Activity cycle memorandum (Activity Appraisal Document (BEMO))

(for ODA activities)

1.1 General information

Please refer to the ODA Policy Data Guide to help you provide the following information.

Application number (required by FSO to register the activity and to make folders in Sophia for archiving as quickly as possible)	4000005402
Date of receipt of application (final document)	Unsolicited proposal received: 13.10.2021 Final proposal: 10.11.2021
Short name of application (clear, meaningful short name in English or French; must not contain budget holder code or abbreviations, max. 60 characters, this will be published in open data)	Design and implementation of Rain water harvesting practices in Azraq, North Jordan Valley Basins and North Mafraq area.
Full name of application (maximum 150 characters, this will be published in open data)	Design and implementation of Rain water harvesting practices in Azraq, North Jordan Valley Basins and North Mafraq area for enhanced resiliency of Jordan's groundwater resources and adaptability to the impact of climate change.
Description of application (5 sentences max. on the key components of the activity; this information will be entered into SAP)	This proposal is dedicated to the integration of water harvesting as an integral water management and climate adaptation intervention for Jordan's resiliency efforts. The consortium of partners and experts make the case and methodology for instituting water harvesting with complementary policy and capacity building action, as a sustainable approach to enhancing the resiliency of communities and ecosystems most vulnerable to the impacts of climate change and population growth in Jordan. The proposed project will be implemented over a 36 month period to focus on supporting a sustainable water management approach, by reducing water use of unsustainable sources (by reducing water losses and increasing water use efficiency) and by increasing water supply from sustainable sources (by supporting water harvesting and promoting the use of non-conventional sustainable water resources). Furthermore, the intervention aims to be aligned with national and local water policy and management systems, as well as provide

	innovative design tools to allow for water harvesting practices in Jordan to continue to improve and react to changing climate conditions.
Budget holder (the department or mission financing the activity)	Embassy of the Kingdom of the Netherlands in Jordan
Business partner (known as 'business partner' in SAP; ask your Control Unit what information you need to provide to FSO and how you should provide it)	The Inter-Islamic Network for Water Resources Development and Management (INWRDAM)
Business partner's number (issued by FSO after form has been submitted)	30083896
Commitment in foreign currency (if applicable, give the currency for the contract; this can for example be USD, GBP or the currency of the country where the activity will be carried out)	N/A
Corporate rate (exchange rate used when entering commitment amount in SAP; normally fixed once a year - ask your Control Unit for advice)	N/A
Commitment in EUR (if the contract is in EUR, enter the amount here – if the contract is in another currency, convert the commitment to EUR using the corporate rate above)	EUR 5.000.000
Funds centre (budgetplaats, ask your Control Unit for this) Make sure that the funds centre corresponds with the financial instrument.	1702U02030013
Activity start date (date given in the contract as start date for implementing the activity)	1 January 2022
Activity end date (normally one year after the contract end date to allow for the completion of administrative procedures, evaluation and external audit)	1 January 2026
Contract start date (this is almost always the same date as the activity start date)	1 December 2021
Contract end date (actual end date of the activity agreed with implementing organisation; after this, the implementing organisation can no longer enter into payment obligations but can finalise and pay outstanding commitments - agree with the implementing organisation when the last payments are scheduled in the contract)	1 January 2025
Is this a follow-up to a previous activity? (If so, provide the number of the previous activity)	Yes, this proposal has been developed in accordance with the recent conceptual study on Rainwater harvesting in Jordan supported by IGG, the Netherlands Embassy and financed by the Dutch Enterprise Agency (RVO). The study was finalised in September 2021. Recommendations from the study have been integrated into the proposal.

Confidentiality activity (open data)	2. Activity is not confidential. Public bemo and all other activity related will be published unmodified.
Specific undertakings (State here if the activity to be financed is the result of an undertaking by a minister, an amendment by the House of Representatives or another reason. You should also state here if the activity is a fully confidential activity and should therefore be excluded from open data).	No specific undertakings for this project, there is no political angle to it.
In case of PPB and EUR 25.000 or more, name program fund (PPB) and start at 2.2. the appraisal and use the policy instuctions in het HBBZ: Policy instructions.	N/A

1.2 Information for OESO-DAC

(Please refer to the ODA Policy Data Guide to help you provide the following information.)

Aid modality	Non-earmarked contributions
Donor role	Single donor
Technical assistance	25<TA<50 Between 25% and 50% of the activity budget
Beneficiary's country/region The **beneficiary country** is the (OECD/DAC) country where the target group lives and/or comes from. It is the country that ultimately benefits from the activity. This is not necessarily the country where the activity is implemented. When the activity takes place in more than one country, state the region concerned when all countries are taking place in one region according to the region classification in annex 2 of the ODA Policy Data Guide. If not (multiple countries in multiple regions), select **worldwide**.	Country (state the country concerned below) Jordan N/A
Specified countries + division of budget over those countries (in so far as this is known). Only fill this item when a region or worldwide has been selected in the item above. Please state here the relevant beneficiary countries. Give an estimation of the part (in %) of the total budget during the full duration of the	Jordan 100% Country Y ..% Country Z ..% Unspecified ..%

activity that can be attributed to each country. When this is (partially) unknown, you can register (part of) your activity as unspecified. This can be adjusted during the monitoring phase of the activity.	Etc. (add more rows if necessary)	..%
	Total	**100%**
Location within the country/ countries (be as specific as possible) When the activity targets (a) specific location(s), please state the location(s) here (mostly relevant for decentral activities).	District Azraq, Mafraq and North Jordan Valley areas.	
CRS sector code (1 CRS sector code per activity)	14015-Water resources Conservation (including data collection)	
Policy markers weighted 'principal' (principal = the activity will not take place if the activity does not score on this marker)	Gender (GlkhMv)	Not applicable
	Climate adaptation	Principal
	Climate mitigation	Principal
	Biodiversity	Principal
	Desertification	Not applicable
		Explain your choices in section 2.1.
	Etc. (add more policy markers if applicable)	
Policy markers weighted 'significant' (significant = the activity takes place anyhow, even if the activity does not score on this marker)	Gender (GlkhMv)	Significant
	Climate adaptation	Not applicable
	Climate mitigation	Not applicable
	Biodiversity	Not applicable
	Desertification	Significant
		Explain your choices in section 2.1.
	Etc. (add more policy marker if applicable)	

