



OPTIMAL
GREENING

THE AGALA TRANSFORMATION STORY

A WATER, SANITATION
& HYGIENE PROJECT
IMPACT REPORT



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Agala Struggle:

Battling Water, Waste, and Vulnerability



“ I remember the time when I gave birth to my last child. At first, I had to resort to purchasing expensive bottled water for my child due to the unsuitability of our well water. As finances became tighter, I had no choice but to boil the community's well water, even though it still posed health risks to my child. This struggle drained both my resources and my time. ~ WASH Committee Chairperson

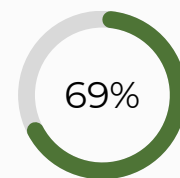
Just half an hour by boat from the Lagos mainland, Agala stood in the shadows of progress, a community where daily life was a struggle for survival. Its people fetched oil-polluted water from shallow wells, cooked with firewood, and lived without toilets or electricity. The stench of stagnant water and the fear of disease were daily unforgiving realities.

Mothers watched children fall ill from waterborne diseases such as diarrhea, cholera and typhoid. Women risked their safety at night seeking privacy to defecate. Girls missed school, spending hours fetching water for domestic use or caring for sick siblings. The island's isolation deepened despair; residents felt unseen and unserved.

In early 2020, displacement worsened the crisis when hundreds were evicted from informal settlements in nearby Tarkwa Bay and resettled on Agala island.

For them, survival meant drinking what they could find, limited volumes of contaminated water from unprotected sources. For the community, dignity had become a luxury, and the future seemed bleak.

This backdrop of health crises, environmental damage, and social vulnerability defined the urgent call for change, a call answered by Optimal Greening's promise of clean water, safe sanitation, and community renewal. The stage was set for transformation.



Consume contaminated and untreated well water

The Turning Point:

Optimal Greening and The Birth of WEDA



Agala's journey to change began in mid-2021 when Optimal Greening was invited to visit the island. Driven by its vision to restore dignity to underserved communities through clean water, renewable energy, and sustainable waste management solutions, the team arrived not just with solutions, but with a mission to listen.

Welcomed by the community, the team heard stories etched with daily hardship. Nearly seven out of ten families drank untreated water from shallow wells, and 80% of homes spent precious time, more than 15 minutes per trip, fetching water from mostly unprotected sources. Open defecation was the norm, practiced in bushes or nearby waterbodies, polluting the environment and putting women and girls in harm's way.

“ *For the first time in our memory, we are moving towards a new and improved way of life. We no longer have to fear waterborne diseases that have plagued our community for generations. ~ Community Chief (Baale)*

Mothers endured sleepless nights, holding feverish children, especially toddlers under the age of five, as they battled relentless bouts of diarrhea and other waterborne diseases. Among women and girls, painful infections were a quiet epidemic, an expensive and heartbreaking struggle for families already fighting to make ends meet. In classrooms, children scratched their skin, robbed of focus and comfort from bathing with the very water meant to sustain them.

Through heartfelt conversations and detailed household surveys, a picture of urgent need emerged. Safe water and sanitation stood out as the community's greatest hope. It was out of these voices that the Water Ease for Development Alliance (WEDA) project was born. An ambitious pilot designed to blend innovation, infrastructure, and the power of community to overcome Agala's Water, Sanitation and Hygiene (WASH) challenges.

Waves of Change

A Blueprint for Inclusive WASH Transformation



“The changes we have been expecting to see are starting to manifest. We are really excited to see that Agala has developed to the extent that an innovative project like this was brought here. ~ Female Community Leader

The WASH project became a beacon of hope, drilling deep to unlock an industrial borehole that promised enough water for all 1,100 residents. This water was purified through a solar-powered treatment plant, delivering access to an improved drinking water source never before experienced on the island.

But the WASH Project's vision went beyond just water. It built safe, gender-separated toilets and handwashing stations, transforming health and privacy for women and girls. The project embraced circularity by installing an anaerobic biodigester that turns human waste into clean cooking biogas and organic fertilizer, nurturing the community and its environment. All powered by solar energy, The WASH infrastructure shines as a green, reliable, and inclusive lifeline.

Adding innovation to inclusion, a prepaid water dispensing system empowered locals to manage water access and revenue through household water cards, supporting local governance and financial sustainability. Alongside establishing robust community committees, training, and job creation, the WASH Project's infrastructure is not only water pipes and toilets, but also the heart of Agala's renewed hope, health, and opportunity.



