

# Lake Kivu and Rusizi River Basin Water Quality Management Project

**Review PIF and Make a recommendation**

## Basic project information

**GEF ID**

10566

**Countries**

Regional (Burundi, Congo DR, Rwanda)

**Project Name**

Lake Kivu and Rusizi River Basin Water Quality Management Project

**Agencies**

AfDB

**Date received by PM**

3/23/2020

**Review completed by PM**

4/11/2020

**Program Manager**

Astrid Hillers

**Focal Area**

International Waters

**Project Type**

FSP

## PIF

### Part I – Project Information

#### Focal area elements

**1. Is the project/program aligned with the relevant GEF focal area elements in Table A, as defined by the GEF 7 Programming Directions?**

#### **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)

The project is aligned with the IW Focal Area objective 3. Please split the focal area resources across applicable sub-objectives as already described in the PIF section on alignment with the Focal Area (e.g. component 3 aligns with sub-objective 3-7 investing in the Waster-food-energy nexus).

(4 -10-2020)

We understand that based on internal discussions and coordination with GIZ, the AfDB team for now prefers the alignment with IW3-6. There is no harm to classify this as such at PIF stage given this is a first/foundational project for lake Kivu. If not now then *latest by endorsement*, please revisit for split in table A across all IW-3 sub-objectives.

(4 -11-2020) Comment addressed. **Cleared**.

### **Agency Response**

10 April 2020

Thank you for the comment. We have indicated a split in table A across all IW-3 sub-objectives. This may be revised by endorsement stage during the PPG phase.

### **Indicative project/program description summary**

**2. Are the components in Table B and as described in the PIF sound, appropriate, and sufficiently clear to achieve the project/program objectives and the core indicators?**

### **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020) Yes, the components are logically aligned with what the projects aims to achieve.

For detailed comments on the components please see qu. 3 in Part II of the review sheet.

*Cleared* (comments on components addressed in Part II).

### **Agency Response**

**Co-financing**

**3. Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines, with a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized?**

**Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)

1. The indicative co-finance decreased from 32 million to 12 million compared to the upstream version we had looked at. The current amount is low for an IW investment across several countries. Please address and aim to increase the *indicative* co-finance (e.g. a range of development partners are mentioned in the PIF and investing in the countries/region; also co-finance may come from expected engagement with some of the municipalities and private sector players listed in the PIF could add to the co-finance; to be firmed up during PPG).

2. Please add a short explanation (title/scope) of the GIZ investment mobilized co-finance.

(4 -10-2020)

Both comments have been addressed. **Cleared.**

**Agency Response**

10 April 2020

1. Thank you for the comment. The total co-financing has been raised to 26,150,000 USD. It has been mainly identified from the active portfolio of the AfDB.

2. An explanation has been added underneath Table B for the co-financing of each component. Co-financing for component 1 in particular will be derived from the **Regional Project Support to the Integrated Management of Water Resources of Lake Kivu and Ruzizi River**, a UE funded project implemented by GIZ.

**GEF Resource Availability**

**4. Is the proposed GEF financing in Table D (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply):**

**Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020) Yes

Cleared.

**Agency Response**

The STAR allocation?

**Secretariat Comment at PIF/Work Program Inclusion** N/A

**Agency Response**

The focal area allocation?

**Secretariat Comment at PIF/Work Program Inclusion** Yes

**Agency Response**

The LDCF under the principle of equitable access

**Secretariat Comment at PIF/Work Program Inclusion** N/A

**Agency Response**

The SCCF (Adaptation or Technology Transfer)?

**Secretariat Comment at PIF/Work Program Inclusion** N/A

**Agency Response**

Focal area set-aside?

**Secretariat Comment at PIF/Work Program Inclusion** N/A

**Agency Response**

Impact Program Incentive?

**Secretariat Comment at PIF/Work Program Inclusion** N/A

**Agency Response**

Project Preparation Grant

5. Is PPG requested in Table E within the allowable cap? Has an exception (e.g. for regional projects) been sufficiently substantiated? (not applicable to PFD)

**Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020) Yes.

Cleared.