2. APPRAISAL OF THE ACTIVITY

(For terms and concepts referred to in sections 2, 3, 4 and 5, see the list of widely used terms)

2.1 Policy relevance (including digitalisation) and monitoring, evaluation and learning (MEL)

Here, provide a snapshot of the PDF file from the results application, even if the proposed intervention does NOT contribute to the thematic results frameworks, and assess the activity's policy relevance. This will help make the activity appraisal document (BEMO) a standalone, cohesive document in its own right. This is important not only for internal processes but also for the open data published with the public BEMO. This applies to ODA activities of EUR 250.000 and more.

Improved water resources management became an increasingly prominent priority of the development aid policy of the Dutch Ministry of Foreign Affairs (MFA). There was a dual justification for this. First, severe and urgent water problems – of water scarcity in some parts and flooding in other parts of the world, linked to issues such as increasing conflict over catchment areas, exacerbated by population growth and climate change – affect the world's economy and sustainable development. Secondly, the Netherlands, as a world leader in water management, has an opportunity, as well as a duty, to be a driving force and provide a fundamental contribution to solving these problems.

In line with the international discourse on water management, the Dutch policy is guided by the principle of integrated water resource management (IWRM), defined as a process that promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.

Water is also a Top sector for the Dutch economy and public sector. The water theme is therefore ideally suited to the interweaving of aid and trade. Water aid in developing countries can create opportunities for trade, not only in the water sector itself, but also in other sectors such as agriculture and transport.

This Rain water harvesting project conforms with the Multi-annual country strategy (MACS) of the Ministry of Foreign Affairs of the Netherlands for Jordan. It is perfectly in line with the Ministry's long-term policy objective of strengthening the economic resilience in the face of extreme water scarcity and climate change.

The project's proposal is driven by the scoping study on Rainwater harvesting jointly organised by IGG, RVO and the Netherlands Embassy in Amman, and carried out in the Summer of 2021 by a consortium of Dutch and Jordanian experts. Following the clear recommendations of the scoping study, the INWRDAM proposal was developed to cover both technical and policy making levels. It also considered capacity building and participatory approach as core themes in the scope of work. This project is dedicated to the integration of Rain water harvesting as an integral water management and climate adaptation intervention for Jordan's resiliency efforts. The INWRDAM consortium of partners and experts make the case and methodology for instituting water harvesting with complementary policy and capacity building action, as a sustainable approach to enhancing the resilience of communities and ecosystems most vulnerable to the impacts of climate change and population growth in Jordan.

As the second most water-stressed country in the world, Jordan relies on groundwater for its primary source of water supply, making aquifer management a matter of national security and concern. Overexploitation of natural resources across the country has led to severe ecosystem degradation. Urbanisation and population growth, particularly after the arrival of an estimated one million Syrian refugees in the last decade, have placed additional strains on dwindling natural resources. Exacerbating these prevailing water management challenges is the impact of climate change. Current climate change projections show that by the year 2025, the water supply in the Arab region will be 15% of the levels in 1960. By 2030, the predominant effects of climate change will include a decrease in precipitation, a drastic rise in average temperatures and an increase in seawater intrusion into coastal aquifers as sea levels rise and groundwater overexploitation continues.

	Assessment
Task In addition, assess the extent to which this intervention is relevant to policy.	The activity matches the relevant policy described in section 2.1.

State how this intervention scores on the cross-cutting themes of gender, climate adaptation and climate mitigation. Ensure that this is in accordance with the policy markers selected in section 1.2.	The activity covers several cross-cutting thematic areas including: climate adaptation, climate mitigation, biodiversity and gender.

2.2 Problem analysis and lessons learned

2.2.1 Description

Briefly describe the following points and give reasons why they apply (insofar as relevant):

- the problem the proposed activity addresses;
- the extent to which unequal gender relations and climate change are part of the problem;
- the extent to which the activity helps to solve the problem.

1. The problem and opportunity through the lens of policies, climate change vulnerability and Nature Based Solutions (NBS)

1.1 National policy integration of water harvesting in climate adaptation strategy

The concept of water harvesting 3Rs is being used around the world to reframe policy debates on environmental conservation, climate change adaptation and mitigation strategies, and the sustainable use of natural resources. Simultaneously, a growing pool of water harvesting research and case studies emphasise the necessity of supportive policy and regulatory systems to enhance the sustainability of this type of water resource intervention. Addressing Jordanian policy and regulations around water harvesting practices is a vital element for its integration and acceptance, as well as for the likelihood of future scaling.

Jordan already has a climate action agenda. The country ratified the UNFCCC in 1994 and has continued to show commitment to climate-positive solutions more recently with its submission of the Third National Communications (TNC), an Intended Nationally Determined Contribution (INDC), as well as the completion of a Climate Change Technical Needs Assessments (TNA). Jordan also has a national climate change policy, including one specifically for water. However, the institutional and individual capacities, especially at sub-national levels, for effective climate programming (e.g. through spatial strategies and planning) is still weak.

The intervention proposal especially aligns with Jordan's TNC, INDC, and TNA and National Water Strategy and National Climate Change Policy (for water). Relevant ministries have been consulted to fully align with their most recent priorities.

Furthermore, the consortium intends the water harvesting interventions to be fully aligned with national technical standards, including standards for environmental and social impacts, land use planning, water supply, harvesting, reuse etc. Environmental and social impacts are required for proposed interventions, this will be done during the intervention development phase.