Agala's story of change is defined by the project's robust monitoring and evaluation system, ensuring every improvement was measured and sustained. For 18 months after commissioning, the Optimal Greening team tracked health, environment, economic, and social indicators through regular household surveys and focus group discussions.

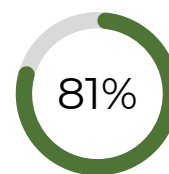
Each advancement, from cleaner water and toilet adoption to new jobs and behavioral changes, was recorded with pride. This disciplined and participatory approach forged trust, ensured accountability, and created a living blueprint for future WASH success stories in Agala and beyond.

Transformation and Impact:

When Water Restored Hope



Healthy Lives



Reduction in water borne diseases
- diarrhea, cholera and typhoid

Clean Water, Strong Communities

Access to clean water has transformed daily life in Agala. Women and girls now spend less time on household chores and water collection, allowing them to focus on education and income-generating activities, which has improved school enrollment and productivity. Households benefit from more time for rest and energy for social activities, while children, especially girls, take pride in leading hygiene initiatives among their peers.

Health outcomes in Agala have also dramatically improved. With reduced reliance on unsafe water sources, the community has seen fewer cases of waterborne illnesses and diarrhea, especially among young children. Homes are cleaner, and proper sanitation and hygiene practices are more widespread, resulting in increased well-being, lower health costs, and fewer days lost to illness.

Overall, improved health, cleaner homes, and reduced anxiety have created a renewed sense of hope, safety, and community pride. The collaborative efforts of residents and successful WASH solutions have restored dignity and opportunity, making Agala a clear example of the positive impact of clean water access.

Dignity in Sanitation

Six gender-separated toilets, showers, and handwashing stations replaced years of open defecation. Women and girls now use safe, sanitation facilities without fear. No longer forced into unsafe open defecation, the community saw a 100% access rate to improved sanitation facilities and a virtual end to gender-based violence linked to privacy concerns.

Improved hygiene practices increased fivefold, visibly reducing environmental pollution with residents' observing less flies and disease transmission in the community. At least 64% of households regularly use the improved sanitation facilities, while community hygiene practices, particularly handwashing, rose from 9% to 71%.



Rising Together:

Inclusive Governance and Empowerment

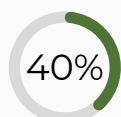
Social Renewal

The WASH Project's success stems from fostering local ownership through the Community Development Association, WASH Committee, Facilities Management Team, and Student-led SaniStars hygiene champions. This community-centric approach created jobs, and inclusive governance that sustained operations and promoted behavioral change.

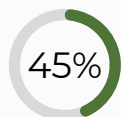
Optimal Greening empowered Agala's new community groups with hands-on training in financial management, WASH systems, gender equity, leadership and sustainability. Armed with a laptop, tablet, MiFi, and practical tools, from budgeting templates to monthly scorecards, local leaders gained the skills and resources to keep clean water and sanitation services running strong, now and for the future.



Gender Inclusion



Female representation in governance bodies



Increase in women's productivity (income generating activities)



We appreciate Optimal Greening for coming to teach us to make liquid soap. Personally, I will use it, sell and wash with it. ~ WASHCOM Member



Women Empowerment

Access to water freed women's time and energy. Many women turned to small businesses and trading, while girls returned to school. The project recorded a 45% increase in women's productivity and a 19% rise in girls' school enrollment post implementation.

Agala women took part in a lively training to master local soap making—sparked by the dual goals of building entrepreneurial skills and fueling lasting, community-wide hygiene. This initiative empowered them to create new income streams while promoting health and cleanliness throughout the village.

From the very start, Optimal Greening ensured that women had a real seat at the table, mandating at least one-third female representation in the new governance structure. These efforts paid off, with women ultimately reaching 40% participation across all teams, shaping decisions and leading Agala boldly into a future defined by inclusion and shared leadership.

Greening Agala:

Circular and Renewable Solutions in Action

“ Before, I will charge at work before coming to Agala because I know I won't see light to charge in Agala. Now I don't have to fear coming to Agala without battery again because of the solar, I have been using it to charge always. Thank you for the project, it has really helped our community. ~ Community Member

Restoring Nature's Balance

Prior to the WASH Project, untreated human waste due to widespread open defecation severely polluted Agala's land and surrounding waters. The introduction of an anaerobic biodigester effectively treats sewage, modeling circular waste management setting a new standard for island waste management. Improved human waste disposal and sanitation practices have begun reversing ecosystem degradation, protecting groundwater, and reducing environmental health hazards.

