## HydroLife

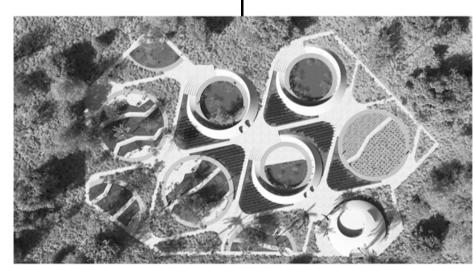
The proposed design integrates modern technologies, such as photovoltaic cells, with ancient indigenous techniques for water harvesting and storage. This dual approach merges two branches of sustainable technology—renewable energy generation and vernacular environmental management—into a cohesive and ecologically sensitive system



Hootaks in Dashtyari, Sistan & Baluchestan province, Iran



PV Solar Farm



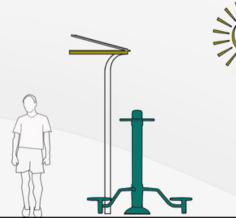
The project incorporates various low-tech systems, including autonomous solar lighting units, kinetic energy-harvesting fitness equipment, and a series of solar water stills. Beyond their practical function in supporting emergency water access and decentralized energy generation, these technologies serve as interactive educational tools, fostering environmental literacy and public awareness regarding context-specific, sustainable resource management strategies." By weaving together indigenous wisdom and clean technologies, HydroLife addresses critical water and energy challenges while restoring the cultural landscape with a resilient, low-impact approach.



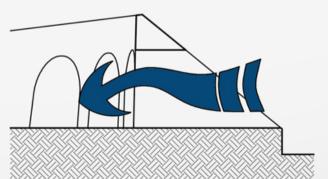




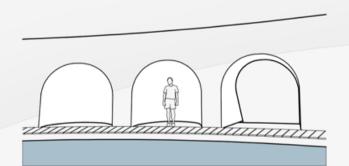
The solar water stills are designed with transparent polycarbonate sheets, UV-resistant glass, black heat-absorbing panels, and droplet collection channels.



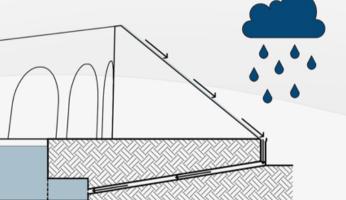
The site's recreational trails are illuminated and supported using independent solar lights, as well as energy-generating sports equipment that generates energy from mechanical movement.



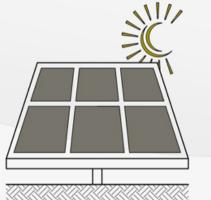
The placement of openings in the southeast direction of the Hootak's walls and in the direction of the prevailing wind in the area helps create ventilation and wind tunnels in the humid areas of the Hootaks.



the arched niches embedded in the interior walls of the Hootaks function as shaded rest areas that encourage social interaction. Their recessed orientation and wind-sheltered positioning also provide temporary refuge during storms, particularly against falling coconuts.



Rainwater, after flowing over the sloped walls of the Hootak, is directed through gutters and buried pipes toward a filtration system, and after initial purification, it is stored in the Hootak reservoir.



Required power = 75kW

Panel capacity = 350 W

Number of panels = 215

Total area

PV SOLAR FARM