**Agency Response**

Core indicators

6. Are the identified core indicators in Table F calculated using the methodology included in the correspondent Guidelines? (GEF/C.54/11/Rev.01)

## Secretariat Comment at PIF/Work Program Inclusion

(8-31-2020)

- Please indicate how the areas under indicator 3 were estimated (rough \$/ha and/or expected location)
- Indicator 11: The number of beneficiaries listed captures all people in the Lake Kivu area. These are all both directly and indirectly benefiting from the project. The indicator here only aims capturing people directly benefiting from the project. Please estimate these and update at endorsement.

(4 -10-2020)

The additional worksheet/explanation on the calculation of estimated areas and the number of direct beneficiaries is noted; please update by endorsement.

We also note that there may be some *pilot* work with some artisanal gold miners to address their water pollution to the lake. There is no use of chemicals money and the target value of 20 m tons must be a typo (i.e. this is orders of magnitude above what any pilots with small scale miners may do). Please do not set targets under core indicator/sub-indicators 9 at PIF stage and first get a reasonable baseline during PPG. **Please address.**

(4 -11-2020) Comment addressed. **Cleared.**

## Agency Response

10 April 2020

- Thank you for the comment. The rationale for the core indicators estimations was provided in the form of an explanatory table showing the calculations. This table was attached in the Portal in the section where OFP's letters of endorsement were attached.

10 April 2020

Thank you for the comment. The additional worksheet/explanation on the calculation of estimated areas and the number of direct beneficiaries will be updated during the PPG phase. In addition, given the lack of access to resources of chemicals and waste activities, we have removed any targets under core indicator/sub-indicators 9 at PIF stage.

## Project/Program taxonomy

**7. Is the project/ program properly tagged with the appropriate keywords as requested in Table G?**

**Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)

Yes, overall this appears to be comprehensive.

Please indicate a Rio Marker.

(4 -10-2020)

Done. Cleared.

**Agency Response**

10 April 2020

A Rio Marker was indicated for adaptation "1".

**Part II – Project Justification**

**1. Has the project/program described the global environmental / adaptation problems, including the root causes and barriers that need to be addressed?**

**Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)

Yes, an extensive explanation is provided. The project background and barriers are logically laid out and align to the project components to address main barriers. The implied Theory of Change/logic of the project is clearly laid out within the PIF.

One small comment: the issue of CH<sub>4</sub> and CO in the lake may - as noted - lead to explosion but also the risk of out-gasing and possible suffocation of people in that event (as has occurred elsewhere).

(4 -10-2020) addressed. Cleared.

**Agency Response**



10 April 2020

Thank you for the comment on the issue of CH<sub>4</sub> and CO in the lake. We will take this into account in the review of monitoring systems in place at ABAKIR and adequately strengthen the institution.

**2. Is the baseline scenario or any associated baseline projects appropriately described?**

### **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020) Yes. The PIF describes baseline the policy, institutional and project/investment baseline.

One such investment listed under the baseline is the 2019/20 EU and BMZ funded and GIZ implemented project. Please explain how the proposed project is building on and not duplicating what is funded here as e.g. that investment is also funding a 'strategic action plan for the sustainable management of Lake Kivu' (see page 30).

(4 -10-2020)

Thanks for adding detail on the GIZ work. Timing of both interventions should align well to build on each other. Please during PPG define more clearly if the GIZ supported SAP will be further refined by the AfDB project (see component 1) or if GEF finance action plans mainly focus on the water quality dimension. As written this indicates further coordination with GIZ. Cleared.

### **Agency Response**

10 April 2020

Thank you for the comment. **A paragraph describing the** Regional Project Support to the Integrated Management of Water Resources of Lake Kivu and Ruzizi River (GIZ) has been add to the base line section.

This GEF project will complement and advance this GIZ project by implementing specific activities of the strategic action plan. The component 1 of this GEF project will focus on legal agreement specific to water quality management, in line with international standards. Generally speaking, this project is not duplication the GIZ project and PPG stage will be an opportunity to negotiate partnership.

