halting collaboration with authorities in Myanmar as a result for the military coup in February 2021 and subsequent guidance from the United Nations. Collaboration with the United Nations Climate Security and Environmental Advisor to Somalia (2021 and ongoing) and with UNEP’s Environment and Security Unit on work in the Horn of Africa (2020 and ongoing).

Programmatic risks

Risk Factor	Likelihood	Impact	Risk response
Ambition vs resources and opportunities: Core funding provided by the Danish Ministry of Foreign Affairs cannot be sufficiently leveraged to fully achieve the programme outcomes.	Unlikely	Moderate – Major	<p>Attention will be given to exploring current and new funding sources, starting with an internal report that considers the funding landscape to identify the better potential opportunities, which will then form the basis for follow-up action. This will form the basis of a fundraising strategy.</p> <p>Biannual reports from the Centre will be used to communicate progress and challenges, as will a planned mid-term evaluation. These should be used by the partners and Advisory Board to monitor and guide work, as well as agree on appropriate actions.</p>
Partner dependence for delivery: The outcomes of the programme are heavily dependent on the direct and indirect involvement of multiple partners. Consequently, if partners' priorities and plans change, the expected programme outcomes can be negatively affected.	Likely for some initiatives	Moderate	While the outcomes and means of verification of the programme will be clearly specified, there is a deliberate degree of flexibility built into the programme design. For example, the programme's specific outputs allow the centre to adjust between partners and initiatives in order to maximize opportunities that were impossible to identify during the programme formulation phase and ensure outcomes are achieved. The Advisory Board plays an important role in providing strategic guidance in this respect.

Institutional risks

Risk Factor	Likelihood	Impact	Risk response
Key Staff: Staff working on important activities leave the Centre	Uncertain	Minor – Moderate	While some level of staff turnover is unavoidable, staffing of the Centre's activities is under constant review, and use of DHP's Quality Assurance systems ensure strong process and document management. Negative impacts should thereby be minimized.
Attainment of raised targets: Based on an increased budget, the targets for leveraged funds and outputs have been significantly increased since the previous phase, but the Centre may not be able to reach these targets. Consequently, funding to support UNEP's work may be reduced in a subsequent phase.	Uncertain	Moderate - major	<p>A request has been made to Danida to be able to use a portion of funding to reinstate a fulltime UNEP Chief Manager of the Centre to further strengthen linkages to UNEP and further build on the many opportunities there are for the Centre to support UNEP's work.</p> <p>UNEP will increase its in-kind contribution of from higher level management staff, who will be drawn upon to assist this programme in achieving its ambitions.</p> <p>The monitoring of the work of the Centre will be strengthened in line with recommendations made in the most recent appraisal, which will support tracking of progress and allow for appropriate remedial action to be taken.</p>

Annex 5: Budget Details

A total of 15 million DKK per year over a four-year period will be made available to UNEP to support the work of UNEP-DHI Centre in Denmark for the engagements described in this document.

The table below shows an indicative budget breakdown in USD, based on a total budget allocation of DKK 60 million. This budget format is the one required by UNEP and will be used for formal financial reporting and auditing purposes. The exchange rate used for the table is USD 1 = DKK 6.45 (average exchange rate for the prior 6 months at time of writing). However, the exact USD budget will be determined by the actual USD to DKK exchange rate at time of transfer. UNEP shall be authorized to make variations not exceeding 10 per cent from any one budget line item of the budget. This is provided that the total budget allocated by the Danish Ministry of Foreign Affairs is not exceeded, and on the understanding that any reallocations are captured in financial reports. Any variations above 10 per cent require written approval from the Danish Ministry of Foreign Affairs. Up to 10 % of the total Danish funding will be spent on managing the programme. Any reallocations to budget items for salaries and staff costs must be approved by the MFA.

The two separate columns to the right show the estimated in-kind contributions from DHI and UNEP in USD. DHI's in-kind contribution is calculated as the reduction of staff costs compared to market rates. UNEP's in-kind contribution is calculated as the reduction of programme support costs (7 %) compared to the standard rate of 13 % and the UN contracted staff resources involved in joint activities that assist the partnership.

