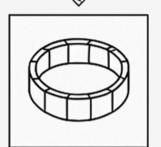
## HydroLife

Conceptual Timeline Diagram for the Construction Phase of the "HydroLife" Prototype:



1. Site Preparation

Clearing the site, initial leveling, and preparing the foundation for the Hootak systems.



2. Modular Formwork Installation

Using pre-fabricated templates to define the precise shape of the Hootak walls.



3. Soil Filling and Material Stabiliza-

Completing the walls with compacted soil, stabilized with lime, sarooj, or other local natural materials.



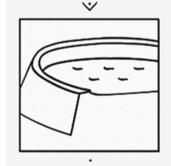
4. Installation of Solar Systems

Mounting solar panels on the Hootak edges and installing energy-generating devices.



5. Construction of Agricultural and Tourist Pathways

Creating access roads and preparing lands for flood-based farming activities



6. Initial Water Filling & Performance Testing

Testing the water storage capacity, checking for leakage, and verifying the operation of solar panels and other equipment.



7. Preparation of Public Spaces and Handover

Finalizing public areas and officially transferring the project to the local community.







From an environmental perspective, the proposed systems will play a crucial role in the long-term preservation of several tons of soil (suspended flood sediments) within the watershed area. By effectively managing sedimentation, these systems prevent erosion and contribute to the sustainable management of natural resources in the region.

Leveraging indigenous knowledge, and where necessary, combining it with modern scientific advancements, is not only valuable but essential for the sustainable development of water, soil, and the environment. This approach fosters a harmonious relationship between traditional and contemporary practices, promoting environmental resilience and resource conservation.