1.2 Climate change, population booms, and over-pumping

In Jordan, water demand clearly exceeds supply as the annual water availability per capita has declined significantly, from 3,600 m^3 per capita in 1946 to less than 100 m^3 in 2020. Jordan requires about 1,200 MCM annually (2019) but has, on average, only 848 MCM of renewable water. Extended droughts caused by climate change, intensive agriculture, acute population spikes, and increased urbanisation that requires pumping aquifer water to urban centres like Amman, have all created further strain on water resources management in Jordan. For decades, groundwater has acted as the country's main source of water supply and a centrepiece to the national water security strategy. In 2020, the increased demand for water had led to over-abstraction from freshwater aquifers to reach 160 percent (MWI 2020).

Previous studies and strategic documents (i.e. Water sector Green Growth National Action Plan 2021-2025, Jordan's SNC (2009) and National Climate Change Policy (2013)) have identified scarcity of water resources as one of the major barriers facing sustainable development in Jordan; a situation that will be magnified by climate change, leading to more water stress. Projected water-related impacts also include reduced total water availability, less reliable seasonal patterns, increasing intensity of droughts during which reservoirs are not refilled, and reduced groundwater recharge. Flood events will also be more likely as rainfall events that do occur are projected to be intense, increasing erosion, loss of soil water storage, and building siltation in reservoirs.

1.3 Identification of Azraq Basin, Mafraq and North Jordan Valley as highly susceptible to negative effects of climate change and other stressors

A climate change vulnerability assessment acts to identify the resources in an area most susceptible to the negative effects of climate change and other stressors (IPCC). Considering exposure to climate and stressor-risks and the adaptive capacity of a water system to the mounting impact of climate change, severe groundwater depletion and large population strain on the Azraq and North Jordan Valley basins and North Mafraq area make them easily two of the country's most vulnerable and pivotal water resources.

In the early 1990s, water depletion struck Azraq, and the ecosystem started collapsing for multiple reasons, including extended drought due to climate change and mega farming projects, and pumping domestic water to some major cities in Jordan. Since 2013, water resources are even more stressed as it covers the needs of Azraq refugee camp, hosting more than 30,000 Syrian refugees and NGO personnel, as well as the several military bases. The local Azraq Basin has been exploited for the past three decades to meet these demands, and as a result has observed a dramatic drop in its water table. Such depletion of the fresh groundwater body, along with the abandonment of local salt production, has led to further expansion and intrusion of the interfacing saline groundwater body; increasing concentrations of Na and Cl render many wells unsuitable for use and cause high economic loss. Together, the fallen water tables and deteriorating water quality pose a serious threat to Jordan's freshwater reserves and Azraq's survival both as a community and as a wetland.

Basins in the North Jordan Valley have undergone similar, unsustainable exploitation due to the region's important agricultural activity, rapidly expanding urban areas, and settlement of refugees. The impact of this diminishing water availability will ultimately mean that there is not enough freshwater available to serve all water use demanded from this basin, including irrigation, industry, and most importantly, domestic consumption, much less to offer any 'left over' environmental flows.

A third region was identified north of Mafraq where the same phenomenon of unsustainable groundwater pumping over the past four decades has left its aquifers severely stressed. Over-pumping increased after the Syria crisis in 2010 due to receiving more than half a million refugees in Mafraq (UNICEF 2013). Groundwater levels dropped by more than 50 meters in 30 years (BGR 2018) causing higher pumping costs and requiring the deepening of wells. The area receives 300 mm of rain (MWI 2020) which represents 50% of agricultural demand (600-700 mm/yr). The rest ofthe demand is covered by groundwater. Due to variation in rain volumes and patterns, farmers are forced to use more groundwater (if available) to sustain their agro-businesses.

Ultimately, if nothing is done to combat the depletion and salinisation of these three freshwater systems in the face of the increasing strains of climate change and population growth, within the next three decades these key water resources will be unable to perform any ecosystem services any longer. In other words, these regions have been identified as rapidly closing basins. They are also prime sites for improved climate adaptation measures, as the current local and national water management strategy continues to rely on their groundwater to meet increasing demands.

1.4 The opportunity: Water harvesting through 3Rs (Recharge, Retention and Reuse)

At moments when water is plentiful, often a large portion of it disappears unused through floods, surface runoff and evaporation. The essence of water buffering is to better manage natural recharge in subsurfaces and to retain the water longer. In this manner, unused runoff and evapotranspiration can be reduced. The larger idea is that tackling a local water crisis is not so much about re-allocating scarce water, but to store water when it is plentiful and to make it available for the dry periods – and also to extend the chain of uses. Storage is, thus, the central concept.

Often storage is associated with large surface reservoirs and mega-dams. Recharge, Retention and Reuse, also known as 3R, presents an alternative concept – of using many smaller systems and storing water in the landscape. Much water storage is invisible: it takes place in the ground - in the upper part of the soil, the unsaturated zone, or below the water table (the saturated zone). In addition, water can be stored in many small surface systems.
The advantages of decentralised storage compared to large dams are several:

- The range of geographic and livelihood settings where 3R solutions can be applied is huge and is almost universal – in arid and humid areas, in hilly topography but also in flat lowlands.
- Storage in the soil profile or in aquifers does not lead to loss of water due to evaporation as large surface reservoirs do.
- Many surface reservoirs are affected by sedimentation that over time reduces their capacity.

In contrast, when storing water in the soil or in small reservoirs, sedimentation is usually not a problem and soil deposits may even become assets as they improve fertility. Finally – different from large reservoirs - many small decentralised storage systems do not disrupt life when introduced but add value to livelihoods already in the area.

Recharge

Recharge adds water to a buffer and as such it adds water to the circulation. Recharge can be natural – the infiltration of rain and run-off water across the landscape - or it can be managed (artificial recharge) through special structures or by the considerate planning of roads and paved surfaces. Recharge can also be a welcome by-product of, for instance, inefficient irrigation or leakage in existing water systems.

Retention

Retention is the process in which the speed of the natural water cycle is reduced in order to create large wet buffers. This process can be increased artificially, for example by slowing down the (ground)water flow or by hindering the surface water runoff through dams and reservoirs. Therefore, it extends the chain of water uses and can have a large impact on agricultural productivity.

