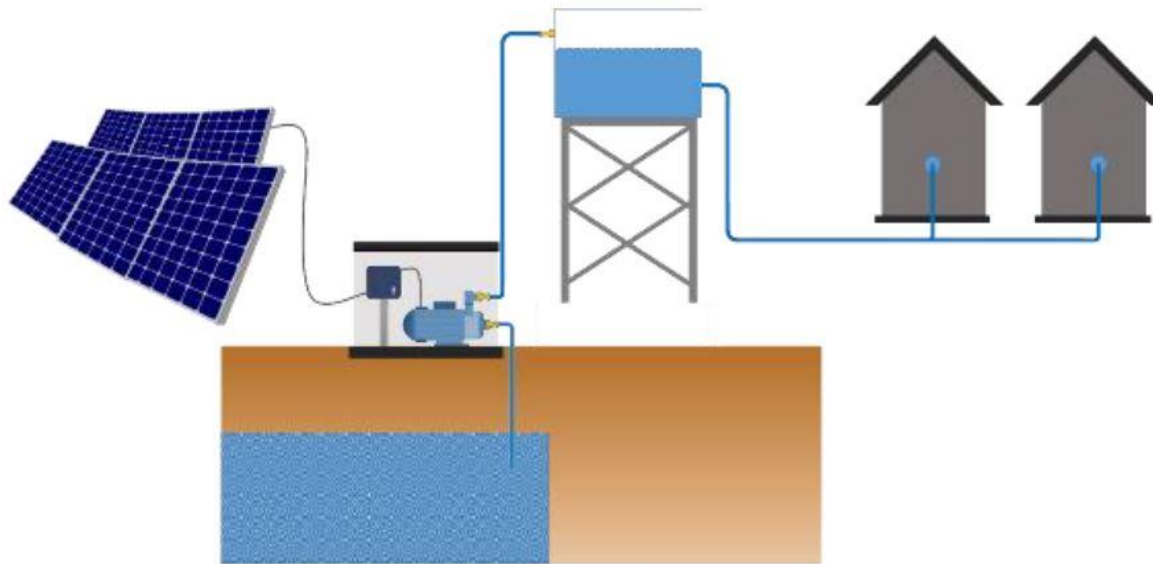




RENÉ MOAWAD FOUNDATION
مؤسسة رينه مروض

Solar- Powered Water Stations



- The steep national currency devaluation drastically increasing fuel costs, has led to the reduced operations of key community services such as water supply
- RMF in partnership with UNHCR assessed the impact of the fuel crisis on the NLWE operations and water systems. Assessments have shown that active water pumping stations, running on diesel, have had their operating hours reduced to mitigate the increase in fuel costs

Solar- Powered Water Stations- Advantages

- No Fuel cost – as it uses available free sunlight
- Solar energy is a green energy. It is renewable and does not cause pollution
- Long operating life
- Highly reliable and durable
- Easy to operate and maintain
- Eco-friendly

Solar- Powered Water Stations- Challenges

- The initial cost of purchasing a solar system is fairly high
- Most of application need water storage typically higher than for equivalent diesel system
- Risk of theft of panels, that are still seen as a valuable commodity in some locations
- System is dependent on solar radiations levels
- Operators' Lack of knowledge in monitoring the System
- Uses a lot of space
- Weather- Dependent. Although solar energy can still be collected during cloudy and rainy days, the efficiency of the solar system drops.
- Batteries are not recycled locally and will constitute a major source of pollution in the coming years



Solar- Powered Water Stations- Executed 2021



Equipping the Water Station of Kferhalda- Batroun with an Off- Grid Solar System, providing 50 KVA during the Day and 25 KVA at Night shift

Solar- Powered Water Stations- Executed 2021



Equipping the Water Station of Al Blat- Meryata with a Solar pumping System
to operate a 17.5 HP submersible pump

Solar- Powered Water Stations- Executed 2021



Equipping the Water Station of Al Quadi- Meryata with a Solar pumping System to operate a 7.5 HP pump