



Groundwater for Deep Resilience in Africa (G4DR in Africa)

Review CEO Endorsement and Make a recommendation

Basic project information

GEF ID

10970

Countries

Regional (Malawi, Mozambique, Uganda, Benin, Togo)

Project Name

Groundwater for Deep Resilience in Africa (G4DR in Africa)

Agencies

FAO

Date received by PM

6/19/2023

Review completed by PM

12/14/2023

Program Manager

Astrid Hillers

Focal Area

International Waters

Project Type

PIF CEO Endorsement

Part I ? Project Information

Focal area elements

1. Does the project remain aligned with the relevant GEF focal area elements as presented in PIF (as indicated in table A)?

Secretariat Comment at CEO Endorsement Request

(7/21/2023) No.

1. Please update the full list of countries where pilots will take place
2. Endorsement/LOEs: Please provide LOEs for all ?new?/additional countries in which pilots will take place.
3. As the pilots have now been defined, please provide the country and/or regional (RBO) executing partners for the respective pilots. Please also clearly indicate these in the component description and institutional set-up sections of the ER/prodoc.

(11/15/2023)

1. Please work with the GEF IT to assist you in adding the countries.
2. That is correct. The LOEs for Benin and Togo were filed (note that they list a wrong/higher agency fee and therefore endorse a slightly higher amount beyond the project budget).
3. See below.

(12/12/2023)

Comments above addressed.

Agency Response

FAO response 8-Dec'23

1. Togo and Benin added in the relevant field.
2. Noted with thanks re to the submission of the LOEs filed. We verified the fees, which are exactly set at 9.5%. Fees = 563,927, project Grant+PPG=5,786,075+150,000=5,936,073. Therefore: $536,927 / 5,936,073 = 9.5\%$.
3. See below.

FAO response Oct 23

1. The list of countries in the portal cannot be edited on our end. May it be an IT glitch in the portal? Please advise.
2. the LOEs of Togo and Benin were uploaded already on 6/19/2023. They are available in the roadmap of the submission.
3. We added the Mono and its two riparian countries, Benin and Togo, to the focus countries. We also added the Mono Basin Authority to the institutional arrangements, as described further below.

Project description summary

2. Is the project structure/design appropriate to achieve the expected outcomes and outputs as in Table B and described in the project document?

Secretariat Comment at CEO Endorsement Request
(7/21/2023) No.

1. Please note that many ? if not the majority ? of PIF level comments to be addressed during PPG/by endorsement have not been sufficiently addressed. This is of concern. Please go back to the comments and review them when you resubmit the ER.
2. The premise of the project support is to support capacities in groundwater in Africa, increase cross-sector interactions and work with and through AMCOW and the three regional centers of expertise on groundwater in Africa. See PIF comments.
3. Please strengthen and clarify the project objective to provide a measurable outcome (what is project success ?)
4. The majority of comments on the project design can be found in Part II of the review.
5. Please adjust the PMC costs to PMC co-finance to the same ratio as the grant to co-finance ratio.

(11/15/2023)

The extensive revisions are well noted. Please see comments on the revised endorsement request.

1. The PDO of the Project description summary and the Results Framework differ. Please clarify which one is which and explain in the TOC what the end of project goal is in terms of this objective.

2. PMC has been adjusted. Noted.

(12/12/2023)

Comment above addressed.

Agency Response

FAO response 8-Dec'23

1. The correct objective "To enhance water security and resilience in Africa by unlocking the potential of sustainable groundwater development and protection." The Result Framework included in the previous submission was the old version, not reflecting the revision made in September 2023. The objective is now consistent along the project. Wording added to the ToC description to clearly explain the final goal of the GEF's investment. .

2. Noted, thanks

FAO response Oct 23

1. We reviewed again the PIF review comments and subsequent responses, and we are confident that all points have been addressed. Please let us know if there are outstanding issues.

2. We have revised the proposal and clarified the project objective, which is to provide support to AMCOW as a central node for strategic groundwater planning in Africa, improve

the knowledge base on groundwater, build capacity of regional and national experts, and engage with key stakeholders and youth to raise awareness about importance of groundwater for enhancing water security and resilience.

3. Thanks for pointing out this deficiency. We added measurable outcomes.

4. Thanks. As mentioned above, we carefully review the comments and address them in this resubmission.

5. We adjusted the co-finance of PMC accordingly.

3. If this is a non-grant instrument, has a reflow calendar been presented in Annex D?

Secretariat Comment at CEO Endorsement Request N/A

Agency Response N/A

Co-financing

4. Are the confirmed expected amounts, sources and types of co-financing adequately documented, with supporting evidence and a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized, and a description of any major changes from PIF, consistent with the requirements of the Co-Financing Policy and Guidelines?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

1. There are several development partners supporting AMCOW on groundwater (see PIF Comments) incl support to ANBO (which used to also be GEF supported) and the three regional centers (SADC-GMI (SADC region); OSS (ECOWAS region) and IGAD (Horn of Africa region; and linking with the Horn of Africa Initiative on groundwater and resilience supported by the WB).

Please comment when these development partners have been consulted with and how work is aligned and how there will be coordination among these AMCOW partners (including this project). Why is there no co-finance (in-kind or grant) from e.g. WB, CIWA (WB) EU, UNESCO, IGRAC, Sida,... as these efforts are closely aligned. This seems indicative of a disconnect of the proposed project design and the overall support to and work by AMCOW and regional cooperation on groundwater with and supported by these development partners.

3. Please add the type of co-finance for Togo. Please also - see later comments - that engagement and in-kind support by the Mono River Authority is missing if this pilot is indeed viable and bottom up driven.

4. The detail of the letters of co-finance will be reviewed at the next submission/during policy review.

(11/15/2023) and (11/27/2023) comments:

1. FAO, IWMI and IIASA substantial co-finance is well noted. As written: how has this co-finance by component been calculated/estimated ? It would aid at MTR stage to provide at endorsement stage an informal table for transparency and tracking of co-finance at MTR and TE.

2. AMCOW co-finance: The letter of cofinancing from African Ministers' Council on Water (AMCOW) indicates type of co-financing as grant. Please revise ? in-kind? to ?grant? and ?recurrent expenditures? to ?investment mobilized.

3. SADC: please verify that this is not double counting co-finance that was accounted against the GEF support for the 'Sustainable Groundwater Management in SADC Member States Phase 2' Project.

4. Malawi co-finance MWASIP project of 6 million is shown in the letter as grant. Please revise ? in-kind? to ?grant? and ?recurrent expenditures? to ?investment mobilized and explain (under the table) how the investment mobilized portion has been identified. Please also assure that project files have a trackable record of the in-kind contribution for trackability at MTR and TER.

5. Evidence Action Malawi co-finance: Please also assure that project files have a trackable record of the in-kind contribution for trackability at MTR and TER.

6. Uganda and Mozambique co-finance: Please also assure that project files have a trackable record of the in-kind contribution for trackability at MTR and TER.

7. Benin: The letter of co-financing from Benin indicates type of co-financing as public and equity investment. Please revise ? in-kind? to ?grant? and ?recurrent expenditures? to ?investment mobilized'.

8. Togo (Ministry of Environment and Forestry) co-finance: the letter shows co-finance as investments. Please revise ? in-kind? to ?grant? and ?recurrent expenditures? to ?investment mobilized in the table and add text to explain the investment mobilized under the table.

9. Togo/Hydraulics: co-finance is specified as public investment in the letter of co-finance. Please revise Please revise ? in-kind? to ?grant? and ?recurrent expenditures? to ?investment mobilized in the co-finance table.

10: Benin and Togo co-finance: Please note that thw GEF is providing support to WACA in Benin and Togo. Please verify that there is no double-counting of co-finance.

11. Across all co-financing sources identified as Investment mobilized: Please describe how any "Investment Mobilized" was identified under the co-financing table.

(12/12/2023)

1. Please assure transparent tracking of such in-kind contributions in a uniform format during implementation and report at MTR and TR.

2. AMCOW: email by AMCOW uploaded to the portal is noted. Cleared.

3. SADC-GMI: as above. Cleared.

4. Addressed.

5. and 6. Noted.

7. and 8. Noted.

9. Addressed.

10. Noted.

11. Addressed.

Comments have been addressed.

Agency Response

FAO response 8-Dec'23

1. All the letters of co-financing include a table allocating the resources by components. This was done by the technical staff of each agency by assessing the relevance of the committed co-financing with the outcomes, outputs, and planned activities/deliverables of each component. In summary, the amount allocated to each project's components corresponds to the sum of the commitments per component in each co-financing letter.

2. The co-financing letter provided by AMCOW on June 2, 2023 indicated in-kind in the text and grant in the table dividing the funds per component. We requested AMCOW to clarify. The organization responded that the committed co-financing is all in kind. As such, it is categorized and classified in the portal. The email confirming this information has been uploaded in the roadmap of the submission for ease reference.

3. We requested SADC to clarify. The organization confirmed that the co-financing is not double counted. The email confirming this information has been uploaded in the roadmap of the submission for ease reference.

4. The co-financing from MWASIP project has been classified as 'grant' and 'investment mobilized'. An explanation has been added at the end of the project's co-financing table. FAO and the executing agencies will track the in-kind and any other type of co-financing every year with the PIR and at MTR and TE stage.

5. FAO and the executing agencies will track the in-kind and any other type of co-financing every year with the PIR and at MTR and TE stage.

6. FAO and the executing agencies will track the in-kind and any other type of co-financing every year with the PIR and at MTR and TE stage.

7. The co-financing from Benin has been classified in two different lines as 'equity' and 'public investment' and 'investment mobilized'. An explanation has been added at the end of the project's co-financing table.

