



**Invitation to tender: CONSULTANCY SERVICES TO CONDUCT A CADASTRAL SURVEY IN THE TWO DESIGNATED IRRIGATION SCHEMES UNDER THE JOINT SONGWE RIVER BASIN DEVELOPMENT PROGRAMME OF MALAWI AND TANZANIA**

I am pleased to inform you that your organisation is invited to take part in a tender procedure for the above contract.

The deadline for receipt of tenders is: **5 April 2019 12:00 GMT**

**Point of contact:** Ziyanda Mpakama  
**E-mail address:** [ziyanda.mpakama@siwi.org](mailto:ziyanda.mpakama@siwi.org)

**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.

Name:	Stockholm International Water Institute
Organisation number:	802425-8702
VAT identification number:	SE802425870201
Postal address:	Box 101 87, 100 55 Stockholm
Visiting address:	Linnégatan 87A, 115 23 Stockholm
Telephone:	+46 8 121 360 00
Website:	<a href="http://www.siwi.org">www.siwi.org</a>

**1. Africa-EU Water Partnership Programme and the Songwe River Basin Development Programme**

The Africa-EU Water Partnership Project (AEWPP) has been jointly initiated by EU, Sweden and the African Ministerial Council on Water (AMCOW). The AEWPP seeks to make more public and private capital accessible for water-related infrastructure projects in Africa and to encourage and support African governments to invest in water governance through capacity building related to infrastructure finance. Project implementation is supported by the Stockholm International Water Institute (SIWI) via the SIWI African Regional Centre in Pretoria.

Through the AEWPP, SIWI is supporting the Songwe River Basin Commission (SRBC) in engaging a consultancy firm to undertake a cadastral survey to the designated areas already detailed designed to be developed under irrigation in both Malawi and Tanzania. SIWI is therefore looking to hire services of a land survey firm to undertake such cadastral survey for the intended two irrigation schemes under the SRBC.

**Background**

The Songwe River Basin Development Programme (SRBDP) is jointly executed by the Governments of Malawi and Tanzania. The programme recognises several challenges which would be addressed through its execution. These include, among others, high poverty levels, poor access to electricity, poor access to clean water supply, unstable riverbanks, shifting river course and as a result, seasonal shifting borders and poor levels of development.

## 1.1 The Key Project Components

- The Key Project Components entails a multi-purpose dam and hydropower plant with a capacity to produce 180.2MW (for only the Lower Songwe Dam and Hydropower Plant)”;
- There are two irrigation schemes with a total area of 6,200 hectares:  
LSRM: Lower Songwe River Malawi Irrigation and Drainage scheme = 3,050Ha  
LSRT: Lower Songwe River Tanzania Irrigation and Drainage scheme = 3,150Ha
- There are two Water Supply Projects to serve 450,000 people in the Songwe River Basin whereby the Kasumulu (Tanzania) and Songwe (Malawi) Small Towns Water Supply and downstream communities will serve around 190,000 people and the Rural Water Supply Project (in the upper catchment of the Songwe River Basin) will serve around 260,000 people; and
- Other Projects are: Rural Electrification Project to benefit around 120,000 people in 22,200 households and fisheries and Tourism Development Projects.

## 1.2 The following are some of the expected outcomes upon successful execution of the programme:

- Increased hydropower production to facilitate the development of small and medium industries (SMI) and improve energy source in the basin, and electricity grids in Malawi and Tanzania
- Increase in food production through irrigated agriculture
- Increased access to water supply and sanitation in the basin
- Water conservation/storage to improve water access during droughts
- Overall socio-economic improvement of the Songwe River Basin inhabitants
- Mitigation of floods
- Small-scale fisheries activities to enhance protein intake and provide an alternative source of income to the inhabitants
- Sustainable management of the Songwe River Basin
- Improved management information system through water resources monitoring, development and management
- Improved cooperation in transboundary WRM through a formal framework
- Enhanced cooperation between Malawi and Tanzania

## • 1.3 Lower Songwe River Tanzania Irrigation and Drainage Scheme

The LSRT Irrigation and Drainage scheme is located in the lower part of the SRB on the left bank of the Songwe River and situated between the Songwe River and the Kiwira River with its upper boundary near the town of Kasumulu just downstream of the Kasumulu Bridge. LSRT, as well as its related project in Malawi, requires the construction of the Lower Songwe Dam for its water supply. The net irrigation area of LSRT is 3,150 ha. Extensive soil and topographic surveys were carried out under the project to provide information to determine the net irrigation area and the layout of the canal and drain network.

