Invitation to tender

Quantitative and qualitative assessment characterizing sedimentation flows in the Lake Hawassa sub basin region from 'source-to-lake'

The deadline for receipt of tenders is: 12 August, 2019

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Stockholm International Water Institute
SIWI is a knowledge organisation using its expertise and convening power to strengthen water governance for a just, prosperous and sustainable future. SIWI arranges the annual World Water Week in Stockholm.

SIWI is duly constituted as a foundation in Sweden.

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Background and scope
This assignment will support the implementation of a larger project that aims to establish the foundations for source-to-sea management through pilot testing the source-to-sea approach in two locations, one of which is the Vu Gia – Thu Bon River basin in Viet Nam and the other is in the Lake Hawassa sub basin region in Ethiopia.

Source-to-sea management considers the entire source-to-sea system – stressing upstream and downstream environmental, social and economic linkages and stimulating coordination across sectors and segments. Source-to-sea management focusses on six flows. These six source-to-sea flows – water, sediment, pollutants, biota, materials and ecosystem services – connect segments along the source-to-sea continuum at different spatial scales. All flows have natural ranges of variation that biodiversity and human activities have adapted to. Variation outside of these natural ranges can disrupt individual species' life cycles, impact human health, alter ecosystems and disrupt social and economic systems.

The pilots will implement the first three steps of the source-to-sea approach as described in *Implementing the Source-to-Sea Approach: A Guide for Practitioners.*

This tender is for a study to support the first step of the source-to-sea approach: the characterization of a key "source-to-sea" flow, which will focus on sediment flows in the Lake Hawassa region.

The outputs of the study will be used to strengthen understanding of the issue of sediment flows in the Lake Hawassa Basin amongst local stakeholders and will be the basis for developing a source-to-lake approach to managing sediment for improved social, economic and environmental outcomes.

While not a marine environment, Lake Hawassa has similar qualities to seas and oceans. It is the singular receiving body for all water flows draining the Hawassa sub basin and land-based activities surrounding it. However, due to the small lake area and lack of currents, the connection between upstream activities and downstream impacts will be highlighted. Lake Hawassa is the smallest among the eight Major Rift Valley Lakes situated in the Southern regional state (SNNP) of Ethiopia, 275 km south of the capital city Addis Ababa. The Hawassa sub-basin (1,403 km2) with a lake area of approximately 90 km2 with a maximum depth of 22 m subject to seasonal variation. Lake Hawassa has no effluent rivers due to its closed system nature but has a groundwater outflow. Lake Hawassa is situated nearby Hawassa, a fast-growing urban centre of 350,000 people (according to the last census). Lake water is used for domestic, irrigation, recreational purposes and fishery as sources of income for the local communities. However, the fast rate of the urbanisation, surrounding commercial and industrial activities as well as population growth and associated expansion of agricultural activities are contributing water pollution and general environmental degradation.

Requirements for the services

The study to characterize sedimentation flows from 'source-to-lake' in the Lake Hawassa Region should include the following:

- Geographic locations of sediment loss and the transport pathways to Lake Hawassa with detailed description of the degree and type of alteration from natural regimes for sediment flows in the Lake Hawassa region;
- Estimations of quantities of sediment losses and their relative contribution to sediment loading in Lake Hawassa;
- Historical analysis of changes in sediment loss and the relation with land use changes;
- Analysis and description of main (human) activities and natural causes that lead to alterations of sediment flows; this should include identifying the locations of activities resulting in alteration of flows;

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- Analysis and description of the environmental, economic and social impacts of alteration of sediment flows. This should include description of sectors or communities impacted by the alteration of sediment flows, analysis of how they are impacted and identification of the locations of impacts; and

- Recommendations on priority actions to reduce sedimentation from 'source-to-lake' in the Lake Hawassa region.

The assessment will rely on international best practice for the methodology used and will require local field work to ground-truth all outputs. Inputs to the assessment will include interviews of local stakeholders, and universities to complement the quantitative assessment.