8. The co-financing from Togo (Ministry of Environment and Forestry) has been classified in two different lines as 'equity' and 'public investment' and 'investment mobilized'. An explanation has been added at the end of the project's co-financing table.

9. The co-financing from Togo/Hydraulics has been classified as 'public investment' and 'investment mobilized'. An explanation has been added at the end of the project's co-financing table.

10. We requested clarification to Benin and Togo who confirmed that the co-financing committed is not double counted. The emails confirming this information have been uploaded in the roadmap of the submission for ease reference.

11. A revision was made and justifications provided as appropriate for the "Investments Mobilized".

FAO response Oct 23:

1 and 2. There has now been good consultation with most of these partners, which is referenced in Annex L that has also been updated to provide additional information. Annex L also discusses envisioned interaction in the context of the project, and there are references to many of these actors throughout the ProDoc. Annex L: Stakeholder Engagement Matrix and Grievance Redress Mechanism is available in the Roadmap of the submission.

3. We added co-financing type for Togo, thanks for pointing out this gap.

4. Noted, thanks.

GEF Resource Availability

5. Is the financing presented in Table D adequate and does the project demonstrate a cost-effective approach to meet the project objectives?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

It aligns with the PIF in amounts but should list the sub-objectives.

(11/15/2023)

O.k. Cleared.

Agency Response
FAO response 8-Dec'23

Noted, thanks

FAO response Oct 23:

Kindly note that TABLE D is complete in all its fields. We also added text to the prodoc for clarification that the project will contribute to IW objective 3, to enhance water security in freshwater ecosystems.

Project Preparation Grant

6. Is the status and utilization of the PPG reported in Annex C in the document?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

Please itemize (split the lines) for the listed sub-contracts.

(11/15/2023)

Noted. Please address in the next resubmission.

(12/13/2023)

Annex C: Addressed.

Agency Response

FAO response 8-Dec'23

Addressed: An updated table providing details on the use of the PPG has been uploaded.

Core indicators

7. Are there changes/adjustments made in the core indicator targets indicated in Table E? Do they remain realistic?

Secretariat Comment at CEO Endorsement Request

(7/21/2023)

1. CI 7: Please revisit the indicator and sub-indicators and refer to the definitions in the GEF core indicator guidance:

- the Number of shared basins is set as zero. Why?

- there is no figure for 7.1, 7.2, 7.3, or 7.4

2. CI 11 : the number of 1200 was asked to be assessed during PPG as this is very low and explained. It has not changed from PIF while a pilot was added. The text under the CI table reads as if a PIF comment.

3. Given the work in the pilots there is no area under improved management at the end of the project estimated ? That seems an omission.

(11/27/2023)

1. Core indicators: GEF Core Indicators and their targets are required to be explicitly mentioned in the Results Framework in Annex A at CEO Endorsement. Please include the core indicators and their targets in the annex A.

(12/13/2023)

Addressed.

Agency Response
FAO response 8-Dec'23

Core indicators added at the beginning of the Results Framework

FAO response Oct 23

1. Re to Indicator 7:

The project is focused on transboundary aquifers, which include the Shire River basin aquifer, the aquifer system in Uganda, and the aquifers in the Mono River basin. Both the Mono and Shire have been indicated. A TDA has already been developed for the Shire system therefore sub-indicator 7.1 was set to 4 for this system. In addition, we kept global in this CI to encompass the Pan-African nature of the project. Re to Indicator 4:

2. Re to Indicator 11:

Building on Indicator 4, With a population density of 139 people/km² based on the global world population data of 2020, this results in a beneficiary of around 20,000 people. Similarly, for the Mono River Basin, with ten monitoring boreholes equipped with data loggers, the area under improvement will be 100 km², and with the population density of 108 people/km² for the Mono River Basin, around 11,000 people will benefit. This includes as required only direct beneficiaries through work on the ground. The scaling-up will increase this number substantially within the five target countries and at the Pan-African level. In Uganda, 3,200 people will directly benefit from improved management, including approximately 420 that will be trained. The total is 34,200 people with 13,680 women, and 20,520 men.

3. re to indicator 4:

The groundwater monitoring network will be designed for the whole catchment area (the optimal location of monitoring boreholes will be determined). After the optimal monitoring network is designed, a phased approach will be followed, where monitoring boreholes are drilled and equipped in phases depending on fund availability. The density of wells in a groundwater monitoring network depends on several factors, which include the cost of drilling, aquifer geology and groundwater flow, regulatory requirements, and the type of monitoring network. Assuming a monitoring network density of 1 in 10 km² (Jousma, 2008), the area under improved management is estimated. The area under improvement management for the Shire with 14 boreholes equipped with a data logger is 14,000ha, which is 3.5% of the area of the transboundary Shire alluvial aquifer. In application of a similar process in Uganda, 2,000ha of land will be under improved management. A similar approach was adopted for the

Mono assessing a total of 10,000ha of area under improved management. The Total is therefore 26,000ha.

Part II ? Project Justification

1. Is there a sufficient elaboration on how the global environmental/adaptation problems, including the root causes and barriers, are going to be addressed?

Secretariat Comment at CEO Endorsement Request

(7/21/2023) No

1. The project description remains on a very general level of literature summary on groundwater issues in Africa.

The references mainly focus on scientific literature and studies and do not refer to any past or ongoing on the ground experiences and/or policies and strategies that support or hinder sustainable groundwater management in Africa.

2. Please more clearly list barriers and root causes that have been identified and, therefore, build the base for the design of the project.

The text as is does not provide a sufficient project specific background to prepare the ground for the project design and theory of change.

3. To aid the flow of the document, please annex all lists of references across the ER in one Annex.

(11/15/2023)

The substantial revisions of the text are well noted. Much improved while still long.

1. Para 1: Please note that while the groundwater resources in Africa are estimated to be very large only a fraction of this groundwater is considered to be economically viable to be exploited (see also the cited WB report). The background often skips to consider the economics in terms of the costs of pumping versus the use and benefit.

2. Barriers:

i. Groundwater Governance: Gaps in governance frameworks to build the enabling environment across sectors to safeguard overuse and prevent pollution is strangely not listed as barrier. Also not considered are inequalities of access to water as well as pitfalls of often tying land and groundwater rights.

The project should aim to address to support AMCOW and the countries to address gaps in shortfalls in governance more explicitly.

ii. Capacity: Please include the lack of capacity to assess and monitor groundwater quality in very many countries in Africa.

(12/13/2023)

The comments have been addressed in the revision. Cleared.

Agency Response

FAO response 8-Dec'23

We added a paragraph on the economics of groundwater abstraction and considerable text on governance barriers. Coverage is now given to capacity constraints as well.

FAO response Oct 23

1. The project description has been revised and expanded with more detailed information to describe more in detail: 1) the status of groundwater resources and management in Africa; and 2) the main groundwater governance challenges the region and countries are facing.

Only relevant and up-to-date scientific references have been kept. Existing relevant projects, program and policies have been now included for improved contextualization from a science and policy perspective.

2. Project description and baseline scenarios have been revised and expanded to provide more context and support the ToC.

Project description and baseline scenarios have been revised and expanded to provide more context and support the ToC.

3. We shifted all references into the last Annex.

2. Is there an elaboration on how the baseline scenario or any associated baseline projects were derived?

Secretariat Comment at CEO Endorsement Request

(7/21/2023)

1. The baseline does need to capture the situation in the region, including relevant initiatives, policies, strategies etc. in the case of groundwater there is clearly a need to consider linkages across sectors, e.g. large plans for, say, irrigation expansion in a sub-region or urban growth in areas of already high groundwater dependence will require to change cause to increased policy and strategy coherence and a systems approach.

The baseline lists ongoing projects and programs and please identify lessons learned from these that will or have informed project design and implementation.

The section is also very long and could be streamlined to focus on where the project goals are. General section can be shortened and taken out (studies that stay general and do not aid the project development much : ".. groundwater resources in the region are vulnerable to climate change and human activities", "as groundwater resources decline or become contaminated, natural ecosystems such as wetlands, rivers, and forests may be negatively impacts" and the like.

FAO to advise the executing partners on the emphasis and common outlines of background and baseline sections for GEF projects.

2. While the ER is full of literature and study references many are too academic, and others are rather outdated, such as 2012 UNESCO studies on groundwater use.

3. Water quality (again: better to be in the section on environmental/adaptation problems): we have provided a few pointers in the comments at PIF stage to recent compendiums. While water quality information is scarce in Africa its isn't nil. A 2021 CGIAR study is cited and pollutants listed but with no data or map attached to this.

4. STAP asked for possible futures and how the project will be impacted. The listed bullets of futures scenarios then need to have reference to the project and adaptive project management options. E.g. just as one (1) example from the text: if solar pumping keeps taking off, this aids food supply/irrigation but could have significant negative impacts on groundwater uses as now crops could be irrigated beyond their de facto value. What can needs to be done e..g via water user associations or other. Can this be addressed in one of the pilots (more on the selection of pilots below under project description).

5. The baseline/ 'background' for the case studies amounts to a simple description. It does not relate to the problem setting and root causes, it needs to be make clearer why and how these case studies are chosen based on the root causes and needs, innovation or upscaling potential. This is a major weakness for now.

6. Who are main actors in Africa that the project needs to engage, what is their role, what could be their role in an improved end of project and beyond scenario - including the government across levels and sectors., key private sector players (and champions that could be engaged), regional expertise and experiences (including by OSS, SADC GMI, IGRAC or the Africa Groundwater Caucus, Africa borderlands, etc....)