10 April 2020

Thank you for the comment. It is projected that GEF activities will complement and build on the SAP work undertaken by GIZ. The complementarity of these activities will be further defined and detailed at PPG phase to ensure sound coordination between GEF and GIZ activities.

### 3. Does the proposed alternative scenario describe the expected outcomes and components of the project/program?

#### **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020) Over all the project is well articulated and the component structure follows the logic laid out in the PIF in a clear manner. The project is ambitious in what it aims to achieve and its success will rely on the co-finance to materialize/be available.

Please address comments below:

#### **Component 1:**

- Please describe how the project will build on and not duplicate the IWRM plan/SAP developed with support of GIZ.
- Please include a sustainability/post project exit strategy within the ABAKIR strengthening aspects
- The development of a Shared Vision is described in the PIF. This is a milestone and it would be worth considering to capture this as an output.
- Does the project fund/include the development of a TDA or does an equivalent exist already ? The PIF in various sections mentions TDA development (see e.g. Outcome 4.1 page 35) but it is not clear from the component description nor part of table B outputs.
- Under 1.1.1 Bullet 1 it is mentioned that “Regional and basin-wide agreements on basin key issues are drafted and signed”. Each and every regional agreement (to be drafted, negotiated and signed) is a major effort. Can you indicate one or two specific examples under discussions (indicative is fine).

#### **Component 2:**

- The first bullet under 2.1.1. appears to duplicate the second bullet under 1.1.1. “Regional and National information sharing protocol agreed”. Ditto for component 4.2.1. bullet 3.
- 2.1.2.: the third bullet mentions a satellite information system to exchange data- and information. *During PPG or early during project implementation* you will want to evaluate different technology options that could fulfill that need. The aim would be to use what is widely usable, reliable and affordable/sustainable in the local context of the countries involved.
- 2.1.3 Do you mean a vessel for collecting samples for lake monitoring (not research perse/only)?
- Water quality fund: this is mentioned later in the PIF as well, but would be useful here to add a couple of sentences on what the overall idea of that fund is (who will fund it/how will it be maintained and governed and what is it supposed to fund?)

**Component 4:**

By *endorsement*, please allocate at least 1 % of the project grant for IW:Learn related activities in the project budget.

(4 -10-2020)

Comments have been addressed. **Cleared.**

*By endorsement:*

- By endorsement/during PPG please further align actions with GIZ (especially with regard to building on initial work on aTDA and SAP equivalent).
- Note, that the development of a Shared Vision may often result in a Shared Vision *statement*, not a long *document*.
- By endorsement, further elaborate the envisioned models/options to be explored during the project and experiences in Africa to build on for a possible water quality fund.

Cleared.

**Agency Response**

10 April 2020

Thank you for these comments which are addressed here below:

**Component 1:**

- The development of a shared vision document was added as an output under Component 1
- An explanatory section (as part of introduction to Component 1) has been added in the PIF document to address the issues of GIZ project complementarity, and how the proposed projects builds on on-going work on TDA/SAP.
- The sustainability issues have also been tackled and presented in the PIF.

-The type of possible agreement areas have been suggested but these will need to be elaborated at PPG stage.

## **Component 2:**

-The second bullet under output 1.1.1. and the third bullet under output 4.2.1. have been deleted.

- Accordingly and as relevant, different technology options that could fulfill that need will be identified either during PPG or early during project implementation. The aim of this exercise will be to recommend, establish and use a system that would be widely usable, reliable and affordable/sustainable in light of the specific context of target countries.

-The purpose and scope of the proposed monitoring program has been presented in the PIF document.

-The purpose and likely operational modalities of the proposed water quality fund is also presented in the PIF section (Output 2.1.3)

## **Component 4:**

It is envisaged that at least 1 % of the project grant will be directed to IW:Learn related activities in the project budget.

10 April 2020

-Thank you for the comment. At PPG phase, further consultations and coordination will take place with the GIZ to ensure that TDA and SAP activities build on each other and are complementary with each other.

-We note the comment about the Shared Vision document that a statement would be a good enough milestone to attain for this project. This will be further explored during the PPG phase.

