PROJECT COMPLETION & IMPACT REPORT

Solar-Powered Water ATM – 12 No. Tank, Salt Lake

Implemented by: Divine Script Society (DSS Kolkata)

Project Location: 12 No. Tank, Salt Lake, Kolkata

Beneficiaries: Approximately 150 households / 600 community members

Project Status: Completed and inaugurated

1. Executive Summary

DSS Kolkata is pleased to report the successful completion and inauguration of the Solar-Powered Water ATM at 12 No. Tank, Salt Lake, established to provide the local community with access to safe drinking water in a sustainable and hygienic manner.

The project has created a complete water infrastructure comprising a water station, 2,000-litre overhead tank, filtration system, purified-water storage, solar power system, automated Water ATM, community collection taps, drainage facilities and improved washing and bathing infrastructure.

The system has an approximate capacity of 2,000 litres of safe drinking water per day under suitable sunlight conditions and is expected to benefit approximately 150 households, representing around 600 people.

The project has been successfully inaugurated and represents a significant community asset, combining access to safe water with renewable energy, improved hygiene and better environmental management.

2. The Need

Access to safe and reliable drinking water is a fundamental requirement for community health, dignity and well-being. The 12 No. Tank community faced challenges related to the availability and accessibility of safe drinking water and the condition of existing water infrastructure.

Recognising this need, DSS Kolkata undertook the establishment of a sustainable community water facility that would not only provide purified drinking water but also improve the surrounding water, sanitation and hygiene environment.

The intervention was designed around three principles:

- Safe and accessible drinking water
- Sustainable, solar-powered operation
- Improved community hygiene and sanitation

3. Project Objectives

The project aimed to:

1. Provide the community with reliable access to purified drinking water.

2. Establish a sustainable water system powered by renewable solar energy.

3. Improve water storage, dispensing and collection facilities.

4. Improve hygiene through better washing, bathing and drainage facilities.

5. Create a community-owned and sustainable water resource serving approximately 150 households.

4. Key Infrastructure Created

The project has resulted in the establishment of the following infrastructure:

Water Supply & Storage:

- A strong concrete foundation for the complete Water ATM infrastructure.

- A water station with a 2,000-litre overhead water tank.

- Two purified-water storage tanks within the pump house.

- Community water collection taps.

Water Purification:

- Multiple filtration media tanks.

- Filtration and backwashing systems.

- Automated dispensing through Water ATM units.

Solar & Automation:

- A solar power system to operate the Water ATM using clean and renewable energy.

- Automatic water-level sensors to prevent tank overflow.

- Automated control and dispensing systems.

Pump House -The pump house has been completed with:

- Internal and external plastering

- Flooring

- Painting

- Water purification and storage infrastructure

Sanitation & Drainage:

- The old well structure was demolished and a new well platform constructed.

- Separate washing and bathing facilities were created for community use.

- A wastewater drainage pipeline was installed and connected to the main drainage system, helping prevent waterlogging and maintain a cleaner environment.

5. Key Project Outputs

Indicator	Achievement
Community Household expected to benefit	150 approx
People expected to benefit	600 approx
Water production capacity	2000 lit/day* approx.
Overhead water tank	2000 litres
Purified water storage tanks	2
Solar power system	Installed
Water ATM units	Installed and operational
Automated dispensing system	Installed
Automatic water level sensor	Installed
Community collection taps	Installed
Washing/bathing facilities	Constructed
Wastewater drainage connection	completed

*Capacity is dependent on sunlight and operating conditions

6. Implementation Journey

The project was implemented in a challenging environment and required sustained engagement with multiple stakeholders.

Political and community-related challenges, uncertainty at the site and practical implementation issues created considerable pressure during the project. Rather than allowing these challenges to delay the initiative, the project team relied on patience, dialogue, diplomacy and strong community relationships to build cooperation and keep the project moving forward.