7. Map 2 is not useful unless there is some text with it. Why is terrestrial vegetation depicted as small dots, inland surface waters do not show major rivers, etc. Is there a better map on groundwater dependent ecosystems in Africa that could be used (check with RAMSAR?; any trends ?).

8. The text is long and seems to not have a clear thread running through it. This project is supporting AMCOW and the countries AMCOW represents to address key challenges and needs to strategize and prioritize what needs to be addressed: then could there be a reflection on these needs (AMCOW White Paper?), capacity needs (human, institutional, information, technology..) and what then can the project support to move this forward in the framework of support of AMCOW and the existing groundwater centers. The project has to articulate more clearly how it is designed to be building both on demand from bottom up and marrying this with the outstanding capacities and complementarities of IIASA and IWMI.

(11/15/2023)

Revisions are well noted. Comments below reflect the revised text:

1. Table 2/baseline: Please separate past initiatives from the ongoing/time overlap with project baseline on which the GEF increment is identified.
2. Please add reference to ANBO which is after all the technical arm of AMCOW.
3. Case study selection: Please concisely describe the "vertically integrated engagement process" leading to the selection of the three pilots and alternatives considered.
4. Shire river basin pilot: it somewhere mentions that water hyacinth is among the main groundwater problems. This may be typo.

(12/13/2023)

The comments have now been addressed. Cleared.

Agency Response

FAO response 8-Dec'23

1. Table 2 has been divided into two (ongoing and past projects),
2. Attention has been given to ANBO, and a paragraph on criteria has been included.

3. Criteria and guiding case study selection, alternatives considered and engagement process is explained.

4. Reference to water hyacinth has been removed.

FAO response Oct 23

1. The baseline has been revised to capture ongoing or recently finished projects and initiatives G4DR could build upon.

The list of baseline projects was conceived with the idea of having a knowledge base upon which G4DR could be built. Many of the mapped projects have developed data that can directly inform some of the components. Other projects have approaches or methodologies like those we plan to implement (e.g., capacity development activities, monitoring, stakeholder dialogues, among many others), for which we would need to dive further during project implementation to identify good practices.

We shorted this section as requested.

We have revised the outline to align it with other GEF proposals.

2. We have integrated also nonacademic references, and ensure that the ones remaining are up to date.

3. We have expanded the description of the water quality issues and type of drivers, as well as included some maps, fixed the references and added a few country/aquifer specific studies. To avoid adding even further to the length of this section we kept it short. But these results will be considered during project execution.

4. Considering that this project is still under GEF7 we have not fully transformed the section to the multiple futures design the STAP requests for GEF-8. Instead we focus on outlining one baseline scenario including the key activities already in place to address key challenges identified.

5. The case study baseline for the three pilots has been updated and better connected to the problem setting.

6. We added a detailed list of key actors at the pan-African level as well as for the three focus areas.

7. The second bullet point in the list before Figure 1 was referring to this map. We added a key statement but kept it brief to not further add to the length of this section. It just highlights the need for spatial prioritization. All three project focus sites are located where priority GDEs are located. Africa scores medium to high in diversity of GDE but low in terms of risks

at continental level, although some areas of southern, eastern and western Africa present higher risks. <https://iopscience.iop.org/article/10.1088/1748-9326/acea97/pdf> .

8. The text has been substantially revised to address the concerns expressed under point 8.

3. Is the proposed alternative scenario as described in PIF/PFD sound and adequate? Is there sufficient clarity on the expected outcomes and components of the project and a description on the project is aiming to achieve them?

Secretariat Comment at PIF/Work Program Inclusion

(7/21/2023)

The aim of the project and the expertise of the executing agencies provide a unique and powerful mix to support the Africa groundwater agenda. IIASA's experience in participatory scenario development and leadership in cross-sector modeling can provide support and transfer of approaches and knowledge to the regional groundwater centers and show-casing this with MOIWR in Uganda in a practical application. IWMI bridges science and policy and has long years of expertise to address cross-sector approaches in basins across the globe.

Overall comments:

1. In the project design and set-up it needs to be made clearer how the two executing agencies are supporting and empowering agencies and stakeholders on the ground. There is no doubt that they themselves will deliver e.g. outcomes in pilots. What needs to be strengthened in the way the project is set-up is clarity on demand driven-ness of the pilots and how country based agencies and stakeholders will own and continue the work initiated in the pilots, for example. At PIF Stage it was commented that the project (G4DR) is portrayed like an independent entity and actor while the expectation is that it is embedded in AMCOW.

Similarly, it needs to be strengthened and clarified who drives policy documents and request for recommendations. It would seem logical that this is demand driven by AMCOW plans or other mandates and request from sub-regional or national entities and facilitated through AMCOW, or the three regional groundwater efforts of the RECs. This for now is an assumption and it does warrant spelling out reporting lines (or double-reporting lines) and responsiveness and accountability of the project staff.

2. PMU: see earlier comment and PIF comments and discussion on the "location" of the PMU to be close and later on within AMCOW offices. This will be an important part of sustainability and an exit strategy for the project. Please address both.

3. Pilots: please (1) provide the criteria for the selection e.g. based on innovation and up-scaling potential or other; (2) please provide an outline on the implementation arrangements for the pilots. Who is the counterpart in country or locality to co- lead the effort with support of the executing agencies and how will the project address the local needs and provide

potential for transfer of this to similar circumstances and/or being transformative? Indicators in the results framework would be useful to account both for process and desired impact.

4. ToC: Please provide a narrative for the ToC to accompany the diagram. This will provide a much clearer and needed framework for the project component description that follows. Outcomes of the project need to be clearer to address x-sector engagement and policy coherence while also supporting the assessment tools described to underpin actions.

5. Please mainstream gender considerations more clearly in the project and component descriptions.

Component 1:

6. Sustainable finance to AMCOW for groundwater is mentioned (under outcome 1.1) which is great to see and very much a shortcoming of many projects. What are the mechanisms envisioned ?

7. Please explain how the reach-benefit - empower framework to include women and youth will be applied in the activities.

8. Outcome 1.2: how will the lesson sharing involve and use the set-up and experience of SADC-GMI, the reach and expertise of OSS and the Horn of Africa groundwater work with IGAD countries. The discussion from PIF on was that AMCOW would work with and through the African regional groundwater initiatives.

9. Activity 1.2.1: AMCOW with aid of BGR has piloted national groundwater assessment approaches in Namibia and asked to expand the application or expansion of this framework in other countries. Will the project support this?

10. Diagnostic study of gender responsive-ness of groundwater governance and management: is the aim for a pan-african effort realistic or a focus on select countries ? What is the intent on making this happen across all countries? Will this engage a group of female African researchers and practitioners (and possibly even members of the Youth Forum)? Who is anticipated to lead this work?

Component 2:

11. The ambitions for this effort is high as described and going all the way to the household level differentiated users. It would be good to see if there could be consortium formed with entities who regularly collect regular field data this could build on including possibly UNICEF, FAO, WB, UNESCO, IGRAC, IAEA (see Table 2 of the ER) and of course as mentioned RECs and RBOs with a bottom up data collection related to groundwater. A mixed group of partners may aid to enrich and ground the risk and opportunities analysis as well.

Who is envisioned to house and maintain this inventory of groundwater data in the long run ? ANBO? Regional Centers? Other?

12. Outcome 2.2. : for a long term approach that continues past the project and not relies on a few workshops, please consider some form of Training-of-Trainers approach, including through AMCOW/ANBO, SADC-GMI and OSS or other regional entities (e.g. universities),

Component 3:

13. As commented on before a clearer rationale for the selection of the pilots is needed as well as implementation modalities for these pilots. Who is the client and counterpart for each study. How have local stakeholders been engaged in the design and will be involved in the implementation (incl. communities with consideration of gender roles and attention to local minority groups). Furthermore, a clear view of the envisioned outcomes for each pilot as well as continuity at site; finance past project; innovation and scale-up potential needs clearer articulation.

14. Shire River: what are the main expected pollutants and what do they originate from? Would it make sense to potentially partner with the IAEA Africa Water Quality network ? What drives the location of samples (e.g. groundwater uses , suspected pollutants , new uses ?)

What is the expected follow up if contamination is found?

15. Mono River Basin: the choice of the basin comes to us as a surprise as the IUCN Mono River Basin project is under design at the same time and executed by the Mono Basin Authority, OSS and GWP. How will these efforts link ? Has there been a request by the MBA and/or either country to AMCOW or IWMI? What was the background of selection the Mono basin and what is the location of work? Is this related to the phosphate pollution and - if so - is there engagement with the phosphate mining companies ?

Given the groundwater expertise of OSS and involvement as executing partner in the Mono Basin project, will this executing model be used ?

Are O&M commitments assured for the expected groundwater monitoring network and well installation? This will be critical for sustainability.

From a GEF funding point of view it is essential to clarify the linkages with the MBA project and a clear arrangement showing complementarity and synergy of efforts which have the same endorsement deadlines in December.

16. Uganda work: we understand that this builds on a longer relation established between IIASA and the Uganda Ministry of Water and Environment. While this is the case, the relation of the work in terms of stakeholder engagement and leading of workshops and field visits and especially SAP development as written appears to be IIASA lead and studies only

later refined and endorsed by the Ministry. This may be a drafting issue. Please clarify and assure leadership of the Ministry.

17. KM , synthesis of lessons and dissemination (components 3 and 5): please come back to the hub-and-spoke idea with AMCOW groundwater desk facilitating knowledge exchanges across sub-regions as well as making use of the AMCOW lead Africa Water Week, the SADC GMI annual groundwater meetings, and other existing regional efforts that the IWMI supported PMU can facilitate to strengthen (at this point co-located at AMCOW).