Reuse

Reuse is the third element in buffer management. The big challenge of 3R is to make water circulate as much as possible. Scarcity is resolved not only by managing demand through reduction in use, but also by keeping water in active circulation. In managing reuse two processes are important. The first is to manage non-beneficial evaporation to the atmosphere. The other process is the management of water quality – to make sure that water can move from one use to another, even as water quality changes along the chain of uses.

Figure 1. Overview of some 3R techniques.

MAR

One specific measure of 3R is Managed Aquifer Recharge (MAR). Managed Aquifer Recharge aims to artificially bring water in the subsurface during the wet/flood season where it is stored, and use it when the demand is there to irrigate crops in the dry growing season. The advantages are plenty, such as:

- There is no water loss due to evaporation
- It does not take up any valuable space
- No expensive dam has to be built
- No water quality problems
- The groundwater system can partially recover

The project's interventions will focus on supporting a sustainable water management approach by reducing water use of unsustainable sources (by reducing water losses and increasing water use-efficiency) and by increasing water supply of sustainable sources (by supporting water harvesting and promoting the use of non-conventional sustainable water resources). Furthermore, the intervention aims to be aligned with national and local policy and management systems, as well as provide innovative design tools to allow for water harvesting practices in Jordan to continue to improve and react to changes in climate conditions.

Intervention objectives can be described by the following four points:

1. Implementation of a series of water harvesting sites - in three geographical/ climatological settings - with regular monitoring of the resulting water recharge quantities and qualities;
2. Capacity building of MWI staff and other key, local stakeholders in the knowledge and skills around managed aquifer recharge practices, including collaborative development of a model and guidelines for Managed Aquifer Recharge and its operations related to water harvesting sites in Jordan;
3. Initiation of national water harvesting (3Rs) policy dialogue with the ultimate aim of creating relevant legislation and regulation;
4. Promotion of the key learnings and success stories gained from these rainwater harvesting interventions, using tools such as a Media Lab.

Project components and outcomes:

1. Outcomes of Component 1: Implementation of water harvesting sites and monitoring practices
- Better understanding of suitable locations for water harvesting and 3R Potential Maps for Azraq Basin and North Jordan Valley and North Mafraq area;
- Sustainable, repeatable and innovative water harvesting structure;
- Pilots show-casing different 3Rs techniques, tested, evaluated and ready for upscaling;
- Economically and environmentally sustainable Home Based Businesses on RWH;
- Enhanced knowledge of the use of water harvesting for 3 Rs;
- Reduced soil erosion and sustainability of agro-businesses;
- Augmentation of groundwater levels, and enhancing environmental welfare including biodiversity;
- Partnerships with the private sector.
2. Outcomes of Component 2: Capacity building of MWI staff, local communities and other key, local stakeholders in the knowledge and skills around water harvesting and managed aquifer recharge practices
- Innovative pilot sites prepared for training and knowledge transfer;
- Trained personnel at national and municipal levels to manage water harvesting interventions;
- Trained local community including women and youth on rainwater harvesting and catchment protection;

- Various workshops during the inception and mapping, site selection, design and implementation phases of the project;
- Institutionalised monitoring and operation capacities for RWH in Jordan's water management system;
- More scientific procedures needed for rain water harvesting interventions.
3. Outcomes of Component 3: Initiation of national water harvesting (3Rs) policy dialogue with the ultimate aim of creating relevant legislation and regulation
- Improved policies on groundwater management and resource use and water harvesting;
- Initiation of a water harvesting national dialogue (Water Harvesting Forum);
- Water Harvesting 3Rs guidelines to support the policy dialogue.
4. Outcomes of Component 4: Promotion of the key learnings and success stories gained from water harvesting interventions, using tools such as a Media Lab.
- Enhanced public awareness and acceptance around RWH, particularly water harvesting practices;
- Enhanced water citizenship;
- Info graphs, policy briefs and technical materials shared online in publicly accessible forms;
- Active knowledge dissemination strategy;
- Additional recommendations to bridge the gap between academia, policy making and community.

Business support

The business support component is designed to complement technical assistance with providing opportunities for existing and new farming businesses, and HBBs through improved management, entrepreneurship, and market linkages in order to boost incomes and job creation.

The project aims at establishing a business support unit for RWH. The project will leverage the presence of the Agricultural Business Support Incubator (AG.BSI), implemented by INWRDAM with NARC, with funding from AFD, to promote water harvesting businesses. The AG.BSI is a supporting mechanism hosted by NARC headquarters and supported by 5 field stations in the target areas.

As a critical element of our exit strategy, the AG.BSI will be embedded within existing NARC operations, providing a sustainable structure driven by a local actor whose vision aligns with the objectives. The AG.BSI will integrate multi-stakeholder collaboration processes, providing a platform for systematically engaging relevant actors such as CBOs, farming cooperatives, and local authorities.

The project will connect the established HBBs with the AG.BSI to improve technical and financial capacities of the implemented RWH sites and associated HBBs and agribusinesses.

A detailed business model and plan will be further developed during the first stage of implementation, jointly with the consortium partners and the Netherlands Embassy.

Identification of the Beneficiaries

The project will be implemented through a bottom-up, demand-driven, and people-centric approach reflecting do-no-harm principles and gender sensitivity. Upon project startup, the consortium will carry out a comprehensive baseline assessment that will inform beneficiary identification and engagement. Core selection criteria will aim to achieve 1:1 gender balance, with at least 70% youth participation, target the most vulnerable as regards to income and working conditions, and prioritise beneficiaries who are open to new agricultural and business practices, have an entrepreneurial spirit, and are committed to participate in project training and activities. These criteria will be refined based on the baseline assessment, considering issues such as type and size of existing businesses (e.g. farms, livestock), irrigation methods used, types of crops farmed, workplace conditions, year-round versus seasonal income, and potential for starting supporting businesses (e.g. HBB, aquaponics, food processing etc.)