-We will also further explore possible working models, identify past experiences in Africa during the PPG phase and select the most appropriate one for the setting up of a possible water quality fund.

**4. Is the project/program aligned with focal area and/or Impact Program strategies?**

## **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020) Yes.

Cleared.

### **Agency Response**

**5. Is the incremental / additional cost reasoning properly described as per the Guidelines provided in GEF/C.31/12?**

### **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020) Yes, this is well laid out.

Cleared.

### **Agency Response**

**6. Are the project's/program's indicative targeted contributions to global environmental benefits (measured through core indicators) reasonable and achievable? Or for adaptation benefits?**

### **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)

The project is ambitious but doable via GEF and co-finance.

The GEB section needs strengthening with regard to describing the expected benefits regional benefits of the project to the condition of the lake and wider regional cooperation, integration, and benefits of people and ecosystems. This is described elsewhere in the PIF but the para under this heading is weak on this and focuses largely on description of the species diversity in the lake.

(4-10-2020)

Section has been revised. Comment has been addressed. Cleared.

### **Agency Response**

10 April 2020

Thank you for the comment. The GEB section has been expanded to include benefits for ecosystems and regional cooperation extending to the Lake Tanganyika basin.

**7. Is there potential for innovation, sustainability and scaling up in this project?**

**Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020) Yes, this is described adequately for a concept/PIF.

Cleared.

**Agency Response**

**Project/Program Map and Coordinates**

**Is there a preliminary geo-reference to the project's/program's intended location?**

**Secretariat Comment at PIF/Work Program Inclusion**

(4-10-2020) yes. Cleared.

**Agency Response**

**Stakeholders**

**Does the PIF/PFD include indicative information on Stakeholders engagement to date? If not, is the justification provided appropriate? Does the PIF/PFD include information about the proposed means of future engagement?**

**Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)

Yes, the preliminary list and outline of stakeholder roles is well described for a PIF/concept.

Please relabel the category under which FAO and UNDP are listed. These are intergovernmental organisations not NGOs.

(4-10-2020) Comment addressed. Cleared.

### **Agency Response**

10 April 2020

Thank you for the comment. The category under which FAO and UNDP are listed has been relabeled as “intergovernmental organizations”.

15 April 2020

Thank you for the comment (please "Recommendation" section in the review sheet). A paragraph was added in the corresponding section presenting how the African Development Bank (AfDB) financially supported the development process of the Ruzizi masterplan (SDAR) through a participatory approach at various levels. A series of informational and awareness raising sessions were organized at local level along with validation workshops both at national and regional levels with country officials, local leaders, representatives of agricultural associations and civil society organizations. Follow-up discussions were then organized with and input gathered from key sector government officials, GEF Operational and/or political focal points of Burundi, DRC and Rwanda as well as representatives of the Lake Kivu and Rusizi/ Ruzizi River Basin Authority (ABAKIR) to discuss the AfDB-GEF project proposal which will co-finance relevant activities planned as part of the SDAR masterplan. However, further and more comprehensive stakeholder consultations are planned to take place at PPG phase involving civil society, local beneficiaries, the private sector and key government officials prior to CEO endorsement.

### **Gender Equality and Women's Empowerment**

**Is the articulation of gender context and indicative information on the importance and need to promote gender equality and the empowerment of women, adequate?**

### **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020) Yes, this is well described at PIF stage. It also is well noted that gender aspects are mentioned in part of the components as well as it will be essential to address gender aspects during PPG/project design.

Cleared.

### **Agency Response**

#### **Private Sector Engagement**

**Is the case made for private sector engagement consistent with the proposed approach?**

### **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020) Yes.

Cleared.

### **Agency Response**

#### **Risks**

**Does the project/program consider potential major risks, including the consequences of climate change, that might prevent the project objectives from being achieved or may be resulting from project/program implementation, and propose measures that address these risks to be further developed during the project design?**

### **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)



Yes, the risks are well described both in the risk section and the project description (with regard to climate change). By *endorsement*, it would be useful to separate a risk rating without mitigating actions to the risk rating including such measures by the project to decrease risks.