Description	UN Development Group budget categories (and subcategories)	Average annual Budget in USD*	Total 4 Year Budget in USD	Total 4 Year Estimated in-kind contribution from DHI	Total 4 Year Estimated in-kind contribution from UNEP
Technical experts at DHI, and in-kind	Transfer to Implementing Partner (IP) - Staff and other personnel	1,460,000	5,840,000	648,889	-
Duty travel	Transfer to IP - Travel	35,000	140,000	-	-
	Travel	25,000	100,000	-	-
Contractual services#	Transfer to IP - Contractual Services	250,000	1,000,000	-	-
	Contractual services	50,000	200,000	-	-
Operational costs	Transfer to IP - Other Operational Costs §	60,000	240,000	-	-
	Operational costs: project evaluation (mid-term and final)	18,441	73,762	-	-
UN Environment Programme staff costs, and in-kind	Chief Manager UNEP-DHI Centre	275,000	1,100,000	-	250,000
UN Environment Programme Support Costs (7%)	UN PSC	152,141	608,563	-	521,626
GRAND TOTAL*		2,325,581	9,302,325	648,889	771,626
# External technical experts, communication & outreach, audits, evaluations					
§ Office rent; student interns at DHI					
* Equivalent to DKK 15 million per year based on USD1 to DKK 6.45					

Below is an indicative budget breakdown against the four main work areas over the four-year period, shown in DKK, as well as a total USD value. This is not for detailed financial reporting, but for general guidance. Activity based progress reports based on annual work plans to be developed and agreed between UNEP and DHI, with consideration of any inputs from the Advisory Board, will be used to track and report actual time use.

Also included in the table is a target estimate of leveraged resources. The resources made available from the Danish Ministry of Foreign Affairs will be supplemented with additional (leveraged) resources from other sources to fully deliver on all outcomes and outputs. Leveraged resources are additional resources –beyond those committed to the programme itself at the time of approval– that are mobilized as a direct result of the programme. Leveraged resources can be in the form of direct financing or in-kind contributions from other donors, NGOs, foundations,

governments, communities or the private sector. An estimated ratio of approximately 1:1.2 core to leveraged resources is considered appropriate and realistic. The planned work has been scoped to reflect the scale of the allocated resources, as well as the targeted resources to be leveraged, and is based on UNEP-DHI Centre's earlier performance in this area.

Main work Areas	Anticipated % of Total Budget	Annual DKK Value of Danida Funding	Total DKK Value of Danida Funding Over 4 Years	Target Additional Leveraged Resources (1:1.2 ratio) in DKK
Outcome 1: Countries report to the UN on sustainable water management (SDG 6.5.1); and the protection and restoration of water-related ecosystems (SDG 6.6.1)	15%	2,250,000	9,000,000	10,080,000
Outcome 2: Countries' water management and freshwater ecosystem challenges and solutions are identified and prioritized, based data from outcome 1	25%	3,750,000	15,000,000	16,800,000
Outcome 3: Country partners have specialized knowledge and skills and are implementing water-related adaptation strategies and plans, technology tools to address floods, droughts and coastal issues linked to impact areas e.g. agriculture, energy, industry, urban development, freshwater ecosystems and human well-being.	30%	4,500,000	18,000,000	20,160,000
Outcome 4: Country partners have specialized knowledge and skills related to key water management challenges and are applying technology tools to address ecosystem and pollution issues linked to impact areas, e.g. water quality/plastics, water-use efficiency and ecosystem health/services.	20%	3,000,000	12,000,000	13,440,000
Administration, monitoring and mid-term review⁺²¹	10%	1,500,000	6,000,000	6,720,000
Totals	100%	15,000,000	60,000,000	67,200,000

²¹ Includes, but not limited to:

- a. Assistance in the organization and execution of planned work
- b. Reporting and other administrative duties
- c. Participation in internal and external management meetings
- d. Role as Secretariat for the Centre's Advisory Board and UNEP – Denmark Partnership Committee
- e. Participation and support to UN Environment Interdivisional Water Group
- f. Communications and outreach
- g. Ad hoc work and unscheduled technical backstopping of countries in support of UN Environment
- h. Further development and strengthening of partnerships
- i. Monitoring, Evaluation, Accountability and Learning review
- j. Support to the mid-term evaluation

Annex 6: Plan for Communication of Results

The UNEP-DHI Centre will use a range of methods and media to communicate information, including on outputs, outcomes and results to a range of stakeholders and adjusted to the actual purpose and context. For example, needs vary from reporting on progress, to attracting additional financing and partners, as well as disseminating technology tools to users in the field.

