



Integrated Safeguards Data Sheet Appraisal Stage

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I. BASIC INFORMATION

1. BASIC PROJECT DATA

Project ID P169078	Project Name Horn of Africa - Groundwater Initiative
Task Team Leader(s) Tesfaye Bekalu Wondem	Country Africa
Approval Date 23-May-2019	Environmental Category B-Partial Assessment
Managing Unit GWA01	Is this a Repeater project? No

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	2.70
Total Financing	2.70
Financing Gap	0.00

DETAILS

Non-World Bank Group Financing

Trust Funds	2.70
Cooperation in International Waters in Africa	2.70

2. PROJECT DEVELOPMENT OBJECTIVE

Project Development Objective

To support selected IGAD countries prepare for the development and management of groundwater through strengthening knowledge systems, building their capacity and assessing the feasibility of specific investments.



3. PROJECT DESCRIPTION

A. Project Components

1. The proposed project with an estimated budget of US\$ 2.7 million. has been structured around four main components that start addressing the abovementioned gaps. Each component includes a regional dimension, with a set of activities at local, national or transboundary level in the Horn of Africa, and a global dimension aiming at developing guidance for assessing and managing groundwater in dryland regions in Africa and elsewhere. The Project components are:-
2. **Component 1: Expand the knowledge base on regional groundwater resources (US\$500,000).** This component seeks to continue taking stock of existing information and initiatives to establish a baseline of knowledge on the physical and social aspects of groundwater resources in the region, engaging external partners for some of the activities as needed. This component consists of: (i) technical studies to determine the availability, variability, and natural recharge of shallow groundwater and (ii) workshops to disseminate and validate the technical studies. Building on the methodology of a pilot study to understand availability, spatial and temporal variability, and reliability in the regions of Somaliland and Puntland, volumes of water available for harvesting for 7, 14, and 21 days monthly will be defined at catchment level for the entire region. The input data used for the study will be extracted from a modelling exercise being carried out at the Intergovernmental Authority on Development Climate Prediction and Application Center (ICPAC) in Nairobi, Kenya. This subcomponent will be complemented by mapping of the potential groundwater recharge zones in the arid lands of the IGAD region (funded by the European Space Agency [ESA]).
3. **Component 2: Strengthen capacities in groundwater development and management in IGAD member countries (US\$500,000).** This component consists of a program of capacity building to: (i) identify institutional needs and regional cooperation opportunities, particularly as they relate to groundwater and drought resilience and on transboundary cooperation; and (b) validation of findings with key stakeholders, including, inter alia, regional, national and local institutions, universities, civil society organizations. Activities under this component will focus specifically on the nexus “groundwater and drought resilience and on transboundary cooperation,” technical aspects such as design for drilling and completion of (deep) wells, manual drilling of shallow wells, and pump selection. Some capacity-building activities proposed will be more tailored to state-level needs. Under this component, IGAD member states will have active role in defining their needs as well as mobilizing relevant sector institutions at the national and sub national levels including basin authorities, universities, CSOs, NGO’s and others.
4. **Component 3: Maximize the benefits of groundwater to strengthen resilience to drought and economic development in the region (US\$1,500,000).** This component consists of: (i) the development of feasibility studies related to sectoral water needs and assessment of economically exploitable groundwater resources as a means to build resilience to drought using groundwater in up to three IGAD areas; (ii) preparation of a ToR for the Environmental and Social Impact Assessments (ESIAs); and (iii) development of any safeguard-related instruments, including ESIAs. The feasibility studies will include assessment of environmental and social factors that might affect the study areas, with accompanying mitigation measures. The component will focus on sectoral water needs and on assessing economically exploitable groundwater resources (as opposed to theoretically available resources) and starts identifying suitable solutions to build resilience to drought using groundwater. The development in future demands from groundwater resources will certainly require a more detailed understanding of the water availability, water quality, and the potential pollution threats because the available knowledge is not enough for the aquifers in use. Some priorities include Mt. Elgon (between Uganda and Kenya), Merti (between Somalia and Kenya), and Bagara Aquifera between South Sudan and Sudan. All these are shared groundwater resources and, if developed, have huge potential in promoting cooperation among the shared water resource users. The studies will be outsourced to professional consultancy firms and will also provide general guidelines for groundwater assessment and development



in different aquifer types (geology) and at different depths. Depending on the outcomes of these feasibility studies, other potential aquifers will be considered for feasibility study during the Mid Term Review of the project.

