

EMERGING APPLICATIONS OF MEGHDOOT® AWH

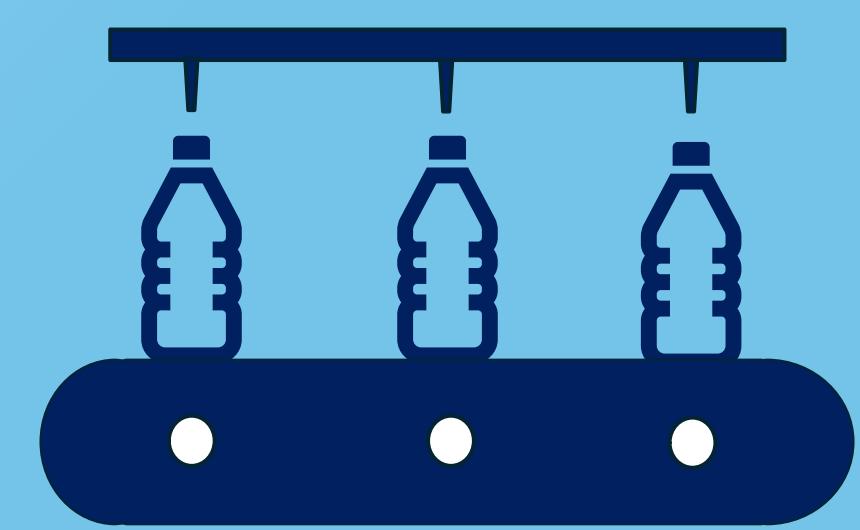
WHAT'S NEXT?



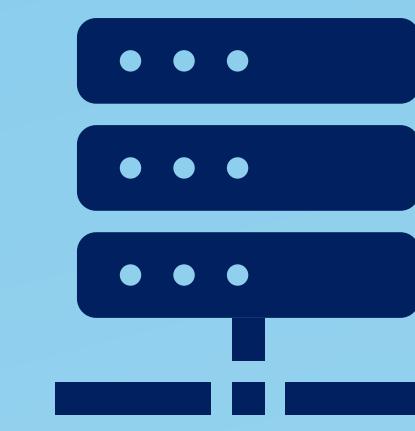
Water For
Communities



Fresh Air Cooling &
Cold Storage



Air to Water
Bottling Plant



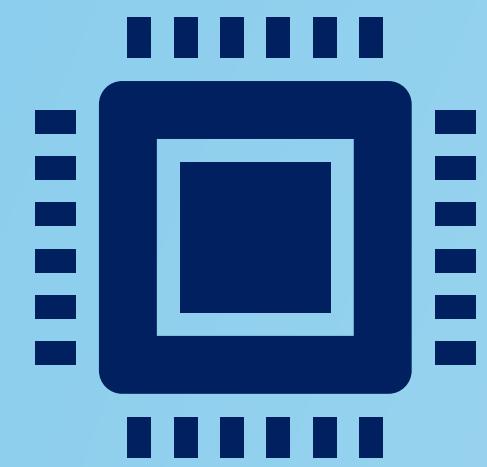
Data Centre
Cooling



Water For Dialysis



Ultra-Pure Water
For Pharma Industry



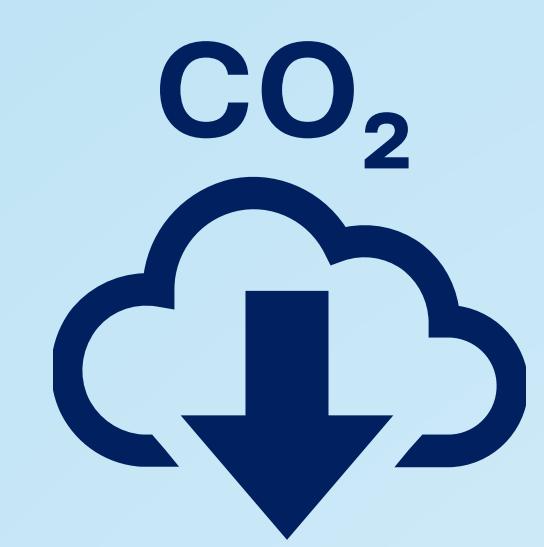
Ultra-Pure Water
For Semiconductor Industry