18. Outcome 5.1: who are the "both countries" mentioned in the overall para for which "good working relations" are to be established ?

19. Can you please describe what is meant by a gender responsive monitoring system and the application of the reach-benefit- empower framework in practice? is this systems only tracking gender relevant activities or all activities but with sex-disaggregated data and information collection.

(11/15/2023)

1. Comment addressed.

2. Addressed and co-location with SADC-GMI noted. Cleared.

3. Neither table 1 in the prodoc nor in the endorsement request lists criteria. Please review this reference and provide e.g. page number in the FAO prodoc. Similarly table 3 in the ER is a list of baseline projects and not relevant to the pilots specifically. **Please address.**

4. The (rather wordy) TOC narrative is noted. (i) Please comment that the TOC very clearly lists groundwater governance as Barrier (barrier 1), yet the project appears to not address this very well. (ii) please explain what e.g. "knowledge exchange will establish planning supportive evidence" means. (iii) the TOC narrative speaks about an "upscaling strategy" based on the pilots which is good but needs clearer elaboration in component 3. (iv) further the TOC narrative assumes available co-finance to implement solutions. Unless this refers to the upscaling after the project, this co-finance for the current project is to be secured before endorsement. **Please address/comment.**

5. Comment addressed.

6. - 10. Component 1 comments addressed.

11. Finding a long term and sustainable option to host and maintain data within a regional institution will be of key importance and needs to be explored early in the project to involve that institution in the project activities from the start. *Please address during year 1 of project.*

12. Addressed

13. See comment 4. above.

14. Response noted. During the project please verify that the Malawi authorities have capacities for collection, preservation and analysis of groundwater quality samples and quality assurance protocols in place as well as capacities to enforce these standards as is assumed in the agency response. *Please address during implementation.*

15. - 18. Comments addressed.

19. Improved language in the text and annex noted. Addressed.

BUDGET comments (11/15/2023 and 11/27/2023):

20. Please add a column for M&E costs and match with the budgeted M&E table (see respective comments later in the review sheet).

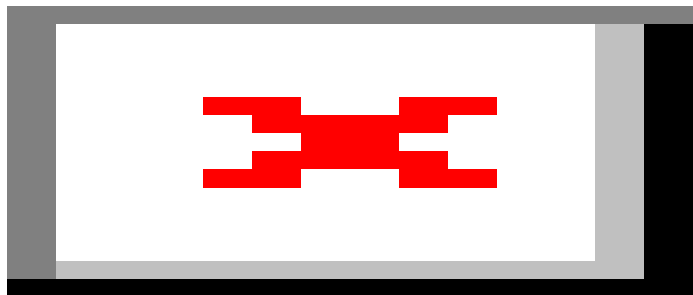
21. Please add a column for "Responsible party" and add the "budget holder"/responsible party for each and every budget line.

23. IIASA and AMCOW are co-executing agencies. Why are these listed as contractors ? Details on the 800 K to AMCOW and 1.4 million to IIASA need to be provided.

24. Please confirm that all contracts will conform with FAO guidelines and thresholds for competitive bidding, (e.g. well rehabilitation. etc.)

25. On the budget (11/27/2023): A Chief Technical Advisor is being charged across components and PMC. Per Guidelines, the costs associated with the project's execution have to be covered by the GEF portion and the co-financing portion allocated to PMC please ask the Agency to revise.

26. Spot-checks must be charged to M&E, not to PMC.



(12/13/2023)

3. Comments addressed.

4. Comments addressed in the revised version.

5. - 19. Were addressed.

Budget:

20. Addressed.

21. Addressed (and noted that this column is on the left; Also noted and approved that FAO is budget holder for MTR and TE)

22. <skipped that number >>

23. Noted and yes, the roles of IIASA and AMCOW are clearly elaborated in the documents. Please upload in the Portal a copy of their TORs and budget breakdown at the time of the first PIR (mark as for official use only).

24. Noted and cleared.

25. The TORs have been reviewed and the 22 % allocation to PMC noted. (also noted that the listed co-finance is not in nature as to be able to co-pay the CTA for this project).
Cleared.

26. Addressed.

All comments addressed. Cleared.

Agency Response

FAO response 8-Dec'23

1. Noted. Thanks.

2. Noted. Thanks.

3. As noted in previous comment, criteria are now included. In addition, to acknowledge that the degree to which baseline projects may link with G4DR varies, a column has been added to Table 3 dividing projects into low, medium and high linkage with G4Dr project.

4. TOC narrative is substantially updated. Project team apologizes for some sloppiness in previous text.

5. Noted. Thanks.

6. - 10. Noted. Thanks.

11. Noted with thanks. Efforts will be done at early stages of project execution to secure long-term and sustainable option to host and maintain data within a regional institution. Options to be explored include AMCOW's Knowledge Hub, which covers a wider scope of water and sanitation data. Data will also be provided to the regional centers and feed into their data platforms such as the SADC Groundwater Information Portal (SADC-GIP). It is important to mention that all (non-sensitive) data collected will be made openly and freely available on public repositories such as ZENODO to facilitate knowledge transfer to and uptake by regional/national organizations. We have now added this into the project document.

12. Noted. Thanks.

13. Addressed in response to comment 4. above.

14. Noted with thanks. Monitoring all the activities executed, expenses and flow of data and information produced by all the countries will be part of the monitoring and evaluation routines performed by the Executing Agencies and FAO.

15. - 18. Noted. Thanks.

19. Noted. Thanks.

20. A column for M&E is included in the uploaded budget. Its total (USD 272,664) matches the amount budgeted in the M&E table included in the CEO ER.

21. A column for "Responsible party" is included in the uploaded budget.

23. As agreed at PIF stage, IWMI will be the leading executing agency for the project. IIASA and AMCOW will receive resources from the lead executing agency (IWMI) for the deliverables detailed in the ProDoc for Component 1 (AMCOW) and Components 2 and 3 (IIASA). Operationally, this is the most cost-effective way of involving them and transferring resources in-line with FAO and GEF fiduciary standards. IIASA and AMCOW's funding is listed under subcontract because they will receive the funds from IWMI. Kindly note that regardless of whether AMCOW and IIASA are budgeted under the subcontracts' category, their roles are clearly and transparently explained in the execution arrangements section of the CEO ER.

In application of the Operational Partner Agreement signed with and under the supervision of FAO, IWMI will develop the subcontract budgets for IIASA, AMCOW, and any other regional or national entity that will execute technical activities in the project. The budgets of AMCOW and IIASA are being developed and can be made available upon request.

24. IWMI's technical capacity and administrative infrastructure, including procurement standards, have been duly assessed in line with FAO rules and procedures and with GEF fiduciary standards. Therefore, IWMI's rules and regulations will be applied for bidding processes.

25. A Chief Technical Advisor cost is partially covered by technical components because this staff of the PMU will run both managerial/coordination activities (covered by the portion allocated to the PMC) and technical activities covered by the technical budget under the five project's components. The technical activities delivered by the CTA are duly listed and detailed in the Terms of Reference of the CTA included in Annex P: TORs of key staff and consultants (attached both as stand-alone document in the roadmap of the submission and as part of the FAO Project Document).

26. Spot-checks moved to M&E as requested By the GEF TM.

FAO response Oct 23

1. We added a sub-section on the demand driven process and clarified the role of AMCOW in the various activities.
2. We added a sub-section on sustainability of the process and clarified AMCOW's role (as per AMCOW's request).
3. We used a well-defined and transparent set of criteria listed in Table 1 of the selection of the main document for the selection of the case studies in addition to the diversity in geographic locations (East, West, and Southern Africa), governance (availability of River Basin organization or institutions), past project activities (Shire (IWMI), and Uganda (IIASA)). The case studies were selected based on a series of stakeholder engagements. A

table summarizing the client and counterpart for each case study and local stakeholder engagement is presented in Table 3.

4. We added a narrative to the TOC diagram.

5. The language has been strengthened throughout the document and added paragraphs with specific reference to the ?reach-benefit-empowerment- gender mainstreaming framework.

6. Additional detail has been added related to specific actors that are envisioned to form part of a Partners forum, as well as methods related to income streams and diversification options.

7. While the Annex does detail this we have now included more explicit reference to this in the text.

8. We expanded the activity description to: ?To support planning, it is equally relevant to share lessons on groundwater governance and support harmonization and inter-linkage between planning processes at a pan-African scale and in RECs, RBOs and member states. Regional entities such as SADC-GMI, OSS and IGAD will play an integral role here, through provision of examples of frameworks for lesson-sharing such as the those emerging from the SADC-GMI Policy, Legal and Institutional (PLI) Development project. They will also play a key role in provision and synthesis of key data and information.?

9. Yes, the project will actively collaborate with BGR and this is now noted in component 1.

10. Focus will be on select countries with inputs from a variety of female scholars and practitioners. This will be colead by IWMI and AMCOW.

11. Discussions on collaborations on this activity with several entities who regularly collect field data such as IGRAC, IAEA, WB, BGR, BGS and FAO have been initiated and will be agreed on during the inception phase of the project.

To ensure the long-term hosting and maintenance of the compiled groundwater data, it will be provided to AMCOW to potentially feed into its Knowledge Hub, which covers a wider scope of water and sanitation data. Data will also be provided to the regional centers and feed into their data platforms such as the SADC Groundwater Information Portal (SADC-GIP). As a backup strategy, all (non-sensitive) data collected will be made openly and freely available on public repositories such as ZENODO. We will explore other options for housing the data during the project based on discussion with partners.