The area planned for irrigation is currently a rain fed cropping area with the majority of the land under rice cultivation. The rice in this region is a traditional variety which is popular and fetches a good price. This would continue to be the main crop in the wet season, with irrigation being supplemental to the rainfall, and a good portion of it (60%) in the dry season which will need constant irrigation. The other 40% will be typical upland crops of maize, groundnuts, cassava and market vegetables.

Total crop water demand varies from a peak of 0.79 l/s/ha in September to 0.0 in April. With feeder, main and secondary canal efficiencies in the 90-95% range and tertiary, field and farm efficiencies between 75-85%, the peak irrigation requirement is 7 m<sup>3</sup>/sec at the feeder canal intake.

Basic characteristics of the LSRT scheme are:

- a net irrigated area of 3,150 ha
- a 21 km lined Feeder Canal with a maximum conveyance capacity of 7 m<sup>3</sup>/s;
- a 15 km lined Main Canal;
- 19 lined Secondary Canals with total length 40.7 km approximately,
- 84 earthen Tertiary Canals with total length 66.2 km approximately,
- a Main Drain, 20.4 km long,
- 19 Secondary Drains with total length 48.95 km approximately,
- 68 Tertiary Drains with total length 52.126 km approximately,
- A network of Type I (main) roads of 36.10 km and,
- A network of Type II (services) roads with total approximate length of 84.7 km
- The farmers currently farming this land are the same people that will benefit from the new irrigation and drainage scheme. Certain farmers land parcels will be affected because of the route of the new irrigation channel and it will be necessary to demarcate the land parcels or reallocate farming land to those farmers.

The overall construction costs, based on an earlier technical study, for the LSRT Project are estimated at USD 49.82m including 5% technical and 5% financial contingencies.

#### • **1.4 Lower Songwe River Malawi Irrigation and Drainage Scheme**

The LSRM Irrigation and Drainage scheme is located in the lower part of the SRB on the right bank of the Songwe River and situated between the Songwe River and the main highway from the town of Songwe toward Karonga. LSRM, as well as its related project in Tanzania, requires the construction of the Lower Songwe Dam for its water supply. The net irrigation area of LSRM is 3,050 ha. Extensive soil and topographic surveys were carried out under the project to provide information to determine the net irrigation area and the layout of the canal and drain network.

The area planned for irrigation is currently a rain fed cropping area with the majority of the land under rice cultivation. The rice in this region is a traditional variety which is popular and fetches a good price. This would continue to be the main crop in the wet season, with irrigation being supplemental to the rainfall, and a good portion of it (60%) in the dry season which will need constant irrigation. The other 40% will be typical upland crops of maize, groundnuts, cassava and market vegetables.

Total crop water demand varies from a peak of 0.79 l/s/ha in September to 0.0 in April. With feeder, main and secondary canal efficiencies in the 90-95% range and tertiary, field and farm efficiencies between 75-85%, the peak irrigation requirement is 7 m<sup>3</sup>/sec at the feeder canal intake.

Basic characteristics of the LSRM scheme are:

- a net irrigated area of 3,050 ha
- a 24.4 km line feeder canal with a maximum conveyance capacity of 7m<sup>3</sup>/s;
- a 14.750 km lined Main canal;
- 17 lined secondary canals with total length 35.436 km,
- 85 earthen tertiary canals with total length 78.430 km,
- 3 main drains (Main drain, Main drain left and Kyungu River) of 23.905 km long
- 17 secondary drains with total length 46.494 km,
- 68 tertiary drains with total length 68 km,
- A network of Type I (main) roads of 35 km and,
- A network of Type II (services) roads with total approximate length of 54 km
- The farmers currently farming this land are the same people that will benefit from the new irrigation and drainage scheme. Certain farmers land parcels will be affected because of the route of the new irrigation channel and it will be necessary to demarcate the land parcels or reallocate farming land to those farmers

The overall construction costs, based on an earlier technical study, for the Project are estimated to be USD 49.18m including 5% technical and 5% financial contingencies.