Water Reclamation From
Cooling Tower Plumes



Sustainable Irrigation



Carbon Dioxide
Capture



Process Water For
Industries



Green Hydrogen
Production

Driving innovation towards climate-resilient, decentralized, and sustainable water solutions

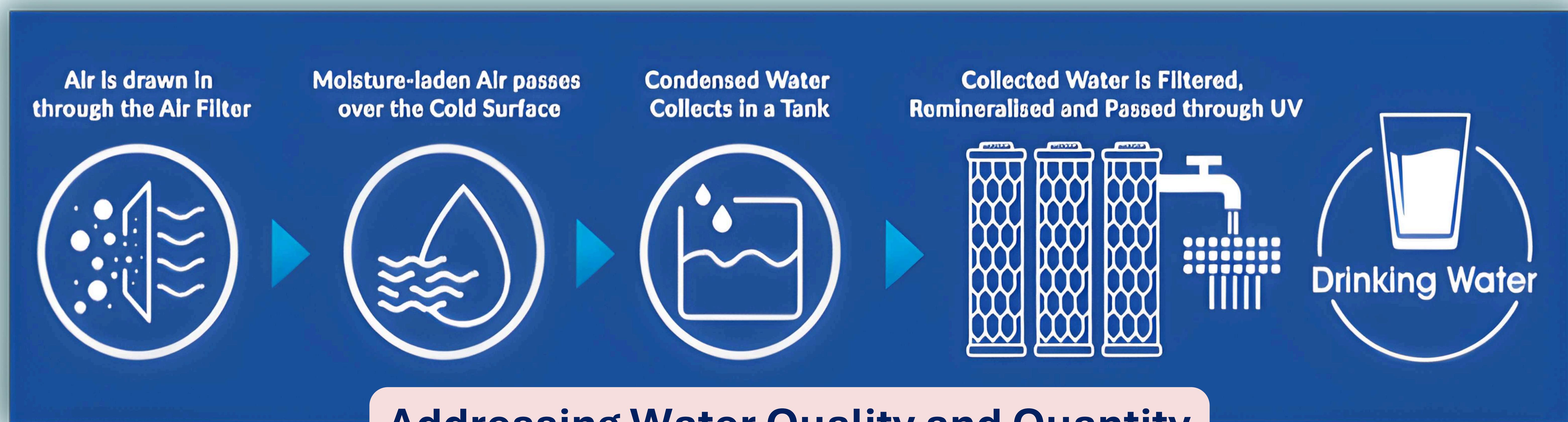