Based on in-depth stakeholder analysis, the consortium partners will work with municipalities, women's CBOs, agricultural cooperatives, and business associations to identify and reach out to

target groups. Potential beneficiaries will be invited to a kickoff event and a series of community-based events to introduce the project, explain its expected benefits and required commitments.

Beneficiary selection criteria will be clearly communicated to ensure transparency. Upon joining the project, beneficiaries will be continually engaged and supported through formal scheduled sessions, classroom-based trainings and on-the-job training. They will also receive technical, financial, legal, and in-kind assistance to rehabilitate farmland and processing facilities, launch new businesses and HBBs, and build linkages to markets through the private sector.

Gender mainstreaming

The project champions a gender-sensitive approach through proactive efforts to identify and overcome gender gaps for better natural resource governance and conservation outcomes.

The project will use gender mainstreaming to help ensure benefits are extended to both women and men. Given their role in improving the livelihoods of vulnerable women, especially widows and female heads of households, women-owned Home-Based Businesses will be specifically targeted.

To help ensure gender sensitivity, the baseline assessment will include a gender analysis examining the specific needs of women, men, boys, and girls, and how those needs may differ between Syrians and Jordanians. Based on this analysis, INWRDAM and its partners will adopt contextually appropriate measures to maximise women's participation, considering issues such as timing and location of activities, childcare arrangements for mothers, safe workplace conditions, and home-based activities allowing women to contribute to household security, with increased incomes available for health and children's schooling, thus reducing the risks of child labor and early marriage. INWRDAM will hire a dedicated gender consultant who will work closely with the M&E team to ensure gender mainstreaming across the project cycle and the active participation of women in key decision-making processes. Other cross-cutting elements mainstreamed in the consortium's approach include do-no-harm principles, youth integration and entrepreneurship, and Disaster Risk Reduction (DRR) to promote sustainability and resilience.

2.2.2 Appraisal

Assess the project's contextual analysis in the table below. If certain criteria do not apply, explain why. Process in this paragraph and when applicable in other paragraphs the conclusions and recommendations from de Q@E.

Task Assess the quality of the contextual analysis.	**Appraisal (Yes/No, plus reasons):**
The proposal and the contextual risks (see section 4) have been agreed with the mission(s) concerned.	Yes, contextual risks agreed with the Embassy of the Kingdom of the Netherlands in Amman.
The proposal is based on a careful and thorough contextual analysis (including a gender analysis) that results in a logical problem definition and objective.	Yes, clear contextual analysis (including a gender analysis) is provided in the proposal.
Based on the problem formulated, the proposal explains in a logical manner why the intervention is aimed at the specified geographical location.	Yes, selection of geographic locations for project is clearly explained in the proposal.
The proposal justifies the choice of target group and the target group's gender-specific interests and needs.	Yes, see 2.2.1.
The proposal sets out which relevant actors were involved in formulating the proposal and what influence they had on its content.	Yes, the proposal sets out the involvement of actors (consortium), both in formulating the proposal and in the proposed intervention.
A stakeholder analysis (incl. women and young people) has been carried out and the results incorporated into the proposal.	Yes, the proposal sets out who has a stake in the programme/project and details their relative interests.

	Also, upon project startup, the consortium will carry out a comprehensive baseline assessment that will inform beneficiary identification and engagement. Core selection criteria will aim to achieve 1:1 gender balance, with at least 70% youth participation, and target the most vulnerable as it relates to income and working conditions.
Insights and lessons learned from the following sources have been used in formulating the proposal: • previous or comparable activities • published evaluations • relevant publications (academic, online, etc.).	Yes, this proposal has been developed in accordance with the recent conceptual study on Rainwater harvesting in Jordan supported by IGG, the Netherlands Embassy and financed by the Dutch Enterprise Agency (RVO). The study was finalised in September 2021. Recommendations from the study have been integrated into the proposal.
In the case of technological solutions: • the added value and risks associated with the solution(s) have been considered carefully • the most efficient technology has been chosen • the technology has been developed with the users to reach a diverse user group • an analysis of the local digital ecosystem (strengthening existing system, no duplication and not standalone).	Yes, the consortium proposes to apply the concept of 3Rs (Recharge, Retention and Reuse) in the Azraq Basin, Mafraq and North Jordan Valley. By applying this concept, the consortium is able to identify and implement innovative water harvesting techniques in the Jordan water sector to enhance local water availability. It is also supportive to the strategically plan for catchment management activities. Part of these activities can be realised within this project, but the remaining identified catchment management activities and opportunities can be planned for and implemented after the projects' end. The first step to maximise the impact and minimise the technological risks is to combine the historic hydrogeological studies and available maps on the study areas with Remote Sensing, Satellite Imagery and available well data (location, depth, yield) in a GIS database. This database is used to draft 3R suitability maps, based on which the draft intervention locations are determined. The main focus of the 3R potential maps lie on identifying and selecting suitable sites and technologies for RWH. In the design phase, the chosen 3R techniques are optimised to fit the locations in Azraq Basin, Mafraq and North Jordan Valley. Among others, this includes an optimised RWH design, indicating infiltration wells/recharge areas and abstraction wells. The design phase will be an iterative process during which additional field investigations may support and improve the design. Modeling and experimentation will include study of geochemical interactions between recharged and ambient water and optimal design for recharge and extraction systems for each site. As part of the design phase also the most suitable water use technology and beneficiaries will be identified, which best fits the local environment and knowledge level of the users.