Cleared.

## **Agency Response**

10 April 2020

Thank you for the comment. A preliminary screening and categorization using Bank guidelines has been added in the Portal section dedicated to endorsement letters. By CEO endorsement, a comprehensive social and environmental analysis will be undertaken which may lead to a revision of the initial risk categorization of the project that is presented at PIF stage. An explanation of the risk rating, mitigation measures as well as actions to be undertaken by the project to decrease relevant risks will be indicated at PPG stage.

15 April 2020

Thank you for the comment (please "additional comments" section in the review sheet). As indicated in our response to the previous comment on social and environmental safeguards, a more in-depth analysis will be undertaken on the possible impacts. The development of an environmental and social safeguards framework taking into consideration potential local level activities affecting communities' livelihoods in relation to access to natural resources is also envisaged and will be done accordingly during the PPG phase.

## **Coordination**

**Is the institutional arrangement for project/program coordination including management, monitoring and evaluation outlined? Is there a description of possible coordination with relevant GEF-financed projects/programs and other bilateral/multilateral initiatives in the project/program area?**

## **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)

1. Project execution: Please in Part 1 of the PIF/in the Portal main initial entry mask, please include "**Executing partner type**"

2. The section mentions several past projects that the proposed project will build on. This is somewhat confusing as this section aims at a description of the project institutional arrangements including coordination needs (and possible mechanisms) for cooperation or coordination with other ongoing initiatives or those under design/development. Please move the past projects to build on under an own sub-heading.

3. Coordination: the GIZ effort is the main like-minded ongoing process and mentioned in the PIF (while there is still some need as mentioned earlier to show there is no duplication -see question 3). Please also more clearly mention and aim to cooperate the UNEP implemented Lake Tanganyika project (PIF is currently under review; GEF ID #10388). You will also want to look at linkages and synergies with the GEF 7 Congo Basin program and its child projects and other GEF TF and LDCF projects addressing landscape management in the wider Lake Kivu watershed (incl. GEF IDs 10314, 9515, 9356).

(4-10-2020)

- The limitations of the portal to label ABAKIR as RBO is noted.

- Please note that the WB/GEF support to LVEMP III has been canceled by the WB. Knowledge exchanges with LVBC is still useful.

Comments have been addressed. Cleared.

## **Agency Response**

10 April 2020

Thank you for these comments.

1. Executing partner type added as “Others” since this is the only one that fits from the drop down list.

2. The projects that this GEF proposal will build on have been moved to a separate sub-heading for further clarification.

3. The Lake Victoria Environmental Management Programme Phase 3 (GEF Project ID 10116) approved by the GEF Council in November 2018, led by the World Bank and targeting Burundi, Kenya, Rwanda, Tanzania and Uganda has been added to ensure sound coordination and avoid any duplication of activities.

## **Consistency with National Priorities**

**Has the project/program cited alignment with any of the recipient country’s national strategies and plans or reports and assessments under relevant conventions?**

**Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)

Yes, the project is aligned with national priorities and strategies.

Note: most of what should be in this section is currently described in the national and regional policy baseline (pages 24 to 27). Please refer to these sections.

(4-10-2020) Cleared.

**Agency Response**

10 April 2020

Thank you for the comment. Relevant information from the “national and regional policy baseline section” has been represented in the section on demonstrating the alignment of the project with recipient countries’ relevant national strategies, plans and reports and assessments under relevant conventions.

**Knowledge Management**

**Is the proposed “knowledge management (KM) approach” in line with GEF requirements to foster learning and sharing from relevant projects/programs, initiatives and evaluations; and contribute to the project’s/program’s overall impact and sustainability?**

**Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)

Yes, see also component 4.

(4-10-2020) Cleared.

## **Agency Response**

### **Part III – Country Endorsements**

**Has the project/program been endorsed by the country's GEF Operational Focal Point and has the name and position been checked against the GEF data base?**

### **Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)

Yes, endorsement letters have been obtained.