Solar power drives all water and sanitation facilities, eliminating the need for polluting diesel generators, reducing greenhouse gas emissions, and demonstrating the applicability of renewable energy in community WASH projects. In Agala, climate-smart technology is no longer just a vision, it's the engine of daily life, showing that even the most remote places can thrive with sustainable, resilient infrastructure at their core.



Lighting Up Lives

For generations, Agala Island's nights were cloaked in darkness, with residents relying on dangerous kerosene lamps or enduring total blackouts. This limited not only daily activities but also safety, education, and opportunities for economic growth. The WASH project brought a new dawn through solar-powered electricity, illuminating the community and providing clean, reliable energy to power the WASH facilities.

Powered by a photovoltaic system, Agala now enjoys uninterrupted electricity that runs the water treatment plant, sanitation facilities, and provides access to phone charging services. Electricity's ripple effects are evident across the community: children can study after dusk, women and youth feel safer moving about the community, particularly at nighttime.

The light that flows from the sun's rays now fuels hope, empowerment, and a brighter future for Agala's resilient residents, proving that energy access is a cornerstone of sustainable development.



Unlocking Potential:

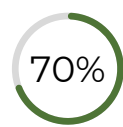
Economic Gains and Livelihood Opportunities



145+ community members trained



15+ jobs created



70% use phone charging services regularly

The arrival of this WASH Project transformed the old narrative of hardship in Agala by turning water, sanitation, and energy infrastructure into a springboard for economic growth. With the project's rollout, a wave of new opportunities followed.

Community members found work as part of the Facilities Management Team, maintaining the water system, sanitation facilities, and solar-powered infrastructure. Local jobs were also created through construction, operations, and ongoing facility management, each role equipping residents with valuable technical and administrative skills.

“The positive impact of this project is immeasurable, and it has alleviated many of the challenges we once faced. Thank you for giving us hope, health, and a better future. ~ WASH Committee Member

Phone charging services alone attracted 70% of residents, offering an unexpected but vital stream of income for operations. The FLOW water dispenser and Point-of-Sale machine for cashless payment nudged Agala toward financial inclusion, with 100% of households gaining access to formal transactions. Regular revenues meant the Facilities Management Team could be compensated for their work, and running costs could be covered even in uncertain times.

Capacity-building programs further empowered local youth and women, ensuring that the next wave of community leaders emerged from within. Women held at least one-third of these new positions, bringing fresh voices to leadership and stabilizing household incomes.

The story of Agala is no longer just about survival. Thanks to the WASH project, it is now about growth, skill-building, and the steady creation of opportunity, proof that investing in core services plants the seeds for long-term economic resilience and prosperity for all.

Sustainability:

A Community-Led WASH Model Built to Last



“ Women in Agala now take part in leadership and decision making meetings, and they also share their ideas and thoughts, which was not the case before. ~ Community Member

The true success of the Agala WASH project lies not only in its infrastructure but in its vision for sustainability. The journey toward sustainable water and sanitation services is powered by the steady flow of community-driven revenue. At the heart of this lies a simple yet transformative idea: residents access clean water through prepaid cards at the WASH water kiosks, making each drop a shared investment in the community's wellbeing.

The money collected through these sales fuels the daily heartbeat of the WASH project's operations. Managed by the local WASH Committee and Facilities Management Team, these funds cover everything from pump repairs and sanitation upkeep to solar system maintenance. By taking control of their resources, Agala's residents strengthen their sense of ownership and accountability, reducing dependence on outside aid and fostering pride in their new facilities.

Furthermore, public sector partnerships with Lagos State and local government authorities anchor the project in official frameworks, securing technical support and dispute resolution long term. Optimal Greening remains a partner, ready to assist but confident that Agala's empowered community is now the steward of its own water and sanitation future.

This story of rooted resilience illustrates how sustainability is not an afterthought but the very foundation of transformative change, ensuring that Agala's renewed health, dignity, and hope will thrive for generations.

Lessons in Resilience

The journey to change was not without hurdles. Financial sustainability was tested by cultural norms resisting the pay-for-service model. Governance stability required ongoing clarification of roles between formal and traditional leadership. Population displacement and technology adoption progressed gradually, emphasizing the need for intensified engagement. These insights fuel the WASH Project's roadmap for scaling, with emphasis on deepening community governance, diversifying revenue streams, enforcing social inclusion, strengthening behavioral change campaigns, and advancing technology uptake.

Bridges of Hope:

The Partners and Donors Behind Agala's Transformation

The story of Agala's transformation would be incomplete without recognizing the champions behind the scenes, its partners and donors, whose shared vision fueled this remarkable journey. The Agala WASH project brought together a dynamic coalition of local leaders, technical experts, government agencies, and generous funders, all united by a common goal: to restore dignity and health to the resilient Agala community.