Maithri Aquatech R&D

HOT & HUMID

Water in Air & Land, Yet Stressed

GROUNDWATER CONTAMINATION, SALINITY, AND OVERUSE THREATEN WATER SECURITY

MEGHDOOT AWH - TRANSFORMING AIR INTO PURE WATER

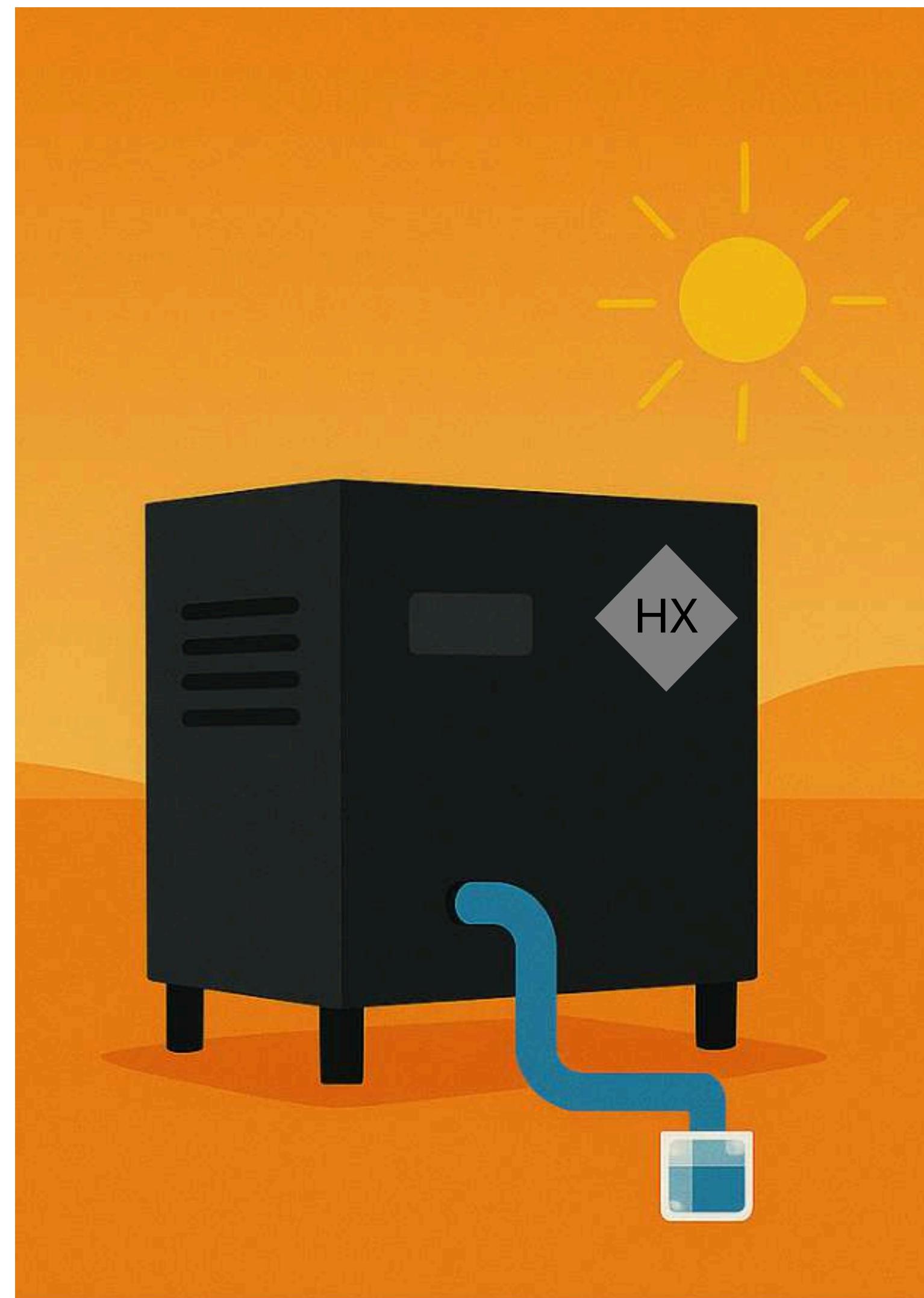


Innovating Every Drop Towards a Water-Positive Future