12. Thank you for this thoughtful comment. We have now added that we will follow the train-the-trainer approach to pass the knowledge and expertise on to the local experts, who may then become trainers themselves. We propose the selection of those local experts to be carried out by AMCOW/RBOs/RECs.

13. We used a well-defined set of criteria listed in Table 1 of the selection of the main document for the selection of the case studies in addition to the diversity in geographic

locations (East, West, and Southern Africa), governance (availability of River Basin organization or institutions), past project activities (Shire (IWMI), and Uganda (IIASA)). The case studies were selected based on a series of stakeholder engagements. A table summarizing the client and counterpart for each case study and local stakeholder engagement is presented in Table 3.

14. The main pollutant sources in the Shire catchment include 1) sedimentation due to farmland expansion and catchment degradation, 2) pesticides due to agricultural applications, 3) nitrate and phosphate pollution due to fertilizer applications in agriculture, 4) wastewater - composition varies depending on the type of effluent (can be heavy metals, nutrients). Groundwater quality problems in the Shire River Basin include also high fluoride, iron, arsenic, salinity, and water hyacinth. Since the Shire River basin is in the East African Rift Valley, groundwater fluoride concentration is high, sometimes above WHO drinking water standard.

Malawi is the focal country for the IAEA Global Africa-wide Water Quality Network. IAEA has a dedicated water quality laboratory in Malawi where they do capacity building under their Global African-wide water quality network. With the IAEA, we see two pathways for collaboration: 1) Make use of their laboratory in Malawi to analyze water quality samples collected in wet and dry seasons in the Shire, and 2) IAEA is currently doing groundwater dating to know the residence time of groundwater. Hence, we may use this data for our water quality data analysis to infer the source of pollution and the sources of groundwater resources. We will develop a small contract with IAEA for water quality sample analysis.

Re to the expected follow up if contamination is found. Monitoring aquifer pollution is an important strategy in managing groundwater quality. Once the contaminant of concerns and sources are identified by comparing against WHO and the country's water quality standards, further measures are recommended to reduce the concentration or limit further degradation. For instance, in Malawi, the effluent discharge is compared with Malawi Standard, and if it is above the standard, they will be penalized by the National Water Resources Authority or Malawi Environment Protection Authority. On the pollution from fertilizers and pesticides - advice includes enhancing land cover (vegetation), promoting the use of organic farming, integrated pest management, etc.

15. Annex G has been added that outlines linkages.

OSS's activities and those supported by G4DR will be complementary. G4DR's activities in the Mono will be implemented by MBA, national point of contacts, and IWMI. As just noted, complementarities are reflected in the table in Annex G. To ensure synergy, OSS is envisioned to sit on a technical committee for G4DR-supported work in the Mono.

The ability of the pilot activity to continue delivering the intended service depends on the stability of financial resources for the maintenance of physical infrastructure, technical and institutional capacity to sustain the operation of the pilot activity, and coordination with government and community organizations and beneficiaries. The pilot activities are co-

designed with key stakeholders, and we will ensure that local and community organizations are actively involved in all stages of project implementation. The pilot activities will be implemented with key government and River Basin organizations with sufficient human and physical resources and the technical skills needed to take over. The proposed technologies in the pilot activities are appropriate, and further training will be provided to enhance their capacity for operation and maintenance. The National Coordination Units will facilitate the operational coordination of the project activities in each participating country.

Clarifications on the linkages with the MBA project and a clear arrangement showing complementarity and synergy of efforts are available in Annex G.

16. The allocation of responsibilities within the Uganda activities has been clarified to reflect the role of IIASA and the main partner (Ministry of Water and Environment). The Ministry will indeed lead some core activities such as the development of the SAP, along with the coordination of stakeholder engagement activities. IIASA will support by offering tools and processes to facilitate the implementation of the activities.

17. Noted, SADC-GMI will facilitate cross-region lessons exchange which will be channelled up to AMCOW. Equally, guiding frameworks on a set of key issues will be developed in component 1 and fine-tuned in case studies of case studies. Finally, dissemination activities in component 5 will certainly be channelled through to outcomes areas 1.2 and 1.3 for which AMCOW will play a central role.

18. Language has been corrected.

19. This has been explained in the Annex N: Gender Integration and Equality Approach and Action Plan ? we have now added some detail to the text as well. Annex N is available both as a stand-alone document in the roadmap of the submission and also as part of the FAO ProDoc attached as PDF.

4. Is there further elaboration on how the project is aligned with focal area/impact program strategies?

Secretariat Comment at CEO Endorsement Request

(7/21/2023) Yes but please strengthen to describe how the project will not only lead to better information but also improved governance and interaction across e.g. water - food - ecosystem dimensions and address water security.

Please note that the CCA -3 is not applicable here as this is specific to another GEF managed Trust Fund.

(11/15/2023)

Revision noted. Cleared.

Agency Response
FAO response 8-Dec'23

Noted. Thanks.

FAO response Oct 23

Thanks for pointing this out. We revised the section accordingly.

5. Is the incremental reasoning, contribution from the baseline, and co-financing clearly elaborated?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

1. It is not entirely clear to the review what is meant with a "novel institutional vehicle" and the "proposed institutional support framework".
2. It is well appreciated that the World Bank/CIWA, the Government of the Netherlands, the US State Department and wider CGIAR systems expressed interest in cooperation with the project. This was an earlier comment and question including re. potential co-finance.
3. The section explicitly mentions suitability assessment for MAR. Kindly cross reference the sub-component where MAR is addressed.

(11/15/2023)

1. - 3. Answers noted. Addressed

Agency Response
FAO response 8-Dec'23

Noted. Thanks.

FAO response Oct 23

1. We revised the text to clarify the incremental reasoning.
2. We also added text to the coordination with other initiatives throughout the ProDoc.
3. Multiple activities in Component 3 will lay a basis for pursuing MAR. While MAR will not be explicitly undertaken in the project, activities will support identification of potential for MAR. In particular, monitoring work in C3 will feed into outcome area 1.3 to highlight investment opportunities for MAR.

6. Is there further and better elaboration on the project's expected contribution to global environmental benefits or adaptation benefits?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

Please focus on benefits that are clearly addressed and also measured by the project or can at least be credibly estimated tracked as co-benefits.

(11/15/2023)

Section much improved. Please capture co-benefits to groundwater fed ecosystems and avoidance of cross-stakeholder conflicts on local levels in the project lessons learning especially in the pilots. If not monitored and documented such co-benefits will not be accounted for in future. Cleared.

Agency Response
FAO response 8-Dec'23

We have added the co-benefits provided by improved groundwater management to groundwater-dependent ecosystems and avoidance of cross-stakeholders conflicts. We will make sure to monitor and document these co-benefits during the project implementation. We have added this into Component 3, Output 3.4.2 Synthesis and dissemination of lessons, so this required action is documented.

FAO response Oct 23

This section has been revised to make sure we focus on the benefits and co-benefits of the project that can be measured.

7. Is there further and better elaboration to show that the project is innovative and sustainable including the potential for scaling up?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

Please focus this section on the project and its expected impacts and innovative approaches. Please keep this clear and more concise.

(11/15/2023)

Addressed.

Agency Response
FAO response 8-Dec'23

Noted. Thanks.

FAO response Oct 23

This section has been revised to clearly indicate the project innovativeness and expected impacts.

Project Map and Coordinates

Is there an accurate and confirmed geo-referenced information where the project intervention will take place?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

Please provide maps of the pilot areas and geo-location/coordinates. Please zoom this in to actual areas of the pilots (not entire countries or basins).

(11/27/2023)

Geographic location data: In Annex D on Project Map and Coordinates, please consider inserting the geographic location of the site directly under the dedicated ?GEO LOCATION INFORMATION? ? it is left blank. This includes the Location Name, Latitude and Longitude (data entry field in decimal degree format only).

(12/20/2023)

On Geographic location: Geographic location data: In Annex D on Project Map and Coordinates, please consider inserting the geographic location of the site directly under the dedicated "GEO LOCATION INFORMATION" if it is left blank. This includes the Location Name, Latitude and Longitude (data entry field in decimal degree format only).

(12/21/2023) Comment addressed. This is a continent-wide regional project. Locations of the pilot sites provided. Cleared.

Agency Response

FAO response 21-Dec'23

The geographic location indicating the *"Name, Latitude and Longitude in decimal degree"* is included directly under the dedicated "GEO LOCATION INFORMATION".

FAO response 8-Dec'23

A table with the coordinates of the site has been included in the submission **below** the maps which were already included previously.

FAO response Oct 23

We added a map as per request.

Child Project

If this is a child project, is there an adequate reflection of how it contributes to the overall program impact?

Secretariat Comment at CEO Endorsement Request

NA

Agency Response N/A

Stakeholders

Does the project include detailed report on stakeholders engaged during the design phase? Is there an adequate stakeholder engagement plan or equivalent documentation for the implementation

phase, with information on Stakeholders who will be engaged, the means of engagement, and dissemination of information?

Secretariat Comment at CEO Endorsement Request

(7/21/2023)

1. Lists of entities and titles of people consulted during the design phase are provided. Please add the names to provide transparency.

2. Lists of stakeholder entities are listed and frequency of expected interaction and their role/category.

While these lists are long the actual implementation modalities of the pilot actions are for the most part not clear- see earlier comments.

3. The ownership and central role of AMCOW needs to show across the entire project description. e.g. for the formulation of the project "AMCOW provided inputs at various points in the process" is casting doubts of the ownership and leading role of AMCOW.

