**Supply and Install solar systems for (8) Agricultural wells in Sinjar**

1. **PROJECT BACKGROUND**
   1. **Project description:**

The project is Supply and Install of solar systems for (8) Agricultural wells in Sinjar. The wells belong to civil owners and are used to provide water to farms producing various crops in Sinjar sub-district.

**Direct and indirect beneficiaries:**

* + 1. Direct beneficiaries: (270) people (owners of water wells and workers in farms) in Sinjar.
    2. Indirect beneficiaries: 180,000 people in Sinjar District (55% females, 45% males).
  1. **Impact and how it will be measured:** The installation of the solar system for the wells will develop the Agricultural sector and serve the energy consumption by using the sustainable energy to save electrical. Power and save the environment from pollution and lower the bill of grid energy or even the generator fuel requirements. the production of agricultural crops in the area will be more and will open a livelihood source for farmers, marketers, transporters, and others.

1. **LOCATION**

The project is in Sinjar District- Ninawa Governorate, Coordinates: (36.255444, 41.856166) and 7 different location as stated in the BoQ.

1. **BUILDING/CONSTRUCTION DESCRIPTION**.

No building included in the project.

1. **DESCRIPTION OF THE DAMAGE**

No damages exist, the project is a new founded.

1. **WORKS ON BRIEF**

The civil work includes but not limited to erect a concrete foundation after the site preparation for the area.

The electrical part of the works includes but not limited to provide the solar power panels with all accessories and supply and installation of the elect. Pumping controller sys. Including Smart Inverter, MPPT, Pump Controller, Frequency Drive, Dry Running Sensor, Filter/Sine Wave Filter, Circuit Breakers (9 Strings Min.) Surge Protection & Protection System with all other fittings, accessories and required works as indicated in the BoQ.

While the mechanical work of the rehabilitation work includes but not limited to provide steel racks and supports, installing the PV panels and connect, fixing, and commissioning the solar unit to run the well.

1. **DURATION OF THE PROJECT**

80 Calendar days