- Component 4: Project management, monitoring, and evaluation (US\$200,000).** This component consists of: (i) key consultancies to support Project implementation; (ii) travel expenses related to the Project; and (iii) provision of Operating Costs. IGAD is the implementing agency for the project and will mobilize its in-house capacity for the work. However, as the need arises, IGAD will use the service of consultants either a firm or individual to fill some of the missing specialized input gaps. This component will finance IGAD staff travel-related expenses to supervise this project, consultant contracts and travels costs, workshop and review meeting costs, and report production and dissemination expenses.

B. Project Cost and Financing

Project Components	Project cost	Trust Funds	Counterpart Funding
Component 1: Expand the knowledge base on regional groundwater resources	500,000	500,000	0
Component 2: Strengthen capacities in groundwater development and management in IGAD member	500,000	500,000	0
Component 3: Maximize the benefits of groundwater to strengthen resilience to drought and economic development in the region	1,500,000	1,500,000	0
Component 4: Project management, Monitoring and evaluation	200,000	200,000	0
Total Costs	2,700,000	2,700,000	

I. IMPLEMENTATION

A. Institutional and Implementation Arrangements

- A regional organization is considered as implementing agency: The Intergovernmental Authority on Development (IGAD). IGAD's past and present program activities provide a foundation from which to further integrate and enhance understanding and utilization of groundwater resources. IGAD has a strong presence across the Greater Horn of Africa and in supporting its individual member states. IGAD is engaged in a range of individual and collaborative efforts to improve knowledge, understanding and strategies on integrated water resources management and drought resilience. Specifically, regarding groundwater, there is opportunity for greater targeted knowledge generation particularly for resources beyond superficial shallow aquifers and translation into investments to support disaster risk reduction, climate resilience and livelihood development.
- The components and activities are knowledge management, technical assistance and capacity building. Most of the activities will be undertaken using the inhouse capacity of IGAD and for some specialized areas consultant service contacts will be used that will be managed by IGAD Headquarters from Djibouti. Overall IGAD's institutional capacity is adequate. IGAD has also experience in managing similar recipient executed activities to the required technical and fiduciary quality.
- IGAD has assigned a dedicated team that includes a team leader, Financial management specialist, procurement specialist, project accountant, internal auditor, M&E Specialist, communications and Gender officer for the project.



IGAD has also communicated in writing the staff authorized signatories for the client Connection. The project team is streamlined with in IGAD's Water Unit and will have all the institutional support from the regional body for all support that it needs

B. Results Monitoring and Evaluation

9. A simplified Monitoring and Evaluation system including reporting formats will be developed to report on the results indicators. World Bank will maintain a biannual implementation review mission on the project and supplement that with interim support missions as needed. IGAD will produce periodical reports on the agreed results framework and prepare a final project completion report after project closure. Periodical reports need to combine the status of activities together with the financial standing for ease of monitoring the agreed deliverables.

C. Sustainability

10. The feasibility studies on the three groundwater potential areas will include detailed cost-effective technical options to extract and rationally use the groundwater, institutional arrangement to implement and manage groundwater, economic and financial analysis, and detailed operation and maintenance arrangements. These studies will also include the preparation of detailed environmental impact assessment for any potential impact that might arise during the development of the groundwater. This will ensure sustainable use of the resources for a long foreseeable time while maintaining a balance between extraction and recharge of the aquifers. All these are expected to contribute to the sustainable use of the groundwater sources with a balanced recharge rate. The institutional strengthening and capacity building as related to the Ground Water development and management in the region coupled with expanding knowledge base is also expected to contribute to the sustainability.