4. As per earlier comments, key partners to AMCOW and support to groundwater and APGrop in particular are not involved in the project. Per table 3 in the endorsement request "IGRAC, BGR, SDC, UNESCO, ANBO and CIWA" are referred to as "Pending interest from such organizations, they will be invited to strategic consultations with input and partnership solicited in project roll-out".

The cooperation with these close partners to AMCOW and many RBOs and countries on groundwater is essential for meaningful and successful implementation of the project. Such dialogue and collaboration would have been a logical and essential part of working with AMCOW during the preparation of the project. While COIVD may have made in person meetings harder, 2023 all meetings and travels are happening and close development partner cooperation or at least coordination in support to AMCOW is an essential element before this project moves forward.

(11/15/2023)

1. *In future* please also capture and list the names of people consulted.

2. Noted, these organograms will need to be refined *during implementation* including roles on local levels.

3. This has been revised. Comment addressed.

4. Addressed and to be expanded and please captured in the annual PIRs *during project implementation*.

5. It is noted that the project has provided details on stakeholder consultations during PPG and submitted a stakeholder engagement plan (SEP). However, the SEP only provides limited information on specific NGOs and civil society organizations and groups that will be engaged in project implementation in the respective participating countries. Please ask Agency to provide further details on these specific organizations and groups, their roles as related to project components, as well as the planned means of engagement.

(12/13/2023)

1. - 4. addressed for now.

5. The additions on youth networks and other NGOs and some CSOs has been noted (Annex L). During implementation there should be a case-by-case assessment if digital consultations are suitable and effective as the only means for exchanges. This should be explicitly reported on in the PIR. Especially in the case study areas (Mono basin, Shire river, and Uganda) the direct involvement and face-to-face meetings involving local NGOs, CBOs, and youth networks should be explored and, where feasible, be aimed at.

Comment addressed at ER stage, *but please follow up and report during implementation.*

Agency Response

FAO response 8-Dec'23

1. Noted with thanks

2 Noted, the organograms will be refined during implementation.

3 Noted. Thanks.

4. Noted. Advice will be implemented during the preparation of the annual PIRs.

5 Noted. Enriched mapping of CSOs and NGOs which were and will be engaged added to the table included in the UPDATED-Dec23 Annex L-Stakeholder Engagement Matrix and Grievance Redress Mechanism. This annex is available in both the roadmap of the CEO ER, and as part of the FAO ProDoc attached as PDF.

FAO response Oct 23

1. We expanded on this section to further improve the transparency.

2. We have added annex F with pilot execution arrangements

3. We clarified AMCOW's role throughout the ProDoc.

4. We clarified the role of other groundwater-focused organizations in various parts of the ProDoc. We engaged with all of these organizations during the PPG phase.

Gender Equality and Women's Empowerment

Has the gender analysis been completed? Did the gender analysis identify any gender differences, gaps or opportunities linked to project/program objectives and activities? If so, does the project/program include gender-responsive activities, gender-sensitive indicators and expected results?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

There is a gender action plan but much of the analysis especially for the pilots will only be done during the first 6 months of the project. The gender responsive activities especially in the pilots are not clear. Gender aspects and gender differentiated roles are not mainstreamed in the project document and this needs to be strengthened and added with additional text and/or clear and specific reference to sections of the gender action plan.

(11/15/2023)

The updated annex is noted and agreed that details in the pilots will only be carried out during the first 6 months of the project. The methodology and activities to be carried out in this regard for the pilots are well described. Please explicitly capture both in the project monitoring and in reporting during project implementation. Addressed.

Agency Response
FAO response 8-Dec'23

Noted with thanks.

FAO response:

The gender analysis has not been completed because it will follow during the Project Execution. This will be a part of the project. The 'reach-benefit-empowerment' gender mainstreaming framework (description and links to activities provided) which is described in the Annex attends to this. Extra reference to this framework has been made in the text.

Analysis will be done in the first six months of the project to ensure that the findings are incorporated in the rest of the project. Additional text has been added with more reference to the gender action plan.

Private Sector Engagement

If there is a private sector engagement, is there an elaboration of its role as a financier and/or as a stakeholder?

Secretariat Comment at CEO Endorsement Request

(7/21/2023) No. The involvement of the private sector - major users and dependent on groundwater - needs to still be outlined in practical terms for the project activities. The description is conceptual at this point and detailed and valuable as a starting point.

Please translate this on who (what leading private sector players) will be involved in the project in what role. Please include this in the component description.

(11/15/2023)

Agreed. Please capture in PIRs and experience notes for the project both with regard to major users (quantity) and interaction and activities engaged polluting industries and sectors (incl. e.g. mining and agriculture).

Agency Response

FAO response 8-Dec'23

We have added this into Component 3, Output 3.4.2 Synthesis and dissemination of lessons, so it is documented. We will make sure to capture the engagement with the private sector in the PIRs and experience notes of the project.

FAO response Oct 23

We have now indicated ways to engage with the private sector in the different project components and some initial mapping of potential private sector actors. We propose that a detailed mapping of relevant product and service providers throughout the groundwater value chains to be done during the project execution.

Risks to Achieving Project Objectives

Has the project elaborated on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved? Were there proposed measures that address these risks at the time of project implementation?

Secretariat Comment at CEO Endorsement Request

(7/21/2023)

1. Please be more detailed on the climate risk assessment in the risk matrix. Given the climate risk in Africa is the risk to project sustainability low or moderate?

2. Ownership and interest of countries and private sector partners - the risk is underestimated given a rather shortlived engagement and unclear local leadership in the pilots and no concrete interest and private sector partners and champions identified at this point.

3. Please assess: Sustainability of activities post project closure

4. Please add: Lack of cross-sector cooperation and policy reforms

(11/15/2023)

Overall comment: Please separate columns describing the risk from describing mitigation measures that the project will put in place to address this risk (as needed/applicable). To be clear: one column should describe the risk (you already have a column for the rating of that risk; please maintain it). Another column should be added to describe the mitigation measures (and you already have a column to rate the residual risk with mitigation measures; please maintain it).

1. Environmental/social and climate risks:

i.) Why is the risk matrix assessing the "risks of the assessment" instead of the risk TO the project or the risk BY the project ?

ii.) Climate Risk: IIASA has a wealth of data on their fingertips to provide information on climate risks for Africa as a continent as well as the three pilots (to represent west, Southern and the Horn of Africa) as well to comment on the estimated impacts on groundwater recharge. Please provide some more solid information and data here.

2. Included.

3. Not addressed.

4. Included/addressed.

(12/14/2023)

Comments addressed.

(12/14/2023)

Overall comment addressed.

Agency Response

FAO response 8-Dec'23

We have now re-arranged the risk 'Table 7. Risks to achieving project objectives and mitigation measures', with one column describing the risk, one rating the risk without mitigation measures, one describing the mitigation measures, and one rating the risk with mitigation measures.

i.) As suggested, we have removed the 'risks of the assessment' and focused on the risks to the project and the risks by the project.

ii.) We have revised the climate risk part and added the different climate datasets we are planning to use during the project implementation to assess climate risks in the continent and the pilots and its impact on groundwater resources.

2. Noted with thanks.

3. Risks related to sustainability are now acknowledged in the risk section. We have also added a new line in table 7 about risk of limited sustainability of project activities post-completion and a list of mitigation measures to address this risk.

4. Noted with thanks

FAO response Oct 23

1. 2. and 3.

We have completely revised the risk assessment matrix as suggested. We added additional explanation of the climate risk and mitigation measures. We re-assessed the risk of ownership and interest of countries and private sector partners and added mitigation measures. We add the risk of lack of cross-sector cooperation and mitigation measures. Sustainability will be enhanced by embedding national coordinators in key institutes such as MBA.

Coordination

Is the institutional arrangement for project implementation fully described? Is there an elaboration on possible coordination with relevant GEF-financed projects and other bilateral/multilateral initiatives in the project area?

Secretariat Comment at CEO Endorsement Request

(7/21/2023)

1. As commented earlier there is concern from GEF side on project internal coordination if the PMU is hosted in IWMI and not co-located within or close to the AMCOW offices.
2. The cooperation and coordination with earlier listed partners to AMCOW on groundwater and other groundwater activities and initiatives in Africa often supported financially as well as technically by these partners needs to be substantially strengthened. It will not be possible for a lean AMCOW office to function without solid and seamless cooperation among development partners.
3. Please develop a clear and well formulated and common agreed modus operandi and co-implementation arrangements with the GEF supported, IUCN implemented and Mono River Authority, OSS and GWP before endorsement. Furthermore, GIZ is currently supporting the preparation of a Mono state of the basin and river basin action plan which also needs to be considered.
4. The institutional arrangements for the pilots especially in the Mono and Shire basin are not well explained. Please provide annexes for each of the pilots that clearly and in concise terms how this is envisioned, who is responsible and accountable to who, etc.
5. As the pilot studies are serving government priorities and are lead by government it would make sense that national counterpart officers/national coordinators are provided as in-kind contributions by governments and not project paid.
6. TORs of key staff: please confirm that the recruitment and appointment by IWMI follows regular procurement procedures for competitively hired positions.
7. As commented before the support by IWMI and IIASA to AMCOW and regional centers in a 'hub-and-spoke' approach to country and RBO support, capacity development and KM and knowledge dissemination was understood to run like a red thread through the project and needs to be strengthened.

(11/15/2023)

1. Addressed.
2. Addressed based on feedback and please strengthen these relations via partners forum.
3. and 4. Noted. Please further strengthen *in the first year of implementation* as mentioned before.
5. In kind contributions from national and local counterparts need to be secured before implementing the pilots to demonstrate their commitment and enable sustainability past project closure. Please confirm that this will be pursued in the project.