At the heart of this collaboration was Optimal Greening, the steadfast custodian who steered the project from vision to reality. The Amuwo Odofin Local Government Authority and Lagos State Ministry of The Environment provided crucial governance support and aligned the project with the State's development strategies, ensuring long-term sustainability.



“One thing that is quite important is forging partnerships. Don't try working alone. There is always some organisation or people, NGOs, companies that are willing to collaborate to do these projects. If you work with someone else, I believe you can do a better job and be able to reach more people. ~ A2E Fund Manager, EDP S.A.

Technical partnerships with industry leaders such as Grundfos, GVE Projects, Naston Engineering, Elfad Concepts, and Hydrogenesis, brought cutting-edge expertise and innovation to each infrastructure component: an industrial borehole and water treatment plant, improved sanitation facilities and biodigester sewage treatment plant, solar power system, and smart water management technology.

This collective effort was generously backed by visionary donors who believed in Agala's potential. Crowdfunding campaigns sparked initial momentum, followed by substantial support from EDP's (Energias de Portugal) A2E Fund, Grundfos Foundation (PDJF), AllOn, and other corporate and individual contributors. Their investments not only built physical structures but ignited hope, jobs, and empowerment.

Together, these partners and donors formed a bridge across challenges, making Agala's clean water and sanitation story a shining example of what collaboration can achieve for marginalized communities. Their united commitment continues to inspire future expansions of this life-changing model.

How Agala's Success Is Inspiring a Movement Beyond Its Shores

As the sun sets over Agala, laughter and conversation ripple through the island, signs of a newfound confidence. Only a couple of years ago, Agala's families were defined by daily hardships: polluted water, open defecation, and long walks that stole time from school and work. Today, those struggles are being replaced with opportunity, thanks to the Agala WASH project by Optimal Greening.

News of Agala's transformation is spreading. Policymakers, partners, and leaders from other marginalized communities have visited to learn firsthand how this innovative WASH model works. Inspired by tangible health, social, environmental and economic outcomes, interest in replication is high. The WASH project has redefined what's possible for Nigeria's most underserved settlements and has been recognized by Lagos State Ministry of The Environment and Water Resources with the 2023 Sanitation Innovation Award.



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To all the individuals and corporates who donated, we say thank you. We would like to see more people support and tell their friends and colleagues to also donate. We are imploring private companies to also support the cause and donate to scale up Optimal Greening's WASH Program. ~ CEO Optimal Greening

Already, Optimal Greening has begun partnering with new communities, adapting lessons from Agala to meet local needs with two ongoing WASH projects in Ikorodu, Lagos. Nine new communities in Epe, Lagos have also been identified in partnership with local government authorities and present further opportunities for scale up of the WASH program.

What began as a bold experiment on a remote Lagos Island is now a blueprint for change across the region. Agala's story proves that when technology, community ownership, and sustainable planning unite, hope can ripple outward. With each visit from a neighboring community leader, Agala's legacy grows, poised not just for survival, but for a wave of scale up that promises health, dignity, and opportunity for thousands more.

Water Restores Dignity. Empowerment Sustains It. Partnership Multiplies It

DONATE NOW

Optimal Greening invites partners, donors, and governments to join us in scaling this innovative WASH solution for broader impact and transformation.

Echoes of Impact:

From the Community and Collaborators

This project is a very circular and holistic approach. The community get water, sanitation and at the same time they are being empowered economically ~ Senior Manager, Programs, Optimal Greening

Optimal Greening coming into Agala community is a step in the right direction. With time, energy now also comes on board, so that is why this collaboration is important to us ~ Head of Business Development, GVE Projects

Happiness and joy has come to us because the problem we have been facing, especially with the children, will stop. ~ WASHCOM Member

Since my child started going to the club, I've noticed that he washes his hands properly and even reminds his brother and sister to do the same. ~ Sanistar Mom

In my own opinion, what I benefited and what I saw others benefit in the community based on the project is light, toilet, and bathing. At least Optimal Greening has helped make life easier for Agala people ~ Community Member

Sun flies that used to bite us have reduced. Probably because we no longer defecate at the shores. Since the facilities, sun flies have stopped and everything is fine. ~ Community Member

It is rewarding to see that all of our efforts over the last 9-12 months or so, have finally come to fruition and seeing all the women and little children excited and the impact that this clean water and sanitation facilities will have on them. ~ Founder Optimal Greening

