Qattara Seawater Community

IPRO 497-348: A Vision for Developing Large-Scale Desalination in the Sahara

Location: Qattara Depression, Egypt

"If present trends continue, 1.8 billion people will be living in countries or regions with water scarcity by 2025, and two-thirds of the world population could be subject to water stress."

-Asha Rose Migiro
United Nations Deputy Secretary General

With increasing global strain on fresh water sources and rising demand for higher food production, the goal is to apply modern technologies and strategies to an independent and sustainable system; one that could rely exclusively on the sea as the renewable source for water and that could not only be self-sufficient but substantially profitable for the investing parties and residents.

The project scope is designed for a single scenario within the Egyptian Sahara, however the system is to become a template for uninhabitable coastal deserts throughout the globe; from the coastal Sahara to the Namib desert or Death valley, the system could bring long term relief to imminent problems like urban sprawl, limited food production and desertification, to name a few.

Feasible sites for the project

The Solar Field Village

Water is a big part of a big problem.

By 2030 50% of the world will need more food.

1 in 8 people lack enough food to lead a healthy life.

By 2030 45% of the world will need more energy.

4.9% of the earth’s water can be used as drinking water.

In 2025, 2/3 of the population will face water scarcity or stress.

800 Million people lack access to safe drinking water.

About 1/3 people lack access to proper sanitation.

Rising population, and declining fresh water will greatly affect the production of food.

This would be influenced by the estimation that 2/3 of the world population will be living in cities.