6. Addressed.

7. Addressed.

(12/14/2023) Cleared.

Agency Response

FAO response 8-Dec'23

1. Noted with thanks.

2. Noted with thanks.

3. and 4. Noted with thanks.

5. We do confirm the project will take all possible measures to secure In-kind contributions from national and local counterparts during the execution phase.

6. Noted with thanks.

7. Noted with thanks.

FAO response Oct 23

1. PMU will sit in SADC-GMI.

2. During the PPG phase we had a series of meetings with AMCOW partners to discuss the implementation of the project and to coordinate with their various initiatives. AMCOW is fully engaged and approved the submitted ProDoc, and it is supportive and pushing the activities proposed.

3. The institutional arrangement Section has been substantially revised and a series of discussions have been held with AMCOW and the relevant partners in the three target areas. This has been done in coordination with AMCOW.

4. We have now provided an annex with execution arrangements in the pilots.

5. Noted. While each partner provided co-financing which reflects diversion of some resources to G4DR, in-kind contribution were not made in every case.

6. We confirm that appointment of key staff will follow standard procedures in accordance with IWMI HR Policy.

7. We strengthened the text throughout the relevant sections.

Consistency with National Priorities

Has the project described the alignment of the project with identified national strategies and plans or reports and assessments under the relevant conventions?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

1. The plans are well listed but links of the most project relevant ones to the project should be better articulated (very briefly; a sentence or less often only needed).

(11/15/2023)

Addressed.

Agency Response
FAO response 8-Dec'23

Noted with thanks.

FAO response Oct 23

We elaborated accordingly.

Knowledge Management

Is the proposed Knowledge Management Approach for the project adequately elaborated with a timeline and a set of deliverables?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

1. Please summarize a timelines and set of deliverables incl. their target audience.

2. Please again assure that this is done with and through AMCOW (and/or ANBO as technical arm of AMCOW), SADC-GMI, OSS or IGAD Horn of Africa groundwater and resilience. The formulation puts G4DR which is a project name as an independent entity while the project is intended to strengthen the attention to groundwater in Africa through AMCOW.

3. Please embed the Communications strategy and products in AMCOW and member countries to strengthen their communication. The support by the IWMI communications efforts will assure high quality.

(11/15/2023)

1. Not addressed. The agency is requested to clarify the budget and implementation timeline for key KM&L and communications activities/deliverables across all components. This can be done by including a simple table in the KM&L section.

2. Addressed.

3. Addressed.

(12/20/2023)

In response to KM comments, a table has been added to the KM section, providing implementation timelines for key KM&L and communications activities/deliverables across all components. However, budgets for these activities/deliverables have not been provided. Also, the data sharing platforms and study tours have not been included in the table.

In addition, it should be highlighted that 1 % of the GEF grant is allocated to the full participation in [IW:LEARN](#).

Therefore, the agency is requested to include the data sharing platforms and study tours and provide budgets for all listed activities/deliverables.

(12/21/2023) Comment addressed and a budget for the KM&L activities has been provided and includes study tours etc. Cleared.

Agency Response
FAO response 21-Dec'23

The KM table has been expanded by adding two lines data sharing platforms and study tours. A column indicating the allocated budget has been added for all the lines.

Re the 1% for **IW:LEARN**, the project budget includes two lines tagged as 1% **IW:LEARN**; however, a note has been added at the end of the KM table to reaffirm that at least 1% of the budget will be used supporting **IW:LEARN** initiatives and activities.

FAO response 8-Dec'23

1 A deliverable table has now been added in the KM section, specifying both deliverables and target audience.

2. Noted with thanks.

3. Noted with thanks.

FAO response Oct 23

1. We added to this Section to explain the Communications and Outreach strategy and implementation plan.

2. We reaffirmed AMCOW's central role in the project and key partners.

3. We added this missing link, thanks for pointing this out.

Environmental and Social Safeguard (ESS)

Are environmental and social risks, impacts and management measures adequately documented at this stage and consistent with requirements set out in SD/PL/03?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

1. Please attach the ESS documentation and not just an ESS risk certificate. I do see that the ESS screen is marked as submitted but please point me to where it is or submit next time.

(11/15/2023) and (11/27/2023)

1. I can see the risk certification as Annex to the FAO prodoc and the project is rated as low.

I am sorry, I cannot find the more detailed screening checklist. Please email separately and I can upload it from my end again. Thank you.

2. In addition, please make it clear what the environmental and social risks are associated with the project, mitigation measures for each risk, and how to integrate these mitigation measures as a part of each project activity.

(12/14/2023)

Comment addressed and agency response noted. Cleared.

Agency Response

FAO response 8-Dec'23

The ESS FAO Risk Identification ? Screening Checklist for G4DR was uploaded again on the portal. Moreover, it has been submitted to the GEF TM by email.

On a similar note, kindly note:

The project as classified a LOW risk during the PIF stage. The ESS Risk Identification ? Screening Checklist attached still reflects this rating.

At the end of the PPG phase, the internal FAO's committee requested to reclassify to MODERATE, based on cumulative risk and mainly social risks related to the project foreseeing effects on Indigenous Peoples (ESS9), and any risks related to Decent Work (ESS7) in case the project employs local communities.

In FAO internal project cycle, the reclassification for this causes does not require preparing a new ESS Risk Identification ? Screening Checklist, nor the issuing a new certificate. However, the FAO committee requested modifications to the project document as detailed below:

? Language and actions to prevent negative impacts on indigenous people have been included in the resubmission.

? A new and updated version of the FAO's Grievance Redress Mechanism has been attached as part of the UPDATED-Dec23 Annex L-Stakeholder Engagement Matrix and Grievance Redress Mechanism. This is available both the roadmap of the CEO ER and as part of the FA Project Document attached in PDF

FAO response Oct 23

We assure that the ESS documentation was added, but maybe there was a problem with the system. We will ensure it is again added during re-submission. The file is available in the roadmap of the submission tagged as FAO ES Risk Identification ? Screening Checklist-G4DR.

Monitoring and Evaluation

Does the project include a budgeted M&E Plan that monitors and measures results with indicators and targets?

Secretariat Comment at CEO Endorsement Request
(7/21/2023)

1. It has two tables on M&E with one lacking a budget and the other one focusing on evaluation (pg. 131/132 and pg 137). The M&E costs should be included in a column of the budget table template as well.

(11/15/2023)

1. Please add a column with M\$ E costs (in USD) to table 6. Please make sure the total budget for M&E added then in the total of table 6 matches the total of the M&E column of the GEF Budget table (Annex E). Note also, that an M&E column needs to be added to the budget table !

(12/14/2023)

Comment addressed. Cleared.

Agency Response
FAO response 8-Dec'23

Addressed as explained above. M&E column added to the budget which total matches with the total of the M&E table in the CEO ER annex E.

FAO response Oct 23

Thanks, we revised the Section accordingly.

Benefits

Are the socioeconomic benefits at the national and local levels sufficiently described resulting from the project? Is there an elaboration on how these benefits translate in supporting the achievement of GEBs or adaptation benefits?

Secretariat Comment at CEO Endorsement Request

(7/21/2023) Please focus on the benefits of the project as well as directly attributable co-benefits.

(11/15/2023)

Please capture (quantify) direct and main co-benefits in the project monitoring and during project supervision and include in MTR and TE.

Cleared.

Agency Response

FAO response 8-Dec'23

Addressed as above. This will be considered during MTR and TE. Indicated in the Socio-economic benefits section, so this required action is documented.

FAO response Oct 23:

We have revised this section to focus more on the benefits and co-benefits of the projects.

Annexes

Are all the required annexes attached and adequately responded to?

Secretariat Comment at CEO Endorsement Request

(7/21/2023)

<< comment to be finalized after GEF policy review>>

(11/15/2023)

Yes (minus my earlier comment on not able to locate the ESS checklist in addition to the FAO risk certification).

(12/14/2023)

Addressed.

Agency Response

FAO response 8-Dec'23

ESS attachment was uploaded again in the roadmap of the submission and also shared by email with the GEF TM.

FAO response Oct 23:

to me responded in the next revision.

Project Results Framework

Secretariat Comment at CEO Endorsement Request

(7/21/2023)

1. Please explain the CI sub-indicator final targets of 4 across the board.
2. Please set the overall CI 7 indicator
3. What is meant with the mid-term indicator "TOR for sustained AMCOW confirmed". also, why is the baselines "AMCOW ceases in 2023"?
4. Capacity building/1.2 ; indicators appear to indicate very much the concept of distinct/often one-off workshops. for sustainability - as mentioned before - please explore a longer term approach and working through existing expertise in the region.
5. There is a column for "responsibility for data collection". Should this simply be responsible party ? Key partners would be useful to be listed for specific sub-components.

(11/15/2023) and (11/27/2023)

1. Please clearly list all core indicators and sub-indicators with baselines and targets, including for CI 4.

2. Not addressed. Please separate ratings for CI 7 by basin - as done in the CI table.

3. - 5 . Addressed.

6. Please indicate which indicators will be captured sex/gender disaggregated and please indicate where targets are sex differentiated e.g. if trainings or youth forum aims for XX% of women, please indicate this in the Results Framework. It is not sufficient to only have such targets in gender action plans.

(11/27/2023)

Please note earlier comment to include all project relevant GEF core indicators and targets in the RF.

(12/14/2023)

Addressed. Response noted.

Agency Response

FAO response 8-Dec'23

1., 2., 6., and PPO's comment: all addressed

kindly note that the indicators for gender and youth have been included in the Results Framework where not previously already indicated. These correspond to the detail presented in the Gender Action Plan and includes specification if/when sex disaggregated data will be captured.