11. The major outputs of this programmatic technical assistance are a surface and ground water assessment for selected parts of the region, Comprehensive needs assessment of the capacity to develop and manage groundwater in the region, and three complete feasibility studies for the development of Ground Water potential areas. All are aiming to benefit the states and people of IGAD block countries. IGAD has a well-established dissemination and outreach mechanism for outputs and deliverable to have a wide distribution. A series of review workshops both for the major and additional outputs to solicit inputs will be organized largely with experts from IGAD member countries and sector partners participation. The final deliverables will be reviewed and endorsed by IGAD's technical Committee for wider distribution. All the reports will help World Bank and development partners to design support programs to the region and member states. The reports will be available to public for easy access on IGAD's website and websites of member states relevant ministries. Most of the reports will also be shared on the World Bank Water GP website "Ask Water" to help teams in other places that are planning to design similar initiatives use it for easy reference.

I. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks



12. The risks associated with this proposal are considered minimal and manageable. This rating has been determined based upon limited political and operational risks. The main risks relate to accessing data, which can be overcome via engagement with multiple stakeholders and relying on both primary and secondary data sources. Stakeholder engagement is enhanced by working with a partner, such as IGAD, with a strong network and good engagement with member countries. On the other hand, any promotion of resource development risks overexploitation if inadequately managed groundwater development is not different and has the added risk of being difficult to control access. Hence, for the pilots to be implemented, it is imperative to calculate sustainable yields, acknowledging environmental baseflows, and develop appropriate governance and management strategies, with accompanying community engagement/ownership (and potentially enforcement) components. Such issues will be addressed in the program components. For the feasibility studies that include trips, surveying or training in the field, security risk exists, which may slow down project implementation and jeopardize field work.
13. There is also risk of not enough ownership from the institutions in charge of compiling and running the databases and different tools developed or lack of engagement with the training programs or other planned products and activities. Similarly, the possibility of information related to ground water not being accessible to everyone who needs it is also the other associated risk. The project will strive to streamline activities into existing agencies at national level and IGAD will continue to play the leading role in knowledge management and dissemination at the regional level and will ensure sustainability and continuation. Awareness building and training will also play an important role in ensuring the sustainability of the project’s outputs.

4. PROJECT LOCATION AND SALIENT PHYSICAL CHARACTERISTICS RELEVANT TO THE SAFEGUARD ANALYSIS (IF KNOWN)

This is a project that includes conducting feasibility studies on ground water potential in three places in the horn of Africa. Some priorities include Mt. Elgon (between Uganda and Kenya), Merti (between Somalia and Kenya), and Bagara Aquifer between South Sudan and Sudan. The feasibility studies will include assessment of environmental and social factors that might affect the study areas, with accompanying mitigation measures. Since the specific sites for the feasibility studies are known, each feasibility study will include an Environmental and Social Impact Assessment (ESIA). The assessment must be done side by side with the feasibility studies and for this very reason a ToR for conducting the ESIA is the project’s effectiveness condition as reflected in the project’s grant agreement.

