



## About the Project

Iraq is considered the 5th most vulnerable country to the effects of climate change. The impacts of climate change

Farms will serve as demo sites utilizing hydroponic and aquaponic techniques to promote the Nexus approach. The efficient irrigation techniques will support the subsistence farmers (smallholders) in Basra, Iraq.

**Description of the Service**

- Developing a plan for crop farming (crop calendar) with full cooperation with the IUCN team based on selected crop types and the nature of each location
- Submission of a complete package of design for Greensoilless demo sites and efficient irrigation systems for each site including drawings, BOQs, specifications, and implementation methodology. Both soft (AutoCAD & PDF) and hard copies.
- During design all safety precautions and environmental regulations must be considered
- Prior to implementation, the design package must be reviewed and approved by the IUCN.

The key tasks to be undertaken to deliver this phase should be included but not limited to the following

- Must obtain the full approval from the IUCN on the design package before starting implementation.
- Provide an implementation plan within a defined time frame include needed resources, materials, equipment, site priorities etc.
- The contractor should be responsible for the required resources (e.g. personal, workers, transportation, water, electricity, etc) during implementation and the accommodation facilities for his staff and workers.

- Conduct on-site training for the efficient irrigation system operation and maintenance for each farm's beneficiaries.
- Develop and submit a list of the spare parts and warranties for the installed system
- As built drawing should be drafted and submitted to IUCN for all installed systems
- All sites targeted for irrigation efficiency should be set on one map and include real coordinates.
- Green soilless farms (demo site) should be set on one map and include real coordinates.
- Handing over all implemented sites to the beneficiaries in accordance with approved forms

## Essential Requirements

### 1. of experts

The team of experts should have the following qualifications and experiences as a minimum requirement:

<p><b>1. Construction manager (team leader)</b></p> <ul style="list-style-type: none"> <li>• University degree in civil engineering or a relevant field (master's /PhD degree is an advantage).</li> <li>• A minimum of 10 years of general experience in designing, installing, and commissioning different projects</li> <li>• A minimum of 5 years of specific experience in agriculture field.</li> <li>• Proven expertise and in-depth knowledge of the field of agriculture with work experience in a similar project</li> <li>• Expertise in managing the implementation of various projects that applied new agricultural practices such as soilless agriculture projects.</li> <li>• Advanced knowledge of English and Arabic languages.</li> <li>• Strong interpersonal skills and the ability to communicate with various stakeholders in politically sensitive situations with diplomacy and tact.</li> </ul>
<p><b>2. Agriculture expert</b></p> <ul style="list-style-type: none"> <li>• University degree in agriculture or a relevant field (master/PhD degree is an advantage).</li> <li>• A minimum of 10 years of general experience in designing, installing, and commissioning different agriculture projects</li> <li>• A minimum of 5 years of specific experience in irrigation techniques, crop management, smart agriculture practices</li> <li>• Proven expertise and in-depth knowledge of the field of agriculture with work experience in a similar project</li> <li>• Expertise in designing, supervising and implementing various agri-projects that applied new agricultural practices such as soilless agriculture projects</li> <li>• Advance knowledge about crop management and irrigation networks.</li> <li>• Advanced knowledge of English and Arabic languages. Strong interpersonal skills and the ability to communicate with various stakeholders in politically sensitive situations with diplomacy and tact.</li> </ul>
<p><b>3. Irrigation expert</b></p> <ul style="list-style-type: none"> <li>• University degree in irrigation or relevant field (master/PhD is an advantage).</li> <li>• A minimum of 10 years of experience in design and implementation of</li> <li>• A minimum of 5 years of specific experience in crop management, smart agriculture practices, smart irrigation systems and soilless agriculture techniques</li> <li>• Proven expertise and in-depth knowledge of the field of agriculture, irrigation in Jordan.</li> <li>• Expertise in designing, supervising and implementing various smart irrigation systems (especially systems utilize efficient water use such as soilless agriculture, aquaponic, and drip irrigation).</li> <li>• Advanced knowledge of English and Arabic languages. Strong interpersonal skills and the ability to communicate with various stakeholders in politically sensitive situations with diplomacy and tact.</li> </ul>
<p><b>4. Renewable energy expert</b></p> <ul style="list-style-type: none"> <li>• University degree in Renewable energy or relevant field (master/PhD is an advantage).</li> <li>• A minimum of 5 years' experience in the designing and implementation of renewable energy projects</li> <li>• Proven expertise and in-depth Knowledge of the field of renewable energy in Jordan.</li> <li>• Expertise in designing, supervision and implementing various Renewable energy techniques for agriculture irrigation (including the usage of renewable energy for at least one project that adopts climate agriculture such as soilless agriculture)</li> <li>• Advanced knowledge of English and Arabic languages. Strong interpersonal skills and the ability to communicate with various stakeholders in politically sensitive situations with diplomacy and tact.</li> </ul>

**Reporting:**

During the project life, the contractor should

Payment 3; Upon satisfactory complete implementation of the fifteen-efficient irrigation systems.

30% of corresponding total amount

- Satisfactory completion of fifteen efficient irrigation systems