The table below provides a general overview of communications based on the outcome areas of the results framework as well as those that are more cross-cutting in nature. More detailed communication plans will be made for specific projects and activities within the programme, and will be monitored accordingly, as is currently the case.

Cross-cutting				
What? (the message)	When? (the timing)	How? (the mechanism)	Audience(s)	Responsible
Information about the UNEP-DHI Centre, its activities and outputs	Ongoing	Centre's main website, specific project websites, mailing lists, direct mails, Linked-in, publications, presentations in various fora, via partners' communications channels etc.	Political decision-makers, wide range of technical experts, partner organizations, academics (external)	UNEP-DHI Centre and UNEP on occasion

Outcome 1: Countries report to the UN on sustainable water management (SDG 6.5.1); and the protection and restoration of water-related ecosystems (SDG 6.6.1)				
What? (the message)	When? (the timing)	How? (the mechanism)	Audience(s)	Responsible
Status of progress on SDG 6.5.1 at global, regional, national and sub-national levels	2022-2026	Data Portal for 6.5.1 national, regional and global data updated to support Phase 2 processes	Political decision-makers, wide range of technical experts, partner organizations, academics	UNEP-DHI Centre and UN Water Members and Partners
Why SDG 6.5.1 reporting is important and how it will take place	2023	Capacity-building support materials for national monitoring	Country focal points	UNEP-DHI Centre and UN Water Members and Partners
How to undertake SDG 6.5.1 national monitoring and reporting	2023	Country monitoring methodology and monitoring guide revised	Country focal points	UNEP-DHI Centre and UN Water Members and Partners

Outcome 2: Countries' water management and freshwater ecosystem challenges and solutions are identified and prioritized based data from outcome 1				
What? (the message)	When? (the timing)	How? (the mechanism)	Audience(s)	Responsible
Status of progress on SDG 6.5.1 at global, regional, national	2022-2026	Reports on SDG6.5.1 status	Political decision-makers, wide range of technical experts, partner organizations, academics	UNEP-DHI Centre and UN Water

and sub-national levels				Members and Partners
Country status, problems and possible solutions	2022-2026	Country status briefs that inform national level decision-making about solutions for selected Member States Match Water Solutions Portal - including private sector solutions	Political and technology-related decision-makers	UNEP-DHI Centre and selected partners
How to strengthen IWRM implementation	2022-2026	Action-oriented IWRM implementation plans for selected countries	Political decision-makers, and a wide range of sector experts	UNEP-DHI Centre and selected partners

Outcome 3: Country partners have specialized knowledge and skills and are implementing water-related adaptation strategies and plans, technology tools to address floods, droughts and coastal issues linked to impact areas e.g. agriculture, energy, industry, urban development, freshwater ecosystems and human well-being.

What? (the message)	When? (the timing)	How? (the mechanism)	Audience(s)	Responsible
Technical guidance on thematic areas	1 x 2023 2 x 2024 3 x 2026 (Cumulative)	Physical and web-based publications and portals	A wide range of sector experts, and political decision-makers	UNEP-DHI Centre and selected partners
Technology tools to address key water-related issues applied in countries	2022-2026	Web-based e.g. project or tool websites	UNEP and DHI, as well as the Advisory Board and Danida when appropriate	UNEP-DHI Centre and selected partners

Outcome 4: Country partners have specialized knowledge and skills related to key water management challenges and are applying technology tools to address ecosystem and pollution issues linked to impact areas, e.g. water quality/plastics, water-use efficiency and ecosystem health/services.

