



Tropentag, September 19-21, 2016, Vienna, Austria

“Solidarity in a competing world —
fair use of resources”

The Use of Sea Water in the Conservation of Natural Resources via Sustainable Phyto-pump System (SPPS)

MAGDY NIAZY

Agric. Res. Cent., Egypt, Environmental, Egypt

Abstract

Resources more than 70 percent of the world's population lives on coastal plains, and 11 of the 15 largest cities in the world are located on the coast and estuaries. Over the twentieth century, sea levels rose by between 10 and 20 centimeters (4.8 inches). The Intergovernmental Panel (IPCC) predicts rising sea level from 9 to 88 cm in the 21st century.

The deserts of the world's coastal and inland saline can be irrigated land from the sea or microclimate change in each region, and this constitutes an area of 130 000 000 Hectares of new land, which can be used in food production without compromising the soils of the forest or the depletion of fresh water resources scarce. Sustainable Phyto-Pump System (SPPS) to change desert conditions from drought and water scarcity and high salinity and temperature, or in other words, change from environmental stress to conditions suitable for the growth of agricultural plants.

Transport of sea water inside the desert by pipe to wide hole or Cyclic basin lined layer of HDPE to prevent leakage of sea water to underground water and Inside Seawater put mangrove and surrounded also by mangrove through three circles (first track) the mangrove act as pump humidity inside the desert and change the microclimate in desert leads to increase rain water and humidity by more than 50 %. The second track halophytes fodder (*Bassia indica* and *Atriplex Nummularia*) and the Third track : The cultivation of fruit trees tolerant to salinity and drought, including many types by dew harvest.

Keywords: Change desert conditions, desert, halophytes fodder , mangrove , phyto-pump