## **2. Requirements on the tenderer**

As a preparatory work before the construction work for the irrigation infrastructure, it is important to also prepare the farmers in the irrigation schemes on the land tenure issue to ensure appropriate ownership of the developed farm parcels/plots while considering equality/equity on the same. This will be achieved through land consolidation/rearrangement of existing farm plots following the new design already done during the detailed design of the project, which also requires undertaking cadastral surveys and demarcations for easy work of the Local Governments/ District Councils/Wards and Village leadership to undertake the reallocation of the newly designed farm plots under the guidance of the Secretariat of the Songwe River Basin Commission.

Only firms/organisations may apply for this position. The firm (the 'Consulting firm') will set up a team of experts that will be assigned to the Project, according to the following sections – Expertise of the team. Only the assigned expert's CV should be submitted as part of this application and are not substitutable.

The objective of the consultancy work is to undertake a cadastral survey, through which a Land Audit to determine who owns which piece of land within the above study area of the LSRT and LSRM can be done. A comprehensive land audit and presentation is requested for the identified study area/s including the overlay of the planned irrigation canals such that the Local Governments/ District Councils/Wards and Village leadership can undertake the reallocation of the newly designed farm plots under the guidance of the SRBC.

The types of cadastral land parcels that need to be audited to determine land ownership, probably includes the following categories:

- Farm portions;
- Agricultural land;
- Land use different from agriculture;
- Irrigation and drainage canals alignments;
- Surrounding Rural villages.

To achieve the aforementioned outcomes, the tenderer will have to set up a core project team. The tenderer should be able to demonstrate that he can compose a team of qualified personnel, covering at least Professional Land Surveyor; Land use Planner/Town & Regional Planner; and Cartographer (or equivalent) knowing that all staff has to have experience and ability to work in an international and multicultural environment and **must** be fluent in English.

## **2.1 Scope of work – according to the following timeline:**

The proposed partnership will be implemented in two consecutive phases, according to a timeline indicated in *section 2.2. Time schedule.*

### **2.1.1 Phase 1 – Surveying existing land ownership**

SIWI seeks to appoint a tenderer that will conduct a technical investigation that will;

- Spatially identify land and give ownership information of land within the identified study areas.
- Conduct a comprehensive land audit of all properties within the study area.
- Flag, record and report any illegal occupation
- Create a user-friendly GIS database with ownership categories as specified in section 2.1 above with useful fields that will assist in the planning and packaging of interventions.
- Lastly, create a land audit report (maps, tables and graphs, not limited to the list above) for the SRBC.

It is the responsibility of the tenderer to source relevant Deeds information for the land audit. The cost of such Deeds information must be carried by the tenderer and included in the project proposal.

This project will entail fieldwork which will assist in identifying communally worked, traditional council areas within the study area, and recording some other important data. The land audit results should be spatially located by linking the Deeds information to the cadastral information for the identified areas and compared with the Deeds information for verification purposes.

The budgeted allowance this part of the assignment is 12 working days. It is expected that the workshop will take place in July 2019.

### **2.1.2 Phase 2 - Overlay the planned canal system**



This phase will, considering the planned canal system, identify the affected land owners as well as potential new areas to be allocated, The tenderer having an overview of the available land areas needs to identify where new land is available, which may be allocated to the affected land owners.

The owners of the new land will have to be identified and details listed for consideration by the SRBC and the Local Governments/ District Councils/Wards and Village leadership.

The tenderer will organise meetings/workshops with representatives of stakeholders to discuss and illustrate all aspects of the tariff study process to ensure the effective transfer of information.

The tenderer will organize at workshops/seminars to present the pre-final Phase 2 findings to SIWI, SRBC and countries who will revert back within 30 days with their final views and recommendations. This workshop will take place at the SRBC offices in Tanzania.

The tenderer will then be able to proceed and finalise the report.

The budgeted allowance this part of the assignment is 18 working days. It is expected that the workshop will take place in September 2019.

## 2.2 Requirements on the supplies/services

The Consultant will be responsible for delivering the outcomes and scope of work listed above, according to the following work schedule;

Item	Deliverables	Time schedule
1	Inception report	Will be submitted two (2) weeks after Inception Meeting
10 working days for SIWI and SRBC to review and comment		
2	Phase 1 – Existing Ownership	Will be submitted two (2) months after the inception of the order to commence.
10 working days for SIWI and SRBC to review and comment		
3	Phase 2 – New land alternatives	Will be submitted four (4) months after the reception of the order to commence
Validation Workshop - SIWI and SRBC will review and comment after the planned workshop		

## 3. Methodology and Level of Effort

The Consultant will present a proposal that will include a methodology, an estimation of work volume per activity and a work schedule. SIWI will review and accept the proposal prior to the signing of the contract. The accepted schedule will be incorporated in the consultant's contract.