HOT & DRY

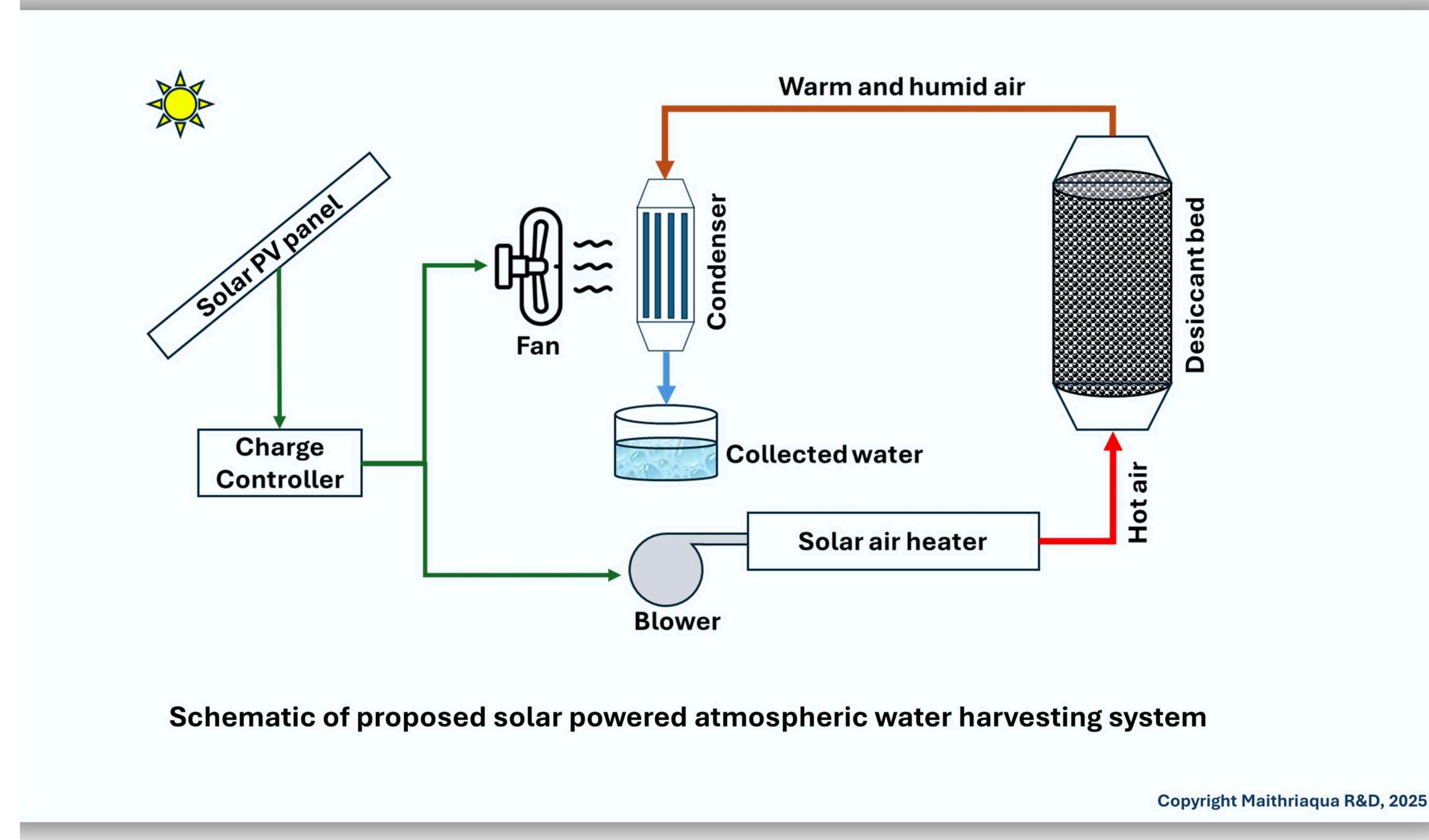
High Sensible Heat Load & Low Relative Humidity

MEGHDOOT- ADVANCED AWH & DESICCANT SERIES



Advanced AWH

- Precooling incoming air with cold exit air
- Novel flow path with passive cross flow HX
- Reduces sensible heat load and improves RH