Requirements on the tenderer

The tenderer is expected to have knowledge and experience in international best practice for quantitative and qualitative assessment of changes in sediment flows and the ability to apply these methods and approaches to the local context in the Lake Hawassa Basin. This may best be met by a team of consultants with different competencies and experience of working in Sub-Saharan Africa, preferably Ethiopia.

The tenderer **should have the following competences:**

Functional Competencies:

- Demonstrated experience in applying international best practice in assessing sediment loss over time and transport pathways, their sources, quantities and the causes of the loss.
- Knowledge of local (Ethiopian) social, economic, water and land resources governance context that enables meaningful assessment of causes of and solutions to sediment loss.
- Capacity for local mission(s) to conduct field work as part of the sediment flows assessment.
- Technical proficiency in field work and ability to garner information locally through interviews.
- Strong project management, research, report writing and presentation skills, in English. Proficiency in local languages preferred.
- Proven experience and understanding of different aspects of natural resource management and environmental sciences, including in depth knowledge on best practice and international experiences relevant to addressing sedimentation of water bodies;
- Ability to adapt and develop existing concepts for specific purposes:
- Demonstrated ability as lead author for technical publications; and
- Demonstrated ability to meet deadlines and work under pressure.

Behavioural Competencies:

- Ability to be flexible and respond to changes in review processes;

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- Strong interpersonal skills to communicate and work with diverse people;
- Participate effectively in team-based information-sharing environment;
- Focus on impact and results for the client.

Education

- Masters' Degree or higher in a relevant field with at least ten (10) years' relevant experience.

The tenderer will be expected to work closely with SIWI's project team, which includes staff working for the African Regional Centre and the Stockholm office. Regular contact with updates on progress will be required.

Required deliverables of the tender are as follows:

1) A written report (25-40 pages, plus annexes) characterizing sedimentation flows in the Lake Hawassa Basin Region from 'Source to Lake'.

2) An executive summary of the report (2-4 pages) of findings and conclusions suitable for decision makers.

3) Delivery of a power point presentation of findings and recommendations to local stakeholders including the Rift Valley Lakes Basin Development Office (RVLBDO).

4) Documentation of interviews of local stakeholders to be used as part of overall project documentation and communications.

Tenderers are encouraged to include within their proposal partners or members that are based in or have experience working in Ethiopia for this assignment.

Deadline	Deliverable (s)
16 September	Work plan and annotated outline of report (Inception Report)
23 September	Report draft
Date to be determined	Presentation of findings to stakeholders
30 October	Final report and executive summary

The tender **must** contain the following information:

- Details regarding the methodology that would be applied to perform this study. This is expected to include literature review of available data and studies performed in the area, interviews, and field surveys.

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- Work plan for delivery of the assignment.
- CVs, qualifications and roles of consultant(s) delivering the assignment.
- Proposed outline (annotated table of contents) for final report.
- A description of your organisation.
- A description of the services offered.
- All prices (net of VAT), and payment terms.
- Estimated delivery time.
- Name and contact information of point of contact;

Renumeration
The ceiling amount for this assignment is 18,000 EUR (inclusive VAT, exclusive of travel costs).

Award criteria
The contract will be awarded based on the following criteria:

- Quality and feasibility of proposed methodology and deliverables
- Qualifications and expertise of candidates
- Timeframe for project delivery
- Value for cost

Tendering
SIWI must have received the tender by **12 August, 2019.**

The tender must be submitted to the following email address:

Josh.weinberg@siwi.org

The subject of the email should be **Tender for consultancy: Lake Hawassa Sediment**

Questions regarding the tender can be submitted until 05 August to Cryton Zazu at: cryton.zazu@siwi.org

Processing of personal data
SIWI will process personal data included in tender documents and communications. For information about SIWI's processing of personal data, please use the following link:

Processing of personal data

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