



- SYSTEMS for SMART AGRICULTURE Two Scenarios, LOCAL Water A**
- availability and REGIONAL Water Availability in Concentrations
- (1) WATER is Available UNDERGROUND but NEED PUMPING
 - (2) CONCENTRATIONS of SURFACE or UNDERGROUND WATER is Available at a few UNDERGROUND ZONES or as SURFACE RIVER STREAM WATER but not everywhere in sufficient Quantity and NEED PUMPING and STORAGE except in Rainy Season
 - (3) SOLAR ENERGY, is Plentiful in TROPICS, tapped by GREENHOUSES and SOLAR PV PANELS
 - (4) SOLAR PV PANELS are Arranged in ROWS, and AGRIFARMING is feasible in between ROWS
 - (5) AGROPHOTOVOLTAICS is a Systematic Use of LAND for SOLAR PV and AGRICULTURE.
 - (6) AGROPHOTOVOLTAIC Land can be even Better used for GREENHOUSE POLYHOUSE, where Land Use for SOLAR PV AGRICULTURE and WATER HUMIDITY CONSERVATION for Better Productivity and Better Overall Economy, without the Land being Degraded by Salinity.
 - (7) AGROPHOTOVOLTAIC GREENHOUSES POLYHOUSES can combine Optimal Land Use for SOLAR PV, AGRICULTURE and WATER HUMIDITY CONSERVATION with AIR WATER MIST COOLED GROUND HUMIDITY CONDENSATION DESALINATION due to COOLING of AIR for WATER CONSERVATION for Better Productivity and Better Overall Economy, without the Land being Degraded by Salinity.
 - (8) POLYMER FILM is Cheap, Conserves Water, is Useful again frost by Trapping Ground Heat, Useful as a Source of WATER, serving as AIR WATER MIST COOLED GROUND HUMIDITY CONDENSATION DESALINATION due to COOLING of HUMID AIR for WATER CONSERVATION
 - (9) POLYHOUSE made from Polymers is a Cheaper form of GREENHOUSE, useful for Controlling Water and Humidity, as well as Temperature as a Way of preventing Damage due to Frost, can combine Optimal Land Use for SOLAR PV, AGRICULTURE and WATER HUMIDITY CONSERVATION with AIR WATER MIST COOLED GROUND HUMIDITY CONDENSATION DESALINATION due to COOLING of AIR for WATER CONSERVATION for Better Productivity and Better Overall Economy, without Degradation of Land by Salinity.
 - (10) NETHOUSE made from NETS is basically for SHADING PLANTS for Temperature Control during Hot Dry Summers to Reduce Local Plant based Water Evaporation
 - (11) DRIP IRRIGATION is BEST form of IRRIGATION in DRY AREAS but Surface Evaporation can cause some Surface Soil Salinity
 - (12) DRIP IRRIGATION with WATER SPRINKLERS are the BEST form of IRRIGATION in DRY AREAS, because the SOIL SURFACE is also WASHED resulting in No Surface Salinity.