Advanced Desiccant Based AWH

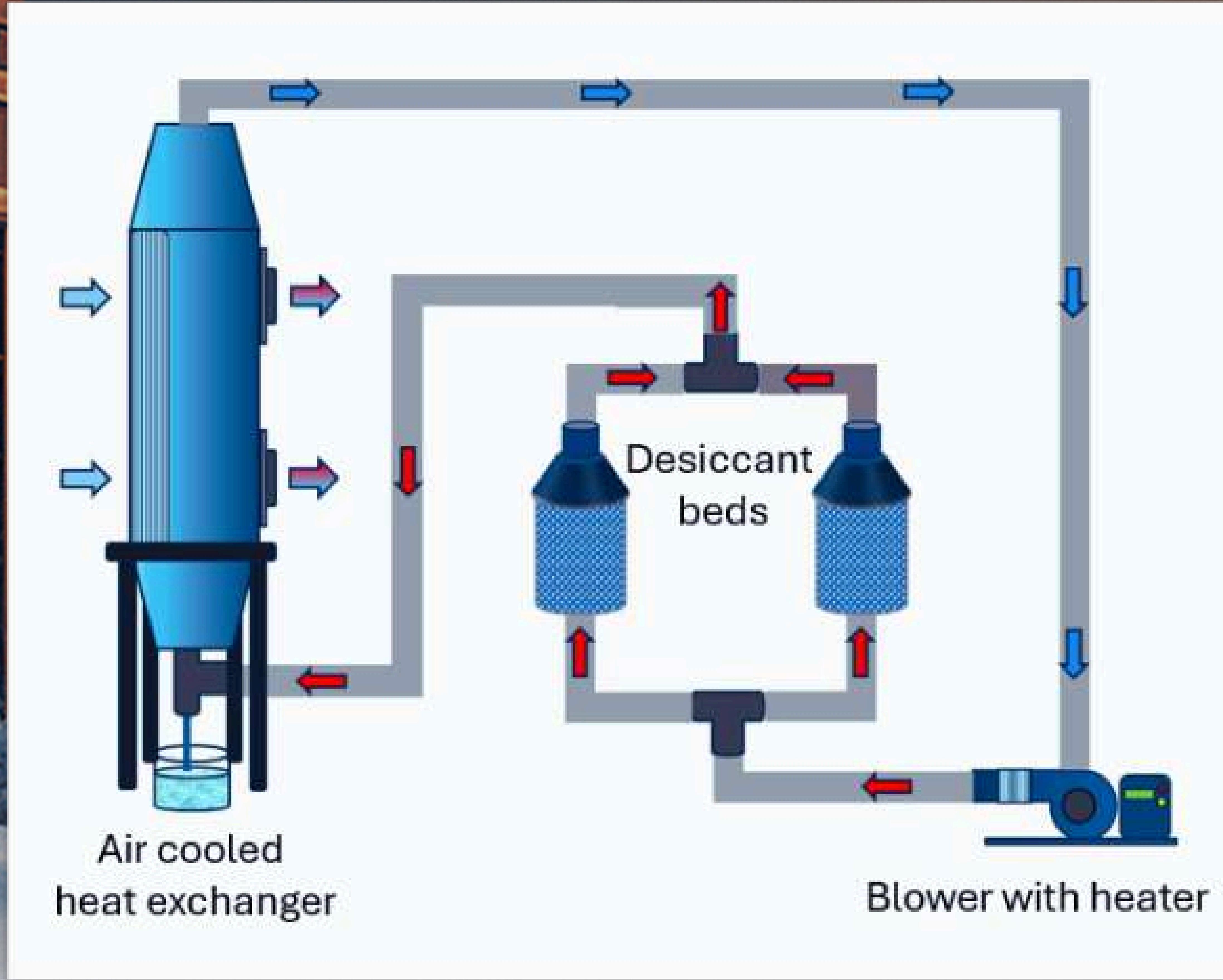
- Extended operation under low RH conditions
- Desiccant regeneration with solar air heater
- Ambient air cooled HX for condensation

Engineered to harvest more, even when others give less or no water

COLD & HUMID

Freezing On Cooling Coils
Sub - Zero Dew Point
Very Low Solar Intensity

MEGHDOOT- ADVANCED DESICCANT SERIES WITH HEATER



- Extended operation in low sunshine hours
- Desorption of desiccant facilitated by external heater
- Ambient air cooled HX for condensation

