Technical assistance for developing the design of interventions at new sites and vetting the existing design under Community water stewardship project

Terms of References (ToRs) for Consultant

GENERAL

This document contains Terms of Reference (TORs) for the Consultant, to be engaged by WWF-Pakistan (hereinafter called the Employer), for interventions designs developing and vetting/approving under Community water stewardship project.

OBJECTIVES AND SCOPE OF SERVICES

WWF-Pakistan is implementing a Pepsi-Cola funded project on Community Water Stewardship titled “Community Water Stewardship: Replenishing the Water Resources in Lahore and Multan (Phase – II)”. Water Stewardship is a concept developed and advocated by WWF International globally to promote efforts of collective action for conserving and restoring water resources which serve community purposes. As part of the global network, WWF-Pakistan has also been an advocate of the concept and has been working actively on implementing water stewardship since past ten years. The concept proposes different possible interventions to replenish groundwater i. By constructing groundwater recharge wells, ii. By installing rainwater harvesting systems in households in a selected community in Lahore within PepsiCo. watershed, iii. Reuse ablution water system, iv. By restoring existing areas into wetlands or by constructing new wetlands, within the watershed, where water ponding occurs, v. Land cover management and vi. On form water management practices. It is estimated that with the combination of these interventions an average 331,925 m³/annum of groundwater replenishment would be possible, which would allow to demonstrate good water stewardship practice.
**Specific Task**

In this regard, to address the depleting water resources and to create awareness about the need to conserve water resources, employer’s freshwater team intends to hire a technical consultant to develop, evaluate and supervise the interventions for successful completion of this project for the following tasks;

1. Review available literature and case studies regarding community water stewardship in Pakistan and in the region.

2. Review of project intervention designs and methodology for implementation of recharge wells, rainwater harvesting systems, recycling of ablution water, floating treatment wetlands, on-farm water management (Agricultural) practices and land cover management techniques.

3. Devise the methodology for calculating replenishment numbers of installed capacity and actual replenishment numbers according to standard methods (VWBA).

4. Review of technical drawings, Bills of Quantities (BOQs) and design of filtration system.

5. Conduct site visits to monitor interventions and their performance as per schedule.

6. Provide over all technical assistance and design approving/vetting services.

7. Conduct joint stakeholder meetings.

8. Develop joint research publications on water replenishment for future prospects.

**Deliverables:**

1. To design project interventions to be installed during the remaining timeline of the project.

2. To vet/approve designs of installed interventions to-date.

3. To submit the description of recommended designs and their installation methodology along with other relevant information in the form of a final report.

**Requirements:**

M.S. degree (minimum sixteen years of education) desirable from a recognized and reputable university in Hydrology, Agriculture Sciences, Climate Change/ Environmental Sciences.

Minimum 10 years, post qualification experience.

The consultant must have experience relevant to project concept and can frequently visit the sites.

**TIME FRAME**

*From:* 28 Feb 2022 *to:* 31 Sep. 2022.