The experience demonstrated that infrastructure development in vulnerable communities requires not only technical expertise but also sensitivity, trust-building and continuous engagement with the people who will ultimately use and maintain the facility.

7. Community Participation

Community engagement remained an important part of the project throughout its implementation.

The response of community members at the inauguration was particularly encouraging. The smiles, appreciation and blessings expressed by beneficiaries reinforced the importance of the intervention and demonstrated the value of creating infrastructure that responds directly to community needs.

The participation of children in the inauguration activities was also particularly inspiring. Despite heavy rain washing away their artwork, the children returned and restarted their work with remarkable enthusiasm and determination.

Their spirit reflected the resilience of the community and the significance of the new facility to them.

8. Impact & Expected Benefits

The Water ATM is expected to contribute to:

-Improved access to safe drinking water

Approximately 600 people across 150 households are expected to have improved access to purified drinking water.

- Improved health and hygiene

Access to treated water, together with improved washing and bathing facilities, is expected to contribute to better hygiene practices and a healthier community environment.

- Environmental sustainability

The use of solar energy reduces dependence on conventional electricity and supports a more environmentally sustainable model of community water provision.

- Improved community environment

The new wastewater drainage connection will help prevent waterlogging and reduce stagnant wastewater around the facility.

- Dignity and convenience

The availability of a dedicated community water facility provides easier and more dignified access to an essential daily resource.

9. Testing, Water Safety & Commissioning

Prior to full community operation, the project underwent system testing covering:

- Solar power system performance
- Filtration media performance
- Backwashing process
- Automatic sensors and control systems
- Water storage and dispensing systems
- Laboratory testing of water quality

The water quality testing is an essential component of the project to ensure that the water supplied to the community meets the required safety standards.

Relevant laboratory reports and technical documentation may be provided as part of the project annexures.

10. Sustainability

Sustainability has been incorporated into the design of the project through:

- Solar-powered operation
- Automated water-level management
- Proper water filtration and backwashing
- Purified-water storage
- Appropriate wastewater drainage
- Community-level access and engagement

Regular maintenance of the filtration, solar, pumping and dispensing systems, together with periodic water-quality testing, will be important to ensure that the facility continues to serve the community effectively over the long term.

11. A Dream Realised

For everyone involved, this project represents more than the construction of a water facility.

It was a dream that required considerable perseverance to become a reality. There were moments when political challenges, community issues, uncertainty and practical obstacles made completion seem extremely difficult.

Yet the project team remained committed.

The successful completion of the Water ATM demonstrates what can be achieved when dedication is stronger than challenges, and when technical expertise is combined with patience, community engagement and a shared commitment to improving people's lives.

The heartfelt appreciation of the beneficiaries and their prayers for Dr. Jack Preger, whose vision and dream inspired this initiative, made the journey worthwhile.

12. Acknowledgement

DSS expresses its sincere gratitude to everyone – our donors, supporters, and every stakeholder who contributed to making this project possible.

Most importantly, we thank the community members and beneficiaries whose cooperation, patience and participation made the project possible.

13. Conclusion

The completion of the Solar-Powered Water ATM at 12 No. Tank, Salt Lake marks an important step towards improving access to safe drinking water for a vulnerable community.

With an approximate capacity of 2,000 litres per day, renewable solar energy, water purification and storage systems, automated dispensing, improved sanitation facilities and proper wastewater management, the project has created a comprehensive and sustainable community water resource.

For approximately 150 households and 600 people, this facility represents not merely a source of water, but a step towards better health, hygiene, dignity and a cleaner living environment.

A dream has become a community resource. Dreams come true when dedication is stronger than challenges.

14. Picture Gallery








Dream
Coming True
Together, We Build a Stronger Community
CLEAN WATER | STRONG COMMUNITY | BRIGHTER TOMORROW


12NO TANK , SALTLAKE
TRANSFORMATION FOR A BETTER TOMORROW
THEN
NOW
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