All project relevant GEF core indicators and targets added to the RF.

FAO response Oct 23

1. We added CI 4 (and the relevant sub-indicator 4.3) to the results framework and to the other relevant sections.

2. We added the overall CI 7.

3. We reworded the Baseline to "AMCOW's capacity to guide pan-African groundwater planning remains limited." And the Mid-term target to "AMCOW support continued."

4. We changed the indicator to "Number of capacity building events held and number of assessments conducted with newly provided tools and implemented in partnership with

regional centers of excellence and their networks to ensure sustainable capacity improvements.?

5. We changed it to ?Responsible party?.

GEF Secretariat comments

Secretariat Comment at CEO Endorsement Request

(7/21/2023)

1. Please note that many of PIF level comments to be addressed during PPG/by endorsement have not been sufficiently addressed. This is of concern. Please go back to the comments and review them before resubmitting.

(11/15/2023)

The majority of comments have now been addressed. Thank you for making a substantial effort to address comments and revise the prodoc and endorsement request.

(12/14/2023) Please take note and follow through on comments to be addressed during implementation and to be reported either in PIRs, yearly work plans and/or the MTR and TR.

Agency Response

FAO response 8-Dec'23

We made all possible efforts to duly address all the comments/requests or provide explanations to GEF SEC in case this was not possible.

FAO response Oct 23

The project team believe they have made strong efforts to respond to the general thrust of comments and feel the overall level of improvement in the ProDoc includes some foundational additions ? e.g., early on focused on root causes and baseline projects ? that cover central areas in comments. We welcome indication on specific points on which

insufficient detail has provided. In addition, it is important to note that, contrary to what indicated by GEF SEC, AMCOW and other key stakeholders have been fully engaged providing concrete inputs and creating expectations for the execution of this project. This was done following the indication of the GEF which first mobilized interest for this investment.

Council comments

Secretariat Comment at CEO Endorsement Request (11/15/2023) None.

Agency Response

STAP comments

Secretariat Comment at CEO Endorsement Request

(7/21/2023)

Please fully address the comments on identifying the key barriers and integrating this in the ToC narrative; engagement of local communities; assumptions and alternative pathways in the ToC narrative; clearer link of pilots to climate resilience; clearer articulation of how the pilots are innovative and replicative; detailed maps of the pilot locations; better articulation on the interface between regional and national institutions; more granular and specific list of stakeholders (incl. on community scale; NGOs; and private sector partners; lesson learned from previous and ongoing efforts.

These comments are for most part already provided across the review sheet as well and hence this will be one and not two separate efforts to address them.

(11/15/2023)

Once the remaining review sheet comments on the TOC are addressed this will address the STAP comments as well.

(12/14/2023) Comments addressed.

Agency Response

FAO response 8-Dec'23

Noted with thanks, and addressed by responding the comments on the TOC

FAO response Oct 23

We added a narrative to the TOC diagram and elaborated on the assumptions and barriers, and described the alternative future this project is targeting, which is to avoid a future of unplanned and unsustainable groundwater use across Africa as many countries are on the verge to embarking on developing groundwater resources to battle increasing climate variability. Instead, the project will establish processes, capacities, and foundational evidence and tools to guide sustainable groundwater management, revealing risks and defining sustainable opportunities for improved water security across Africa, particularly in the three target areas. Pilots have been further discussed with stakeholders and a more granular description has been provided, alongside with maps. We also added text synthesizing lessons learnt from past and ongoing investments relevant for groundwater management in Africa.

Convention Secretariat comments

Secretariat Comment at CEO Endorsement Request N/A

Agency Response N/A

Other Agencies comments

Secretariat Comment at CEO Endorsement Request N/A

Agency Response N/A

CSOs comments

Secretariat Comment at CEO Endorsement Request N/A

Agency Response N/A

Status of PPG utilization

Secretariat Comment at CEO Endorsement Request duplicate question

Agency Response N/A

Project maps and coordinates

Secretariat Comment at CEO Endorsement Request duplicate question

Agency Response N/A

Does the termsheet in Annex F provide finalized financial terms and conditions? Does the termsheet and financial structure address concerns raised at PIF stage and that were pending to be resolved ahead of CEO endorsement? (For NGI Only)

Secretariat Comment at CEO Endorsement Request

N/A

Agency Response

N/A

Do the Reflow Table Annex G and the Trustee Excel Sheet for reflows provide accurate reflow expectations of the project submitted? Assumptions for Reflows can be submitted to explain expected reflows. (For NGI Only)

Secretariat Comment at CEO Endorsement Request N/A

Agency Response N/A

Did the agency Annex H provided with information to assess the Agency Capacity to generate and manage reflows? (For NGI Only)

Secretariat Comment at CEO Endorsement Request N/A

Agency Response N/A

GEFSEC DECISION

RECOMMENDATION

Is CEO endorsement recommended? (applies only to projects and child projects)

Secretariat Comment at CEO Endorsement Request

(7/21/2023) Please address and discuss overall comments and resubmit.

There is solid momentum and awareness in the region to more fully address groundwater in the development and resilience context which the project is building on. The executing agencies are leading entities on the side of applied science to policy links. The challenge of the project design appears to anchor project activities into regionally and nationally sustained and owned processes and establishing the selection process and criteria for the choice of pilots more clearly as being replicable and innovative. Concern remains for sustainability and building AMCOW capacities without collocating the PMU with the AMCOW offices.

<<In the interest of time in this summer and leave period I am sending the project review with only technical comments. The policy review and comments will be done with resubmission. I hope this is acceptable to all as we want to give the maximum time to address these initial technical comments>>

(11/15/2023) and (11/27/2023) Please address the remaining comments and resubmit. Please reach out to the GEFSEC team for any questions.

Please be mindful of the cancellation deadline and aim to resubmit within two weeks to allow review and endorsement in time.

(12/20/2023) Please address comments on Knowledge Management and Learning and on Geo-location/coordinates.

(12/21/2023) The remaining two comments have been addressed and the project is recommended for endorsement.

NOTE: Please take note of the comments and recommendations to be taken account of during implementation and to be reported either in PIRs, yearly work plans and/or the MTR and TR.

Specifically, while the additions on youth networks and other NGOs and some CSOs has been noted (prodoc/Annex L), during implementation there should be a case-by-case assessment if digital consultations are suitable and effective as the main means for exchanges. This should be explicitly reported on in the PIR. Especially in the case study areas (Mono basin, Shire river, and Uganda) direct involvement and face-to-face meetings involving local NGOs, CBOs, and youth networks should be explored and, where feasible, be aimed at. This will greatly enhance ownership, support the sustainability and scalability of the interventions.

Review Dates

	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
First Review	7/22/2023	
Additional Review (as necessary)	11/16/2023	
Additional Review (as necessary)	12/14/2023	
Additional Review (as necessary)	12/20/2023	

**Additional Review
(as necessary)**

CEO Recommendation

Brief reasoning for CEO Recommendations

Background. Groundwater is often overlooked in initiatives focused on climate and ecosystems. While groundwater is a resource on which the majority of the African population depends (Upton and Danert, 2019), and while groundwater plays a key role in climate resilience as a drought-tolerant resource in rural poor regions for drinking water and irrigation needs, often contributes significantly to urban water security in Africa, is supplementing rivers during low flow periods, and sustaining ecosystems, all too often sector and even cross-sector, river basin strategies and management plans fail to take groundwater explicitly into account. With the strategic role groundwater, can play in the future of climate resilience, development and ecosystem services in Africa, it is of utmost importance to account for and build into such plans and strategies at all levels the role groundwater plays in water security and resilience and the potential it has in further safeguarding communities against climate change, while supporting the equitable distribution of benefits across society and the sustainability of ecosystem services.

The project. The Groundwater for Deep Resilience (G4DR) in Africa project aims to bring groundwater and its sustainable development and protection to the forefront of water security and resilience and investment planning in Africa. It will do so by: 1. Strategic Planning: Supporting the African Ministers' Council on Water (AMCOW), through their Pan-African Groundwater Program (APAGroP); 2. Evidence and Capacity for G4DR in Africa: Identifying aquifers that present risk and opportunity to enhance resilience, as well as populations/socio-economic contexts in Africa informing investments; 3. Demonstrating benefit: Utilizing evidence-based planning to realize on-the-ground impacts in pilots; 4. Incorporating G4DR into an inter-generational effort and supporting. a pan-African Youth Forums: enhancing the beyond-project capacity, outreach, networking, and uptake of long-term workable and sustainable strategies and solutions; and 5. Supporting Knowledge Management and M&E: Supporting capture, exchange and dissemination of key project advancements, as well as evaluation of project progress relative to targets.

G4DR success will be gauged by the direct water security and resilience benefits achieved through enhanced consideration of groundwater in planning. More profoundly, the project will achieve success if it strengthens processes and systems across institutions and scales so that the promotion of groundwater in planning and management is sustained. The project's expected regional and global benefits are the support to AMCOW, RECs, RBOs, and Member States to achieve water security and resilience with improved groundwater planning and management. Outcomes will equally support an improved policy context for introducing innovative groundwater solutions in Africa and foster the cross-scale and cross-sector linkages necessary. Capacity strengthening activities will enable stakeholders across scales to assess groundwater assets and further planning and implementation of integrated solutions through demonstrations undertaken in local pilots. Given the intergenerational impacts of overexploitation and quality degradation of groundwater, the project will support an active youth and young professional network on groundwater. Enhanced knowledge generation and lesson exchange will support to increase awareness on the opportunities and risks related to groundwater.