The assignment is expected to start the 1st May 2019, with a final report expected 5 months from the start of the assignment.

Level of effort - Part time for a maximum of [30] working days.

## 2 Experience

SIWI requires a consulting firm with staff members in professional Land Survey (experience of at least 15 years); Land use Planner/Town & Regional Planner (experience of at least 15 years); and Cartographer (experience of at least 10 years) being strategic thinkers, a problem-solvers and advisers, who are actively participating in the agricultural community in Southern- or Eastern Africa. Knowledge in GIS and related software is also a requirement

The consultant's clients should include farmers, growers, landowners, conservation organisations, agriculture marketing businesses and or retail distributors.

For the selection of the Consultant, priority will be given to those with proven experience in the relevant African region and familiarity with development partners and international organization working procedures.

The above expertise will be complemented with a financing specialist provided by SIWI. This finance specialist will be responsible to monitor and manage the project progress according to the assigned objectives.

**Award criteria**

The contract will be awarded based on the following criteria:

The award criteria, the points available and minimum scores which must be achieved are listed below. No other award criteria, sub-criteria or weightings shall be used by the evaluation committee. Any tender not achieving the minimum points score indicated below for each sub criterion shall be eliminated and not evaluated for price.

Award criteria	Weighting %	Maximum available points	Minimum points which must be achieved
<b>Approach and methodology</b>	40%	40	20
<b>Delivery of services</b> (the tenderers' expertise)	40%	40	20
<b>Management of the service</b> (the tenderer's capability to deliver the tender expected outcomes on time and with the quality requested).	20%	20	10

Each evaluation committee member shall score each tender out of the maximum points available for each of the three (3) sub criterion. The total score to be awarded to each tenderer for each sub criterion shall be the average score of the points of all the members, calculated to two decimal places. A check shall then be made if the tenderer has met the minimum score required for each sub criterion. If this has not been achieved, the tenderer shall be eliminated at this stage.

Where the minimum score has been achieved in each sub criterion, the total points shall then be converted to the weighting percentage for the three criteria mentioned above (Approach and methodology: 40%, Delivery of services: 40% and Management of services: 20%). The final score out of 100% shall be given to two decimal places

The contract will be awarded to the tender offering the best value for money, which will be the one with the best quality-price ratio. The quality/price ratio ("value for money") will be calculated by allocating a mark to each tender, applying the following formula:



Total number of points (The final score out of 100 as per section 8 Award criteria) x 100 000 / Total price (financial value of the tender – excluding travel costs).

The resulting mark gives an indication of the quality of the services offered in relation to their price. The contract will be awarded to the tender, which achieves the highest mark (i.e. the most cost effective).

## Tendering

SIWI must have received the tender by **05 April 2019**. All interested parties are to submit, via email an expression of interest to submit a proposal by **Friday, 22<sup>nd</sup> March**.

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

- A description of your organisation;
- A description of the supplies/services offered and methodology;
- Daily Rate (net of VAT), and payment terms;
- Travel budget
- Estimated delivery time;
- Confirmation that the terms of the Draft agreement are acceptable;
- Name and contact information of point of contact;

The tender must be submitted to the following email addresses:

[ziyanda.mpakama@siwi.org](mailto:ziyanda.mpakama@siwi.org) and [andre.kruger@siwi.org](mailto:andre.kruger@siwi.org)

The deadline to receive tender proposals is **2019-04-05 12:00 GMT**.

The subject of the email should be CONSULTANCY SERVICES TO CONDUCT AN AGRICULTURE FEASIBILITY STUDY AND TO DEVELOP A BUSINESS PLAN IN THE SONGWE RIVER BASIN DEVELOPMENT PROGRAMME, BOTH IN THE DESIGNATED AREAS OF MALAWI AND TANZANIA

### 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](#)

We look forward to receiving your tender.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Anton Earle', written over a light blue horizontal line.

Anton Earle  
Director SIWI Africa Regional Centre