2.3 Cooperation, harmonisation and added value

Task	**Description**
Briefly describe: • whether the proposed activity involves cooperation with, for example, Dutch organisations, EU (EU institutions and member states), other donors, local organisations or other parties; • how this cooperation contributes to harmonisation, complementarity, joint financing, strengthened EU-cooperation, delegated cooperation and/or multidonor financing • the added value of the activity in relation to other activities by donors, EU, NGOs and local authorities.	The Netherlands will be the single donor for this project. The proposed project will be implemented by a consortium led by the Inter-Islamic Network on Water Resources Development and Management (INWRDAM), a non-profit international organisation established in 1987. The headquarters of INWRDAM is in Amman and hosted by the Hashemite Kingdom of Jordan, under the direction of The Higher Council of Science. Consortium partners: IHE Delft Institute for Water Education and Acacia Water. The project objectives can be described by the following four points: 1. Implementation of a series of water harvesting sites - in three geographical/ climatological settings - with regular monitoring of the resulting water recharge quantities and qualities; 2. Capacity building of MWI staff and other key, local stakeholders in the knowledge and skills around Managed Aquifer Recharge practices, including collaborative development of a model and guidelines for Managed Aquifer Recharge and its operations related to water harvesting sites in Jordan; 3. Initiation of national water harvesting (3Rs) policy dialogue with the ultimate aim of creating relevant legislation and regulation; 4. Promotion of the key learnings and success stories gained from these rainwater harvesting interventions, using tools such as a Media Lab. This work is a direct continuation of extensive research and analyses already conducted in these areas. Ultimately, the project will ensure the complementarity with other development partners, NGO and local organisation interventions on Integrated Water Resources Management implemented in the same basins, such as USAID, AFD, UNDP and IUCN projects. **Examples of evidenced experience and track record in water projects:** **1. WISE project:** INWRDAM is implementing a new water management vision in Jordan named as WISE which stands for Water, Innovation for Sustainable Economy. This WISE vision is funded by USAID and involves building on farm management practices of north Jordan local farmers to enhance productivity and reduce operational cost. The capacity building will go beyond the typical farmers

	practices to cover developing of business models and the investment in rain water harvesting to achieve circular economy. **2. Smart Development of Eco-Friendly Solutions and Economic Regional Agricultural Techniques (Smart Desert)** The objective of this project is to support the development of ecologically responsible and economically accessible agricultural solutions and techniques in the highlands of Jordan in Mafraq governorate and Northeast Badia. It implemented within the framework of a consortium of organisations bringing together INWRDAM and IUCN, specialised in the efficient use of water and the reduction of disaster risk, Greentech, a company specialising in energy efficiency and the WEF nexus, Blumont International, an International NGO that works for the benefit of refugees and host populations, and Horizons for Green Development (HGD), a Jordanian NGO whose mission is to support the sustainable development of communities. Funded by the French Development Agency (AFD) in Jordan. **Practical demonstration of good relations with Jordanian authorities and relevant stakeholders and sustainable goals** Innovation and networking with relevant institutions such as ministries, Jordanian authorities and research bodies is highly important for INWRDAM. INWRDAM is always creating partnerships with the Jordanian authorities and relevant stakeholders: 1. INWRDAM has Memorandum of Understanding with Jordan Meteorological data (JMD) and the National Agricultural Research Center (NARC). 2. They have focal points within the most of relevant ministries such as: Ministry of Water and Irrigation, Ministry of Agriculture, Ministry of Environment, and Water Authority of Jordan.

2.4 Channel and aid modality (including *alignment*)

Task	**Description**
Briefly describe: • whether the aid modality selected is appropriate and why; • whether the degree of (financial and policy) alignment is substantiated; see the MACS risk analysis;	The aid modality chosen is a contribution agreement between the Embassy of the Netherlands in Jordan and the Inter-Islamic Network on Water Resources Development and Management (INWRDAM). The contribution agreement was selected as INWRDAM is a non-profit international organisation hosted by the

• whether the aid modality/channel has been chosen on the basis of a consideration of the available options; • whether there is any contribution or co-participation from the recipients, and explain the level of co-participation.	Hashemite Kingdom of Jordan, under the direction of The Higher Council of Science. This organisation is registered in Jordan and therefore outside the EU. INWRDAM was interviewed by the team of the conceptual study on the Rain water harvesting in Jordan (RVO study) as one of the key active players in this field. INWRDAM submitted an unsolicited concept note and proposal based on their joint discussion with the research team.

4. MONITORING AND EVALUATION

4.1 Monitoring (for details, see the MEL guidelines)

Task	Description
Briefly describe: • whether there is sufficient time and capacity available for monitoring and learning; • whether the relevant BZ Theories of Change and results frameworks and results frameworks have been communicated to the implementing organisation and whether these align with BZ standard indicators; • whether the Theory of Change/ intervention logic/logframe for the activity has been set out in sufficient detail in terms of inputs, outputs, outcomes, assumptions and context variables; • how the implementing organisation will organise the monitoring and whether the implementing organisation will deliver a separate **MEL plan**.	INWRDAM integrates ongoing risk management as part of its standard operating procedures to ensure successful project implementation and adaptation to evolving conditions. As part of its SOPs, INWRDAM adopts a systematic process for identifying, mitigating, and responding to risks over the course of project implementation. They begin with a thorough risk assessment at the outset of the project to identify factors that may impede progress, including external risks outside the control of the project team. These factors are documented in a risk register that is updated at least quarterly or as new risks are identified. The Project Manager is responsible for proper risk identification, mitigation, and documentation, as well as training of staff on relevant SOPs. Systems and standards for monitoring, evaluation, project management and reporting will be formally communicated to the Embassy upon award as part of the updated project plan. The project will be reporting on a mix of quantitative and qualitative performance indicators. Apart from the

[2] Public support to undertakings only constitutes State aid under Article 107(1) of the Treaty if it 'distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods' and only insofar as it 'affects trade between Member States'.

	concrete project outputs and services that are delivered, the project will generate and stimulate changes in awareness, capability and actual behaviour across all work packages. BZ's cross-cutting themes (gender and youth) are well-integrated into the project. The Theory of change and Results framework are directly aligned with BZ's policies and the embassy's MACS and Annual plan 2022.

