



SUSTAINABLE WATER SUPPLY THROUGH PROTECTED WATER SPRING MODIFICATION

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Traditional water spring

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Water Storage Tank

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Sustainable water supply



The Problem



- Ugandan springs are free-flow springs
- Reduced water flow due to climate change
- Springs do not provide an adequate water supply.



The Solution

- Enhance springs with storage tanks.
- Store excess spring water for supply consistency.
- Retrofitting with tanks optimizes water use.

The Benefits



- Consistent water supply.
- Sustainable water resource management.
- Community resilience against water shortages.

Design Process

- Site assessment and planning.
- Tank size determination based on demand.
- Tank material selection.
- Integration with existing spring infrastructure.



Technical Implementation

- Water intake mechanisms.
- Storage tank specifications.
- Flow control systems to manage water supply

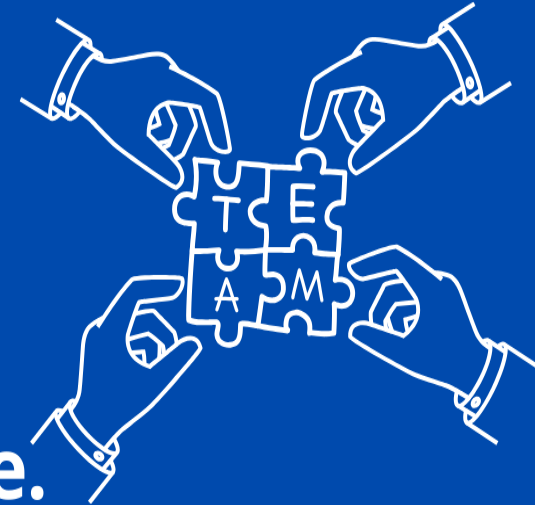


Environmental Impact

- Reduced strain on natural water sources.
- Preservation of local ecosystems.
- Potential for groundwater recharge.



Community Engagement



- Local expertise and knowledge.
- Project ownership and sustainability.
- Community resilience and cooperation.

Challenges & Mitigation

Challenge

- Limited funding.
- Expertise gaps.
- Environmental concerns.
- Community skepticism.

Mitigation

- Seek external funding
- Capacity building.
- Environmental assessments.
- Foster community engagement and awareness.

Sustainability and Replication

- Local community involvement ensures sustainability.
- Proper maintenance preserves long-term benefits.
- Easy to replicate in neighboring regions.
- Monitor and adapt to changing environmental conditions.

Conclusion



- Enhanced water management.
- Ecological preservation.
- Consistent water supply.
- Sustainable resource utilization.



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**THANK
YOU!**