What? (the message)	When? (the timing)	How? (the mechanism)	Audience(s)	Responsible
Technical guidance on thematic areas	1 x 2023 2 x 2024 3 x 2026 (Cumulative)	Physical and web-based publications and portals	A wide range of sector experts, and political decision-makers	UNEP-DHI Centre and selected partners
Technology tools to address key water-related issues applied in countries	2022-2026	Web-based e.g. project or tool websites	UNEP and DHI, as well as the Advisory Board and Danida when appropriate	UNEP-DHI Centre and selected partners

Annex 7: Summary of recommendations of the appraisal

Title of Programme/Project	UNEP-DHI Centre – Supporting Climate Action in the 2030 Agenda through Sustainable Water Management 2022-2026
File number/F2 reference	F2 No. 2021-39757
Appraisal report date	12.01.2022
Council for Development Policy meeting date	24 February 2022
Summary of possible recommendations not followed	
All recommendations have been followed.	
Overall conclusion of the appraisal:	
<p>The 2022–2026 programme proposal of the UNEP–DHI Partnership Centre on Water and Environment (the UNEP–DHI Centre) concerns the grant foreseen in the Danish Finance Act for activities within integrated water resources management and climate adaptation in developing countries towards achievement of SDG 6. The proposal is highly relevant to the priorities and targets of the Danish Strategy for Development Cooperation and aligned to UNEP’s and DHI’s own strategies.</p> <p>The mid-term review (2020) of the current phase highlights the strengths of the UNEP-DHI Centre’s operating model; it is agile, flexible and effective, based on a lean structure and benefitting from the combination of DHI’s widely respected technical expertise and management structure and UNEP’s mandate, providing legitimacy and political clout. The impression of a strong track record of providing relevant and high-quality technical support and tools evidenced in previous reviews was confirmed by interviews with selected key delivery partners and beneficiaries during this desk appraisal.</p> <p>The proposed 7th programme phase consists partly of activity types continued from previous phases, namely related to reporting on the water related SDG indicators, and partly of a new stronger focus on action-oriented work at country level, reflected in outcomes 3 and 4. The appraisal considers this relevant, but deems that the Theory of Change and results framework regarding the mentioned outcomes could be improved. Moreover, the new focus combined with a 25 % increase in the Danish support to the UNEP-DHI Centre (up to DKK 40 million), has motivated recommendations to strengthen the results monitoring system, which has already been raised as an issue in appraisals and reviews of previous phases.</p> <p>Based on the desk appraisal the UNEP-DHI Centre programme is recommended for approval with only minor adjustments according to the recommendations below.</p>	
Recommendations by the appraisal team	Follow up by the responsible unit
Programme Level:	
Preparation process:	

<p>1. Provide a clear analysis of lessons learned and how these have informed the more action-oriented approach in the new programme.</p>	<p>A new section (2.4) with a description and analysis on lessons learned has been included with a focus on 1) how these have informed the increased action-oriented approach of the Centre’s work and 2) how recommendations from the mid-term review have been addressed in the new phase.</p>
<p>Context, relevance, justification, and cross-cutting issues:</p>	
<p>2. Strengthen political economy aspects of the contextual analysis, especially as relates to water conflicts, and clarify how it informs programme design and Theory of Change.</p>	<p>Political economy aspects have been strengthened in the context section in the main text, in annex 1 (context analysis) and in the Theory of Change narrative.</p>
<p>3. Include an analysis of who are the key stakeholders and target audiences at country level, and describe how the programme integrates / addresses Human Rights-Based Approach principles.</p>	<p>A brief stakeholder analysis and how the programme addresses a human rights-based approach have been included in annex 1 (context analysis) and the target audience at country levels has been clarified where possible.</p>
<p>4. Further elaborate on how water resources management links to poverty reduction, as reflected in the Danida Development Cooperation strategy, and improve programme justification vis-à-vis poverty reduction and the Leaving No One Behind principle.</p>	<p>Programme justification vis-à-vis poverty reduction and links to the Danish Strategy for Development Cooperation have been strengthened in the context and justification sections in the main text.</p>
<p>5. Include gender considerations more explicitly in the Theory of Change, results framework, and indicators (i.e.: attempt to include gender-disaggregated information).</p>	<p>Gender considerations have been elaborated in the Theory of Change narrative and in the results framework in section 5 and annex 3, with gender-disaggregated indicators included where appropriate.</p>
<p>Theory of change, objectives and results framework:</p>	
<p>6. Add Theory of Change narrative that clearly explains change pathways showing how the Centre’s inputs will lead to (or contribute to) outcomes and clearly explain approach and modalities to do this (ie: working through existing networks and their partnerships at country level, etc.).</p>	<p>A new section with a narrative on the Theory of Change has been added in section 4, and the Theory of Change figure has been updated.</p>
<p>7. Edit objective for clarity and more pronounced link to climate change adaptation/resilience, and review outcomes 3 and 4 based on the Theory of Change to ensure clarity and level of ambition, (- reconsider use of term ‘on the ground’ to avoid ambiguity).</p>	<p>Development objective, and outcomes 3 and 4, have been revised in accordance with the recommendation and guidance from the AT. ‘On-the-ground’ terminology has been abandoned.</p>
<p>Management, reporting and monitoring:</p>	