4.2 Evaluation (click here for the quick reference guide) (for details, see the MEL guidelines)

Task	**Description**

Describe briefly:
• For activities:
- worth EUR 5 million or more'; or
- of strategic importance; or
- involving political risks/interests; or
- for which evaluation has been agreed with parliament
  • whether the implementing organisation has been informed about the MANDATORY FINAL EVALUATION and the procedure BZ follows in this regard;
  • whether it has been agreed to include specific questions in the final evaluation. State the questions here.
• For all other activities, briefly describe:
  • whether an evaluation or mid-term review will take place and, if so, when.
  • whether sufficient budget has been set aside and whether there is a timetable to ensure the evaluation procedure starts on time;
  • who is going to organise the evaluation - this can be BZ or the implementing organisation that hires an evaluator;
  • whether it has been agreed to include specific evaluation questions in the final evaluation.
	An evaluation is required as the amount of the activity's financial value is Euro 5 million. The recommendation is to have a mid-term evaluation so that results can be used as input for the remainder of the project.
	
	The Embassy is responsible for the activity's evaluation and commissions it by using the framework agreement for evaluation. Evaluation to be carried out in consultation with IOB Helpdesk (ToR, engaging of evaluation expertise).

6. IMPLEMENTATION AND AGREEMENTS

6.1 Budget

6.1.1 Breakdown of costs

Project component	Budget Euros	Involved partners
1- National water harvesting policy dialogue with the ultimate aim of creating relevant legislation and regulation		
Analyse strategies, policies, capacities, and practices	80000	IHE, ACACIA
Stakeholder consultations	50000	INWRDAM, ACACIA
Initiate national dialogue on water harvesting and MAR	100000	All
MAR guidelines and policy recommendations meetings	100000	All
Final MAR Guideline and policy recommendations report	30000	All
Subtotal	360000	

2- Implementation of four water harvesting sites and monitoring practices		
Validation of 3 selected sites in Azraq, Mafraq and NJV	10000	INWRDAM, ACACIA
Update existing studies and prioritize 3 other RWH 3Rs sites	50000	All
RWH sites 1,2 and 3 design and TOR	20000	All
RWH design stakeholders' consultation	10000	All
Implementation of 3 Water harvesting structures in Azraq (1 MCM)	820000	INWRDAM, IHE
Implementation of 10 Water harvesting structures in NJV (0.5 MCM)	600000	INWRDAM, IHE
Implementation of 20 Water harvesting structures in Mafraq (0.5 MCM)	650000	INWRDAM, IHE
Upstream rehabilitation through NBS in 10 sites in Azraq	200000	INWRDAM, ACACIA
Upstream rehabilitation through NBS in 15 sites in Mafraq	230000	INWRDAM, ACACIA
Implementation of 20 Home Based Businesses using RWH (Women&Youth)	280000	INWRDAM, IHE
Monitoring and Evaluation	100000	All
Subtotal	2970000	
3- Capacity building of MWI staff and other key, local stakeholders in the knowledge and skills around water harvesting and managed aquifer recharge practices		
Preparation of field training sites	150000	INWRDAM, ACACIA
Training and capacity building	300000	All
Recommendations for Institutionalised monitoring and operation	50000	IHE, ACACIA
Subtotal	500000	
4- Promotion of the key learnings and success stories gained from water harvesting interventions, using tools such as a Media Lab.		
Initiation of media lab	40000	IHE, ACACIA
Construction of water harvesting knowledge hub.	30000	IHE, ACACIA
Connecting science and academia to water policy making	30000	IHE, ACACIA
Production of Media materials	70000	All
Subtotal	170000	
5- Logestics		
Personnel cost	900000	All
Transportation and travel (Local - International).	100000	All
Subtotal	1000000	
Total (Overhead 10% included.)	5,000,000.00	

6.1.2 Financing

The aim of this section is to provide better insight into the activity's financing. Indicate the total costs and envisaged inputs of the activity. Use the overview below. If there are multiple donors, state each donor's contribution.

Total budget		***EUR 5.000.000***
Implementing organisation's and partners' own contribution	0	
Firm commitments by other donors (itemise by donor)	0	
Dutch contribution	EUR 4.950.000	
Still to be financed		0
Soft commitments by other donors		0

Uncovered balance	N/A	
External Evaluation and audit costs If you are planning to carry out an evaluation on the activity, provide an estimate for these costs.	EUR 50.000	

6.1.3 Other contributions

Task	**Description**
State what other – non-financial – contributions are relevant to implementation of the activity, such as deployment of volunteers, availability of buildings, materials, etc.	N/A

6.1.4 Budgetary risks

Task	**Description**
If there is an uncovered balance, state how this will affect implementation of the activity (e.g. proportional reduction in outputs or omission of regions) and how this will affect the decision whether to fund this activity.	N/A

6.1.5 Statement on the budget presented

The budget presented does/does not satisfy the following requirements:

Budget is arithmetically correct	Choose item
Overheads are proportional to the outputs to be delivered. Please note: What is included? What is recharged? Are costs entered twice (e.g. as indirect costs and in the administrative cost allowance)?	YES
Are the other amounts/rates in the budget acceptable in relation to the activity?	YES
Is the budget suitable as a management tool (linking of outputs – budget)	YES
Implementation is conditional on budget being amended*	NEE

*** Specify the requirements that the budget must satisfy and the date by which the budget must be amended.**

Task	**Description**
Briefly describe any anomalies that were identified when assessing the budget and any changes made to the budget as a result.	N/A

6.2 Prepayments

6.2.1 Earmarking multi-donor activities

Task	**Description**
Is the Dutch contribution to the programme earmarked (i.e. reserved for a specific purpose)? If so, specify the reasons why. Are other donors' contributions earmarked? If so, explain how this will affect reporting.	N/A (Not a multi-donor activity) N/A

6.2.2 Prepayment/no prepayment

Task	Prepayment **Description**
Using the prepayment decision tree, assess whether the payments need to be entered as prepayments and give reasons for this. Give the outcome of this assessment along with a brief explanation in this section. *In the case of lump sum funding, assess this against the applicable criteria and give the reasons for your choice.*	Based on the prepayment decision tree, it is concluded that a prepayment is required.