5. ENVIRONMENTAL AND SOCIAL SAFEGUARDS SPECIALISTS ON THE TEAM

Tracy Hart, Environmental Specialist
Haroub Ahmed Haroub, Social Specialist

6. SAFEGUARD POLICIES TRIGGERED

Safeguard Policies	Triggered	Explanation
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Environmental Assessment OP/BP 4.01	Yes	<p>Component three of the project supports the complete feasibility study of the potential resources and implementation/investment plans for managed development of three ground water aquifers. The feasibility studies will include assessment of environmental and social factors that might affect the study areas, with accompanying mitigation measures. The assessment must be done side by side with the feasibility studies and for this very reason a ToR for conducting the ESIA is the project's effectiveness condition as reflected in the project's grant agreement.</p> <p>The ESIA will include Social analysis including an estimation of the number of persons and structures affected by the Project as well as the identification and estimation of the existing economic activities on site – like grazing.</p>
Natural Habitats OP/BP 4.04	No	<p>Due to the paucity of natural habitats in the Horn of Africa, and the fact that the three physical areas are known, this policy is not likely to be applicable.</p>
Forests OP/BP 4.36	No	<p>Due to the paucity of forests in the Horn of Africa, and the fact that the three physical areas are known, this policy is not likely to be applicable.</p>
Pest Management OP 4.09	No	<p>This policy is not applicable.</p>
Physical Cultural Resources OP/BP 4.11	Yes	<p>This policy will be applicable in order to support the inclusion of chance find procedures in the environmental and social safeguards documents.</p>
Indigenous Peoples OP/BP 4.10	Yes	<p>This is in view of the ground water feasibility studies and their potential to affect indigenous people during future implementation. The feasibility studies will determine that and recommend measures to address.</p>
Involuntary Resettlement OP/BP 4.12	Yes	<p>This is also in view of the ground water feasibility studies and their potential to displace people during future implementation. The feasibility studies will determine that and recommend measures to address.</p> <p>The social baseline and stakeholder engagement activities under ESIA will describe the actions, budgets and resources that will be required for undertaking a resettlement action plan should the</p>



<p>Safety of Dams OP/BP 4.37</p>	<p>Yes</p>	<p>feasibility determine potential for displacement of people.</p> <p>It is possible that the feasibility studies will include options for infrastructural development to include small dams or seasonal storage catchments similar to dams. The ground water feasibility studies will include environmental and social impact assessments (ESIAs) that will have a section on how to manage environmental impacts associated with small dam construction and implementation.</p>
<p>Projects on International Waterways OP/BP 7.50</p>	<p>Yes</p>	<p>OP7.50 is triggered because the Project involves the groundwater resource surveys of the transboundary aquifers of Mt. Elgon (between Uganda and Kenya), Merti (between Somalia and Kenya), and Bagara (between South Sudan and Sudan). Though these are transboundary ground water aquifers which are international waterways as defined by paragraph 1(a) of OP 7.50, the proposed project involves only surveys and feasibility studies and does not include infrastructure work to develop the ground water resources.</p> <p>OP7.50 requires riparian’s to be notified and for projects with activities that have negligible impact on the flows to international water ways, allows exception from notification. Paragraph 7(b) of the Policy spells out this exception, stating that an exception to the requirement of notification can be made in the case of “Water resources surveys and feasibility studies on or involving intranational water ways”. Based on this discussion, the activities under this project will have no impact on the flows to international waterways and the team sought exception from notification. The exception for notification was approved by RVP per terms of OP/BP 7.50 on March 5, 2019.</p>
<p>Projects in Disputed Areas OP/BP 7.60</p>	<p>No</p>	<p>In relation to the ground water feasibility study areas, at this stage there are no disputed areas known to the team. For any eventuality of such issues to arise during implementation the feasibility studies will determine and recommend acceptable modalities of weather to develop the Ground Water potential jointly or by individual countries.</p>

II. KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT



A. SUMMARY OF KEY SAFEGUARD ISSUES

1. Describe any safeguard issues and impacts associated with the Restructured project. Identify and describe any potential large scale, significant and/or irreversible impacts.

OP 4.01 Environmental Assessment is applicable to this project. The currently-known set of potential downstream activities to be supported through this technical assistance are believed to be commensurate with category "B", i.e. their impacts are likely to be site-specific, localized, and reversible. The increased knowledge of the groundwater asset in terms of water quality, quantity, movement, and depth will increase the possibility that further development of the transboundary aquifers can be sustainably managed.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area.