1. Please update the dates of OFP signatures.
2. Please provide an informal english translation of the Burundi LOE.

(4-10-2020) Comments have been addressed. **Cleared.**

## **Agency Response**

10 April 2020

Thank you for the comments.

- 1.The dates of the OFP signatures have been updated in the GEF portal.
- 2.An informal English translation of the Burundi LOE has been provided. In addition, a letter of support from ABAKIR (in French) has been attached in the Portal along with an informal translation in English.

**Termsheet, reflow table and agency capacity in NGI Projects**

Does the project provide sufficient detail in Annex A (indicative termsheet) to take a decision on the following selection criteria: co-financing ratios, financial terms and conditions, and financial additionality? If not, please provide comments. Does the project provide a detailed reflow table in Annex B to assess the project capacity of generating reflows? If not, please provide comments. After reading the questionnaire in Annex C, is the Partner Agency eligible to administer concessional finance? If not, please provide comments.

**Secretariat Comment at PIF/Work Program Inclusion**

N/A

**Agency Response**

**GEFSEC DECISION**

**RECOMMENDATION**

Is the PIF/PFD recommended for technical clearance? Is the PPG (if requested) being recommended for clearance?

**Secretariat Comment at PIF/Work Program Inclusion**

(8-31-2020)

Not yet. Please address the comments and resubmit.

Please also include any AfDB preliminary safeguards risk screening incl a preliminary safeguards risk rating.

(4-10-2020)

A preliminary AfDB safeguards screening has been attached. Cleared.

Please address comment on the core indicator and resubmit.

(4 -11-2020) All comments have been addressed and the project is recommended for technical clearance and inclusion in a future work program.

(4-15-2020) **Please address now/in the PIF with regard to "Stakeholder Engagement"**: The project includes a good description of how stakeholders, **will be engaged** in the project development incl. the means of engagement. However, the PIF is lagging a description on the consultations that have been held during the development of the PIF (i.e. during project *identification* – see the session heading). On the hand, the PIF states (and adds a “tick”) that consultations with *Indigenous Peoples and Local Communities, civil society* and *private sector* were conducted during PIF development, yet there is no description of those consultations. Therefore, please provide a description about the consultations that were conducted with those stakeholders leading up to the PIF (and if not yet consulted, please delete the "tick" mark and explain how they will be involved during ppg/project design). **Please address and resubmit.**

*Please also note* an additional recommendation added re. environmental and social safeguards to be addressed by endorsement.

(4-15-2020) Comment addressed. The stakeholder section was revised. **Cleared.**

[AfDB also confirmed that a detailed environmental and social screening/review of the project will take place during project preparation and possible reclassification of the risk rating may result *by endorsement*.]

#### **ADDITIONAL COMMENTS**

**Additional recommendations to be considered by Agency at the time of CEO endorsement/approval.**

#### **Secretariat Comment at PIF/Work Program Inclusion**

(4-10-2020) Comments to be addressed by endorsement are listed within the review sheet.

Further, on Environmental and social safeguards: AfDB attached the Preliminary safeguard screening and mentioned that overall project risk is negligible (Category 3). Section 5, however, of the PIF states that social risk related community livelihood is “Medium” and this is not fully consistent with the preliminary safeguard screening. AFDB should consider developing an environmental and social safeguards framework to address any potential local community activities e.g. assessing/addressing any potential loss of livelihoods due to loss of access to natural resources.

#### **Review Dates**

	PIF Review	Agency Response
First Review		
Additional Review (as necessary)		
Additional Review (as necessary)		
Additional Review (as necessary)		
Additional Review (as necessary)		