6.2.3 Grant with a repayment obligation, loans, equity investment or guarantee

Task	**Description**
Does the Dutch contribution take the form of a grant with a repayment obligation, a loan, an equity investment or a guarantee (either in whole or in part)? Are there revolving funds? What will happen to any residual funds? If so, briefly set out the consequences for accounting and how correct processing in the financial records will be ensured.	N/A

6.2.4 Accounting for prepayments

Task	Financial statement **Description**
Set out the reporting obligations on the basis of which the prepayment can be closed, such as an audit report (if applicable) or a financial statement issued by the organisation itself.	The accounting for the prepayments will be done based on the financial reports as provided by the partner. Based on these reports, the prepayments can be closed when approved.

6.2.5 Payment schedule

Use the payment schedule decision tree (click here for the quick reference guide) to determine the required payment frequency for this activity. Give the outcome of this assessment along with a brief explanation in this section.

Milestone payment date	Milestone payment currency and amount
After signing of the contract	€ 1.500.000
October 2022	€ 2.000.000
October 2023	€ 1.250.000
After approval of final reports	€ 250.000
TOTAL	**€ 5.000.000**

6.3 Monitoring

For activities that fall under a framework agreement (UN, IFI) or when a multi-donor arrangement is in place, the activity analysis decision tree and the decision tree for determining the type of audit opinion can be skipped.

6.3.1 Narrative and financial reports

Task	**Description**
Use the activity analysis decision tree (click here for the quick reference guide) to determine the required reporting information for this activity. Give the outcome and a brief explanation in this section. **Task** Set out any issues requiring special attention in terms of monitoring.	Based on the performance assessment decision tree, it can be concluded that narrative and financial reports are required as stated under Outcome 8. N/A

Recipients of grants up to EUR 125,000 that fall under the Uniform Grant Framework (USK) must submit activity completion statements (P statements) rather than narrative reports.

In the event of additional criteria: specify what conditions must be set (e.g. greater payment frequency, substantive criteria, etc.). Indicate whether there is another way of gaining insight into the activity's implementation (e.g. participating in the board or the donor committee).

6.3.2 Audit opinions

Task	**Description**
Use the type of audit opinion decision tree (click here for the quick reference guide) to determine whether an audit opinion is required for the activity. Briefly give the reasons in this section, along with the outcome of the decision tree. Will the auditor provide additional reports? Check the risks you set out in the risk section above. It may be desirable to have the audit opinion accompanied by an additional auditor's	An audit opinion is necessary as per the performance decision tree, based on outcome 2. Audit opinion on the beneficiary's annual accounts; activity identifiably included.

report on the risks set out above. You should ask your Control Unit for advice. If the organisation itself also makes prepayments you should ask the organisation's auditor to report on effective monitoring that the organisation carries out on prepayments.	

6.3.3 Annual plans and other reports

Task	**Description**
State whether any other reports (annual plans, management assertions) are required in addition to the above narrative and financial reports.	Annual plans are required to process liquidity requests.

6.3.4 Reporting obligations

Set out the reporting requirements in the table below, to ensure they are accurately incorporated in the decision/agreement. Use the activity analysis decision tree (click here for the quick reference guide) to determine the required reporting information for this activity

Type	Any specific requirements*	Period	Submission
Annual plan		*01.01.2022 – 31.12.2022* *01.01.2023 - 31.12.2023* *01.01.2024 - 31.12.2024*	***Included in the proposal*** ***03.10.2022*** ***30.10.2023***
IATI publication*		*Quarterly*	***Each year***
Narrative report**		*01.01.2022 – 31.12.2022* *01.01.2023 - 31.12.2023*	***01.03.2023*** ***01.03.2024***
Financial report		*01.01.2022 – 31.12.2022* *01.01.2023 - 31.12.2023*	***01.03.2023*** ***01.03.2024***
Final narrative report***		*01.01.2022 -31.12.2024*	***01.03.2025***
Final financial report***		*01.01.2022 -31.12.2024*	***01.03.2025***
Audit	External yearly audit opinion on the beneficiary's annual accounts; activity	*01.01.2022 – 31.12.2022* *01.01.2023 - 31.12.2023*	***01.06.2023*** ***01.06.2024***

	identifiably included	*01.01.2024 - 31.12.2024*	***01.06.2025***
Mid-term evaluation		*01.01.2022-30.06.2023*	***30.09.2023***
Evaluation****		*01.01.2022- 30.12.2024*	***30.06.2025***

** An IATI publication in accordance with the IATI standard, as set out in the BZ publication guidelines.[3] The IATI Standard recommends data to be updated at least once a quarter. The ministry appreciates it if IATI data are regularly kept up to date. Legally, partners are required to update their IATI publication at least once a year, in order to allow for the annual assessment of the progress of the activities.*
If applicable: describe any specific requirements or documents that should be added to the IATI publication (e.g. short narrative reports, Theory of Change, program documents, evaluation report, …), certain results or standard indicators.

*** Narrative report: reports on the contributions by third parties (inputs), outputs, outcome, sustainability and the spending of the Dutch contribution in accordance with the latest approved budget. If the partner provides a full IATI publication on the activity, the narrative report can be limited to those elements that cannot be availed in public, or cannot be expressed in the IATI standard. Please indicate whether the narrative report is submitted as a document in IATI or by email.*
**** See also the results given in section 6.3.1; if any additional criteria are desirable, insert them here. Please indicate whether the final narrative report is submitted as a document in IATI or by email.*

***** Only include evaluation report as a reporting obligation if responsibility for carrying out the evaluation falls to the business partner. In that case, BZ must approve the ToR in advance. Evaluations costs should be part of the activity budget. Please indicate whether the evaluation report is submitted as a document in IATI or by email.*

Task	**Description**
In case a waiver is given for an IATI narrative report for activities worth EUR 250,000 or more, explain why. Also describe what has been agreed with the organisation in terms of implementation and what needs to be included in the contribution agreement or grant decision in this regard.	N/A