



Terms of Reference:

Technical Consultant: AQUASTAT Update - CUBA

The Food and Agriculture Organization (FAO) of the United Nations leads international efforts in the fight to eradicate world hunger. FAO is a neutral forum where all nations meet to discuss agreements and relevant policies in the areas of Food and Agriculture. The Organization is also a source of information and technical assistance to developing countries to improve their agricultural practices to ensure better nutrition. The Global Water Partnership (GWP) is a non-profit global action network which was founded in 1996 by the World Bank, the United Nations Development Programme (UNDP), and the Swedish International Development Cooperation Agency (SIDA) to foster integrated water resource management (IWRM). Its mission is to support the sustainable development and management of water resources at all levels. GWP advocates, facilitates and supports change processes for the sustainable management of water resources. It is a mechanism for coordinated action, adding value to the work of many other development partners; a neutral platform for multi-stakeholder dialogue at different scales; and a resource contributing technical knowledge and building capacity for improving water management.

Agriculture is by far the largest water use at global level, with about 70% of water withdrawal and 90% of water consumption. In several developing countries, irrigation represents up to 95% of all water uses, and plays a major role in food production and food security. Future agricultural development strategies of most of these countries depend on the possibility to maintain, improve and expand irrigated agriculture. Water scarcity is a major limitation for an extension of irrigated agriculture. A sustainable management of water resources is usually based on water balances performed at the watershed scale. Those balances, that compare available water resources on the one hand and water demands of the environment as well as uses for municipal, industrial, and agricultural purposes on the other hand, require to know the spatial extent of irrigated agriculture and the quantities of water withdrawn by irrigated agriculture from its source.

FAO has a unique global water information system, AQUASTAT, developed since 1993 by the Land and Water Division. The main objective of the programme is systematically select the most reliable information on hydrological resources and water use in each country, as well as to make this information available in a standard format for interested global, regional and national users. The information system is centred in developing countries and countries in transition. Main products of AQUASTAT include – amongst others – the main online country database, country profiles, dams database, geospatial information, global map of irrigation areas, irrigation water use, trans boundary river basins, wastewater, water resources, water-related institutions database. All the results produced by AQUASTAT are public and available in the form of reports on the Internet (http://www.fao.org/nr/aquastat), in printed form or on CD-ROM.

The last update of the AQUASTAT report for the Caribbean was done in 2000. In many countries there have been significant developments in the irrigation and drainage infrastructure and water use in agriculture and rural development since that time. This Consultancy therefore, serves to update the information on **Cuba** so that more reliable information is available for decision making in the sector.





The FAO and Global Water Partnership-Caribbean (GWP-C) in support of the Regular Programme in Land and Water Resources Management of the FAO Sub-regional Office for the Caribbean therefore seek a consultant to update the FAO's global water information system – AQUASTAT for **Cuba**.

GENERAL DESCRIPTION OF TASK(S) AND OBJECTIVES TO BE ACHIEVED:

Under the overall guidance of the Land and Water Division of the FAO, and the immediate guidance of the Regional Coordinator of GWP-C, the consultant will update the information system on water and agriculture. The consultant will be informed of the existing AQUASTAT information and will ensure a complete revision. For that purpose, s/he will have to fill in a detailed questionnaire and will have to prepare a country profile. More specifically the consultant will perform the following tasks:

- 1. Contact resource persons in the field of water resources, environment and irrigation in the country (national and international).
- 2. Collect recent literature on irrigation and water resources in the country (seek mostly master plans, sector reviews, national statistics, etc.)
- 3. Critically analyse the references and complete the questionnaire (5 sheets) accordingly
- 4. Prepare in electronic form a country profile (5 to 10 pages) according to the standard guidelines
- 5. Review the irrigated crop calendar table, prepared by AQUASTAT
- 6. Review the Excel water resources sheet, prepared by AQUASTAT
- 7. Update the dams excel file
- 8. Compile required existing maps (when possible, in electronic form)
- 9. Provide an electronic copy (and if not available a hard copy) of the references used
- 10. Provide the list of the country counterparts that could be contacted for review and clearance

The consultant will receive the following documents:

- 1. The guidelines to fill in the questionnaire and write the country profile
- 2. The questionnaire in Excel, which contains six sheets
- 3. A proposal of an irrigated crop calendar to review
- 4. A water resources sheet to verify and correct if necessary
- 5. An excel file to fill in and complete information on dams

EXPECTED OUTPUTS:

- 1. First version of the questionnaire in Excel, containing 5 sheets, filled in and submitted
- 2. Final questionnaire in Excel, taking into consideration all comments received, filled in and submitted
- 3. First version of the country profile prepared and submitted
- 4. Final country profile, taking into consideration all comments received, prepared and submitted
- 5. Irrigated crop calendar reviewed and updated
- 6. Water resources excel file reviewed and corrected if necessary
- 7. Dams file updated and completed
- 8. Thematic maps compiled
- 9. Sources submitted in electronic format on CD-ROM or, if not available, hard copies sent





DURATION & LOCATION:

Three (3) months on a part-time basis, to be undertaken between March 3, 2014 and June 3, 2014.

REQUIRED QUALIFICATIONS:

Education: A M.Sc. degree in Agricultural Studies, Water Resources Management, Environmental management, Socio-Economic Studies or a related field.

Experience: At least 5 years' post-degree experience in research and technical report writing. Familiarity with the main agricultural and water management institutions in the country (local and international); excellent understanding of agricultural, water resources and water services issues in the Caribbean would also be an asset.

Other skills: Strong analytical skills and excellent English writing skills. The consultant must be able to work independently and as part of a team, have excellent communication and interpersonal skills, preferably with a profile known to many of the end users identified for contact. The consultant should be able to plan and organize work and deliver outputs according to agreed milestones.

COST & PAYMENT:

Please provide an itemised cost breakdown (in USD) for the proposed tasks. Payment milestones will be as follows: **20%** upon signature of Agreement, **50%** on completion and acceptance by FAO of the first draft of the reports mentioned under Expected Outputs above and **30%** on completion of the final version.

EVALUATION OF PROPOSAL:

Please provide the following to aid in evaluation of your proposal:

- 1. A short (1 page) note on why you are well suited to this consultancy and confirmation of your availability for the duration the project.
- 2. Your CV including all relevant experience.
- 3. Fee proposal for providing the deliverables.

SUBMISSION OF PROPOSAL:

Interested persons should submit their proposals by Thursday, February 20, 2014 via EMAIL to:

info@gwp-caribbean.org

Attention:

Regional Coordinator GWP - C Secretariat c/o NIHERST #77 Eastern Main Road St. Augustine Trinidad