If the feasibility studies to be financed as part of this technical assistance result in preliminary designs for a small dam or reservoir, there is the potential for the following indirect and/or long-term impacts: seasonal river diversion, including the construction of diversion or storage infrastructure; land clearing and relocation/demolition of existing infrastructures; construction of secondary dykes; population resettlement; construction of access roads; construction, maintenance and closure of labor camps and other temporary infrastructures; construction of a water infrastructure: digging, blasting, construction of foundations, transportation and storage of material, operation of heavy machinery; exploitation of borrow pits (on-site and off-site); manipulation of fuel, waste and hazardous materials, production of wastewater; post-construction changes in water flooding patterns. For this reason, it is essential that public participation occur in the scoping phase of the feasibility studies, in order to inform the upstream design of any potential downstream intervention.

3. Describe any potential alternatives (if relevant) considered to help avoid or minimize adverse impacts.

Included in Component 3 is the financing of three feasibility studies, to include the ground water assessment, the infrastructure need to develop the water assets, preliminary costing, assessment of the associated environmental and social safeguards risks and mitigation measures. That will also include an assessment of the socio-economic barriers to water security for most vulnerable groups/sectors in the IGAD region. A communication strategy on groundwater and its role for building resilience to drought will also be developed as part of Component 3.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

IGAD has in place Guidelines for Transboundary Environmental Assessment, which include very specific protocol for OP 7.50 related notification processes, public participation procedures, supporting technical methodologies for water supply and water resource management, and assessment of institutional and legal frameworks. IGAD has prior experience in complying with World Bank Group environmental and social safeguards policies.

5. Identify the key stakeholders and describe the mechanism for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

They key stakeholders include citizens located in the three transboundary areas of Mt. Elgon (between Uganda and Kenya), Merti (between Somalia and Kenya) and Bagara aquifer between South Sudan and Sudan. IGAD Transboundary Environmental Assessment protocol calls for conducting consultation with potentially affected



communities, relevant government agencies, and representatives of other interested parties, civil society organizations (NGOs), the private sector, independent experts and all other stakeholders including the general public, during the scoping phase of the project cycle. During scoping, meetings shall be held to obtain comments from the identified affected and interested stakeholders, on what should be included in the assessment study and what alternatives should be considered, in order to conduct an adequate Environmental and Social Impact Assessment (ESIA).

B. DISCLOSURE REQUIREMENTS

Environmental Assessment/Audit/Management Plan/Other

Date of receipt by the Bank

Date of submission for disclosure

For Category 'A' projects, date of distributing the Executive Summary of the EA to the Executive Directors

"In country" Disclosure

Resettlement Action Plan/Framework Policy Process

Date of receipt by the Bank

Date of submission for disclosure

"In country" Disclosure

Indigenous Peoples Development Plan/Framework

Date of receipt by the Bank

Date of submission for disclosure

"In country" Disclosure

C. COMPLIANCE MONITORING INDICATORS AT THE CORPORATE LEVEL

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?

No



OP/BP 4.11 - Physical Cultural Resources

Does the EA include adequate measures related to cultural property?	No
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?	NA

OP/BP 4.10 - Indigenous Peoples

Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?	No
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OP/BP 4.12 - Involuntary Resettlement

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	No
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	NA

OP/BP 4.37 - Safety of Dams

Have dam safety plans been prepared?	No
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?	NA
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?	NA

OP 7.50 - Projects on International Waterways

Have the other riparians been notified of the project?	No
If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent?	No
Has the RVP approved such an exception?	No

The World Bank Policy on Disclosure of Information



Have relevant safeguard policies documents been sent to the World Bank for disclosure?	NA
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	NA
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	NA
Have costs related to safeguard policy measures been included in the project cost?	NA
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	NA
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	NA

III. APPROVALS

Task Team Leader(s)	Tsfaye Bekalu Wondem	
Approved By		
Safeguards Advisor	Nathalie S. Munzberg	03-May-2019
Practice Manager/Manager	Catherine Signe Tovey	15-May-2019