COLD & DRY

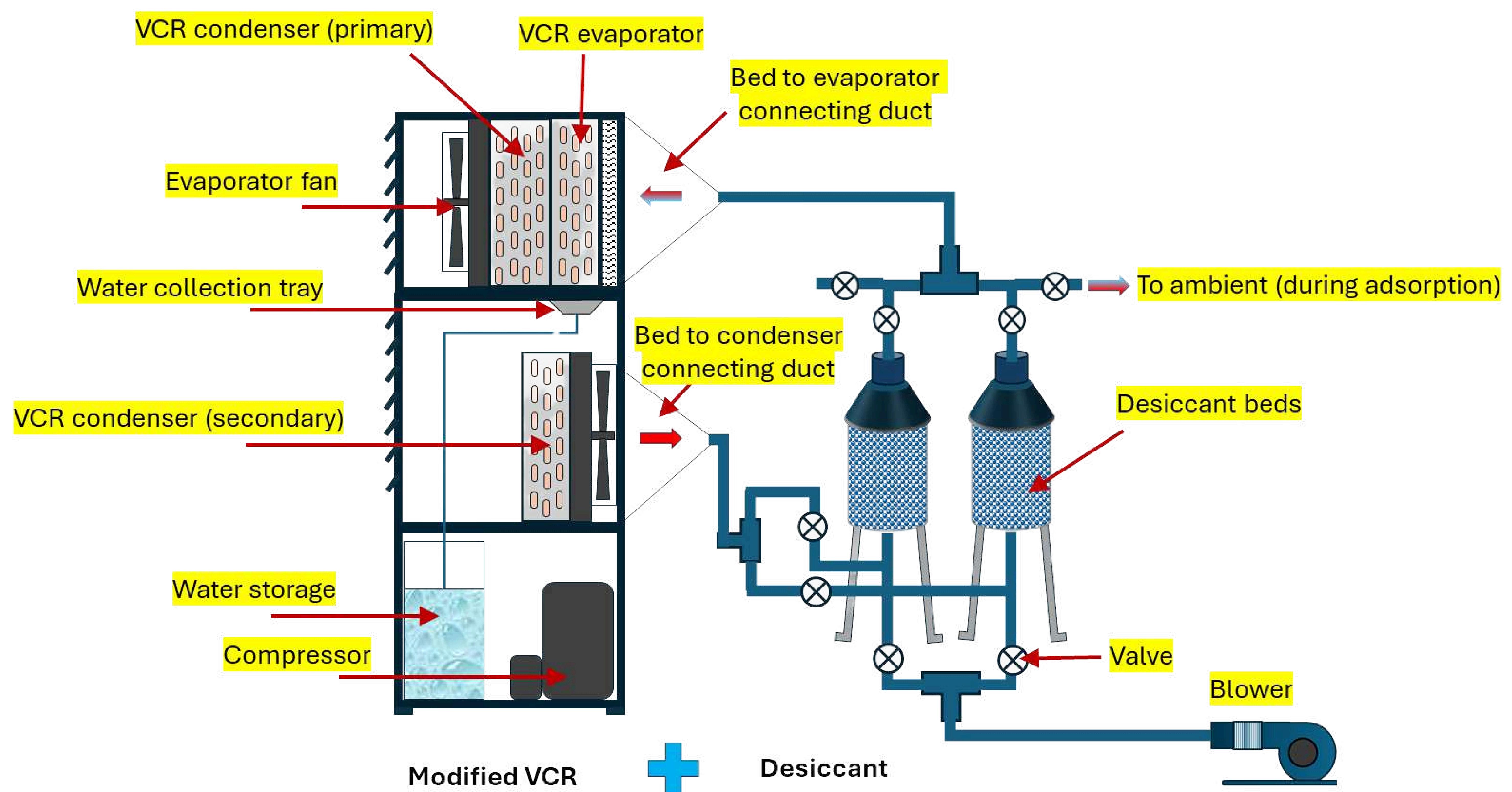
Low Efficiency Of Cooling Based AWH

Sub-Zero Dew Point

Very Low Solar Intensity

Low Ambient RH

MEGHDOOT- HYBRID SERIES



- VCR cycle supplies both cooling & waste heat
- Advanced desiccant enhances humidity capture even at low RH
- Hybrid system offers continuous and efficient water harvesting