**PIF Recommendation to CEO**

**Brief reasoning for recommendations to CEO for PIF Approval**

**Background.** Lake Kivu basin is among the most fragile and highly sensitive ecosystems in the region. It lies on the border between the Democratic Republic of the Congo and Rwanda and shares part of its watershed with Burundi. Together with the Ruzizi River Basin, Lake Kivu is a sub-basin of the Lake Tanganyika Basin which is itself a sub-Basin of the Congo River Basin. Lake Kivu is quite deep, with an average depth of 240 m and a water residence period of 193 years. Water leaves the lake through evaporation (3.6 km3/year) and the Ruzizi River into Lake Tanganyika (3.0 km3/year). The Lake Kivu-Ruzizi basin is uniquely valuable, rich in biodiversity, and a catalyst for economic growth with high potential to improve the quality of life in Lake Basin communities. The basin is important for biodiversity and covers parts of at least 15 Key Biodiversity Areas (KBAs) of which 12 are terrestrial and 3 freshwater KBAs, hosting 55 Red-Listed species. The Virunga National Park, a World Heritage site, is located on the DR Congo side of the basin. Lake Kivu is one of the three known exploding lakes due to its content in carbon dioxide and methane. Measurements since the 1970s indicate that methane produced from organic materials has increased, saturating 40% of the Lake. The gases are trapped in layers 80 metres below the lake's surface by the intense water pressures there. Geological or volcanic events could disturb these waters and release the gases.

*Pressures on the lake.* The lake is being affected by atmospheric pollution, sedimentary, anthropogenic and climate change threats. In the southern part of the Lake the demographic pressure and associated anthropogenic activities coupled with the micro-catchment topography contribute to increased degradation of land and water resources. Excessive growth of human populations in the Lake Kivu basin, land use, urbanization, deforestation, intensive agriculture and climate warming prompt

changes in the water quality of the lake. The major sources of nitrogen and phosphorus appears to be rivers and the atmosphere. The increase in sediment and nutrients loading pose a threat to biodiversity. Although the cause-effect inter-relationship of soil and water pollution is generally recognized, there is a paucity of data on pollution sources in the Lake Kivu Basin, the link to current land-use/cover and its management, the contribution of point and non-point source and atmospheric deposition to the current observable load (Majaliwa et al., 2009)

**The project.** The project builds on the Great Lakes Economic Community (CEPGL) goal to promote peace, security and economic development through regional cooperation. The project objective is “To improve water quality, environmental and economic services of lake Kivu through improved transboundary cooperation”. The project seeks to strengthen the capacity Lake Kivu and River Rusizi Basin Authority (ABAKIR) in managing the water resources and preserving the biodiversity in the basin. Specifically, the project will enhance water quality monitoring capacity and promote catalytic investment in the water-food-energy nexus. The main components are (i) enhanced regional and national cooperation, (ii) improving water quality management and (iii) improved water security in the Lake-Kivu Rusizi basin.

**Sustainability, Innovation and Scale-up.** Project innovativeness relates to its integrated, cross-sectoral, inclusive and participatory nature. First, the project aims to promote private sector engagement to increase cleaner production mechanisms by directly involving them in a common quality monitoring program. By bringing multiple stakeholders together in the monitoring program, and providing a mechanism for openly sharing water quality data, the project builds trust. The common platform enables different interests, including those of the private sector, to be openly debated and reconciled with environmental concerns and national developmental goals. Second, the community water quality monitoring program is a key innovation in the African context in that focus for environmental management is shifted from access to, and use of, resources to their protection and preservation. Furthermore, embedding the regional project activities in both the national and local government institutional frameworks will facilitate effective implementation and mainstreaming long after the funded phase of the project is concluded. With respect to sustainability, the focus on capacity building at both institutional and community level will not only establish the infrastructure and systems for cooperation, but will also generate lasting knowledge that can be utilized for future replication in other parts of the Great Lakes region.

**GEBS.** The project will address the multifaceted threats to transboundary freshwater ecosystems by strengthening multinational cooperation and capacitating a regional basin organizations, ABAKIR. It also supports and furthers the regional economic integration agenda by aligning with the goals of CEPGL. The project directly aims to establish mechanisms to improve the water quality of the lake and prevent further pollution. Furthermore, the Lake Kivu area has experienced social and political upheaval over the years. The project by fostering cooperation between hitherto adversary countries and communities is helping to bring peace to the region. The innovation here is to use non-traditional conflict resolution mechanisms to address both existing and potential conflicts. Thus the potential impact of the project goes beyond just management of water and environmental resources.