8. Include Monitoring, Evaluation, Accountability and Learning (MEAL) section in the programme document, put in place strengthened monitoring procedures during inception, and focus on the monitoring system in (early) Mid-Term Review.	A new section (8) on MEAL has been introduced. In the initial period of the new phase, the Centre will develop a lean MEAL system. Focus on the monitoring system as part of the Mid-Term Review is included in section 9.
Sustainability and continuation/exit scenarios:	
9. Consider how the technical support provided by the UNEP-DHI Centre could be linked into more systemic institutional capacity strengthening processes at country level to promote ownership and sustainability.	A new section 2.6 <i>Institutional capacity building and sustainability</i> has been introduced, addressing aspects of institutional capacity building and long-term sustainability of the work of the Centre.
10. Include considerations on long-term sustainability of the work of the UNEP–DHI Centre.	Same as comment for Recommendation 9.

I hereby confirm that the above-mentioned issues have been addressed properly as part of the appraisal and that the appraisal team has provided the recommendations stated above.

Signed in Copenhagen on the 12.01.2022

Appraisal Team leader/ELK representative: (Silke Mason Westphal, Chief Adviser)

I hereby confirm that the responsible unit has undertaken the follow-up activities stated above. In cases where recommendations have not been accepted, reasons for this are given either in the table or in the notes enclosed.

Signed in Copenhagen on the 07.02.2022

Head of Unit/Embassy: (Karin Poulsen, Director, Green Diplomacy and Climate)

Annex 8: Process Action Plan

Activities	Actual/Target dates	Responsible ²²	Comments
Formulation of new phase of support 2022-2026:			
Finalise PD based on appraisal recommendations	7-31 January	UNEP-DHI/GDK	
Confirm the proposed grant to UNEP-DHI as an agenda item for the UPR meeting in February 2022	13 January	GDK	Deadline is 7 weeks before UPR meeting
Submit final draft programme document for GDK management approval	1 February	GDK	
Submit final PD to UPR Secretariat	7 February	GDK	Deadline is 13 working days before UPR meeting
Council for Development Policy (UPR) Meeting	24 February ²³	ELK	ELK is secretariat for UPR
Minutes of UPR meeting	Late February	ELK	
Approval of the grant proposal by the Danish Minister for Development Cooperation	Late February	MFA	
Approved by Danish Parliament Finance Committee	Late March	GDK	
Donor Agreement (DA) between UNEP and Ministry of Foreign Affairs	Early April	GDK	Decision required on existing DA for UNEP-DHI that runs to Dec 2022
UNEP Project Document, Programme Committee	Mid May	UNEP	
Project Cooperation Agreement between UNEP and DHI	Late May	UNEP-DHI	
Disbursement of 1st annual tranche for UNEP-DHI through UNEP	1 June	GDK	

²² GDK=MFA Department for Green Diplomacy and Climate; ELK= MFA Department for Evaluation, Learning and Quality; DHI= UNEP-DHI Partnership.

²³ Meeting dates are published here: <https://um.dk/en/danida-en/about-danida/danida-transparency/danida-documents/council-for-development-policy/>